The Socio-Ecological Intersections of the Opioid Epidemic and Violence Against Women: A Scoping Review

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In the last two decades, the use of opioids, both prescription and non-prescription, has increased rapidly, leading to a public health crisis with a series of consequences and concerns for individuals, families, communities and formal care and criminal justice systems. The impact of the "opioid epidemic" has been explored in the criminal justice and public health context (Terplan, 2017), but little research has been done to understand the intersection of the current opioid epidemic and violence against women, such as dating and sexual violence (Stone & Rothman, 2019). While previous literature (see El-Bassel, Gilbert, Wu, Chang & Fontdevila, 2007; Jessell et al, 2017; Simonelli, Pasquali, & DePalo, 2014) has addressed the co-occurrence of substance use and abuse and intimate partner and sexual violence, in particular from a selfmedication or coping perspective, current work has not explored the intersections of the opioid epidemic and violence against women in the nonprofit service sector and criminal justice response. Understanding how the opioid epidemic and violence against women intersect illuminate areas of identification, intervention and prevention that could simultaneously address violence against women and substance misuse. The purpose of this scoping review is to map out the intersections of opioid use and violence against women, identify gaps in the current research and evaluation, and propose recommendations for next steps to inform collective response.

Nationwide, research and practice communities are working to address the public health crisis of the opioid epidemic and subsequent impact on the nonprofit service sector and criminal justice system. In a recent analysis of United States mortality files from 1999 to 2017, Scholl et al (2019) found 702,568 deaths were the result of drug overdose with 399,230 of the overdose deaths were caused by opioids. Medical, law enforcement, and social service professionals have been scrambling to adequately respond to the epidemic and prevent further loss of life. Institutions are readily establishing and implementing research agendas to discover and implement effective, evidence-based responses. For example, the National Institute of Health identified 26 specific research priorities to be carried out by its new initiative Helping to End Addiction Long Term (HEAL). The HEAL Initiative research priorities focus on developing effective opioid addiction and pain management treatments (NIH HEAL Initiative Research Plan, n.d.). The National Institute of Justice (NIJ) Drug and Crime Research Portfolio established a strategy conducting studies on opioids in epidemiology, prevention and intervention, drug markets, market disruption, and forensic science.

Much like substance misuse, in the last several decades violence against women has emerged as a widespread public health and criminal justice crisis. The Centers for Disease Control and Prevention (CDC) estimate that one in four women in the U.S have experienced sexual violence, physical abuse or stalking (CDC, 2018) creating a major public health concern with impact on individuals, families, communities and society. The demand for research into women's victimization has increased and led to multi-faceted research priorities informing law enforcement, social service, medical and public health responses (Sacco, 2019).

The opioid and violence against women epidemics are both a public health and criminal justice issue that affects every level of the social ecology and has greatly impacted the criminal justice, non-profit, and healthcare service sectors. These two epidemics intersecting together has created additional barriers for victims to receive services and justice, requiring a dynamic response. While there is a well-established relationship between substance use and violence, there has been little research conducted on the intersections of the current opioid epidemic and violence against women (Rothman, Stone & Bagley, 2018; Stone & Rothman, 2019). Women as mothers and the impact of their opioid use on their pregnancy and children has been at the forefront of research priorities (Meyer, et. al., 2019). However, attention is shifting to how the opioid epidemic is affecting women's safety as more women receiving help for interpersonal violence like sexual assault and domestic violence are presenting with opioid misuse as well. The National Center on Domestic Violence, Trauma, and Mental Health led a series of webinars on the intersections of opioid use and domestic violence (Packard & Warshaw, 2018) and released a study on how substance use is a tool for coercion by abusive partners (Warshaw, et. al., 2014).

Using a socio-ecological framework, this scoping review of research literature and policy will inform future social service and criminal justice research on the impact of opioids on women who have experienced intimate and interpersonal violence. Socio-ecological frameworks are commonly used in both substance use/abuse and violence against women research and practice to understand the multiple infrastructures and context in which these issues exist and proliferate (Heise, 1998; Sitaker, 2007). Due to the complexity of identifying the intersections of the opioid epidemic and violence against women, as well as subsequent research, a socio-ecological framework was used to organize the literature and research guidelines. Ecological models consider both the individual and their environment in which they operate (McLeroy, Bibeau, Steckler, & Glanz, 1988). An ecological framework was the most appropriate choice to guide this review because risk and protective factors multiple factors must be considered when attempting to understand how violence against women and the current opioid crisis, two complicated epidemics, intertwine and impact each other. For the purpose of this review, a

socio-ecological model used by Sitaker (2007) and adapted from Heise (1998) will be used and is detailed below in the methodology section. Heise and Sitaker previously developed and applied socio-ecological models to understanding violence against women. Using a socioecological framework to understand the literature on violence against women and the opioid epidemic will aid identification of comprehensive research and evaluation needs across disciplines to enhance practices for social service systems and identify best practices for a criminal justice response.

Methods

Scoping reviews aim to create a snapshot or map of the components of a complex issue and available research on the subject (Arksey & O'Malley, 2005). It is ideal for research that includes a variety of study medium, such as academic literature, policy papers, and media coverage. Scoping reviews include the breadth of information that is available and do not just include peer-reviewed academic journal articles. Arksey & O'Malley (2005) identify four reasons for conducting a scoping review: (1) examine available research activity; (2) see if there is value in conducting a systematic review; (3) summarize and disseminate research to individuals who would benefit from understanding research on a topic such as policy makers and service providers; and (4) identify gaps in research. For the purpose of this study, a scoping review was undertaken about the intersection of violence against women and the opioid crisis and to identify research gaps and to summarize and disseminate information to criminal justice, social service, policy, and public health professionals. A scoping review was ideal for this study because in addition to available research, media and policy information was used to provide further context and information on the issue and subsequent development of research recommendations.

Academic Literature Search

The academic literature search was conducted from June 2018 to May 2019 and was completed when repeated searches were producing the same articles. The literature search utilized databases Google Scholar, SocINDEX, PsycARTICLES, PsycINFO, Science Direct, ERIC, Criminal Justice Abstracts with full text, HeinOnline, and Academic Search Complete. The search timeframe was from 1995 to 2019. Search terms consisted of "opioid use disorder", "opioid use disorder AND violence against women", "violence against women opioid", "opioid and domestic violence", "opioid and violence against women", "opioid epidemic and violence against women", "opioid and domestic violence or intimate partner violence", "opioid and human trafficking", opioid epidemic and women", "opioid and violence", violence against women and drug abuse", "opioid use and violence", "opioid use AND intimate partner violence or domestic violence or partner abuse", "methadone AND intimate partner violence or domestic violence or partner abuse", heroin AND intimate partner violence or domestic violence or partner abuse", heroin AND trafficking", "opioid AND trafficking", "heroin AND sexual assault", "opioid AND sexual assault", "heroin AND violence", and "human trafficking and drugs". A backward and forward search, which includes reviewing any articles that referenced each article and reviewed the referenced used in the article, was also conducted to identify any additional relevant literature.

Inclusion and exclusion criteria. For the purpose of this scoping review, the inclusion and exclusion criteria were open because the goal of the study is to understand the current state of the research from 1995 to 2019. The inclusion criteria for literature on opioids and violence against women was all-encompassing to ensure nuanced information was captured. Research on substance abuse broadly was included if it involved violence against women. Forms of opioids

included natural and semi-synthetic opioids, synthetic opioids, heroin, and methadone. Violence against women included intimate partner violence, sexual assault, family violence, child abuse, child sexual abuse, human trafficking, and stalking. Since only a few research studies focused on opioids and violence against women specifically, articles were included for review that addressed these epidemics separately to enhance the review. A total of 109 academic articles were identified based on the inclusion criteria above. To further streamline the scope of this review of two complex issues, only studies conducted in English and in the United States were included.

Policy Search and Inclusion

A search for policy related to the intersections of violence against women and the opioid epidemic was conducted. Terms searched for this review include: state policy on opioids And intimate partner violence; state policy on opioids And violence against women; criminal justice And opioids And violence against women; national policy on opioids And violence against women; national policy on opioids And intimate partner violence; policy, opioids, And violence against women; policy, opioids And intimate partner violence. The following databases and search engines were utilized: google general search engine, google scholar, ProQuest, Hein Online, Congressional Research Services website, Center for Budget and Policy Priorities website, and West Law. Additional articles were identified from Twitter.

Inclusion and exclusion criteria. Inclusion criteria was policy specifically addressing violence against women and the opioid epidemic; however, to date, we were unable to identify any policies specifically on this issue. The policy inclusion process was informal and incorporated into the review to highlight the greater context of the issue and the importance of understanding how the opioid epidemic and violence against women intersect to develop

effective policies.

Coding Using Socio-Ecological Framework

The current study uses a socio-ecological framework adapted by Sitaker (2007). This model includes the following levels of analysis:

- Individual factors, such as personal histories, biological and developmental factors, demographics
- 2. Interpersonal relationships, such as intimate partners, friends, and family
- 3. Community, such as institutions, neighborhood, social networks, social structures
- 4. Cultural context, such as general views and attitudes, social and economic environment For the current scoping review, the literature was coded using these four levels of analysis to understand the intersections of violence against women and the opioid epidemic and the state of the research.

Results

There was very little literature available that focused specifically on opioids and violence against women, and none were identified in criminal justice specific academic journals. A scant 10 articles and resources directly addressed opioids and women's IPV and sexual assault victimization (Branstetter et al., 2008; Cole & Logan, 2010; De Dois, Anderson, Caviness & Stein, 2014; El-Bassel, Gilbert, Wu, Chang & Fontdevilia, 2007; El-Bassel, Gilbert, Frye, Wu, Go & Hill, 2004; Gilmore, Hahn, Jaffe, Walsh, Moreland & Ward-Ciesielski, 2018; Hall, Golder, Higgins & Logan, 2016; Rothman et al., 2018; Stone & Rothman, 2019 and Warshaw & Packard, 2018). Of these articles, only two (Cole & Logan, 2010; Hall et al 2016) focused on criminal justice involved women and opioids. The bulk of the articles used for this scoping review focus more generally on substance misuse and violence against women, both collectively and individually. Below, the findings are arranged by individual, interpersonal, community and cultural related factors impacting the intersection of violence against women and the opioid epidemic.

Relationship between Opioid Use and Violence Against Women

Violence against women and substance misuse, including misuse of opioids, have a multidirectional relationship. Experiences of violence both contribute to the use of substances, and substance use increases risk for violence (Armstrong et al., 2019; Stone & Rothman, 2019). Personal use of opioids can exacerbate risk for sexual assault due to the effects of the drug. Prior trauma and substance use lowers a person's ability to utilize their executive functioning skills, making them more vulnerable to further victimization (Decker et. al., 2017; Decker et. al., 2016). In a study of sex workers, researchers found high levels of past and current violent victimization (Surratt, et al, 2004). Using substances such as heroin oftentimes served as the impetus to engage in sex work, and also led to additional victimization as the sex workers were often high when they worked, which put them at greater risk for violence. El-Bassel, et al (2001) also found high rates of trauma history among a sample of sex workers, and highlighted the potential for a repeated cycle of violence and drug use. In another study, women who reported using heroin were more likely to report physical, sexual, and injurious intimate partner violence than women who did not use heroin (Gilbert et al, 2012). Non-medical opioid using young adults in a study conducted by Jessell et. al. (2017) reported numerous instances of sexual assault resulting from the effects of opioids rendering them unconscious or at a diminished level of functioning. Mateu-Gelabert et al (2014) found women who have passed out due to opioid consumption were vulnerable to sexual assault because their peers considered them legitimate targets for using drugs and not protecting themselves while high.

Non-prescription opioid use can eventually lead to the use of other drugs such as cocaine or heroin, further compounding vulnerability for future trauma and lack of safety (Muhuri, Gfroerer, & Davies, 2013; Jessel, et. al., 2017). Some non-prescription opioid users transition to heroin because it is a less expensive alternative (Mateu-Gelabert, et al, 2014). In a study of women who were experiencing homelessness and unstable housing, sexual violence and nonprescription opioid use were predictors of future use of stimulants (Riley et al, 2015). Transitioning from prescription opioids to heroin, cocaine, and other street drugs can increase the chance of experiencing victimization, thereby further substance use may be required to minimize the effects of trauma. One study found women who used heroin increased the likelihood of experiencing injurious intimate partner violence (Gilbert et al., 2011). Another study on women in methadone maintenance treatment found women who used heroin and crack cocaine were more likely to experience intimate partner violence in the past 6 months; however, this was not the case for heroin use alone (El-Bassel et al 2004). Women in methadone maintenance treatment who experienced intimate partner violence exhibited more depressive symptoms and were significantly more likely to have used cocaine (DeDios, Anderson, Caviness, & Stein, 2014). While more research is needed on effective treatments for women experiencing interpersonal violence and opioid use, as well as other substances, a study in 2008 indicated women receiving treatment for opioid use and had a history of sexual, emotional, or physical abuse made less improvement in treatment than those without a history of abuse (Branstetter, Bower, Kamien, & Amass, 2008). In addition, recovery from psychiatric issues and alcohol use was slower than those without a history of victimization.

Individual Factors

Childhood trauma. Individual factors consist of personal experiences and qualities that

impact individual behavior. A person's childhood development is an example of an intrapersonal factor that is known to influence an individual's life trajectory, including the risk of future victimization and substance abuse. Adverse childhood experiences (ACEs) encompasses all experiences of abuse, neglect, and other life challenges that occur before the age of 18 (Filitti, et. al., 1998). Research shows ACEs impact the long-term quality of life for individuals, particularly those who experience multiple traumatic events in childhood (Filitti, et. al., 1998). High levels of ACEs often lead to negative outcomes in adulthood including poor health, risky behavior, mental health challenges, and lower financial stability (Filitti, et. al., 1998). In a study of 457 individuals with opioid use disorder entering a substance abuse treatment program, higher ACEs scores was associated with recent drug use, parental drug use, and earlier onset of illicit drug use (Stein, et. al., 2017). While the study included both females and males, females were more likely to report a greater number of ACEs, particularly childhood sexual abuse than men (Stein, et. al., 2017).

Another study on female exotic dancers found that those most vulnerable to intimate partner violence and client violence utilized hard drugs including heroin and buprenorphine and had a history of childhood abuse (Decker, 2017). Austin, Shanahan, & Zvara's recent analysis (2018) of the National Longitudinal Study of Adolescent to Adult Health data revealed similar findings. Individuals between the ages of 24 to 32 years who reported a history of childhood abuse of any kind were more likely to have taken prescription opioids in the past four weeks. It is possible that individuals who experienced childhood abuse may experience chronic pain and other health issues associated with the abuse and require the use of opioids to manage pain symptoms, or individuals may be attempting to minimize trauma symptoms by self-medicating with opioids, but the reason for the association between childhood abuse and future opioid use is unknown. In a study exploring trauma histories and opioid, cocaine, and nicotine use, researchers found the group who used opioids had an earlier onset of trauma and more likely to have experienced a traumatic event in childhood than those who used cocaine and nicotine (Lawson et al, 2013). Individuals seeking buprenorphine treatment report high levels of various forms of childhood trauma (Sansone, Whitecar, & Wiederman, 2009). Multiple victimizations over the lifespan significantly increased the risk of non-medical opioid use (Cole & Logan, 2010). Given the relationship between opioid use and childhood victimization, it stands to reason that the psychological and physiological impact of trauma would correlate with future opioid use and additional experiences of interpersonal violence (Wisdom, et. al., 2008).

PTSD. A traumatic experience is an event that overwhelms a person's ability to cope with the situation, particularly if traditional coping skills were not learned during childhood due to hardship and abuse (Cloitre, et. al., 2009; Hein, Cohen, & Campbell, 2005). Studies have shown a multi-directional relationship between Post-Traumatic Stress Disorder (PTSD), violence against women and substance use, (Najavitz, Weiss, & Shaw, 1997; Najavitz & Walsh, 2012). In a study of 77 women with PTSD and substance use disorders, researchers found that some women with more severe trauma symptoms purposely made the choice to use substances because they believed it would help them manage their traumatic reactions (Najavits & Walsh, 2012). In a study looking at substance use among college students (Avant, Davis, & Cranston, 2011), researchers found that women who met criteria for PTSD diagnosis reported more opioid use and more days of drinking alcohol. Opioid use was associated with avoidance symptoms, emotional numbing symptoms, and hyperarousal symptoms.

Some research indicates that individuals with a diagnosis of PTSD and hyperarousal symptoms, may be more likely to self-medicate with opioids as a way to calm their highly

anxious state (Avant, Davis & Cranston, 2011; Tull, Gratz, Aklin, & Lejuez, 2010). In a study of women in Alaska with opioid use disorders, 84% of the women experienced hyperarousal as a PTSD symptom and self-medicating was a common coping strategy (Golden, 2017). Tull et al. (2010) also found individuals with hyperarousal symptoms of PTSD used heroin as a possible way to manage a hyperactive nervous system.

Those with opioid use disorder may be at a higher risk for developing severe PTSD symptoms than the non-using population. Meier et al (2014) found individuals who used sedatives in addition to opioids were four times more likely to develop severe PTSD symptoms. Women were more likely than men to have severe PTSD and use prescription opioids. Moderate association with age, 18-34 year olds were more likely to use opioids and develop severe PTSD symptoms (Meier, et. al., 2014). In a sample of pregnant women with substance use disorders including opioid use, those with PTSD were more psychologically impaired than those without PTSD and had problems controlling their behavior (Eggleston, 2009).

Women who have been traumatized by interpersonal violence may be at higher risk for suicidal ideation and suicide attempts. In a study of 60 participants receiving a sexual assault forensic medical exam, researchers found a negative association between prescription opioid use and suicidal ideation; however, a significant association was discovered when an individual had a prior history of sexual assault (Gilmore, et. al., 2018).

Interpersonal Factors

Opioid related violence in families and intimate partner relationships. Abusive partners may use a type of coercive control—substance use coercion- to harm their partners. In a sample of domestic violence hotline users, 43% of callers had experienced at least one form of substance use coercion, the most common being threatening to report use to CPS or law

enforcement (Warshaw, Lyon, Bland, Phillips & Hooper, 2014). There is a strong co-occurrence of history of violence victimization and substance misuse among female medication-assisted treatment (MAT) users. In one study, 86% of female methadone clinic users had experienced domestic violence (El-Bassel, 2004). In a sample of sex workers, opioid use was higher among participants who had experienced domestic violence (Argento et al., 2014). Similarly, Smith et al. (2012) found that domestic violence victimization and perpetration was more likely with all types of substance misuse, and that opioid use was positively associated with victimization.

Research has shown mixed results around whether opioids cause an increase in intimate partner violence perpetration. El-Bassel et al (2007), found high rates of domestic violence perpetration among men in a methadone clinic in New York City. One study showed an increase risk for intimate partner violence (IPV) perpetration for men receiving pharmacotherapy for opioid dependence. Specifically individuals who used cocaine and benzodiazepine while taking medications such as Suboxone also increased risk for physical violence against partners. However, more research is needed because it is unclear if there is another factor impacting the results (Crane, Schlauch, Devine, & Easton, 2016). In a study of male and female offenders, a diagnosis of opioid use disorder indicated reduced IPV perpetration among men, but did not have the same effect among female perpetrators (Crane et al, 2014). In addition to a high rate of intimate violence perpetration, men in a methadone maintenance program who abused their partners were also more likely to share or use dirty needles, further increasing their partners' risk of harm (El-Bassel, 2001). In a study on adolescents and violence, Murphy, McPherson, & Robinson (2014) found opioid abuse using their own prescriptions was the largest indicator of adolescent engagement in violent behavior, followed by alcohol abuse and opioid abuse from diverted prescriptions. While the study did not focus on family violence, the study is important

in that adolescent violent behavior related to opioid abuse may not be due to drug seeking activities. This has implications as to how opioids could affect adolescents in the home.

In a study on opioid dependent fathers, participants reported greater prevalence and frequency of minor and severe physical aggression, severe psychological aggression, and severe sexual coercion. There was also greater risk of injury to the mother. In addition, the study found that there was severe sexual coercion directed at the opioid abusing father by the mother. While more research is needed on the relationship dynamics within opioid abusing families, the authors consider the physiological impact opioid use has on men and sexual functioning, and the challenges of navigating sexual relations while using opioids (Moore, Easton, & McMahon, 2011). Another study on opioid dependent fathers indicated no significant association of negative parenting style related to opioid use alone, but fathers with a history of severe intimate partner violence was strongly associated with negative parenting style (Smith Stover & McMahon, 2014).

Women may use opioids and other substances to lessen the emotional pain of being in an abusive relationship in which they are unable to leave (Baur, Leukefeld, & Havens, 2016; Moe, 2006). Another study found high levels of lifetime non-medical opioid use in women who were victims of recent partner violence, particularly in the rural areas of the state (Cole & Logan, 2010). Verbal abuse may escalate related to the women using substances, due to the perception of their "low status" as drug users, and also helped them numb the physical and emotional pain while in abusive relationship (Gilbert et al, 2001)

Domestic violence occurring in relationships with one or both partners are substance abusing adds a complicated dynamic that plays into the frequency and initiators of abuse. For example, if a female partner leaves the home to obtain opioids for the couple, it may cause her to become more vulnerable to abuse by the partner regardless of what she had to do to obtain the opioids (Simmons & Singer, 2006). A few studies researching these dynamics found that the female partner may be accused of having sex in exchange for drugs (Simmons & Singer, 2006; Gilbert et al, 2001). The same study explored traditional gender roles and found that violence could escalate because the female partner obtained drugs for the couple, a role believed to be traditionally filled by the male partner (Simmons & Singer, 2006).

Another area where opioid use may impact an abusive relationship, is when one of the partners wants to stop using. This causes a strain in the relationship and subsequent increase in abuse (Simmons & Singer, 2006). Using substances to coerce and control partners' behavior was also present in the literature (Moe, 2016; Gilbert et al, 2001). These abusive and controlling tactics can make it especially challenging for the victimized partner to leave the relationship.

To further complicate the dynamics of substance use in abusive relationships, some research found that obtaining opioids for a partner to prevent withdrawal symptoms was considered an act of caregiving (Baur, Leukefeld, & Havens, 2016; Simmons & Singer, 2006). Opioid withdrawal is considered an exceptionally unpleasant experience and part of the care partners show for each other is to ensure there are enough opioids available to prevent withdrawal (Simmons & Singer, 2006; Gilbert et al, 2001). However, withholding opioids when a partner is entering withdrawal serves as a powerful abusive tactic. Partners may become more violent when going into withdrawal from heroin, particularly if the woman doesn't give money to him to buy drugs (Gilbert et al, 2001).

Drug network violence. Preliminary research suggests violence against women is widely experienced with their drug networks. Drug networks may consist of partners, family members, friends, and relative strangers. Family members and communities that support drug use can

make it very difficult for women to abstain from initially using substances, and maintain sobriety as the options for engaging in substance use is greater than avoiding substances (Moe, 2006). In rural areas, drug networks may consist largely of community and family members with whom there are long standing prior relationships and close community ties, possibly making it easier to engage in diversion and particularly difficult to exit the network (Keyes, et al, 2014). Rural women find that substance abuse treatment and mental health care is difficult to access due to transportation issues and cost. Also, many of the women face financial hardships, so they sell prescription opioids for money for food and other necessities. (Baur, Leukefeld, & Havens, 2016). While not specific to women, one study found patterns of collaboration and exploitation and abuse related to transportation issues in going to the doctor or pharmacy to obtain opioids in rural and suburban areas (Green, et al, 2013).

Jessell et. al. (2017) found that many young adults engage in opioid use with their peers. Opioids are shared amongst the network and experimental opioid use is initiated within the peer group. The transition from non-medical opioid use to heroin and other hard substances also takes place within the peer network (Mateu-Gelabert et al, 2014). In a study conducted in rural Appalacia, network members used threats and violence to prevent women from leaving the network (Baur, Leukefeld, & Havens, 2016). Women in the same study reported being afraid of retaliation should they try to leave the drug network. Continuing to use opioids served as a protective factor against violence. Sexual assault of women within drug networks is common (Jessel, et. al., 2017). Besides the vulnerability to sexual assault stemming from the physiological effects of opioids rendering users incapacitated, sexual assault is experienced within the act of obtaining opioids and the expectation of sex in exchange for drugs (Jessel, et. al., 2017). The act of obtaining opioids through diversion outside of usual drug networks also increases vulnerability for violence. While not specific to violence against women, one study looked at partnerships that were created for diversion and found patterns of exploitation that included coercion and abuse (Green et al, 2013).

Community Factors

Witnessing violence. Using data from the 2005 National Survey of Adolescents – Replication, McCauley et al. (2010) explored the relationship of traumatic events on adolescent use of non-medical use of prescription drugs and found that witnessing violence was the only significant risk factor for subsequent use of opioids. Similarly, in a study of individuals seeking buprenorphine treatment, reports of childhood trauma was exceedingly high, with witnessing violence as one of the two more reported traumatic events (Sansone, Whitecar, & Wiederman, 2009). Neither of these studies were specific to women, but are relevant considering the high rates of family and network violence, to which young people may be exposed.

Law enforcement. While law enforcement plays an important role in addressing the opioid epidemic and violence against women, no academic literature emerged in the review search related to law enforcement efforts to address the intersection of these two issues. Law enforcement is struggling to respond to the opioid epidemic and understandably focused on preventing overdose deaths (PERF, 2017). Law enforcement personnel recognize a different approach is needed that requires them to act as social workers, medical workers, and police all in one (PERF, 2017). No account of how law enforcement is responding to the opioid epidemic mentioned violence against women and how the intersection of the two issues are appearing and impacting their work.

Women who experience abuse and utilize substances may be afraid to report to law

enforcement, which minimizes law enforcement's ability to effectively respond to violence against women. In one study, female exotic dancers would seek assistance from club management for client related violence, but did not reach out to law enforcement or utilize hotlines. This may be due to the fear of being arrested for engaging in drug related activity or the sex trade; however, more research is needed to understand the low help seeking rate (Decker et al, 2017). Other research has demonstrated that individuals who recently experienced an overdose only called for emergency assistance 51% of the time, possibly out of fear of arrest and police response (Wagner et al, 2015). Research is needed to explore whether women experiencing interpersonal violence are even less likely to call police in an emergency if they or the abuser is using opioids.

Corrections systems. In a study of women in the criminal justice system, there were no differences found in the types of criminal charges between those who had non-prescription opioid use (NPOU) and non-users (Hall, Golder, Higgins & Logan, 2016). However, NPOUs reported a significantly higher amount of physical violence by intimate partners and non-partners. NPOUs were also more likely to have a PTSD diagnosis and be more affected by their PTSD symptoms (Hall, Golder, Higgins, & Logan, 2016). If individuals are managing pain and PTSD symptoms with NPOUs, they may encounter more parole violations and ultimately struggle to effectively reintegrate into society as they continue to self-medicate without the proper treatment (Hall, Golder, Higgins, & Logan, 2016). In a study of 406 victimized women on probation and parole in an urban community, 45% of the women reported use of at least one illicit substance in the past year (Golder et al, 2014). Among probationers, having been in a controlled environment was associated with a higher prevalence of illicit substance use as compared to parolees, indicating the possible effect incarceration itself has on women who use

substances. Further compounding chances of recidivism, another study found women sentenced to drug court had high rates of trauma exposure and hardship, including homelessness and prostitution (Sartor et al, 2012). Some research has shown that overdose deaths increase after a period of abstinence such as what one might experience during incarceration (Wagner, et. al., 2015).

Violence against women service sector. The community VAW service sector is comprised largely of shelters, non-residential centers, housing programs and non-profits that serve victims of domestic and sexual assault (Macy, Giattina, Sangster, Crosby, Montijo, 2009; NNEDV, 2019). There are over 1800 identified domestic violence programs that serve over 74,000 victims on any given day (National Network to End Domestic Violence (NNEDV), 2019). These organizations typically interface in a formal or informal collaboration with the criminal justice system and other non-profits to provide comprehensive services to victims of violence (Macy et al., 2009). Community-based VAW programs typically operate in a voluntary service model based in an empowerment approach, where in victims select the services they want to engage in, without mandate to participate in a particular intervention (Nnawulezi, Godsay, Sullivan, Marcus, & Hacskaylo, 2018; Sullivan, 2018). The voluntary service approach is codified in policy through the Family Violence and Prevention Services Act (FVPSA) as the practice model for those receiving this funding (Nnawulezi et al 2018). Some of the most common services provided by community VAW organizations are advocacy, counseling, children's services, housing, prevention education, and shelter (NNEDV, 2019).

There is a substantial lack of research about interventions to address concurrent domestic and sexual violence victimization, resulting trauma impact, and substance misuse in the community VAW organization setting. The multidirectional relationship between substance misuse and domestic and sexual violence necessitates a flexible and skilled community approach, from criminal justice systems, substance misuse treatment centers, and VAW programs (Armstrong, Reed & Bennett, 2019; Martin et al., 2008; Stone & Rothman, 2019). For the last several decades, researchers, policy makers and practitioners have established the strong co-occurrence of substance misuse among domestic and sexual violence victims using community based VAW programs, including shelters, housing, and counseling (Armstrong et al., 2019; Martin et al., 2008). Further, substance misuse use treatment centers and MAT programs have documented high rates of domestic and sexual violence victimization among women at methadone clinics (El-Bassel, 2004; Di Dois, Anderson, Caviness & Stein, 2014). However, fear of stigma, lack of training, and criminalization of substance misuse has prohibited a sensitive and skilled training response (Packard &Warshaw, 2018; Rothman & Stone, 2019).

The traditional service response in VAW organizational settings to substance misuse has been lacking. Despite high prevalence of substance misuse among victims, and the strong presence of additional risk factors for use, such as chronic pain and mental health concerns, few VAW organizations have dedicated substance misuse counseling staff or specialized programs (Armstrong et al., 2019; Martin et al, 2008; Rothman et al., 2018). Agency directors report a variety of screening and referral approaches, with policy tensions around housing clients with active substance use (Rothman et al., 2018). A study of 71 VAW agencies in one state found only half had policies related to substance misuse, and a third of the agencies would refuse shelter for intoxicated clients. There was a lack of established collaborations, such as MOUs and cross training, among the VAW programs with substance treatment agencies (Martin et al., 2008). Recent scholarship has suggested that substance treatment agencies are more likely to address domestic and sexual violence internally with their own staff, and VAW programs address substance misuse externally, by referral to a community agency (Armstrong et al., 2019). In a survey of over 200 organizations addressing VAW and substance misuse in some capacity, only 21% of VAW organizations provided substance misuse treatment in house, compared to 65% of substance use treatment agencies that address VAW in house (Armstrong et al., 2019). VAW agency directors report a lack of services for substance misuse, particularly in rural areas (Rothman et al., 2018). In Canada, shifting governmental policy guidance has changed VAW agency response to substance misuse. There are many perceived benefits to increased VAW organizational action on substance misuse, including increased client safety, improved service access and more non-judgmental agency environment (Hovey, Roberts, Scott & Chambers, 2019). Staffing, rural locations, and number of shelter beds was associated with lower levels of substance misuse treatment and policy change in VAW organizational settings (Hovey et al., 2019).

Future directions for interventions in the VAW community organizational setting include co-located services for substance misuse and trauma impacts, healthy relationship education, safety planning for people misusing substances and harm reduction skills and training (Armstrong et al., 2019; Packard & Warshaw, 2018, Stone & Rothman, 2019). Strong community collaborations are needed to increase service access (Martin et al., 2008; Packard & Warshaw, 2018). Integrated approaches incorporating both substance misuse and domestic and sexual violence best practices are more impactful than service as usual to best serve victims using substances or in recovery (Schumacher & Holt, 2012). VAW organizations need more training, particularly in harm reductions techniques; use of naloxone; legality concerns with client substance use; and screening and identification of substance misuse (Armstrong et al., 2019; Packard & Warshaw, 2018; Rothman et al, 2018). Additional training needs for both VAW and substance use treatment organizations include increased understanding of the abuse tactic and substance use coercion (Packard & Warshaw, 2018). Safety planning can be enhanced with attention to substance misuse, using harm reduction principals (Packard & Warshaw, 2018). Other promising practices policy guidance about onsite use policies, individual locked medication storage, and services for those in recovery (Packard & Warshaw, 2018). Educational interventions for service providers may be a promising approach to bridging treatment gaps. A cross training intervention in Canada for both substance treatment and VAW professionals found significant increases in knowledge at posttest, as well a reduction in negative attitude and stigmatizing behaviors towards substance misuse and domestic and sexual violence (Mason, Wolf, O'Rinn & Ene, 2017).

Other community service sectors outside of the violence against women organizational setting also provide a possible avenue to engage victims misusing opioids with services. Recent opioid overdose survivors were more likely to have presented in the criminal justice or hospital systems in the last six months (Wagner, Liu, Davidson, Cuevas-Mota, Armenta, & Garfein, 2015).

Cultural and Society

Policy. Heise (1998) explains that policy is a reflection of culture, and policy has the ability to change culture. Policies addressing the current opioid epidemic reflect this philosophy and there is a shift in how systems respond to substance abuse. Within the last decade, public health professionals began acknowledging that addiction is a disease for which evidence-based prevention and treatment programs needed to be administered by the criminal justice system. Julie Warren points out in her 2018 article entitled *Defining the Opioid Crisis and the Limited Role of Criminal Justice System Resolving It*, that the criminal justice system was not designed to

control public health events, instead the system continued its "tough on crime" approach that presumes that incarceration is the answer to justice for both drug users and abusers alike. However, recent policies indicate an attempt on behalf of the criminal justice system to respond holistically, specifically to minimize the high rate of opioid overdoses. For example, law enforcement officers around the country are carrying and administering naloxone to prevent overdose deaths (PERF, 2017). Research has shown police presence may cause substance users to rush their injections to prevent police interference, increasing the chance of an overdose (Wagner et al, 2015).

Many communities now collaborate with the criminal justice system to provide services to victims of violence and substance abuse treatment (Danis & Bhandari, 2010; Macy et al, 2009). The Office of National Drug Control Policy has encouraged alternatives to incarceration by providing family based-programs, and treatment interventions that are trauma-informed. Drug courts provide alternatives to jail sentencing with intense supervisions, drug testing and treatment (Warren, 2018; Califano, 2010). Law enforcement officers who respond to overdoses with medical assistance and referrals to services could increase the likelihood individuals will seek emergency assistance in the future. While this is a significant change in criminal justice response in reaction to the opioid epidemic, research is needed to evaluate the effectiveness of these efforts and how these criminal justice policies affect women who are experiencing interpersonal violence. Researchers suggest that these new provisions *should* be helpful in addressing women's needs, with the caveat that more research and evaluation of programs is needed, and to date no official policy has been written to make this collaboration a concrete and long-lasting effort (Simmons & Singer, 2006; Armstrong, Reed & Bennet, 2019; Martin et al., 2008; Stone & Rothman, 2019).

While the criminal justice system is attempting innovative approaches to minimize overdose deaths by utilizing a more holistic response to individuals who are using opioids, there is another policy trend taking place that encompasses a more traditional criminalization response. Statutes that authorize prosecution for drug-related overdose deaths as criminal homicide have been implemented or there has been in increase in individuals charged in 21 states (Prescription Drug Abuse Policy System, 2019). Although there are variations across the 21 states, essentially anyone who shares or sells drugs to a person who then dies by overdose can be charged with a homicide. This is a recent development and there is little to no research on the impact these policies have on the opioid epidemic. There is also no research or information on what this policy would mean for women who are in abusive relationships and are coerced or forced into diversion practices, using and selling opioids.

Child welfare policy. The intersections of interpersonal violence against women and the opioid epidemic should also be explored in child welfare policy. Throughout many states pregnant women and women with children are reported to child protective services for using drugs or seeking treatment. Women with children fear being caught using drugs or reporting domestic abuse to law enforcement for the fear of losing their children and/or being incarcerated (Pinkham, Stoicesu, and Myers 2012; Warren, 2018). By seeking treatment these women admit to using drugs and/or being connected to the criminal justice system, which leads to them losing custody of their children (Pinkham, Stoicesu & Myers, 2012; Jessell, Mateu-Gealbert et al., 2017; Buer, Leukefeld & Haven, 2016). Child protective services is frequently used as a means to control women and prevent them from leaving violent relationships and drug networks. Furthermore, involvement with child protective services exacerbates any mental health and substance abuse issues (Baur, Leukefeld, & Havens, 2016). More research is needed to inform

policies that would address the safety and resilience of the entire family.

Limitations. There are a number of limitations to the current scoping review. One limitation is that there is very little research and policy specifically addressing violence against women and the opioid epidemic, which required the review of research on each subject and extrapolating the results. Another limitation is the review of the literature and policy was not systematic. While the present study is a scoping review to capture as much nuanced information about the intersections of violence against women and the opioid epidemic, it increased the possibility of researcher bias, particularly in the policy section of the review.

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