Sexual and Intimate Partner Violence Against Women with Schizophrenia: A Scoping Review

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Background: Globally, 641 million women are touched by intimate partner violence (IPV), establishing it as the most prevalent form of violence affecting women. Women, who are already disproportionately affected by sexual and IPV, face an elevated risk when dealing with severe mental illnesses (SMI) compared to the general population. Schizophrenia, classified as an SMI, poses numerous obstacles that impact women's ability to maintain employment, good health, and sustain stable relationships. Nevertheless, limited data exists on IPV against women with schizophrenia and its effect. Aims: The objective of this scoping review was to summarize the available literature on sexual and IPV against women with schizophrenia and underlie future avenues of research. Methods: We conducted an electronic search using keywords in the following databases: APA PsychInfo, PubMed, Scopus, Google Scholar, and Psychology and Behavioral Sciences Collection. The search yielded a total of 6,099 articles. Upon title and abstract review, 97 articles were retained for full-text reading, after which 7 articles were included in this review. **Results:** The available articles reveal an association between sexual violence and IPV against women with schizophrenia. Younger women diagnosed with schizophrenia, especially those with low income or unemployed, are at a higher risk of experiencing sexual and IPV. This victimization increases the likelihood of suicide and exacerbates psychopathology. Conclusion: Research should examine care-setting interventions for women with schizophrenia, who are at increased risk of sexual and IPV, aiming to prevent severe harm. Implementation of preventive measures is essential for enhancing healthcare and societal transformation.

Keywords: IPV, sexual violence, schizophrenia, women, victimization

Intimate partner violence (IPV) is defined as any conduct occurring within an intimate relationship that inflicts physical, sexual, or psychological harm. IPV has sparked significant public health apprehension due to the growing prevalence highlighted by diverse global news outlets. It has infiltrated all societal levels, emerging as the predominant manifestation of gender-based violence, leading to immediate and enduring health repercussions for those affected. Population-based prevalence estimates typically fail to accurately represent the problem's magnitude due to substantial underreporting; nonetheless, IPV still significantly contributes to crime statistics in all societies (Afe et al., 2016). Indeed, as many as 38% of all murders of women are committed by intimate partners (World Health Organisation [WHO], 2021). Research findings, as highlighted by Afe et al. (2017), indicate that women, who are disproportionately impacted by sexual violencecovering non-consensual sexual activities, coercion, exploitation, harassment, or advances, irrespective of the perpetrator's relationship with the victim or the setting— and IPV are at heightened risk if they experience severe mental illness (SMI). SMI is defined as individuals with persistent or recurrent mental disorders significantly affecting their functioning, compared to the general population. This negatively affects women's physical, mental, sexual, and reproductive health (WHO, 2021). Thus, minimal research has been conducted on the sexual and IPV victimization experienced by women with schizophrenia, a severe mental illness characterized by hallucinations, delusions, social withdrawal, diminished pleasure and motivation, cognitive deficits, and other symptoms (Darves-Bornoz et al., 1995). As such, the objective of this research is to elucidate our knowledge on this topic. While IPV encompasses verbal, psychological, physical, and sexual abuse, we have opted to draw a distinction between IPV and sexual violence. Specifically, our discussion of IPV encompasses sexual violence perpetrated by intimate partners, whereas the section on sexual violence includes acts perpetrated by intimate partners as well as by individuals other than partners.

Intimate Partner Violence Against Women

Globally, 641 million women are affected by partner violence, establishing it as the most prevalent form of violence affecting women (Buchholz, 2021). During their lives, one out of three women worldwide will experience IPV (Buchholz, 2021). Adding to this distressing statistic, globally, women constitute 20 percent of all murder victims, and the majority of these cases involve killings by a partner or ex-partner (Buchholz, 2021). Characterized by any behaviour within an intimate relationship causing physical, sexual, or psychological harm, IPV can account for physical aggression, sexual manipulation, psychological maltreatment, and controlling conduct done by a present or past partner (Afe et al., 2016). The rising media coverage of this behaviour has raised substantial public health concerns globally. Beyond the immediate potential traumatic events, it is imperative to acknowledge the enduring short and long-term consequences faced by survivors. This underscores the urgent need for multifaceted approaches to prevention and intervention, addressing the root causes of IPV while providing comprehensive support for survivors to rebuild their lives. **Sexual Violence Against Women**

According to the World Health Organization's Multi-Country Study (MCS), the lifetime prevalence of women experiencing sexual abuse by a partner was between 6% and 59% (WHO, 2002). Sexual violence is a profound human rights violation that encompasses any sexual activity involving coercion, sexual exploitation, harassment, or advances committed by an individual, irrespective of the relationship with the victim, and the environment (Dartnall & Jewkes, 2013; Krug et al., 2022). As perpetrators are generally men known by the victims and commonly intimate partners, it is important to acknowledge that sexual violence is pervasive in every society and frequently targets women (Dartnall & Jewkes, 2013; WHO, 2002). Notably, women facing mental health challenges experience a higher victimization rate, reaching 53 incidents per 1000 individuals, in contrast to the general population's rate of 17 incidents per 1000 people (Van Deinse et al., 2019). Indeed, violent victimization against women with SMI was estimated at 25% greater than the general population (Van Deinse et al., 2019). Therefore, it is crucial to acquire deeper insights into the topic, given that sexual violence can lead to lasting adverse effects, worsen mental health challenges, and contribute to the emergence of concurrent disorders. Schizophrenia

As of 2019, approximately 0.3 percent of the world population was reported to have schizophrenia (OWID, 2019). This disorder can disturb various facets of an individual's mental faculties such as thoughts, perception, speech, emotions, behaviour, and social functioning (Schultz et al., 2007). Symptoms may encompass hallucinations (e.g., hearing voices), delusions (e.g., paranoia), social withdrawal, lack of pleasure, loss of motivation, cognitive deficits, and other problems disrupting patients' lives (Schultz et al., 2007).

As schizophrenia affects various facets of women's lives, many have difficulty relating and connecting to the world around them, making these women vulnerable to feelings of loneliness and isolation. Moreover, the entourage of women with schizophrenia may have difficulty understanding that their illness may complicate their relationships. This challenge becomes especially daunting when attempting to establish intimate relationships, as these women are more vulnerable to emotional and physical victimization. Indeed, in Chernomas's (2000) research, women expressed how they feared intimacy as many felt preyed upon once their psychiatric history was known. Additionally, numerous women shared experiences of childhood abuse, rape, and physical mistreatment, leading to a strong reluctance and fear towards engaging in sexual intimacy (Chernomas et al., 2000). These acute stressors have been identified as factors contributing to an elevated risk of suicidal behaviours (Chernomas et al., 2000). As the lifetime prevalence of suicide in the schizophrenia population has been estimated to be ten times higher than in the general population, the severity of symptoms and victimization leads to a greater number of suicide attempts in women with schizophrenia (Carlborg et al., 2010; Thara & Kamath, 2015).

In terms of employment, certain women opt to be homemakers, remain on disability pensions, or engage in work fields (Chernomas et al., 2000). While some express a desire to work, they are apprehensive about their ability to cope with the stress of employment. They fear the potential of falling ill and being financially strained, coupled with the challenge of finding alternative employment (Chernomas et al., 2000). Moreover, many women diagnosed with schizophrenia have encountered limiting messages regarding their ability to pursue employment or education due to their disability, underscoring their apprehension about entering the workforce (Chernomas et al., 2000).

Schizophrenia has devastating effects not only on women's emotional and cognitive health but also on their physical health. The negative impacts of antipsychotic medications include weight gain, amenorrhea, reduced libido, lactation, and facial hair growth (Chernomas et al., 2000). These side effects have a detrimental impact on women's well-being and undermine their sense of self and femininity. Furthermore, women with schizophrenia have expressed a lack of sufficient information from health professionals regarding family planning, pregnancy, parenting, or menopause, particularly in light of their mental health condition and its psychopharmacologic treatment (Chernomas et al., 2000). The lack of communication and support from healthcare professionals can lead women to be hesitant to discuss menstrual irregularities and sexuality as they face insufficient responses to their concerns on these matters (Chernomas et al., 2000).

Women with schizophrenia constitute a vulnerable population as their illness impacts multiple aspects of their lives, including their potential for employment, pursuit of higher education, health, and ability to establish and maintain stable relationships. Given that symptoms may exacerbate in the face of challenges, women with schizophrenia also exhibit a higher likelihood of suicide compared to the general population, highlighting the pressing need to improve our comprehension of women's circumstances and their vulnerability to victimization. **IPV, Sexual Violence and Schizophrenia**

As IPV against women is highly prevalent, past literature has indicated that women with SMI are at elevated risk of being victims of sexual and IPV (Afe et al., 2017). Across various research, the lifetime exposure to sexual and physical abuse fell between 43% and 81% for women with SMI (Kim et al., 2006). These women are more susceptible to abusive and violent relationships due to the persistent, debilitating impact of the illness and social stigmatization. Particularly, it was found by Thara & Kamath (2015), that women with schizophrenia were severely disabled compared to women with other diagnoses. This highlights the need to intensify focus on schizophrenia, particularly considering the insufficient available data regarding the prevalence of sexual and IPV against women diagnosed with schizophrenia and its potential impact on their condition.

Following the methodological framework proposed by Arksey and O'Malley (2005) and Levac et al. (2010), this scoping review seeks to describe the present literature regarding IPV and sexual violence among women with schizophrenia worldwide. Given the pervasive nature of violence against women worldwide, causing harm to millions, and being especially prevalent among women with SMI, it is imperative to thoroughly investigate this phenomenon. The impact of such violence on symptoms, treatment complexities, and the overall quality of life for these women cannot be understated. Mental health professionals must be aware and diligent surrounding this issue by carefully assessing for this factor (Afe et al., 2016). By gaining a deeper understanding of the relationship between sexual violence, IPV, and women with schizophrenia, more effective strategies for prevention, intervention, and support can be developed. Ultimately, this examination can contribute to an enhanced comprehension of the issue, offering insights into potential avenues for future research.

Methodology

As a scoping review, this article is based on the methodological framework developed by Arksey and O'Malley (2005) and refined by Levac et al. (2010) following PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines (Tricco et al., 2018). The purpose of scoping reviews is to provide a comprehensive overview of a new area of research and identify potential gaps that need to be addressed. According to recent literature, five key steps are necessary for conducting scoping reviews: 1) identifying the research question; 2) identifying relevant studies; 3) selecting studies; 4) charting the data; and 5) collating, summarizing, and reporting results (Arksey and O'Malley, 2005; Levac et al., 2010). The main question directing this review is "What is the state of knowledge regarding sexual and intimate partner violence against women with schizophrenia?" Literature Research

An electronic literature search was initiated on September 6, 2023, through the following databases: APA PsychInfo, PubMed, Scopus, Google Scholar, and Psychology and Behavioral Sciences Collection. In collaboration with an academic librarian, KAB developed a search strategy using controlled vocabulary (MeSH and index terms) and keywords relevant to "sexual violence," "intimate partner violence (IPV)" and "schizophrenia." Continual collaboration, validation, and discussion followed with SH and AM.

For sexual violence and intimate partner violence, the terms employed for the search were: "sexual violence" OR "intimate partner violence" OR "intimate partner abuse" OR "sexual viol*" OR "sexual abuse" OR "sexual assault" OR "sexual coercion" OR "sexual harassment" OR "sex offenses" OR "acquaintance rape" OR "domestic violence" OR "victimization" OR "marital rape." For schizophrenia, the terms employed were: "schizophrenia." The search strategy is presented in Figure 1. **Study Selection**

After conducting the database search, all identified literature was imported into Zotero reference management software (v6). The search generated 6,099 articles, of which 4,459 remained after removing duplicates. To determine eligibility for full-text review, KAB and SH screened titles and abstracts. To be selected, studies had to meet the following inclusion criteria: (1) the primary theme had to be related to both sexual violence, IPV, and schizophrenia (2) articles were published in a peer-reviewed journal, (3) articles were available in English or French, (4) articles could not be systematic reviews, (5) article population had to be women (included studies that distinguished findings between sexes), (6) excluded children and (7) article population was diagnosed with schizophrenia. The authors chose to exclude children from the study due to childhood-onset schizophrenia being recognized as a distinct subtype of the disorder, necessitating separate research. Incorporating studies involving children would primarily delve into child sexual abuse, which warrants dedicated investigation on its own.

A total of 97 articles were retained for full-text review, and the final selection was agreed upon by SH and AM. Following the full-text review, seven articles were retained and included in the review. For each included article, references, authors, and "cited by" were scanned to identify additional relevant studies. The flowchart of the study selection and screening process can be seen in Figure 2. **Data extraction and analysis**

A charting form was used to facilitate team discussion and approval during full-text screening and descriptive analysis. Using charting forms developed by Peters et al. (2020), Lauzon-Schnittka et al. (2022), and Arnstein et al. (2020), we extracted the following information for each article: authors, journal, year of publication, study location, the number of participants, age of participants, the aim of the study, methodology, and important results. The extraction was done by KAB and validated by SH and AM. The results were then summarized, and narrative synthesis was employed to report the findings (Popay et al., 2006).

Results

The characteristics of the 7 retained articles are displayed in Table 1.

Study characteristics

Among the selected articles, one was published in 1995 (Darves-Bornoz et al., 1995) and one in 2006 (Kim et al., 2006). A total of 5 articles were published after 2013 (Afe et al., 2016, 2017; Khalifeh et al., 2015; Leslie et al., 2023; Yildirim et al., 2014). Two studies were conducted in Nigeria (Afe et al., 2016, 2017), one in Turkey (Yildirim et al., 2014), one in South Korea (Kim et al., 2006) and one in Canada (Leslie et al., 2023). Two studies were from Europe, including one from France (Darves-Bornoz et al., 1995) and the other from England (Khalifeh et al., 2015). The number of participants in the selected studies ranged from 70 to 1,802,645. Two articles examined female outpatients diagnosed with schizophrenia with an average age of 38.3 years (Afe et al., 2016, 2017), while Kim et al. (2006) had an average age of 33.5 years. Two studies consisted of in-patients undergoing treatment (Khalifeh et al., 2015; Yildirim et al., 2014). Yildirim et al. (2014) sample consisted of female patients with an average age of 39.24 years. Khalifeh et al. (2015) randomly recruited patients with SMI (59.7% with schizophrenia) through community mental health services, with an average age of 40.8 years. Two studies had a sample of in and outpatients with schizophrenia (Darves-Bornoz et al., 1995; Kim et al., 2006). Kim et al. (2006) had a sample with an average age of 33.5 years while Darves-Bornoz and colleagues (1995), recruited females with an average age of 34.3 years. Lastly, Leslie et al. (2023) study compared women in Ontario with or without schizophrenia and who became pregnant between April 1, 2004, and March 31, 2018, with an average age of 30.6 years. Methodology

The seven articles were quantitative (Afe et al., 2016, 2017; Darves-Bornoz et al., 1995; Khalifeh et al., 2015; Kim et al., 2006; Leslie et al., 2023; Yildirim et al., 2014). One article was surveyed through a computer-assisted face-to-face interview while also incorporating a self-completion module (Khalifeh et al., 2015). One article utilized a population-based cohort study involving the registry of administrative health and clinical data from 2004 to 2018 in Ontario, Canada (Leslie et al., 2023). Two studies employed semi-structured interviews (Darves-Bornoz et al., 1995; Kim et al., 2006). Finally, Afe et al. (2016, 2017) studies employed interviews to survey women. Even though these studies share the same sample, they vary in terms of the assessment measures employed and the number of participants recruited.

Prevalence of Intimate Partner Violence Among Women with Schizophrenia

In four articles, the authors aimed to explore IPV among women with schizophrenia (Afe et al., 2016, 2017; Khalifeh et al., 2015; Leslie et al., 2023). The four studies reported a higher prevalence of IPV among women with schizophrenia than women without this diagnosis. Afe et al.'s (2016) aim was to study the various patterns of IPV against women with schizophrenia and its association with psychopathology. The results indicated that 75% of the participants experienced at least one occurrence of IPV (Afe et al., 2016). Afe et al. (2017) investigated socio-demographic and other attributes of partners of women with schizophrenia in Nigeria. They reported that 73% of the participants experienced IPV at least once which is much higher than the prevalence of non-mentally ill women found at 40% in Nigeria (Afe et al., 2017).

Khalifeh et al. (2015) assess and compare the prevalence and consequences of domestic and sexual violence among individuals with SMI, with 59.7% of the participants diagnosed with schizophrenia, and the general population. Their research found that women with SMI reported higher domestic violence (69%) compared to the control group (33%) (Khalifeh et al., 2015). The SMI population also had a higher rate of sexual violence (10%) compared to the control group (2%) (Khalifeh et al., 2015). Lastly, Leslie et al. (2023), aimed to assess and compare the risk of interpersonal violence necessitating an emergency department (ED) visit during pregnancy or within one year postpartum among women with and without schizophrenia. They found a higher risk of ED visits for interpersonal violence among women with schizophrenia (4%) compared to women without schizophrenia (0.4%) (Leslie et al., 2023). Prevalence of sexual violence among women with schizophrenia

In three studies, the authors examined sexual violence committed against women with schizophrenia (Darves-Bornoz et al., 1995; Kim et al., 2006; Yildirim et al., 2014). All three studies indicated that women with schizophrenia have a high prevalence of sexual abuse. In Kim et al.'s (2006) article, the aim was to present findings on the prevalence of sexual abuse in female patients attending a mental hospital for schizophrenia in South Korea. They found that 37% of the study's population had a history of sexual abuse where

29.7% were abused by a family member, 32.4% by an unrelated perpetrator and 60% by a stranger (Kim et al., 2006). In Darves-Bornoz et al. (1995), the aim was to study women with schizophrenia and bipolar disorder in relation to sexual victimization. It was discovered that the prevalence of rape was found to be 23% among women with schizophrenia, in contrast to the general population rate of 7% or 8% (Darves-Bornoz et al., 1995). In this research, the perpetrators of sexual violence were family members (Darves-Bornoz et al., 1995). Lastly, Yildirim et al. (2014), aimed to explore the effect of adulthood trauma such as sexual harassment and sexual abuse experienced by patients with schizophrenia who did not have a history of child abuse. They found that 24.3% of patients had experienced sexual abuse during their adulthood whereas 14.3% were abused by a stranger and 10% by someone they knew (Yildirim et al., 2014). For sexual harassment, 28.6% were sexually harassed (Yildirim et al., 2014).

These three studies focused on sexual abuse not committed within an intimate relationship. Nonetheless, three articles which focused on IPV also assessed sexual assaults committed towards schizophrenic women. Khalifeh et al. (2015), found in their population that 61% of women experience sexual assault compared to 21% of women without schizophrenia. In both Afe et al.'s (2016, 2017) studies, the authors reported that 24% of the sample was sexually assaulted. **IPV & Sexual Violence Association with Symptomology**

Out of the seven articles, four found an association between IPV, sexual violence and higher psychopathology (Afe et al., 2016, Darves-Bornoz et al., 1995; Kim et al., 2006; Yildirim et al., 2014), while Afe et al. (2017) revealed that patients who do not adhere to treatment and experience symptom improvement are more likely to become victims of IPV. Afe et al. (2016) found that participants who reported sexual, verbal, and physical IPV indicated higher psychopathology (e.g., worsened psychiatric symptoms). Higher psychopathology was also associated with a decrease in physical health, such as "injuries, gynecological problems, depression of immunity and possibly untimely death" (Afe et al., 2016, p. 8). Kim et al. (2006), identified higher psychopathology scores within the abused population indicating increased distress in somatization, obsessive-compulsive behaviours, depression, and anxiety, while also indicating greater dissociative expression. Yildirim et al. (2014), reported higher psychopathology such as anxiety, aggression, hallucinations, and delayed gratification among patients who experienced sexual abuse. Darves-Bornoz et al. (1995) also stated a relationship between the occurrence of rape and the increased chronicity of the disorder. Lastly, regarding treatment adherence, Afe et al. (2017) noted a counterintuitive finding suggesting that irregular medication use increases the odds of IPV and individuals with a shorter duration of illness are more likely to experience sexual, physical and verbal IPV. **Suicide**

Among the seven articles, five studies discussed the risk of suicide when victimized (Afe et al., 2016, 2017; Darves-Bornoz et al., 1995; Khalifeh et al., 2015; Kim et al., 2006). Kim et al. (2006), discovered a higher risk of suicidal attempts among abused patients compared to non-abused patients. Darves-Bornoz et al. (1995) found that victimization of women with schizophrenia was associated with an elevated risk of suicidal attempts. Afe et al. (2016) claimed that victimization increased the rates of suicide risks while Afe et al. (2017) emphasized how abuse within SMI like schizophrenia raises the incidence of suicide. Lastly, Khalifeh et al. (2015), revealed that half of the women in their sample who were coping with SMI and had encountered sexual assault went on to report instances of attempted suicide. Age

Of the seven selected articles, five discussed the relationship between age and victimization. Afe et al. (2016), found that the younger group had higher chances of reporting IPV than the general population. Afe et al. (2017), similarly showed a higher prevalence of IPV reports within adults younger than 40 years old. Yildirim et al. (2014) discovered that patients who had experienced sexual abuse were notably younger compared to those who did not report a history of sexual abuse. Leslie et al. (2023) indicated that younger mothers had a higher risk for an ED visit for interpersonal violence. Lastly, Darves-Bornoz et al. (1995) found that women with schizophrenia were more at risk of being raped during the end of adolescence and early adulthood. **Unemployment/ Low Income**

Five studies assessed victimization and its association with unemployment/low income. Afe et al. (2016) found higher rates of IPV, more precisely verbal abuse among unemployed women. Afe et al. (2017) also found that participants' unemployment status was linked with higher chances of experiencing IPV. Indeed, women who were unemployed and had low or no income were found to have increased odds of experiencing physical, verbal and sexual abuse from their partners (Afe et al., 2017). Darves-Bornoz et al. (1995), also expressed how low income had an important role in sexual victimization. Leslie et al. (2023), found in their sample that women who experienced interpersonal violence were residing in lower-income neighbourhoods and were also more likely to have an ED visit for interpersonal violence. Lastly, Khalifeh et al. (2015), indicated that within their population who experienced domestic and sexual violence, 80% of the participants were unemployed.

Discussion

The objective of this scoping review was to analyze the existing peer-reviewed literature on sexual and IPV against women with schizophrenia to summarize the current state of knowledge on this subject and highlight future research avenues. As shown through the seven selected studies in this scoping review, a strong association was found between sexual violence, IPV, and women with schizophrenia. Across four studies, it was observed that women diagnosed with schizophrenia demonstrated a significantly higher prevalence of experiencing IPV compared to women without this diagnosis (Afe et al., 2016, 2017; Khalifeh et al., 2015; Leslie et al., 2023). In Leslie et al.'s (2023) study, women with schizophrenia were ten times more likely to experience IPV when pregnant. In contrast, research by Afe et al. (2017) and Khalifeh et al. (2015) showed that women with schizophrenia were twice as likely to experience IPV. The findings from the three remaining studies pointed toward a heightened prevalence of sexual abuse of approximately 28% among women diagnosed with schizophrenia (Darves-Bornoz et al., 1995; Kim et al., 2006; Yildirim et al., 2014). This highlights how women with schizophrenia are more likely to be victims of sexual and IPV. Yet, this issue is rarely discussed by mental health professionals and physicians creating a lack of awareness (Afe et al., 2017).

Through the seven articles, various themes arose describing the risk factors and effect of victimization upon women with schizophrenia. Regarding symptomology, four articles found a relationship between IPV, sexual violence, and elevated psychopathology (Afe et al., 2016, Darves-Bornoz et al., 1995; Kim et al., 2006; Yildirim et al., 2014). Studies have identified that instances of abuse and victimization contribute to heightened psychiatric symptoms in women. This is manifested through increased levels of depression, anxiety, dissociative expression, and hallucinations (Darves-Bornoz et al., 1995; Kim et al., 2006; Yildirim et al., 2014). The amplification of symptoms can be attributed to women's response to victimization and having limited resources in a society that stigmatizes them (Chernomas et al., 2000). Furthermore, women not only face heightened psychiatric symptoms but also encounter physical health issues. Given that individuals with schizophrenia confront a notably shorter life expectancy than the general population, with approximately 90% of deaths attributed to physical illnesses, it becomes apparent that sexual and IPV play a role as contributing factors to the deterioration of health (Chernomas et al., 2000). This form of violence can result in injuries, gynecological problems, and compromised immune function, thereby intensifying the overall health challenges experienced by these women (Chernomas et al., 2000; Seeman, 2018). Conversely, Afe et al. (2017) demonstrated that individuals who do not comply with treatment and show symptom improvement are at a higher risk of IPV. This counterintuitive finding suggests the need to further explore the repercussions of victimization on symptomology.

Among the seven articles analyzed, five studies (Afe et al., 2016, 2017; Darves-Bornoz et al., 1995; Khalifeh et al., 2015; Kim et al., 2006) investigated the relationship between victimization and the risk of suicide. In each instance, there was a uniform observation of an increased risk of suicide. Given that suicide is more prevalent in women with schizophrenia compared to the general population (Seeman, 2018), research indicates that suicidal behaviour increases during acute social crises. Crucial predictive factors for suicide in women with schizophrenia include a history of sexual abuse, IPV, and the loss of children (Carlborg et al., 2010). These traumatic events also have repercussions on women's psychiatric symptoms, with depression and hopelessness identified as significant contributing risk factors to suicide (Carlborg et al., 2010). In schizophrenia, the risk factors for suicide appear to be less associated with typical core symptoms of psychosis, such as delusions and hallucinations, and more linked to depressive symptoms, including agitation, hopelessness, and feelings of worthlessness (Carlborg et al., 2010). Consequently, as suicide risk is already high among people with schizophrenia, victimization exacerbates their situation, leading to an even higher likelihood of committing suicide.

Additionally, an increased likelihood of experiencing sexual and IPV during younger years was found in five studies (Afe et al., 2016, 2017; Darves-Bornoz et al., 1995; Leslie et al., 2023; Yildirim et al., 2014). The vulnerability of younger women with schizophrenia may stem from the decline in social skills and cognition linked to the chronicity of the illness (Afe et al., 2017). Younger women also tend to be more dependent on their partner, increasing their risk of IPV, especially among women with SMI (Afe et al., 2017). Regarding employment, unemployed or low-income women with schizophrenia were more likely to be victims of sexual and IPV (Afe et al., 2016, 2017; Darves-Bornoz et al., 1995; Khalifeh et al., 2015; Leslie et al., 2023). As the study of Afe et al. (2017) pointed out, individuals with schizophrenia are more likely to have a lower socioeconomic status due to the debilitating effect of the illness on their cognition, social skills, and ability to be productive. Moreover, barriers still exist regarding employment and the improvement of the socioeconomic status of people with schizophrenia due to the ongoing stigma and discrimination (Afe et al., 2017). Thus, this becomes even more difficult for women with schizophrenia as gender barriers exist (e.g., men having better economic opportunities, more education, and more employment opportunities) (Afe et al., 2017). Given that employment offers substantial support, contributes to a dignified existence, and fosters financial independence, it is noteworthy that many women with schizophrenia lack jobs or sufficient income (Afe et al., 2017). Consequently, these women face an increased likelihood of experiencing violence, primarily attributable to their socioeconomic status and lower income in comparison to the general population (Afe et al., 2017). These results suggest that younger women diagnosed with schizophrenia, particularly those with low income and/or unemployed status, face an elevated risk of becoming victims of sexual and IPV. This victimization, in turn, amplifies the risk of suicide and heightened psychopathology. The findings also suggest that IPV worsens the progression of schizophrenia, leading to an increase in symptoms and a higher risk of suicide.

These findings underscore the need to enhance interventions that could better support women with

schizophrenia experiencing sexual violence and IPV. Certainly, mental health professionals should routinely inquire about IPV among women with schizophrenia to identify potential victims. By making both direct and indirect inquiries about IPV, clinicians can better detect IPV and develop comprehensive therapy plans that include social interventions to support women with schizophrenia. Additionally, clinicians need to be aware of the elevated prevalence of sexual and physical abuse in this population. They should thoroughly evaluate psychosocial, familial, and clinical histories collectively (Kim et al., 2006). Studies have shown that clinicians can identify IPV risk and address relationship dynamics, socioeconomic challenges, and pharmacological therapy effectively by giving proper attention to women's socio-demographic background, economic circumstances, and partners (Afe et al., 2017). Hence, the integration of regular violence screening and the establishment of a robust therapeutic rapport with clients offers health professionals a vital opportunity for intervention to prevent severe physical, psychological, and social harm to these women.

This review also denotes how the selected articles assessed women in the same age range (between 30 and 40 years old) indicating scarce data for sexual and IPV among women with schizophrenia in younger and elderly populations. As a result, it is recommended that forthcoming studies take into account diverse populations, sexual diversity, and gender while adopting a non-binary perspective. Lastly, the selected studies, published between 1995 and 2023, with a majority published after 2013 (n=5), suggest a recent emergence of reporting sexual and IPV incidences against women with schizophrenia. While most studies were cross-sectional, there is a need for qualitative and mixed-method studies to fully understand the experience of women with schizophrenia to prevent and protect them from sexual and IPV. Overall, this scoping review reveals that more studies are needed to improve our knowledge of sexual and IPV against women with schizophrenia. **Study Limitations**

This scoping review has some limitations to consider. To begin, only peer-reviewed articles published in scientific journals were included in this review, excluding grey literature. The authors decided to exclude grey literature to prioritize the most rigorous reviewed and established research. This helps in providing a clearer picture of the current state of knowledge by ensuring the quality and reliability of the articles. Thus, this limited our ability to identify potential research and advance our understanding. Moreover, the study selection criteria restricted this review to English and French, which prevented studies in other languages from being considered. Furthermore, this research constrained its focus to adult women, omitting post-pubertal schizophrenia in children and young adolescents. Lastly, the chosen articles lacked clear distinctions between sex and gender, with a majority frequently remaining ambiguous about whether they were addressing gender, sex, or both. As such, studies in other languages, the inclusion of grey literature, and the inclusion of a broader population could provide further insight into this subject. Conclusion

The aim of this scoping review was to identify and synthesize literature on sexual and IPV against women with schizophrenia. The studies included in this review revealed a higher prevalence of sexual abuse and IPV among women with schizophrenia relative to the general population. The findings indicate that younger women diagnosed with schizophrenia, especially those with low income and/or unemployed status, are at an increased risk of experiencing sexual and IPV. This victimization, subsequently, raises the likelihood of suicide and heightened psychopathology. These results underscore the necessity of fostering interdisciplinary collaboration among healthcare professionals, social workers, and policymakers to effectively tackle IPV against women diagnosed with schizophrenia. While the retained articles for this review were small, there is a need for further investigation. Future research should explore current care setting interventions to prevent severe physical, psychological, and social harm, while also examining the impact of victimization on symptomatology as current results are mixed. Additional research should also explore childhood-onset psychosis and its association with sexual and intimate partner violence.

References

Afe, T. O., Emedoh, T. C., Ogunsemi, O., & Adegbohun, A. A. (2016). Intimate partner violence, psychopathology and the women with schizophrenia in an outpatient clinic South-South, Nigeria. *BMC Psychiatry*, 16(1), 197. https://doi. org/10.1186/s12888-016-0898-2

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- Afe, T. O., Emedoh, T. C., Ogunsemi, O. O., & Adegohun, A. A. (2017). Socio-Demographic Characteristics, Partner Characteristics, Socioeconomic Variables, and Intimate Partner Violence in Women with Schizophrenia in South-South Nigeria. *Journal of Health Care for the Poor and Underserved*, 28(2), 707–720. https://doi.org/10.1353/hpu.2017.0069
- Arksey, H., & O'Malley, L. (2005). Scoping studies: towards a methodological framework. International *Journal of Social Research Methodology*, 8(1), 19–32. https://doi.org/10.1080/1364557032000 119616
- Arnstein, L., Wadsworth, A. C., Yamamoto, B. A., Stephens, R., Sehmi, K., Jones, R., Sargent, A., Gegeny, T., & Woolley, K. L. (2020). Patient involvement in preparing health research peer-reviewed publications or results summaries: a systematic review and evidence-based recommendations. *Research Involvement and Engagement*, 6(1). https://doi.org/10.1186/s40900-020-00190-w
- Buchholz, K. (March 12, 2021). One in Three Women Experience Violence at Hands of a Partner [Digital image]. Retrieved November 07, 2023, from https://www-statista-com.proxy. ubishops.ca:2443/chart/24406/partner-violence-against-women-by-region/
- Carlborg, A., Winnerbäck, K., Jönsson, E. G., Jokinen, J., & Nordström, P. (2010). Suicide in schizophrenia. *Expert Review of Neurotherapeutics*, 10(7), 1153–1164. https://doi.org/10.1586/ern.10.82
- Chernomas, W. M., Clarke, D. E., & Chisholm, F. A. (2000). Perspectives of Women Living With Schizophrenia. *Psychiatric Services*, 51(12), 1517–1521. https://doi.org/10.1176/appi. ps.51.12.1517
- Dartnall, E., & Jewkes, R. (2013). Sexual violence against women: The scope of the problem. *Best Practice & Research Clinical Obstetrics & Gynae cology*, 27(1), 3–13. https://doi.org/10.1016/j. bpobgyn.2012.08.002
- Darves-Bornoz, Jean-Michel, Lempérière, T., Degiovanni, A., & Gaillard, P. (1995). Victimization in women with schizophrenia and bipolar disorder. *Social Psychiatry and Psychiatric Epidemiology*, 30, 78–84. https://doi.org/10.1007/ BF00794947
- Khalifeh, H., Moran, P., Borschmann, R., Dean,

K., Hart, C., Hogg, J., Osborn, D., Johnson, S., & Howard, L. M. (2015). Domestic and sexual violence against patients with severe mental illness. *Psychological Medicine*, 45(4), 875–886. https://doi.org/10.1017/S0033291714001962

- Kim, D., Kaspar, V., Noh, S., & Nam, J. H. (2006). Sexual and physical abuse among Korean female inpatients with schizophrenia. *Journal of Traumatic Stress*, 19(2), 279–289. https://doi. org/10.1002/jts.20119
- Krug, E. G., Mercy, J. A., Dahlberg, L. L., & Zwi,
 A. B. (2002). The world report on violence and health. *The lancet*, 360(9339), 1083-1088.
- Lauzon-Schnittka, J., Audette-Chapdelaine, S., Boutin, D., Wilhelmy, C., Auger, A.-M., & Brodeur, M. (2022). The experience of patient partners in research: a qualitative systematic review and thematic synthesis. *Research Involvement and Engagement*, 8(1). https://doi. org/10.1186/s40900-022-00388-0
- Leslie, K., Barker, L. C., Brown, H. K., Chen, S., Dennis, C.-L., Ray, J. G., Saunders, N., Taylor, C., & Vigod, S. (2023). Risk of interpersonal violence during and after pregnancy among people with schizophrenia: A population-based cohort study. *CMAJ: Canadian Medical Association Journal*, 195(9), E322– E329. https://doi.org/10.1503/cmaj.220689
- Levac, D., Colquhoun, H., & O'Brien, K. K. (2010). Scoping studies: advancing the methodology. *Implementation Science* : Is, 5, 69–69. https://doi.org/10.1186/1748-5908-5-69
- OWID. (August 1, 2021). Percentage of the population with schizophrenia worldwide from 1990 to 2019 [Graph]. In Statista. Retrieved December 07, 2023, from https:// www-statista com.proxy.ubishops.ca:2443/ statistics/1035194/schizophrenia-worldwide-share-of-population/
- Peters MDJ, Godfrey C, McInerney P, Munn Z, Tricco AC, Khalil, H. Chapter 11: Scoping Reviews (2020 version). In: Aromataris E, Munn Z (Editors)., JBI, 2020. Available JBI Manual for Evidence Synthesis from. https:// doi.org/10.46658/JBIMES-20-12
- Popay, J., Roberts, H., Sowden, A., Petticrew, M., Arai, L., Rodgers, M., & Britten, N. (n.d.).

Guidance on the Conduct of Narrative Synthesis in Systematic Reviews.

- Schultz, S. H., North, S. W., & Shields, C. G. (2007). Schizophrenia: A Review. American Family Physician, 75(12), 1821–1829.
- Seeman, M. V. (2018). Women who suffer from schizophrenia: Critical issues. World Journal of Psychiatry, 8(5), 125–136. https://doi.org/10.5498/wjp. v8.i5.125
- Thara, R., & Kamath, S. (2015). Women and schizophrenia. *Indian Journal of Psychiatry*, 57(Suppl 2), S246–S251. https://doi.org/10.4103/0019-5545.161487
- Van Deinse, T. B., Macy, R. J., Cuddeback, G. S., & Allman, A. J. (2019). Intimate partner violence and sexual assault among women with serious mental illness: A review of prevalence and risk factors. *Journal of Social Work*, 19(6), 789–828. https://doi.org/10.1177/1468017318766425
- Tricco, A. C., Lillie, E., Zarin, W., O'Brien, K. K., Colquhoun, H., Levac, D., Moher, D., Peters, M. D.
 J., Horsley, T., Weeks, L., Hempel, S., Akl, E. A., Chang, C., McGowan, J., Stewart, L., Hartling, L., Aldcroft, A., Wilson, M. G., Garritty, C., ... Straus, S. E. (2018). Prisma extension for scoping reviews (prisma-scr): checklist and explanation. *Annals of Internal Medicine*, 169(7), 467–473. https://doi.org/10.7326/M18-0850
- World Health Organization. (2021, March 9). Violence Against Women. https://www.who.int/newsroom/fact-sheets/detail/violence-against-women
- World Health Organization. (2002). WHO multi-country study on women's health and domestic violence against women (No. WHO/FCH/ GWH/02.2). World Health Organization.
- Yildirim, M., Yildirim, E. A., Kaser, M., Guduk, M., Fistikci, N., Cinar, O., & Yuksel, S. (2014). The relationship between adulthood traumatic experiences and psychotic symptoms in female patients with schizophrenia. *Comprehensive Psychiatry*, 55(8), 1847–1854. https://doi.org/10.1016/j. comppsych.2014.08.049

VIOLENCE AGAINST WOMEN WITH SCHIZOPHRENIA

Figure 1

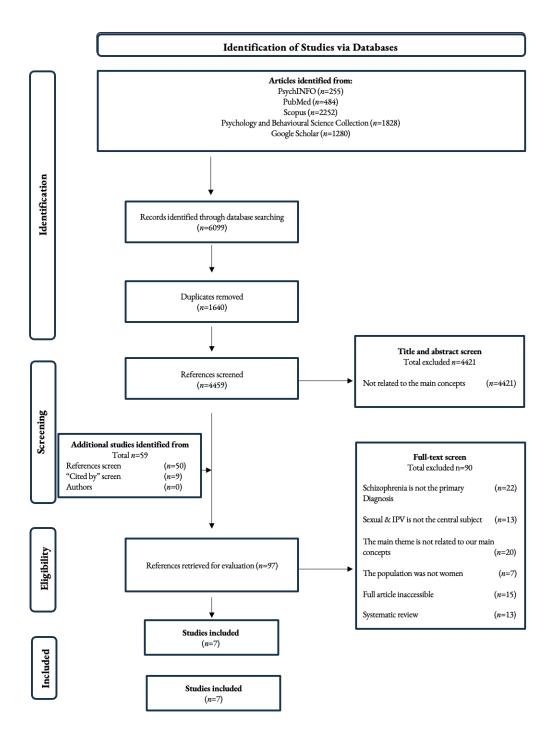
Summary of the search strategy

Keywords						
Sexual Violence & Intimate Partner Violence	Schizophrenia					
("sexual violence" OR "intimate partner	("schizophrenia")					
violence" OR "intimate partner abuse" OR						
"sexual viol*" OR "sexual abuse" OR "sexual						
assault" OR "sexual coercion" OR "sexual						
harassment" OR "sex offenses" OR						
"acquaintance rape" OR "domestic violence"						
OR "victimization" OR "martial rape")						
Databases searched						
APA PsychInfo						
PubMed						
Scopus						
Psychology and Behavioral Sciences Collection						
Google Scholar						

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Figure 2

Flowchart of study selection and screening process



VIOLENCE AGAINST WOMEN WITH SCHIZOPHRENIA

Table 1

Authors, year	Country	Population/ Sample	Methodology	Assessment Tools	Objectives	Conclusion
Afe et al. (2016)	Nigeria	N= 77 Female Age: ~38.3 years old Female patients diagnosed with schizophrenia who were outpatients at the Federal Neuro-psychiatric Hospital.	Cross-sectional descriptive survey Interview based	Socio-demographic Questionnaire <u>Diagnosis</u> : The Structured Clinical Interview for DSM-IV (SCID) The Brief Psychiatric Rating Scale (BPRS) <u>IPV:</u> Intimate Partner Violence questionnaire.	The aim of this study was to survey and explore the various patterns of IPV associated with women with schizophrenia and the association with psychopathology.	The study highlighted the high rate of various forms of IPV among women with schizophrenia. Sexual assault and physical abuse are associated with higher scores on the psychopathology scale.
Afe et al. (2017)	Nigeria	N= 79 Female Age: ~ 38.3 years old Female patients diagnosed with schizophrenia were recruited from the Federal Neuro-psychiatric Hospital.	Cross-sectional descriptive survey Interview based	Socio-demographic questionnaire <u>Diagnosis</u> : Research Version of Structured Clinical Interview SCID (SCID-1) <u>IPV</u> : Intimate partner violence questionnaire	The aim of this study was to explore the socio-demographic and other characteristics of partners of women in Nigeria diagnosed with schizophrenia	The findings show that the prevalence of IPV among women with schizophrenia is high (73%).
Darves- Bornoz et al. (1995)	France	N= 90 (64 schizophrenics, 26 Bipolars) Female Age: ~ 34.3 years old for schizophrenics ~32.7 years old for bipolar Female in-or outpatients with schizophrenia and bipolar disorder were recruited through twelve public hospitals in the department of psychiatry.	Quantitative Semi-structured interviews	Sociodemographic questionnaire <u>Diagnosis</u> : The positive and negative syndrome scale (PANSS) Schizophrenia with deficit syndrome <u>Sexual violence</u> : "Were you ever a victim of rape?"	The aim of the present study was to study two populations, women with schizophrenia and those with bipolar disorder, with reference to sexual victimization.	bipolar disorder are
Yildirim et al. (2014)	Turkey	N=70 Women Age: ~ 39.24 years old Female inpatients under <u>treatment</u> for <u>schizophrenia</u> at Bakirkoy Research and Training Hospital for <u>Psychiatry</u> , <u>Neurology</u> and <u>Neurosurgery</u> .	Quantitative Interview based	Diagnosis: Positive and Negative Syndrome Scale (PANSS) Effect Rating Scale (UKU) Calgary Depression Scale for Schizophrenia (CDSS) <u>Sexual Violence</u> : Traumatic Experiences Checklist (TEC)	The aim of the study was to investigate the effects of adulthood trauma (sexual harassment and sexual abuse) in a sample of patients with schizophrenia who did not report <u>childhood</u> <u>trauma</u> .	We observed that traumatic life events and exposure to violence were common among female patients with schizophrenia.

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Table 1 (cont.)

Khalifeh et al. (2015)	England	N= 303 Gender: Male = 170 (56.1%) Female = 133 (43.9%) Age: ~ 40.8 years old Recruited patients with SMI under the care of community mental health services. Schizophrenia and related disorders 181 (59.7%) Bipolar affective disorder 35 (11.6%) Recurrent depressive disorder 30 (9.9%) Personality disorder 23 (7.6%) Other 34 (11.2%)	Quantitative Survey through a computer-assisted face- to-face interview	<u>IPV</u> : The British Crime Survey domestic/sexual violence questionnaire	This study compared domestic and sexual violence among SMI patients and the general population.	Men and women with SMI who are under the ongoing care of psychiatric services are 2–8 times more likely to experience sexual and domestic violence than the general population.
Kim et al. (2006)	South Korea	N= 100 Female Age: ~33.5 years old Female patients from a psychiatric hospital that were hospitalized for schizophrenic conditions.	Quantitative study Semi-structured interview	Diagnosis: Symptom Checklist-90-Revised (SCL-90-R) Dissociative Experience Scale-Korean version (DES-K) Barron Ego Strength Scale (ES Scale) The PANSS for schizophrenia The Scale for Assessment of Positive Symptoms Sexual violence: Russell's typology (Russell, 1986) of severe and very severe	The present study reports descriptive data on the prevalence of previous exposure to severe forms of sexual and physical abuse among female patients who were admitted to a mental hospital for schizophrenia in South Korea.	Female patients with schizophrenia had experiences of sexual or physical abuse prior to the onset of their illness. In many cases, abusive treatment continued after the onset of the current illness and hospital admission for psychiatric treatment.
Leslie et al. (2023)	Canada	N= 1 802 645 Gender: Female Age: ~30.6 years old for schizophrenics Compared women with and without schizophrenia in Ontario and who became pregnant between Apr. 1, 2004, and Mar. 31, 2018. Control Group: 1 798 175 Schizophrenia group: 4470	Quantitative Accessed administrative health and clinical registry data from 2004 to 2018 in Ontario, Canada	Diagnosis: International Statistical Classification of Diseases and Related Health Problems, 10th Revision [ICD-10]) <u>IPV:</u> Health care providers screened for interpersonal violence and disclosure of violence by asking patient to "threat of or actual physical, sexual, psycho- logical, emotional, or financial abuse"	The aim of the study was to compare the risk of an emergency department (ED) visit for interpersonal violence during pregnancy and until 1 year postpartum among people with and without schizophrenia in Ontario.	They found that pregnant and postpartum people with schizophrenia are a population at high risk of ED visits for interpersonal violence.