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Microfinance and violence prevention: A review of the evidence and adaptations for implementation in the U.S.

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Abstract

Microfinance programs provide access to small amounts of capital in the form of credit, savings, or financial incentives. There is evidence that microfinance reduces financial strain and reduces violence making it a promising public health approach. However, most of this evidence was generated internationally in low-resource countries; thus, it is likely that adaptations are necessary for microfinance to be effective at preventing violence in the U.S. This article reviews the evidence base for microfinance interventions on violence outcomes; outlines the potential of microfinance to prevent violence in the U.S.; and offers some possible adaptations in order to increase the likelihood that microfinance will prevent violence in the U.S. Programs might consider providing matched savings instead of small loans to individuals and providing job skills training. Furthermore, it is important for U.S. microfinance programs to engage multiple sectors and to consider additional content, such as a gender equity component and safety planning to protect those who might be in violent relationships. It is also important that these adaptations be rigorously evaluated for impacts on multiple forms of violence.

Keywords

Microfinance; Violence; Adaptation; Prevention; Gender equity

1. Introduction

Poverty and financial strain are disproportionately linked to a higher burden of multiple forms of violence (Wilkins et al., 2014). A growing body of research indicates that the health impact of poverty begins in childhood and extends across the life course and into subsequent generations (Shonkoff and Garner, 2012). Thus, addressing the social and economic determinants of health may be effective in preventing multiple forms of violence and achieving health equity. Interventions that address an individual’s economic circumstances and measure their effects on violence are limited. However, a small number of researchers are implementing economic interventions and evaluating whether they have an

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impact on violence (Pronyk et al., 2006). Examples of economic interventions include tax credits (e.g., Earned Income Tax Credit), living wages, microfinance, and training-based microfinance and financial education programs (Pronyk et al., 2006; Niolon et al., 2017; Fortson et al., 2016). In particular, microfinance programs are a promising approach to address the social determinants of health, empower individuals, reduce financial strain, and prevent violence.

Microfinance provides access to small amounts of capital in the form of credit, savings, micro-insurance, or financial incentives (Dworkin and Hatcher, 2011). For the purposes of this paper, the term microfinance includes both financial services as well as training-based programs related to financial capability and microenterprise development. Microfinance can improve family income and a community's economy through the provision of financial services and economic opportunities to people who cannot access traditional financial resources (Stratford et al., 2008). Microfinance programs, particularly those that include curriculum on gender equity, have also been designed to address the intersection of violence and economic well-being and have been evaluated for their impacts on reducing violence (e.g., Pronyk et al., 2006; Cepeda et al., 2017; Gupta et al., 2013; Sarnquist et al., 2018; Schuler and Hashemi, 1994; Ismayilova et al., 2018; Dunbar et al., 2014). Fig. 1 outlines the pathways through which microfinance programs may alleviate financial stress and prevent violence.

According to this framework, microfinance is hypothesized to indirectly affect social determinants of health by directly increasing economic opportunity and decreasing financial stress. This decrease in financial stress is related to preventing and reducing multiple forms of violence. Because racial/ethnic minorities are more likely to experience diminished economic opportunities and financial stress, microfinance might indirectly reduce minority stress. This might also serve to prevent and reduce violence. Because microfinance has the potential to prevent and reduce violence, several studies have rigorously evaluated its impacts on violence and other health outcomes. The current paper: (a) systematically summarizes the evidence base for microfinance interventions on violence outcomes; (b) discusses the promise of microfinance to address violence in the U.S.; and, (c) advances some potential adaptations that could potentially bolster the likelihood that microfinance programs would prevent violence in the U.S.

2. Summary of evidence for microfinance interventions on violence outcomes

Microfinance emerged from the work of the economist Muhammad Yunus, who addressed the fact that extremely low-income people in Bangladesh had no access to credit to support their businesses. Many needed less than one dollar to expand or continue their business (Yunus, 1999). As a result, Yunus began loaning small amounts of money to villagers and was repeatedly paid back. In 1983, Yunus created his own bank, the Grameen Bank, to lend money to the poorest borrowers. The Grameen Bank lifted one fifth of borrowers out of poverty (Yunus, 1999). As of 2011, Grameen Bank had 8.3 million borrowers and covered more than 97% of villages in Bangladesh. Since Yunus' success, a variety of microfinance

interventions have been implemented and evaluated in international settings. In this article, we summarize the findings from evaluations of microfinance programs that measured impacts on violence outcomes. In order to be as comprehensive as possible, we included studies that explored the relationship between microfinance and violence outcomes regardless of evaluation design (i.e., those that used experimental, quasi-experimental, pre-post designs, and secondary data) to examine the relationship between program participation and violence.

Using the search terms microfinance, microloan, microcredit, microenterprise, microsavings, economic empowerment programs, income generation programs, and financial interventions, systematic searches were conducted of PsycINFO, Google Scholar, Medline, Embase, Global Health, ABI Inform ProQuest, EconLit, and Scopus. We did not place any restrictions on the year of publication and further refined our search to include studies that examined microfinance's impact on violence outcomes (i.e., intimate partner violence, sexual violence, physical violence, and child abuse and neglect). In addition, we searched the reference sections of the included articles to identify additional studies that were not included in the initial database search. We initially identified 629 articles, but after further review, only 14 articles fit our inclusion criteria. These 14 articles are summarized in Table 1. Furthermore, while we attempted to identify studies that explored microfinance's impact on any violence outcomes, the literature was primarily focused on intimate partner violence (IPV) outcomes. Overall, seven studies found that microfinance programs demonstrated positive effects; two studies found mixed effects; four studies found null effects; and one study found that microfinance programs were associated with increases in violence. These studies are described below.

2.1. Positive or mixed findings

As mentioned, a majority of the studies (nine out of fourteen) found positive or mixed findings. All of these studies only included women in their trials (Pronyk et al., 2006; Cepeda et al., 2017; Gupta et al., 2013; Sarnquist et al., 2018; Schuler and Hashemi, 1994; Ismayilova et al., 2018; Dunbar et al., 2014; Koenig et al., 2003; Austrian and Muthengi, 2014). All of the studies used experimental or quasi-experimental designs and were conducted in low resource countries in Africa, South America, and Southeast Asia. All of the studies, except for two, examined microfinance's impact on IPV outcomes; the other two studies examined physical and sexual violence in adolescents (Dunbar et al., 2014; Austrian and Muthengi, 2014). Finally, Sarnquist et al. (2018) included a measure of physical and sexual violence against children in addition to IPV (Sarnquist et al., 2018). To illustrate the pattern of positive findings, the IMAGE study was a randomized controlled trial (RCT) that combined microfinance with a 12–15-month training curriculum that covered gender roles and inequalities, cultural beliefs, IPV, and HIV (Pronyk et al., 2006). The gender equity curricula was an adaptation of the Sisters For Life Program that included two phases: (1) ten one-hour training sessions that covered various topics including gender roles, power relations, and communication skills; and (2) community mobilization to engage youth and men around HIV and IPV. Women who took part in the IMAGE program reported less controlling behavior by their partners and attitudes that challenged established gender roles. Two years after enrolling in the program, female participants reported a 55% reduction in

IPV when compared to similar women in control communities who did not receive the intervention (Pronyk et al., 2006).

In Côte d'Ivoire, an RCT was conducted to evaluate the incremental impact of adding gender dialogue groups to an economic empowerment group savings program on levels of IPV (Gupta et al., 2013). The economic empowerment program brought women together to save money and contribute to a shared fund. In addition to the economic empowerment program, half of the participants were also enrolled in gender dialogue groups with their partners. The intervention groups were not significantly different at baseline for several demographic characteristics. Those in the economic empowerment program with gender dialogue groups had slightly greater, but non-significant, decreases in past year physical and/or sexual IPV compared to the economic empowerment program alone, which also reported reductions in physical and/or sexual IPV. However, the study found women in the "high adherence" gender dialogue group (i.e., those who attended 75% or more of the dialogue groups) were significantly less likely to report physical IPV at the end of the 8-month program compared to those who only attended the group savings program (Gupta et al., 2013). The women in the dialogue group also reported significant decreases in economic abuse and their own justifications for beating a wife. A similar study in Guatemala found that access to microcredit was associated with decreases in economic and psychological violence against women but they did not experience reductions in coercive control (Cepeda et al., 2017). These findings underscore the potential benefits of combining microfinance with a gender equity component in order to reduce and prevent violence against women.

Despite several microfinance programs operating in Africa, they have historically been conducted outside of sub-Saharan and West Africa, and typically do not target the poorest of the poor. Ismayilova et al. (2018) conducted a cluster-randomized controlled trial of Trickle Up (TU), an economic intervention for ultrapoor women, in Burkina Faso, a West African country that is experiencing extreme poverty and food insecurity (Ismayilova et al., 2018). Women in 12 villages ($N = 360$) received either Trickle Up (economic intervention only), Trickle Up Plus (a combination of the economic intervention and family coaching), or were in the waitlist control group. At the 12-month follow-up, women in both treatment conditions reported a significant reduction in spousal emotional violence compared to the waitlist control condition (the women in the TU Plus arm showed a large effect size compared with the women in the TU arm, which had a medium effect size). However, there were no significant intervention effects on spousal physical violence. The authors noted that the family coaching curriculum in TU Plus focused on issues concerning the well-being of children and a woman's participation in decision-making, not on IPV (Ismayilova et al., 2018). This, in conjunction with other cultural considerations such as household power dynamics, may have contributed to the lack in significant findings for physical violence.

Another pilot study conducted in Zimbabwe focused on adolescent girls at high risk for acquiring HIV (Dunbar et al., 2014). Girls were randomly assigned to the treatment group (SHAZ!), which included sexual and reproductive health services, life skills education (e.g., home-based care training on caring for people with HIV, relationship negotiation, avoiding violence, and identifying safe and dangerous places), economic opportunities such as vocational training, financial literacy education, and a \$100 micro-grant, and integrated

social support in the form of guidance counseling by trained staff. The control group received the sexual and reproductive health services and life-skills education but did not receive economic opportunities or the integrated social support. Results showed that intervention participants had a marginally significant ($p = 0.06$) reduction in the experience of violence (a combined measure of physical/sexual violence or rape) across 24-months compared to control participants, however the authors noted that the overall prevalence for this outcome was very low.

An additional study tested the relationship between participating in a credit program and women's empowerment, which included an indicator of violence within the household (Schuler and Hashemi, 1994). They found that credit membership had a significant, positive effect on the women's reported level of empowerment, but they did not consider its unique effect on violence. More research, especially qualitative research, is needed to understand what might be contributing to these patterns of effects among microfinance programs, especially those without an explicit gender equity/social support component.

Finally, a study conducted in Kenya investigated the impact of a microfinance intervention on women and children (Sarnquist et al., 2018). The intervention consisted of business training, small business loans, and weekly business and social support meetings. Women in both the intervention and control groups reported similar rates of severe IPV and violence against children. After the intervention, the women receiving the microfinance intervention (as compared to the standard of care) reported significantly less severe IPV and a lower incidence of violence against children (Sarnquist et al., 2018). Notably, those receiving the program in this study also participated in social support meetings. This suggests that the social support garnered through these groups might have accounted for the reductions in IPV and violence against children. They may operate in a similar fashion to the gender equity groups described above. Furthermore, Sarnquist and colleagues are the first to explore the impact of microfinance on children demonstrating its potential to reduce and prevent multiple forms of violence (Sarnquist et al., 2018). Due to its potential cross-cutting effects, it is important for evaluations to assess whether microfinance has impacts on IPV, violence against children, youth violence, and sexual violence (Centers for Disease Control and Prevention, 2016).

In addition to those studies with positive findings, two with mixed effects had results that were difficult to categorize so they were described as mixed. For example, a study tested the effects of a Savings Plus program (providing access to savings accounts plus support groups, reproductive health training, and financial education) compared to Savings Only among adolescent girls in Uganda (Austrian and Muthengi, 2014). They found that those in the Savings Plus program did not experience increases in sexual violence-related outcomes while those in the Savings Only program experienced increases in both (Austrian and Muthengi, 2014). In a different study that used secondary data in Bangladesh, participation in savings/credit groups was associated with a higher risk of IPV in conservative areas and no significant differences in IPV risk in less conservative areas (Koenig et al., 2003). These mixed results suggest that there might be broader cultural or political norms that influence the ways in which microfinance programs prevent or reduce violence.

2.2. Null or negative findings

Despite the intention of microfinance programs to improve borrowers' lives, five evaluations demonstrated null (four studies) or negative (one study) effects on violence. The studies with null findings used a range of evaluation designs including randomized control trials and secondary data (Bajracharya and Amin, 2013; Murshid et al., 2016). One was a cluster randomized trial of men and women (86% were women) in Uganda that tested whether small loans to support business development had an impact on women's empowerment, intimate partner relations, and IPV (Green et al., 2015). After 16 months, business ownership and incomes doubled, marital control and autonomy increased, as well as quality of partner relations, but there was no significant change in IPV (Green et al., 2015). In a second experiment in the same study, participants were randomized to receive the microfinance program and invite a household partner who helps make financial decisions (typically a husband) to participate together. This joint participation included an extra full day of training that covered cultural, gender, and financial barriers to female entrepreneurship, couples' communication, and problem-solving tactics. After 16 months, the results showed small, but non-significant reductions in IPV; however, the authors observed large, significant increases in the quality of relationships (Green et al., 2015). The authors concluded that joint participation in a microfinance program increased communication but failed to significantly change gender attitudes and violent behavior towards women (Green et al., 2015).

In addition, a HIV/STI risk reduction (HIVSRR) intervention in Mongolia was compared against a combined microsavings and HIVSRR intervention for women who engage in sex work (Tsai et al., 2016). While both groups showed reductions in physical and sexual violence from a paying partner, there were no significant differences between the two groups (Tsai et al., 2016). As a result of the intervention, many women reduced the amount of sex work they engaged in and increased their income from alternative sources, but the authors surmised that these women may not have been the highest risk for violence or even slight reductions in sex work may not have prevented them from being victims of violence from extremely abusive clients.

In another study, Glass and colleagues conducted an RCT evaluation of a livestock asset transfer program in the Democratic Republic of Congo (Glass et al., 2017). The program transferred livestock to women living in ten villages. Livestock transfer was significantly related to less debt, higher subjective health, less anxiety, and lower symptoms of PTSD for those who received the program (measured 18 months after the livestock transfer). While those in the intervention group also reported less experiences with violence compared to those in the control group, the differences were not statistically significant (Glass et al., 2017). One potential reason for a lack of significant differences between the two groups is that the livestock transfer program did not include a gender equity component, which might be necessary to demonstrate significant difference between the two groups.

Two additional studies examined program impacts on women in Bangladesh using secondary data, one with null and the other with negative effects (Bajracharya and Amin, 2013; Murshid et al., 2016). Murshid et al. found that women with relatively better economic status, as measured by material assets, who participated in microfinance had a 9%

increased probability of experiencing physical or sexual domestic violence than women of better economic status who did not participate in microfinance (Murshid et al., 2016). . In addition, this study used secondary data to examine the relationship between microfinance and violence. Because women were not randomized into the microfinance program, another possible explanation for the negative findings could be attributed to selection bias. Women who were particularly vulnerable to violence may have self-selected into microfinance programs as a possible way to escape from their abusive partners. They may also differ from women not involved with microfinance on other variables related to IPV, such as poverty (Bajracharya and Amin, 2013). Using the same data, one study used propensity score matching and confirmed selection bias in microfinance programs and found null effects (Bajracharya and Amin, 2013). Thus, it is likely that low-income women who are vulnerable to IPV select into microfinance programs and report higher levels of IPV than nonmembers.

Other IPV-related research suggests that women gain economic assets may be at increased risk for violence as they make gains in gender equality due to a male backlash effect (Whaley, 2001). For example, McCloskey and colleagues found that disparity in incomes that favored the female partner predicted men's frequency and severity of violence towards their female partners (whereas overall family income did not) (McCloskey, 1996). This may be due to a perceived power imbalance or an attempt to compensate for a perceived decrease in control of the female partner. Men may feel stress when they perceive their masculinity is being threatened; consequently, they may respond with violence in order to assert their masculinity and maintain dominance and power (Verdello and Bosson, 2013). It is important to ensure women are protected from potential increases in violence as they gain economic autonomy.

3. The promise of microfinance to address violence in the U.S.

In addition to programs that were implemented in international contexts, there are also microfinance programs that are currently being implemented in the U.S. (e.g., Kiva and Accion) (How Kiva Works, 2019; Accion, n.d.). These programs provide small loans and capital to individuals so that they can start small businesses. Accion also provides business training services (How Kiva Works, 2019). These existing U.S.-based microfinance programs have yet to be evaluated for their impacts on violence so there is a dearth of evidence on whether microfinance might prevent and reduce violence in the U.S. The only known evaluation of an economic empowerment program in the United States is the Jewelry Education for Women Empowering Their Lives (JEWEL) project (Sherman et al., 2006). While not a traditional microfinance program that provides loans or other banking services to low-income women, the JEWEL intervention combined an economic empowerment program with HIV prevention to target illicit drug-using women involved in prostitution. The HIV prevention component included sessions on HIV and drug risk reduction, sexual risk reduction, condom demonstration and practice, and the connection between drug use and sex.

While the study did not examine IPV or other forms of violence, it did examine a number of sexual behaviors. Three months post-intervention, the women participating in the program reported reductions in receiving drugs or money for sex, the number of sex trade partners per

month, drug use, and the amount of money spent on drug use. Additionally, they increased their condom use with sex trade partners (Sherman et al., 2006). The income earned from selling the jewelry was associated with significantly fewer sex trade partners, highlighting the importance of providing licit access to money and capital. The results of the JEWEL project are encouraging. Increasing communication with sexual partners, stimulating self-efficacy in obtaining legal employment, as well as enhancing economic status are all outcomes that could impact IPV and other forms of violence.

4. Microfinance in the U.S.: what adaptations might be necessary to prevent violence?

The majority of the studies described above demonstrate that microfinance has the potential to prevent and reduce violence among women, particularly when there is a gender equity or social support component to the programs. Given this growing evidence base, it is reasonable to test whether microfinance programs might have similar effects in the U.S. Below, we provide some suggestions for studies that aim to evaluate the impact of U.S.-based microfinance programs on violence outcomes. They represent a small set of suggestions based on the evidence presented in the systematic review described above. They are not meant to be a comprehensive set of suggestions or a systematic review of the literature on adapting programs from international, low-resource setting so that they can be implemented in the U.S. While we draw from the implementation science literature, we encourage readers to further consult systematic reviews on adapting programs for additional information (Escoffrey et al., 2018).

4.1. Moving beyond IPV outcomes

Given the research demonstrating that microfinance programs have positive and promising effects on IPV outcomes, microfinance might be an important violence prevention strategy in the U.S. The research thus far has focused on microfinance and IPV outcomes, in addition to other health outcomes (e.g., HIV/AIDS), but microfinance may also impact other forms of violence indirectly through its influence on key social determinants of health (Centers for Disease Control and Prevention, 2016). Microfinance has successfully lifted families out of poverty and helped reduce extreme poverty in borrowers (Yunus, 1999; Khandker, 2005; Khandker and Chowdhury, 1995; Todd, 1996). Several forms of violence (e.g., child maltreatment, sexual violence, youth violence, and suicide) share risk factors at multiple levels of the social ecology (Wilkins et al., 2014). For example, economic stress at the relationship level has been associated with child maltreatment, IPV, youth violence, and suicide (Wilkins et al., 2014). At the community level, neighborhood poverty, a lack of economic opportunities, and high unemployment rates are also related to child maltreatment, IPV, sexual violence, youth violence, and suicide (Wilkins et al., 2014). Finally, income inequality at the societal level has been linked to child maltreatment, IPV, and youth violence (Wilkins et al., 2014). By increasing household income and strengthening household financial security, microfinance may potentially prevent or decrease financial stressors (Niolon et al., 2017); furthermore, it may allow families in high poverty areas to move to safer communities with greater access to resources and services. Microfinance addresses risk factors for several forms of violence and warrants further research and

evaluation on multiple violence outcomes (Niolon et al., 2017; Centers for Disease Control and Prevention, 2016; Basile et al., 2016).

4.2. Moving beyond small loans

Even though research on the effectiveness of microfinance programs on multiple forms of violence in the U.S. is limited, the Grameen Bank's microfinance model was replicated in over 40 countries including the U.S. (Yunus, 1999) A bank in both Arkansas and inner-city Chicago adopted the microfinance model (Yunus, 1999). In examining those adaptations, Yunus noted that programs in the U.S. must be heavily subsidized because labor costs are high and consequently bank operations are expensive (Yunus, 1999). The U.S. economy is also focused more on technology compared to Bangladesh or other developing countries where the economy is more labor intensive, so this makes it difficult for entrepreneurs in the U.S. to create self-employment opportunities. Additionally, failure to repay loans on time can damage credit history, making it more difficult to receive loans in the future. Thus, small loans and business start-ups may not be as effective in alleviating financial strain and reducing violence in the U.S. as they have been in other developing countries.

Research demonstrates that providing savings to low-income women and men may be a promising strategy to include in U.S. microfinance programs (Christy-McMullin et al., 2009; Grinstein-Weiss et al., 2007). Multiple U.S.-based and international studies have demonstrated a positive relationship between savings interventions and improved economic wellbeing, with particularly strong results for Individual Development Accounts (IDAs) (Brune et al., 2013; Dupas and Robinson, 2009; Han et al., 2009; Ssewamala et al., 2006). IDAs provide support in the form of savings for low-income individuals (Ssewamala et al., 2006; Department of Housing and Urban Development, 2012). In particular, IDA programs match funds (matching rates range from 1:1 to 6:1) that individuals deposit into an account in order to encourage savings (Ssewamala et al., 2006; Department of Housing and Urban Development, 2012). Grinstein-Weiss and colleagues (Grinstein-Weiss et al., 2007) found that an optimal matching rate is 3:1 in a US IDA program in that those receiving this matching rate saved more frequently compared to those receiving other matching rates. Research has shown that IDA programs along with financial training are particularly effective at improving economic wellbeing (in that they acquired more assets) and that lower income Americans are willing and able to save if given the correct incentive structure and financial training (Ssewamala et al., 2006). Savings interventions also seem to bolster economic wellbeing through mental health mechanisms that improve bargaining power and locus of control (Grinstein-Weiss et al., 2007). Savings programs strengthen hopefulness and future orientation (Christy-McMullin et al., 2009), although one study found no such association (Han et al., 2009). Providing savings accounts while also strengthening social assets through social networks and offering education around reproductive health and finances have been found to be protective in adolescent girls against experiencing sexual harassment; however, the same study found that providing savings accounts without any additional support or education increased the risk of sexual harassment (Austrian and Muthengi, 2014). Such programs may provide networking and peer support for participants which might also bolster their feelings of connectedness and reduce violence (Pronyk et al., 2006).

This shift in personal empowerment and the increased peer support may have important implications for violence prevention. Compared to loans, savings may bolster the wellbeing of low-income men and women more and it does not come with the added burden and stress of starting a successful business and paying back a loan. Hence, U.S. microfinance programs may consider providing an IDA (with a 3:1 matching rate and financial training) and peer support in order to alleviate financial stress and potentially reduce multiple forms of violence.

It may also be important to improve employment opportunities to alleviate economic strain. To bolster employment opportunities, U.S.-based microfinance programs might also consider including job training services (Talen et al., 2002). Evidence has shown that job training programs are effective among low-income workers in the field of information technology (Hendra et al., 2016; Schaberg, 2017). For example, the Per Scholas Employment/Training Program consisted of 15 weeks of job skills training (e.g., preparing for a job interview and resume assistance) and employment services for low-income workers (Hendra et al., 2016; Schaberg, 2017). An evaluation of this program, which included two RCTs, demonstrated that participants had a 30% increase in earnings two to three years after randomization (Hendra et al., 2016; Schaberg, 2017). It is also notable that job training was an essential component of the U.S.-based JEWEL project in that women learned how to make as well as market and sell beaded jewelry (Sherman et al., 2006). Although the benefits of job skills training are encouraging, additional research is needed to understand the effects on violence-related outcomes.

4.3. Gender equity considerations and more

One of the key components of international microfinance programs is the inclusion of content that addresses gender equity and social support. As outlined above, this took the form of gender dialogue groups that focused on gender norms and gender equity; specific instructional content on gender norms; and peer support groups that focused on supporting and empowering women in their economic and relationships endeavors. While this is likely important to include in U.S. programs, additional content might be needed in order to better reduce and prevent violence. Prior exploratory research brought together U.S. microfinance experts in order to identify some potential core components of a U.S. microfinance program to prevent HIV (Stratford et al., 2008). These experts emphasized the need to garner community input into the planning and development of the intervention, the importance of incorporating life skills training, and providing financial training and resources within the intervention (Stratford et al., 2008). In addition, focus groups and in-depth interviews were conducted with young African American women and community leaders in the southeastern U.S. to identify essential elements of a U.S. microfinance intervention. They reported the need for programs to include activities that enhance job employability and sustainability (i.e., similar to the job training services mentioned above), as well as increase self-esteem (Prather et al., 2012).

In addition, as the evidence suggests, some women who participate in microfinance programs may be in violent relationships (Prather et al., 2012). Women who participate in these programs may have violent and controlling partners who may respond to their

participation by increasing their use of violence in order to maintain their actual and perceived control over their partner. Additionally, participation in microfinance programs may lead to, or exacerbate, economic abuse because the male might feel that his masculinity is being threatened by the income the female partner is contributing and the male partner wants to reassert authority in the relationship (Eswaran and Malhotra, 2011). He may also use violence in attempt to extract or control the money received from participation in a microfinance program (Bloch and Rao, 2002). Because of this, it is critical that microfinance programs consider the inclusion of safety planning to better protect their participants and prevent violence. Recommended practices for safety planning include conducting a thorough safety assessment and engaging in an interactive planning process that respects and empowers the victim (Murray et al., 2015). Safety planning should also involve identifying general and specific strategies to promote safety. This could include gathering contact information for key people or making arrangements for pets (Murray et al., 2015). Although research is limited, studies suggest that women who receive safety planning interventions engage in more safety-promoting behaviors (Murray et al., 2015), which highlights the value of incorporating safety planning elements into microfinance interventions. It is also important to note that in order to significantly prevent and reduce multiple forms of violence, future research might consider ways to explicitly include both men and women as participants in microfinance programs that include safety planning. Because these programs are hypothesized to reduce stress and strain, they may have similar effects on preventing and reducing violence for men. Future research might explore whether microfinance programs have similar effects for men in the U.S.

4.4. Multisector engagement and collaboration

Violence is an issue that affects whole communities. In order to adequately address it, efforts across multiple sectors are needed to prevent violence from occurring (Niolon et al., 2017).. For example, Niolon et al. emphasize the critical roles that the business and health sectors, along with government entities, play in implementing interventions in to prevent IPV (Niolon et al., 2017). Microfinance interventions, when implemented as a violence prevention strategy, naturally bridges the financial, business and health sectors, as well as government entities and public health sectors (Niolon et al., 2017). Ideally, a U.S. microfinance program would have the flexibility to be implemented by a range of sectors and settings. For example, a community health clinic might work with partners to offer a microfinance program to their patients and offer those services onsite to best meet their needs. This would help to address both the health and financial needs of individuals and in turn, reduce multiple forms of violence and improve overall health and wellbeing. When microfinance is implemented along with other violence prevention strategies and approaches at other levels of the social ecology (e.g., Earned Income Tax Credit), its potential to prevent multiple forms of violence may be further strengthened. It is important for evaluations to document the range and types of multisector engagement and collaboration in order to understand how they play a role in whether microfinance programs are effective. It is also critical to assess the other types of economic supports that are available to low-income individuals that may further empower individuals and prevent violence.

5. Conclusion

While research has demonstrated that some microfinance strategies are capable of improving economic wellbeing, financial stress, and violence against women (Pronyk et al., 2006; Yunus, 1999), there are still a number of limitations to microfinance programs worth noting. Particularly in the U.S., there have been few attempts to adapt the microfinance model to the needs of low-income individuals. Drawing from international research, it appears that microfinance strategies alone may not be enough to reduce violence. The studies that found an iatrogenic effect on IPV were evaluations of microfinance programs that did not contain a gender equity component. Based on this, it is important for microfinance programs in the U.S. to consider opportunities to address financial capability, increase savings, include safety planning, and gender equity. It will be important to rigorously evaluate the impact of these adaptations on multiple forms of violence.

As one study discovered, individuals who are at high risk for violence, such as those who are in relationships where IPV is occurring, may be more likely to participate in microfinance programs. In other words, those in violent relationships may be self-selecting into the program (Cepeda et al., 2017). As a result, studies that fail to use random assignment or advanced statistical techniques may produce inaccurate results and will mistakenly attribute higher rates of IPV or other forms of violence to microfinance program participation. Another potential reason for higher IPV rates among those participating in microfinance programs is increased violent and controlling behaviors against the participants (Goetz and Gupta, 1996). It is important for microfinance programs to incorporate safety planning into its content to better protect participants.

Microfinance programs might also incorporate job training and engage multiple sectors (e.g., economic and health) throughout the process. In addition, there is a need to move beyond small loans as a means to financial wellbeing. Prior research suggests that savings (i.e., IDAs) may be a more viable microfinance approach in the U.S. at improving economic wellbeing. Our review of the literature suggests that building savings relieved feelings of financial strain and increased feelings of empowerment, which might translate to preventing and reducing violence. Thus, it is important for the field to carefully adapt microfinance programs for them to be effectively implemented in the U.S. Future research might document these adaptations, bring multiple sectors together to support and implement the intervention, and rigorously evaluate them for their impacts on shared risk and protective factors of multiple forms of violence.

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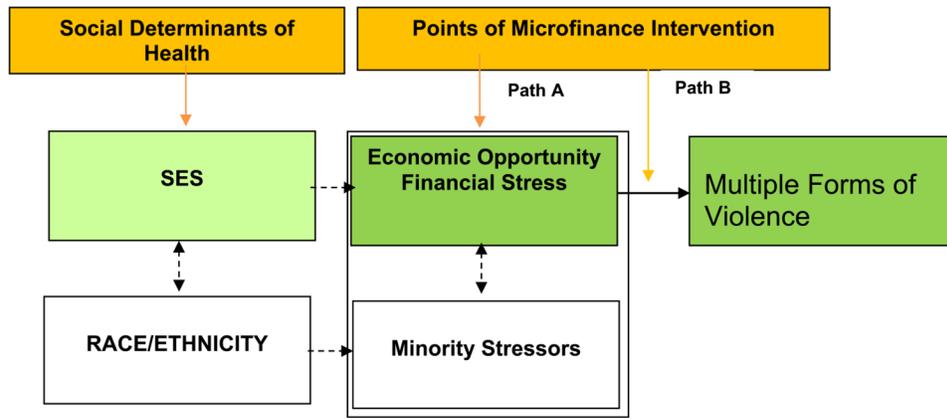


Fig. 1. Guiding framework: social determinants of health, microfinance, financial stress, and multiple forms of violence. Adapted from: LeBlanc AJ, et al. Employment status, work, financial stress, and health: Research relevant to the CDC microenterprise intervention project. Washington, D.C.: CommonHealth ACTION; 2011. 29 p. Contract No.: D10PC184161. Supported by the Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, Division of Violence Prevention.

Table 1

Summary of studies examining microfinance interventions and violence outcomes.

Author (year)	Country	Intervention description	Violence measures ^a	Evaluation design	Effect (positive, mixed, null, negative) ^b
Cepeda et al. (2017)	Guatemala	Membership in a microfinance organization	Economic violence, emotional psychological violence, and coercive control	Cross-sectional with treatment and control group	Positive. Microfinance membership was significantly related to lower levels of economic and emotional psychological violence; coercive control was not statistically associated with microfinance membership.
Ismayilova et al. (2018)	Burkina Faso (West Africa)	Three groups: 1) An economic intervention for women (Trickle Up/TU) 2) A combination of economic intervention and family coaching (Trickle Up Plus) and 3) Waitlist (control arm)	Past year (which the authors coded as "current") and lifetime physical and emotional violence from the current husband	Three-armed cluster randomized controlled trial	Positive. At 12-month follow-up, women in the two treatment arms reported significant reductions in emotional violence from their current husbands; there were no significant intervention effects on physical violence.
Dunbar et al. (2014)	Zimbabwe	Two groups: 1) Shaping the Health of Adolescents in Zimbabwe (SHAZI Pilot Intervention) which is a combined intervention package including life-skills and health education, vocational training, micro-grants and social supports called (treatment) and 2) life-skills and reproductive health education alone (control)	Physical violence (hitting, kicking, and/or shoving), sexual violence (unwanted touching without penetration) and/or forced penetration (rape) since their last study visit	Two-armed, non-blinded randomized controlled trial	Positive. Intervention participants had a marginally statistically significant ($p = 0.06$) reduction in the experience of violence (combined measure of physical/sexual violence or rape) over two years compared to control participants.
Gupta et al. (2013)	Côte d'Ivoire	Two groups: 1) A group savings program (control) and 2) Group savings program plus gender dialogue groups 1 (treatment)	Past year physical IPV, sexual IPV, and economic abuse; attitudes towards justification of wife beating and a woman's ability to refuse sex with her husband	Two-armed, randomized controlled trial	Positive. Compared to the groups savings program alone, the group savings program plus gender dialogue groups resulted in a slightly lower, but non-significant odds of reporting past year physical and/or sexual IPV. Women in the treatment group were significantly less likely to report economic abuse than control group counterparts. Acceptance of wife beating was significantly reduced among the treatment group, while attitudes towards refusal of sex did not significantly change. Compared to control women, treatment women attending more than 75% of intervention sessions with their male partner were less likely to report physical IPV.
Pronyk et al. (2006)	South Africa	IMAGE intervention which includes participatory learning and action curriculum delivered to women in microfinance programs who receive loans under a group lending model	Past year IPV; controlling behavior by an intimate partner in the past 12 months; more progressive attitudes to IPV	Pair-matched cluster randomized controlled trial	Positive. Decrease in reports of IPV; decrease in controlling behavior by a partner in the past 12 months; significantly higher progressive attitudes to IPV in the intervention group than the comparison group.
Sarnquist et al. (2018)	Kenya	Microfinance program that offered 8 weeks of business training, assistance creating a business plan, a small initial loan, and weekly business and IPV social support meetings	Incidence of severe IPV (physical abuse or rape) in the preceding 3 months; incidence of physical and sexual violence against children in the household	Quasi-experimental study with intervention and standard of care communities	Positive. The intervention group showed a decrease in the incidence of IPV. The intervention group also showed a decrease in the incidence of violence against children in the household.

Author (year)	Country	Intervention description	Violence measures ^a	Evaluation design	Effect (positive, mixed, null, negative) ^b
Schuler & Hashemi (1994)	Bangladesh	Credit program	Subjection to domination and violence within the household (e.g., beaten by husband, money taken against will, etc.) included as an indicator of the women's empowerment variable	Analysis of a follow-up survey in 1993 from a randomized two-stage cluster controlled trial; ethnographic data was also analyzed	Positive. Credit membership had significant positive effects on women's level of empowerment.
Austrian & Muthengi, (2014)	Uganda	Two groups: 1) Savings account only (control) and 2) Savings PLUS which included a savings account, mentorship, and group participation and training on reproductive health and finances/personal money management (treatment)	Sexual harassment/violence as measured by the following two questions: 1) In the past six months I have been touched indecently by someone of the opposite sex in my neighborhood, and 2) In my neighborhood, people of the opposite sex tease me as I go about my day.	Quasi-experimental study with intervention and standard of care communities	Mixed. At 12 months post-enrollment, girls in the Savings PLUS group did not experience significant changes in sexual harassment/violence; girls in the Savings account only group reported significantly more sexual violence/harassment
Koenig et al. (2003)	Bangladesh	Savings and credit groups	IPV as measured by the question, "From your husband or husband's family, do you encounter the problem of physical beating?"	Secondary data analysis of Knowledge, Attitude, Practice survey in 1993 that is part of the larger Family Health Research Project	Mixed: In the more conservative area examined, short-term membership in savings and credit groups was associated with higher risk of IPV; in the less conservative area, a woman's membership status to a savings or credit group was not related to IPV, but at the community-level, the percentage of women in savings or credit groups was related to lower levels of IPV.
Glass et al. (2017)	Democratic Republic of Congo	Hybrid microcredit/livestock asset transfer program	For females, victimization of IPV (psychological abuse, physical violence, and sexual violence). For males, perpetration of IPV (psychological abuse, physical violence, and sexual violence)	Randomized controlled trial	Null. At 18 months post-baseline, women and men reported a reduction in experience and perpetration of all forms of intimate partner violence, although the intervention group did not significantly differ from the control group.
Tsai et al. (2016)	Mongolia	Two groups: 1) HIV/STI sexual risk reduction alone (HIVSRR; control condition) and 2) Combined HIVSRR plus microsavings (treatment condition)	Physical or sexual violence from a paying partner in the past 90 days at 3-month and 6-month follow-up	Two-armed, non-blinded randomized controlled trial	Null. There were significant reductions in physical and sexual violence from a paying partner in both groups, but there were no significant differences between the treatment and control conditions.
Bajracharya & Amin (2013)	Bangladesh	Membership in a microcredit organization	Physical or sexual violence by a spouse (domestic violence; DV) in the 12 months preceding the interview	Secondary data analysis of the cross-sectional, nationally representative 2007 Bangladesh Demographic Health Survey	Null. Propensity score matching analyses showed that after adjusting for selection bias, there were no significant differences of physical or sexual violence by a spouse between members of microcredit organizations and non-members.
Green et al. (2015)	Uganda	Study 1: Cash transfer (or microenterprise) program which includes five days of business training, \$150, and supervision and advising. Study 2: The same cash transfer program as Study 1, but half of the women participated in the program with a household partner who helps make financial decisions (typically a spouse)	IPV (physical or emotional abuse in the past 8 months), attitudes towards gender norms, quality of relationship with partner, marital control, support from partner, and autonomy and influence in household purchases	Cluster randomized controlled trial	Null. Study 1: No significant difference in IPV, but small significant increases in marital control, autonomy, and quality of partner relations. Study 2: Significant increase in the quality of relationship with partner, but no effect on IPV.

Author (year)	Country	Intervention description	Violence measures ^a	Evaluation design	Effect (positive, mixed, null, negative) ^b
Murshid et al. (2016)	Bangladesh	Membership in a microfinance organization	Physical or sexual violence by a spouse (IPV) in the 12 months preceding the interview	Secondary data analysis of the cross-sectional, nationally representative 2007 Bangladesh Demographic Health Survey	Negative. The likelihood of experiencing IPV did not vary with microfinance participation. However, the interaction effect of microfinance and better economic status was significantly associated with domestic violence such that women in microfinance programs with relatively better economic status were significantly more likely to report DV than women who were very poor (had few material assets).

^a All identified studies measure female IPV victimization, with the exception of Dunbar et al. (2014) whose sample was adolescent girls. The authors asked about physical and sexual violence and rape, but the perpetrator did not have to be a partner. Additionally, in Glass et al. (2017), females comprised 84% of the sample, so in addition to measuring female victimization, male perpetration was also assessed. In Gupta et al. (2013), the gender dialogue treatment targeted men and women, but the measures focused on female victimization. Finally, Samquist et al. (2018) also included a measure of child victimization in addition to female victimization.

^b Positive = treatment group experienced significant reductions in violence compared to controls; Mixed = there was some benefits to treatment on violence outcomes but the pattern of findings were not consistently positive nor significant; Null = no significant differences between treatment and control groups on violence outcomes; Negative = treatment group experienced significant increases in violence compared to controls.