Australian Centre for Posttraumatic Mental Health

Literature Review:
The Nature of the Relationship between Traumatic Events in People's Lives and Homelessness

A Literature Review by the Australian Centre for Posttraumatic Mental Health for Sacred Heart Mission, Mind Australia, Inner South Community Health Service and VincentCare Victoria

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Executive Summary

The importance of understanding the impact of trauma is increasingly recognised amongst services working with people who experience homelessness. This review aims to present the current state of knowledge on the nature of the relationship between exposure to traumatic events in people's lives and the experience of homelessness. It highlights areas that are particularly relevant to the development of a framework for trauma-informed practice for agencies that work with people experiencing homelessness. In conducting this review, specific criteria have been applied to the literature to ensure that this is a methodologically robust review. This executive summary provides an overview of the literature review for specific questions developed in consultation with Sacred Heart Mission, Mind Australia, Inner South Community Health Service, and VincentCare Victoria. References for all of the information that is presented below can be found in the body of this literature review.

Defining a traumatic event

- In this review, a traumatic event is defined as one where an individual is confronted with actual or threatened death, serious injury or sexual violation, or they are exposed to the death, injury or suffering of others. In the case of childhood trauma, this includes witnessing these events as they occur to others (especially primary caregivers) or learning that these events occurred to a parent or primary caregiver.
- People who are exposed to a traumatic event(s) may experience a range of traumatic stress symptoms which include (but are not limited to) intrusive memories about the event, behavioural and emotional avoidance, high levels of arousal (such as increased startle and hypervigilance), sadness, anxiety and guilt. For some people, traumatic events that occur in childhood may result in pervasive and long-lasting difficulties. Events that occur in childhood that are repetitive or prolonged, involve direct harm and/or neglect by caregivers, and occur at developmentally vulnerable times for the child, can give rise to complex psychological, social and behavioural problems in adulthood.

Types of traumatic events experienced by people who experience long-term homelessness

- High rates of exposure to traumatic events among people who experience homelessness are well documented. Australian studies have found that between 91% and 100% of people experiencing homelessness have experienced at least one major trauma in their lives. In comparison, 57% of the general Australian population report one major traumatic event in their life.
- Few rigorous studies have investigated the prevalence of childhood trauma in people who experience long-term homelessness. The few published, well-designed studies suggest that adults who experience homelessness have experienced high rates of childhood trauma including sexual abuse (ranging from 23% to 84%), and physical abuse (70% to 77%).
- The types of traumatic events that are particularly prevalent within adult homeless populations include physical abuse, witnessing someone being badly injured or killed, rape and sexual abuse.
- In summary, people who experience homelessness have often experienced traumatic events in their childhood/adolescence. They are also at increased risk for experiencing traumatic events during their periods of homelessness.

Prevalent mental health disorders

- The vast majority of people who experience homelessness also experience at least one psychiatric disorder, and the prevalence of psychiatric disorder among adults experiencing homelessness is much higher than in representative community samples. In terms of Axis 1 disorders, mood disorders, psychotic disorders (i.e., schizophrenia and bipolar disorder) and trauma-related disorders (e.g., posttraumatic stress disorder [PTSD]) have all been found to be over-represented amongst adults experiencing homelessness.
- An Australian survey of men and women experiencing homelessness found that 73% of men and 81% of women met criteria for at least one mental disorder in the past year (12 month prevalence) and 40% of men and 50% of women had at least two mental disorders.
- Psychiatric disorder often precedes homelessness, but there is also evidence that some people become mentally ill as a result of experiencing chronic homelessness.

- Surprisingly few studies have assessed PTSD among people experiencing homelessness, and the studies that have been conducted fail to show a consistent picture.
- In the only Australian peer-reviewed study to examine PTSD prevalence rates in adults experiencing homelessness, it was found that 79% of the sample met criteria for a lifetime diagnosis of PTSD, while the 12 month prevalence of PTSD was 41% (PTSD present in the last 12 months).
- In the general population, males are less likely than females to develop PTSD or depression following traumatic events, but more likely to develop substance use disorder (including alcohol use disorders). Therefore it might be expected that for people experiencing homelessness, women would have a higher prevalence of PTSD than men. However, this has not been addressed in the literature, suggesting a pressing need for epidemiological research examining trauma exposure and PTSD, particularly in men experiencing homelessness.
- When PTSD occurs in the context of homelessness it is also associated with high levels of comorbidity with other psychiatric disorders. For example, in an Australian study of adults experiencing homelessness, of those who met criteria for current PTSD, 55% screened positive for psychosis; 69% scored in the severe or extremely severe range for depression; 50% scored in the severe or extremely severe range for anxiety; 63% screened positive for harmful or hazardous drinking or alcohol dependence; and 88% screened positive for substance use, probable abuse or dependence.

Risk factors that contribute to recurring homelessness after the experience of trauma

- Studies in non-homeless samples report that characteristics about the individual increase their risk for developing PTSD after exposure to a traumatic event. These include, previous psychiatric history, prior trauma history, family history of mental illness, and early childhood adversity. Other factors such as a low level of education, female gender, and personality traits have been identified as increasing risk for PTSD. Importantly, these characteristics can increase risk for becoming homeless.
- On the macro level, risk factors for homelessness include poverty, social exclusion, poor education and long-term unemployment. Familial factors include family dysfunction, family violence and sexual abuse, childhood institutionalisation and poor family and social support. Individual attributes such as mental health problem, physical or mental disability and coping ability also play a key role.

- In one of the only longitudinal studies to examine risk factors of long-term homelessness, the most important predictors were: older age, past or current unemployment, a lack of earned income, poorer coping skills, less adequate family support, a history of substance abuse and an arrest history..

Impact of trauma exposure and resulting mental health problems upon homelessness

- There is not much literature that investigates the relationship between trauma exposure and mental health problems. The literature that does exist suggests that trauma, PTSD, substance abuse and physical and mental illness often occur before, during and after periods of homelessness, but the causal pathways and nature of the relationships among these factors remain in need of systematic empirical study.
- Very few studies have investigated the relationship between PTSD and homelessness within the context of time (i.e. which occurs first), but there is some evidence to suggest that the development of PTSD commonly precedes the onset of homelessness.

Barriers experienced by people who experience homelessness in receiving mental health interventions

- Despite high levels of need, many people who experience homelessness do not receive adequate or appropriate physical or mental health care.
- Systematic barriers include the deinstitutionalisation and an apparent lack of a responsive community mental healthcare system to respond to the needs of people with severe mental illness; the general inaccessibility of healthcare to people who experience homelessness; and the pressures of extreme poverty – such as the necessity to obtain food over healthcare.
- Barriers can also come from providers who are reluctant to treat clients experiencing homelessness, and from clients who are distrustful about the providers and authorities.
- Practical problems can hamper efforts to engage with mental health services, such as lack of transportation and the cost of using public transport.
- People experiencing homelessness with mental health problems are less likely than other mental health consumers to experience continuity of care.

- Difficult client behaviour, such as behaviours related to active substance use, and difficulties with engagement can sometimes hinder efforts by workers to promote recovery.

Working with people who experience homelessness: A trauma informed practice model

- Currently, few programs serving individuals experiencing homelessness directly address the specialised needs of trauma survivors.
- Some programs that service clients who experience homelessness are developing trauma-informed services. These services recognise the significance of trauma exposure in understanding client problems.
- A consensus based definition of Trauma-informed Care (TIC) has been developed by Hopper, Bassuk and Oliver (2010). The themes encompassed by this definition include trauma awareness, emphasis on safety, opportunities to rebuild control, and strengths-based approach.

Introduction

Every night, around 105,000 Australians experience homelessness [1], and according to the 2006 Census, 20,511 Victorians were recorded as homeless – a 15 per cent increase in the decade from 1996 [2]. Many people who experience homelessness also experience mental disorders. As the Commonwealth Advisory Committee on Homelessness noted in 1998, "Homelessness among people with mental disorders is a multifaceted complex problem for which the causes are numerous and inter-related" (p.11)[3]. Developing a better understanding of the complex needs of those who experience homelessness, in the context of mental illness, and in particular trauma, will play an important role in the development of appropriate services.

Among the population of people that experience homelessness, three general subgroups have been identified. The largest group comprises people whose primary issues are a lack of affordable housing and/or work opportunities. People in this group typically need relatively little support and most of these people return to housing quickly [4]. The second group, which is sometimes referred to as the 'transitional homeless', experience homelessness for more diverse reasons, remain homeless for longer and have greater support needs than the first group [4]. The third group consists of people who have remained homeless for long periods of time, often cycling between the street, institutions and poor quality temporary accommodation [4]. Although this group is relatively small, overseas research has indicated that they consume a disproportionate amount of health and justice resources [5]. People in this group are often described as experiencing long-term homelessness or chronic homelessness. An examination of homelessness in inner Melbourne found that long-term homelessness (12 months or longer) was experienced by 70% of people aged between 19-24 who had experienced homelessness, and 85% of people 25 or older who experienced homelessness [6]. For this group, it is now widely understood that affordable housing alone is unlikely to be an adequate or lasting solution to homelessness [7]. This third group is the primary focus of this literature review, although at times we report information from studies that have included other homeless subgroups.

Studies, both in Australia and internationally, consistently document that people who experience homelessness also report disproportionate exposure to traumatic events, and some people will go on to experience traumatic stress reactions. However, traumatic

stress reactions are not the only psychiatric issues facing people who experience homelessness; many people experiencing homelessness also suffer from depression, substance abuse [8] and severe mental illness [9]. These issues leave individuals even more vulnerable to further exposure to traumatic events [10]. In Australia, research on the relationship between homelessness and trauma is particularly limited. More research that addresses this gap will assist support services in meeting the needs of those who experience chronic homelessness.

This literature review draws upon the international and national literature to build a detailed understanding of the relationship between traumatic events in people's lives and homelessness.

Literature Review Scope

This literature review is part of the Trauma and Homelessness Initiative. The questions that will be addressed by the literature review were developed by the project's reference group whose membership includes representatives from Sacred Heart Mission, Mind Australia, Inner South Community Health Service and VincentCare Victoria. The key question to be addressed is:

What is the nature of the relationship between traumatic events in people's lives and homelessness?

While literature that addresses this specific question is somewhat limited, there is an extensive trauma literature that can be used to inform the question, giving rise to the following subsidiary questions:

- What are the types of traumatic events that are experienced by people who also experience long-term homelessness?
- What are the mental health disorders that are prevalent amongst people experiencing homelessness?
- What are the risk factors that contribute to recurring homelessness after the experience of trauma?
- What is the impact of trauma exposure and resulting mental health problems upon homelessness?
- What are the barriers experienced by people who experience homelessness in receiving mental health interventions?
- What is the evidence to support a trauma-informed practice model?

Within this agenda, this literature review has primarily been written to:

- review the existing body of empirical literature related to the key question
- review the grey literature related to the key question
- assist in the development of a research project that investigates the nature of the relationship between traumatic events in people's lives and their state of homelessness
- assist in the development of a trauma-informed framework that will guide practice and service delivery of agencies who work with people who are homeless.

Literature Review Methodology

An extensive search of databases was conducted using the search terms: “homeless”, “homelessness”, “stress”, “trauma”, “PTSD”, “mental*health”, “barriers*care”, “mental*health*intervention” and “trauma*informed*service”. The literature was sourced using standard scientific databases, notably Medline, Web of Science and PsychInfo. This search yielded 674 research articles.

On the basis of information contained in the abstracts, articles related to the key question were then selected for inclusion in the review. Where possible, literature involving Australian people experiencing homelessness was utilised, and in the absence of this, research from other similar countries such as the USA and the UK was used. In cases where there was an absence of literature relating to trauma and homelessness, other trauma literature (such as interpersonal violence research), was drawn upon.

Priority was given to high quality studies including systematic reviews and randomised controlled trials. The process resulted in a primary group of 142 articles which were matched to the scope of this review, in terms of context and content. As a quality control process, the first author cross-checked 10 per cent of these primary articles against the review scope. To ensure that the review was comprehensive, after the initial draft of the review was completed, each of the primary and secondary articles was examined once again, to ensure that all key findings were included.

To supplement the literature review, a search of the grey literature (including government reports, research working papers and other authoritative reports) and publically available website resources was also conducted. The aim of this search was to identify any reports or papers in Australia and internationally which have reported on the nature of the relationship between traumatic events in people’s lives and homelessness. This serves to ensure that the review captures research and service development initiatives which exist outside of the scientific literature. The same key words were used as for the scientific literature review. In addition, during consultation that occurred prior to this literature review, the authors were provided with several reports and documents from the Sacred Heart Mission, VincentCare Victoria, Inner South Community Health Service and Mind Australia. Relevant information from these reports was drawn upon in this review. Combined, these strategies contributed to a thorough and robust methodology for this literature review.

Defining Trauma: General Overview

In this review, we will be defining a traumatic experience as one where an individual is confronted with actual or threatened death, serious injury or sexual violation, or they are exposed to the death, injury or suffering of others [11]. In the case of childhood trauma this includes witnessing these events as they occur to others (especially primary caregivers) or learning that these events occurred to a parent or primary caregiver. Examples of traumatic events include serious injury, physical or sexual assault, kidnapping, torture, being threatened with a weapon, and neglect during childhood.

This definition differentiates traumatic events from stressful events. There is an extensive literature exploring how traumatic events differ from other stressors in their nature (quality) and intensity (quantity). Essentially, the word trauma means wound, and a traumatic event is one that has the potential to result in a "psychic wound" or psychological injury. While an in-depth discussion about this topic is beyond the scope of this review, there are a number of review papers which the interested reader may find useful [e.g. 12, 13, 14].

People who are exposed to a traumatic event(s) may experience a range of traumatic stress symptoms which include, intrusive memories about the event, behavioural and emotional avoidance, high levels of arousal (such as increased startle and hypervigilance), sadness, anxiety and guilt. PTSD is a disorder that occurs following exposure to a traumatic event, where the person was confronted with actual or threatened death or serious injury, or a threat to the physical integrity of oneself or others. The person's response must also involve intense fear, helplessness or horror, and the person must experience a constellation of symptoms that includes intrusive memories about the event, behavioural and emotional avoidance, and high levels of arousal [11].

Single occurrences of a trauma are known as *Type I* trauma [15]. For some people, especially those who experience events that are interpersonal, prolonged and/or repeated nature (e.g. imprisonment, torture),, the impact of traumatic events can be pervasive and long-lasting. This type of trauma is often referred to as *Type II* trauma [15]. This is particularly the case for childhood traumatic events that are repetitive or

prolonged, involve direct harm and/or neglect by caregivers, and occur at developmentally vulnerable times for the child. These types of traumatic events can give rise to complex psychological, social and behavioural problems in adulthood. They can lead to lasting changes that interfere with a person's sense of safety, ability to self-regulate, sense of self, perception of control and self-efficacy, and interpersonal relationships [16].

People who have experienced *Type II* trauma present with a constellation of characteristic features alongside the core PTSD symptoms. These features can include: impaired emotional control; self-destructive and impulsive behaviour; impaired relationships with others; hostility; social withdrawal; feeling constantly threatened; dissociation; somatic complaints; feelings of ineffectiveness, shame, despair or hopelessness; feeling permanently damaged; and a loss of prior beliefs and assumptions about their safety and the trustworthiness of others [17]. Issues of chronic self harm and/or suicidal ideation are more common in this group. People exhibiting this constellation of features are often referred as having complex PTSD [18] or Disorders of Extreme Stress Not Otherwise Specified (DESNOS: APA; 1994).

In the community, the majority of people who experience traumatic events recover over time. That is, the majority of individuals are resilient to the impacts of trauma exposure. In a significant minority of people, however, traumatic stress symptoms increase in severity and develop into psychiatric disorders which require treatment. The factors that cause some individuals to be more vulnerable to the effects of exposure to traumatic events, and others to be vulnerable to homelessness, will be discussed in detail, in the section '*What are the risk factors that contribute to recurring homelessness after the experience of trauma'*.

What Types of Traumatic Events Are Experienced by People who Experience Long-term Homelessness?

A high incidence of trauma among people who experience homelessness is well documented, particularly in the US [19-21]. Studies have confirmed similarly high rates of trauma among people who experience homelessness in Australia [22-24]. Buhrich, Hodder & Teeson (2000) found that all women and 91% of males who experienced homelessness, in a large sample from inner Sydney, reported at least one major trauma in their lives and many reported multiple traumas [22]. Similarly, Taylor and Sharpe (2008) found that 98% of their sample from inner Sydney had experienced at least one traumatic event in their lifetime, and 93% had experienced two or more [25]. In comparison, 57% of the general Australian population report one lifetime trauma and 32% report two or more traumas [26]. In this section, we will review the literature related to the types of traumatic events that are experienced by people who experience long-term homelessness, and the frequency with which they experience such events.

In terms of the types of traumatic events that are experienced in the lifetime of those who experience homelessness, one US study found that over two-thirds of women reported an experience of physical abuse [27] in their lifetime. A study of people experiencing homelessness in inner Sydney found that half the women and 10% of men reported they had been raped [22] in their lifetime. For men the experience of rape usually occurred in an institutional setting. In the inner Sydney sample 57% of men and 61% of women were seriously attacked or assaulted in their lifetime, while 55% of men and 55% of women witnessed someone being badly injured or killed.

More often than not, people who experience long-term homelessness have experienced some form of childhood trauma [22, 28, 29]. However, very few studies have investigated the prevalence of childhood trauma using rigorous methodology. One study which did have a good methodology found that 52% of people experiencing homelessness experienced childhood trauma. However, the authors did not specify whether this referred to physical or sexual abuse, or both. Differences in the prevalence of childhood trauma between males and females were not assessed in this study [28]. In another well designed study it was found that 70% of men and 77% of women

experienced physical abuse in childhood, while 64% of men and 84% of women experienced sexual abuse [30]. Interestingly, a study which compared childhood trauma in women experiencing homelessness with housed women receiving financial aid and housing assistance, found that both groups experienced high levels of childhood trauma with no significant differences in prevalence between the groups [31]. This may suggest that childhood trauma itself may not be a barrier to securing stable accommodation.

In the Journey to Social Inclusion (J2SI) study [4] a sample of people experiencing long-term homelessness in Melbourne was examined. Eighty-seven per cent of participants had experienced childhood trauma, and the average age at which they first experienced a traumatic event was 12.7 years. A key indicator of the extent of adverse childhood experiences was growing up in the out-of-home care system (e.g., foster, group or institutional care). In the J2SI study, 40% of participants reported that they had spent time in the Child Protection system when they were growing up [4]. Other research has shown that people who are involved in the Child Protection system typically grow up in homes where parental substance abuse and family violence are common [32, 33]. Almost all of the J2SI participants (95%) had experienced significant trauma. When the researchers looked at specific types of trauma, it was found that: 52% of participants had experienced sexual abuse (66% of women versus 36% of men); 75% had experienced physical assault in their lifetime; 12% had experienced physical assault in the previous six months; 67% had witnessed someone being badly injured; 57% had been threatened with a weapon or held captive; and 54% had been involved in a life threatening accident [4].

People who experience homelessness also report traumatic experiences during homeless episodes. Living without a stable, safe residence and having limited financial and social resources, people experiencing homelessness are vulnerable to exposure to a variety of traumatic events. A study of older people experiencing homelessness in New York found that nearly half were robbed and over one-quarter were physically assaulted in the previous year [34]. Another US study found that in the previous two months, 18% of a sample currently experiencing homelessness had been threatened with a weapon, 16% had been beaten and 6% had been sexually assaulted [35]. People experiencing homelessness are at greater risk of violence than those who are housed [7, 36], with international research suggesting that violence, especially sexual violence, is more

prevalent among homeless women [37, 38]. This is of particular importance given that violence may increase the likelihood of prolonged or chronic homelessness [39].

Factors which may render people experiencing homelessness vulnerable to physical assault include alcohol and drug intoxication, the seeking-out of illicit substances, cognitive impairment and physical frailty [22]. Not surprisingly, fears about personal safety and security are common [25]. In some circumstances this fear may itself contribute to further trauma exposure. Researchers have found that some women seek increased safety through a male partnership that may ultimately lead to violence [40]. In addition, people experiencing homelessness are vulnerable to injury. A survey of homeless adults in the US found that traumatic injuries (many of which resulted from interpersonal violence) were most frequently reported as the reason for last visiting a hospital emergency room [41]. This accounted for 39% of all the annual emergency room visits by people experiencing homelessness, and surpassed all other reasons. Research from the US has also found that people who "sleep rough" (i.e., sleep on the streets) are significantly more likely to experience chronic health problems and have a mortality rate three to four times higher than that of the general population [42].

The Inner South 2009 Client Survey found:

- clients reported an average of eight life events that were reflective of trauma and associated with difficulties
- assault had been experienced by 33.7% of clients, family violence by 30.6%, abuse by 10.7%, sexual abuse was reported by 6%, rape by 0.3%, and war and famine was experienced by 0.4%

The Sacred Heart Mission 2010 Client Survey found:

- 75% of respondents said they had a history of trauma
- trauma occurred before homelessness for 10% of clients, after homelessness for 10%, and both before and after for 55%

In the general community, men are more likely than women to experience traumatic events [43, 44], and in particular non-sexual violent assault (such as being shot or stabbed, mugged/threatened with a weapon or beaten badly) and other accidental injury [9, 43-45]. A number of studies have found that homeless women experience higher

rates of assault than their housed counterparts [46-48], although this finding needs replication. Past research has suggested that homeless women are significantly more likely to be physically assaulted than men [35, 49]. However, in one of the only studies that made a direct comparison there were no statistically significant differences between women and men in reported rates of assault. Women were, however, more likely to experience sexual violence [50]. Importantly though, in this study respondents were asked to report assault within the last 30 days, whereas most other studies included a wider time frame.

As will be discussed in the section '*Mental health disorders that are prevalent amongst people experiencing homelessness'*, people experiencing homelessness have a higher prevalence of psychiatric disorders compared to the general Australian population. Unfortunately, poor mental health also increases the risk of exposure to traumatic experiences, with schizophrenia [50], more severe psychotic symptoms [35], a history of psychiatric hospitalisation [20] and general psychological distress [51], all having been associated with violent assault of people experiencing homelessness.

What Mental Health Disorders are Prevalent Amongst People Experiencing Homelessness?

Research has found that the vast majority of people who experience homelessness also experience at least one psychiatric disorder [22, 52], and that the prevalence of psychiatric disorders among homeless adults is much higher than in representative community samples [53]. In this section, we examine the prevalence of posttraumatic reactions amongst those who experience homelessness, and the most prevalent mental health disorders.

Psychiatric disorder often precedes homelessness [54], but there is also evidence that some people become mentally ill as a result of experiencing chronic homelessness [55]. Consistently, research has found that mood disorders [56], psychotic disorders (i.e., schizophrenia and bipolar disorder) [57] and trauma-related disorders (e.g., posttraumatic stress disorder) [22] have all been found to be over-represented amongst adults experiencing homelessness. There is also a body of literature that has examined the level of comorbid psychiatric disorder amongst those who have experienced traumatic events, and this research is discussed below.

Trauma and homelessness

There are a number of psychiatric disorders that can develop in the aftermath of exposure to traumatic events. Posttraumatic stress disorder (PTSD) is specifically linked to experiencing a traumatic event, and as such, is the disorder that most of the scientific literature has focussed on. There is, however, increasing awareness that other disorders can develop after trauma, including major depressive episode (depression), anxiety disorders and substance use disorders (such as alcohol use disorders).

Evidence suggests that people who experience homelessness are at elevated risk of experiencing PTSD. PTSD is made up of three clusters of symptoms, including recurring and distressing recollection of the event (e.g., intrusive memories or nightmares), avoidance of reminders of the event (e.g., avoiding people with characteristics similar to an assailant), and increased arousal (e.g., increased heart rate or sweating when reminded of the trauma, and poor sleeping). These symptoms are very distressing and can lead to significant levels of social and functional impairment.

Given the high incidence of exposure to multiple traumatic events in the homeless population, one might expect a high prevalence of PTSD [58]. Furthermore, many of the factors which increase the risk of PTSD (e.g., a history of childhood trauma, history of psychiatric disorder, inadequate support systems, low socioeconomic level) are often found in people who experience homelessness [30, 58]. However, surprisingly few studies have assessed PTSD among people experiencing homelessness. Furthermore, the studies that have been conducted fail to show a consistent picture. For example, two international studies which examined lifetime prevalence rates of PTSD (PTSD present at any time during lifetime) in women experiencing homelessness, reported a range from 34% - 36.1% [30, 59]. The only study that examined the one-month prevalence rate (PTSD present in the past month) for women found a rate of 17.4% [59]. Only one study could be found which examined the lifetime prevalence rate of PTSD for men, reporting a rate of 18% [30]. No studies examining the one-month prevalence rate for men experiencing homelessness could be identified.

In the only Australian peer-reviewed study to examine prevalence rates in adults experiencing homelessness, it was found that 79% of the sample (both males and females) met criteria for a lifetime diagnosis of PTSD, while the 12 month prevalence of PTSD (PTSD present in the last 12 months) was 41% [25]. These prevalence rates are considerably higher than those observed in the international studies. The variation in the prevalence rates is most likely due to methodological issues, such as the instruments used to measure PTSD. For example, the Australian study allowed PTSD to be diagnosed by either the USA diagnostic criteria [Diagnostic and Statistical Manual of Mental Disorders (DSM-IV); 11] or the international criteria [International Classification of Mental and Behavioural Disorders (ICD-10); 60], whereas the international studies used DSM-IV criteria alone. Although a breakdown of the prevalence rates for males and females was not reported in the Australian study, it was reported that there were no significant differences in the rates of PTSD between men and women. This finding is similar to that in youths experiencing homelessness, where gender differences in PTSD have not been found [61]. In contrast to the PTSD rates of adults experiencing homelessness, the 12 month prevalence rate of PTSD in the Australian general community is relatively low at 1.5% [26], as is the lifetime PTSD prevalence rate at 5-10% [44].

The VincentCare Homeless and Drug Dependency Trial - Rebuilding Lives (2005) found:

- 9% of clients had been previously diagnosed with PTSD, while 25% had been diagnosed with an anxiety disorder and 57% had been diagnosed with depression

In the general population, males are less likely than females to develop PTSD [44] or depression [62] following traumatic events, but more likely to develop substance use disorder [63]. In a landmark study of the effects of previous exposure to trauma, it was found that trauma-exposed women are more likely to develop PTSD, even when the type of traumatic event is controlled for [58]. In addition, it was found that women's higher risk of PTSD was not attributable to sex differences in history of previous exposure to trauma. Therefore it might be expected that for people experiencing homelessness, women would have a higher prevalence of PTSD than men. However, the literature has fallen short in terms of addressing trauma exposure among homeless men [64]. Instead, the majority of current literature focusses on women or families [e.g. 65, 66, 67]. This highlights a pressing need for epidemiological research examining trauma exposure and PTSD in men experiencing homelessness. This would also allow comparisons to be made between the PTSD prevalence rates for males and females experiencing homelessness.

As discussed in the previous section, people who experience homelessness often experience multiple traumatic events in their lifetime. A study that examined the relationship between types of traumatic events experienced by homeless men and trauma symptoms, found that life threatening illness and witnessing violence were most strongly related to trauma symptom severity [68]. This finding is consistent with other research that has found that those who experience multiple traumatic events have worse long-term outcomes than those who have experienced fewer events [69]. In addition, the number of stressful life events and the presence of a mental health disorder emerged as significant predictors of trauma symptom severity for homeless men [68].

Given the relative dearth of literature related to the prevalence and correlates of PTSD in adult Australians experiencing homelessness, it is important that future research aims to develop a more complete picture of the relationship between these issues.

Other mental health disorders and homelessness

The prevalence of serious psychiatric disorder and substance abuse is high among people experiencing homelessness in many Western cities [70-72]. Common psychiatric diagnoses in this group include major depression, bipolar disorder, schizophrenia and personality disorders.

In a US national survey of people experiencing homelessness, it was found that 39% of respondents had a current mental health disorder, 50% had a current alcohol and/or drug problem, and 23% had concurrent mental health and substance use problems [73]. In comparison, an Australian national survey of people experiencing homelessness, utilising specialist homelessness services, found that 12% of respondents had a current mental health disorder, 19% had a current alcohol and/or drug problem, and 5% had both mental health and substance use problems [74].

A survey of a representative sample of men and women experiencing homelessness in inner Sydney found that 73% of men and 81% of women met criteria for at least one mental disorder in the past year (12 month prevalence) and 40% of men and 50% of women had at least two mental disorders [75]. The prevalence rate of schizophrenia among men and women was 23% and 46%, respectively. The prevalence of any mental disorder was found to be four times higher among homeless men and women in inner Sydney than within the Australian general population. When gender differences were examined, for men in inner Sydney there was a prevalence of 49% for alcohol use disorder, 34% for drug use disorder, 28% for depressive disorder and 22% for anxiety disorder [75]. For women the rates were 15% for alcohol, 44% for drug use, 48% for depressive and 36% for anxiety disorder, respectively. Although mood and anxiety disorders occur commonly in the general Australian population [76], the research suggests that these disorders have a much higher prevalence within the homeless population.

There is also a high level of comorbidity between PTSD and other psychiatric disorders. Comorbidity, the concurrence of two or more psychiatric disorders in the same individual, is gaining increasing attention in the psychiatric literature [72]. In a study of Australian adults experiencing homelessness, of those who met criteria for current PTSD, 55% screened positive for psychosis; 69% scored in the severe or extremely severe range for depression; 50% scored in the severe or extremely severe range for anxiety; 31% met

criteria for a diagnosis of OCD; 56% score in the severe or extremely severe range for stress; 63% screened positive for harmful or hazardous drinking or alcohol dependence; and 88% screened positive for a substance use problem, abuse or dependence [25].

As discussed in the section *'Types of traumatic events that are experienced by people who also experience homelessness'*, there is research to suggest that people who have schizophrenia and psychosis are more likely to be physically assaulted. A systematic review of the prevalence of schizophrenia in homeless persons found rates ranging from 4-16% and a weighted average of 11% in the ten most methodologically sound studies [77]. A study of people experiencing homelessness in inner Sydney found that those with a history of schizophrenia or any other psychotic disorder were 3.1 times more likely to be physically assaulted than those without such a history [36]. It has been proposed that the relationship between assault and psychosis occurs because the symptoms of psychosis often leads to impaired judgment which in turn affects one's ability to identify risk (thus leading to an increased risk of assault). Furthermore, responding to psychotic symptoms (e.g. auditory hallucinations or other positive symptoms) by talking to oneself and disordered behaviour draw attention to people with psychotic disorders, increasing the likelihood of violence [78].

The People Living with Psychotic Illness 2010 Report found:

- Over half (57.2%) of people with a psychotic illness reported experiencing a distressing or traumatic event in childhood, with 16.1% reporting being sexually abused in childhood

As described earlier, substance abuse and dependence have been associated with trauma and PTSD in people who experience homelessness. However, the relationship between addiction and PTSD is complex. Some researchers have suggested substance abuse may be an antecedent to trauma exposure. Others have suggested that substance abuse is a consequence of PTSD for some, used as a mechanism to cope with the symptoms of the disorder. Similarly, there is a common perception that substance abuse and homelessness are linked, but there is considerable contention about the direction of the relationship [79, 80]. A study of people experiencing homelessness in inner Melbourne found that 15% of the sample had substance abuse problems prior to becoming homeless for the first time, meaning that for most people in

the inner Melbourne sample, other factors caused them to become homeless for the first time [81].

The literature covered in this section highlights the fact that there is a high prevalence of mental health problems amongst those who experience homelessness. There is evidence to suggest that PTSD rates are much higher amongst those who experience homelessness than the general population, however this is an area that requires further research.

What are the Risk Factors that Contribute to Recurring Homelessness after the Experience of Trauma?

Many people experiencing homelessness have also experienced trauma, and people with histories of trauma and mental illness are often at increased risk for losing housing or never gaining adequate stable housing [82]. There is a large body of literature that has examined vulnerability to developing PTSD after trauma exposure, and, quite independently, research has also examined the risk factors associated with homelessness. These two bodies of literature, and any relationships observed between the two, are explored below.

Risk factors for developing PTSD following exposure to trauma

Meta-analyses of studies investigating risk factors for PTSD have identified a number of consistent predictors of the development of PTSD following exposure to trauma. While these meta-analyses include a wide range of traumatic experiences and trauma survivors, their findings are relevant to those who experience trauma and homelessness.

There are a number of individual characteristics that increase the risk for developing PTSD. These include previous psychiatric history, prior trauma history, family history of mental illness, and early childhood adversity [83, 84]. Other individual factors such as a low level of education, female gender, and personality traits have also been identified as increasing the risk of PTSD [83, 84]. One of the most important and modifiable risk factors is social support [85]. The extensive literature on risk factors for PTSD suggests that effective social support, including access to supportive family, friends and work colleagues, can lessen the risk of PTSD [83, 84].

Risk factors for experiencing homelessness

The body of research exploring risk factors for homelessness is not well developed, but there is growing consensus that many interrelated factors may contribute to homelessness [86]. On a macro level, risk factors include poverty, lack of affordable housing, poor education and long-term unemployment. Familial factors may include

family dysfunction (i.e., divorce, mental illness within the family, or conflict), family violence and sexual abuse, childhood institutionalisation and poor family and social support [8, 87, 88]. Individual attributes such as mental health problems (including substance abuse), physical or mental disability and coping ability also play a key role. On a practical level, poor availability of low cost housing, the complexity of the housing system, and the failure of government and community services to provide an adequate safety net for individuals sliding into homelessness may also increase risk [89]. Social exclusion- a term used to refer to the complex compound of disadvantages which can act to marginalise a person in terms of their access to resources and their capacity to be involved in their community [24]- also plays an important role. These streams of sequelae interact with each other, so it is not possible to identify a single cause of, or pathway to, homelessness for any individual.

Poverty has been identified as a core risk factor for homelessness, because welfare benefits and the typically insufficient wages provided by marginal jobs force people to rely on a limited pool of subsidised housing or else experience homelessness [87]. An Australian government report found that of couples with and without children seeking accommodation due to homelessness, most commonly cited eviction or being asked to leave their housing as the main reason for doing so [90]. Being unable to pay the rent is a primary cause of eviction and risk factors associated with being unable to pay the rent include lack of education, lack of work skills, physical or mental disability, substance abuse, minority status and sole support parent status [8, 87].

However, a US survey found that the most common reasons for homelessness reported by men and women living on the street were family related problems such as: marital break-up; family care-givers becoming unwilling or unable to care for a mentally ill or substance abusing family member; escape from a dysfunctional family; or not having a family to turn to for support [88]. Similarly, in Australia, domestic and family violence is a major driver of homelessness, with escaping violence being the most common reason provided by people who seek help from specialist homelessness services [90]. Amongst Australian women who seek assistance from specialist homelessness services, domestic and family violence is the principal cause of homelessness. Fifty-five per cent of women with children and 37% of young single women seek help from specialist homelessness services to escape violence [90]. In a case-control study of female-headed families experiencing homelessness and female-headed housed families, mothers experiencing

homelessness were more likely to have been abused as children, battered as adults, and have fragmented support networks [91].

In addition to suffering from disadvantage, many people who experience homelessness also experience social exclusion. Along with exclusion from housing or employment, they experience exclusion from the fabric of social life [24]. Social exclusion may be understood in terms of two forms: cultural exclusion- i.e. inadequate social participation, lack of social integration and a need for social cohesion and solidarity; and income inequality and material exclusion- i.e. poverty or lack of material resources, with exclusion seen as a product of social inequality derived from economic inequality [24].

Childhood experiences of out-of-home care may increase the risk for homelessness as an adult. Two studies of homeless adults have found that over 15% had experienced out-of-home placement during childhood [92, 93]. A further study found that 46% of adults who experienced homelessness lived in a non-parental placement during childhood, with 20% having lived in an institutional or group placement [94]. However, these results must be treated with caution, given that non-homeless comparison groups were not included in these studies. It is known that young people who have spent many of their childhood years in statutory care face significant challenges when making the transition to independent living [95]. It is also widely recognised that there is a need for services to assist young people to make the transition to independent living following leaving care [96], to mitigate the risk of them experiencing homelessness.

At present however, it is not possible to discern from the literature the extent to which out-of-home placement, in and of itself, leads to increased risk for later homelessness. Factors that lead to out-of-home placement and the nature of the child's experience during out-of-home placement are likely to be of critical importance. In one of the only studies to specifically examine adverse childhood experiences as risk factors for adult homelessness, it was found that these experiences are powerful risk factors for adult homelessness [52]. Specifically, lack of care from a parent during childhood sharply increased the likelihood of subsequent homelessness, as did physical abuse. Perhaps surprisingly, sexual abuse in childhood was not found to have a significant impact in this study. The risk of subsequent homelessness among those who experienced both lack of care and either physical or sexual abuse was dramatically increased compared with people who reported neither of these adversities [52].

A substantial body of literature provides evidence that childhood experiences of physical or sexual assault, and inadequate parental care are also risk factors for negative psychiatric outcomes in adulthood [97-99]. Thus, early childhood adversity may contribute independently to homelessness and poor mental health, but there is also reason to believe that there is an interaction between the two outcomes with each compounding the impact of the other [94, 100]. Furthermore, there may be a gender difference in the relationship between the variables of childhood adversity, homelessness and poor mental health. One study found that boys experiencing chronic homelessness were more likely than homeless girls to have left home and to remain homeless for prolonged periods as a result of childhood abuse and problems with depression [101]. While this was the case for some homeless girls, for many homeless girls traumatic assault and emotional problems such as depression did not occur until after they were homeless and engaged in behaviours such as prostitution, drug use and theft.

Risk factors for chronic homelessness

Very few longitudinal studies of people experiencing chronic homelessness have been published, meaning that the course of homelessness is poorly understood. In one of the only longitudinal studies to examine risk factors for chronic homelessness, Caton [102] interviewed newly homeless single adults admitted to New York City shelters at six month intervals, over a period of 18 months. A longer duration of homelessness was found to be related to older age, past or current unemployment, a lack of earned income, poorer coping skills, less adequate family support, a history of substance abuse and an arrest history. The most important predictors were older age and arrest history.

Further understanding of the risk of experiencing chronic homelessness can be gleaned from studies of homeless onset in which people experiencing homelessness are contrasted with people who have never experienced housing loss. In a study where people experiencing homelessness were matched to a never-homeless sample, North et al [103] found that chronicity of homelessness was associated with symptoms of alcohol use disorder, schizophrenia, antisocial personality disorder and age of drug use disorder onset. This study identifies how the characteristics of people experiencing homelessness

differ from the characteristics of people who have extremely low incomes but manage to stay housed, and highlights the importance of mental health issues in this regard.

As discussed earlier in the section *'Types of traumatic events experienced by those who also experience long term homelessness'*, homeless people, particularly those with mental health problems, are frequently assaulted. Physical assault of people experiencing homelessness has been found to have consequences beyond physical and emotional injury. Although there has been little longitudinal research on people experiencing homelessness, it appears that violent assault may prolong homelessness, even more so than factors such as an individual's level of social support [35]. The reason for this has not been established but the previously described relationship between the experience of mental health problems and physical assault, raises the possibility that the relationship between physical assault and prolonged homelessness may be mediated by mental health problems. This highlights the importance of a focus on mental health problems and the establishment of a safe environment in efforts to mitigate the risk of violent assault and prolonged homelessness.

In summary, a review of the risk factors for PTSD and homelessness has highlighted a complex interactive relationship between the variables that may contribute to both, independently and in combination. Potentially traumatic experiences, particularly in childhood, that are risk factors for the development of PTSD, are an important subset of the risk factors for homelessness that also include economic and social disadvantage. Furthermore, there is evidence that the combined experience of mental health problems and homelessness is associated with an increased risk of further trauma exposure (assault) and poorer housing outcomes in the longer term. However, there is insufficient evidence at this stage to establish causal relationships between these variables.

What is the Impact of Trauma Exposure and Resulting Mental Health Problems upon Homelessness?

Exposure to traumatic stressors is prevalent among homeless people, and homelessness is often associated with trauma, substance use and physical or mental illness, however the nature and direction of causality is not clear. It appears likely to vary for different individuals or sub-populations [104]. Unfortunately very little is known about the antecedents and consequences of homelessness, particularly among men, including the role of trauma, substance abuse, and physical and mental illness. The sparse literature suggests that trauma, PTSD, substance abuse and physical and mental illness often occur before, during and after periods of homelessness, but the causal pathways and nature of the relationships among these factors remain in need of systematic empirical study [68].

This is particularly relevant because exposure to traumatic events occurs frequently among homeless adults, and many of the risk factors for homelessness are risk factors for PTSD [44]. For example, as was discussed in the previous sections, people who experience homelessness have a far greater risk of being exposed to a traumatic event than a housed person. Adults who experience homelessness seem to be at higher risk for further traumatic stressors, especially assault, than their housed counterparts, but what role this and the associated PTSD play in chronic homelessness is unknown. It has been suggested that exposure to violence may increase the likelihood of chronic homelessness [39]. Lam and Rosenheck [35] found that recent assault negatively impacted on both duration of homelessness and quality of life, suggesting a critically important role for trauma-informed services that aim to minimise further trauma exposure as well as provide appropriate support.

Very few studies have investigated the relationship between PTSD and homelessness within the context of time (i.e. which occurs first), but there is some evidence to suggest that the development of PTSD commonly precedes the onset of homelessness. In a study conducted in the US, North and Smith found that of those with a lifetime history of PTSD, 71% of men and 74% of women developed PTSD before the year that they first became homeless [30]. Similarly, in an Australian study of homeless youth, trauma preceded homelessness in 50% of cases and was the precipitant for homelessness in

30% of cases [105]. In the only study to examine this issue with Australian adults experiencing homelessness, Taylor and Sharpe [25] found that in 83% of cases the first trauma occurred before the first homeless episode and in another 4% of cases the first trauma and homelessness coincided.

Given the scarcity of research on the nature and direction of the impact of exposure to trauma upon the experience of homelessness, this is an area that is in need of attention from the research community. Since the experience of trauma may be a risk factor for homelessness, it is important that this relationship be better understood, so that steps can be taken to prevent the onset of homelessness in those who have experienced trauma.

What are the Barriers Experienced by People who Experience Homelessness in Receiving Mental Health Interventions?

As we have discussed in the previous sections, many people who experience homelessness also have diagnoses of serious mental illness. In the general community, approximately two thirds of all people with mental illness do not receive treatment in any given year [106], and this proportion is likely to be far higher for those experiencing homelessness, who frequently report difficulties in accessing care [24]. Systemic barriers including deinstitutionalisation and the subsequent failure of the community mental healthcare system to respond to the multitude of needs of people with severe mental illness, the general inaccessibility of healthcare to people who experience homelessness, and the pressures of extreme poverty – such as the necessity to obtain food over healthcare – have all been cited in the international literature as factors that contribute to the problem of experiencing homelessness and mental illness [77, 107-110].

Many efforts have been made to develop useful treatment programs and facilities for people who experience homelessness and mental illness. These services, however, are often not utilised to an extent that would be desirable. Studies have shown that people who experience homelessness report more psychiatric hospitalisations than their housed counterparts [56, 111]. The experience of trauma increases the need to access mental health services, and as we have previously discussed, the majority of people who experience homelessness have also experienced trauma. However, despite high levels of need, many homeless people do not receive adequate or appropriate physical [112] or mental health care [113].

Researchers have defined various types of barriers (e.g., financial, bureaucratic, programmatic and personal) and their potential impact on the extent of service usage for people experiencing homelessness [114]. Mental health service-seeking among those experiencing homelessness tends to be related to their level of need [115], education, residential stability and having a usual place to sleep [116].

Some barriers come from service providers who are reluctant to treat clients experiencing homelessness [117, 118]. Some of the reasons that service providers are

reluctant to treat these clients include, feeling overwhelmed by the clinical problems, being unprepared to deal with social and economic needs, and feeling too demoralised to pursue what they perceive as improbable goals or "lost causes" (p. 450) [117]. Many people experiencing homelessness have not traditionally been well cared for and may be reluctant to engage in services. As such, further barriers may come from the people themselves, who are distrustful about the providers and authorities [119]. Simple practical problems can hamper efforts to engage with mental health services. For example, the lack of transportation to treatment and the cost of using public transport can prevent people from engaging with services [24, 120]. For people who live in remote areas, there is often a lack of services, which can result in feelings of isolation and inadequate support [24]. Little is known however, about the barriers to specific kinds of care and the individualised ways in which interventions can target those barriers to promote preventative and regular service utilisation [121]. In a study which examined barriers to mental healthcare, stigma was found to be the most important barrier, with those reporting the highest level of psychiatric symptoms also a higher probability of reporting perceived stigma and fear of social rejection [122]. Interestingly, over half of the respondents in this study reported that they could solve the mental health problems on their own. Importantly, this study did not involve people experiencing homelessness and the findings may not generalise to this group.

While individuals who experience chronic homelessness have high rates of emergency service utilisation, they are generally unable to access and engage in ongoing outpatient treatment for mental illness, chronic health conditions and substance use disorders. A study by Fortney [123] found that people experiencing homelessness with mental illness are less likely than other mental health consumers to experience continuity of care. This was measured by longer duration between encounters for mental health services, lower volume of service encounters, fewer types of services received, lower likelihood of receiving continuous care from the same facility/provider, and lower likelihood of having a case manager. The authors note that low continuity of outpatient care over time puts people who experience homelessness and mental health problems at risk for encounters with other elements of the service system such as hospitals and emergency departments which are less likely to meet their needs, as well as placing them at risk for encounters with the criminal justice system [123].

These findings are consistent with other studies which have documented inefficient patterns of service utilisation among people experiencing homelessness and mental health problems – more days of acute psychiatric hospitalisation, greater utilisation of services in the psychiatric emergency units of hospitals, and more infrequent use of outpatient mental health services [56, 124, 125]. In one examination of an outreach program for homeless mentally ill veterans, only 24% were still in contact with services after three months [126]. In another study, 40% of a sample of people experiencing homelessness with a dual diagnosis of mental health problems and substance use disorder failed to commit even for one day [127]. Individuals experiencing homelessness are also more likely to cycle in and out of emergency and residential substance abuse treatment services and often find it difficult to maintain participation in outpatient settings [89]. People experiencing homelessness who participate in substance abuse treatment services are more likely than other participants to have had multiple episodes prior to the current treatment episode [128]. Individuals who enter substance abuse treatment programs are often unable or unwilling to complete the program. Studies of a range of treatment interventions have found that only about one-fourth [129] to one-third [130] of participants complete substance abuse treatment programs, even when the programs are specifically designed for homeless people with serious substance use problems.

Difficult client behaviour associated with client conditions can sometimes hamper efforts by workers to engage clients in treatment and promote recovery. For example, behaviours associated with active substance use were seen as difficult to manage in a review of services designed to serve individuals with co-occurring disorders as they transition to permanent supported housing [131]. The time needed for change to occur was cited as another barrier, with staff reporting that they needed more time and patience than they had expected, in order to build trust and address clients' myriad of issues. In some cases, clients were unable to acknowledge that they had mental health problems, and required months of relationship building and education before accepting any form of counselling or treatment. Lack of agreement or insight into mental illness issues, a lack of awareness of available services and a reluctance to access services due to past negative experiences, are all common barriers to receiving treatment for mental illness [132].

By developing a better understanding of, and addressing these barriers to mental health care, it may be possible to develop strategies for improving mental health services for this population.

Working with People Experiencing Homelessness: A Trauma-informed Practice Model

Research shows that people who experience homelessness experience high rates of exposure to traumatic events that occur prior to, and after losing, secure accommodation. Currently, few programs serving individuals experiencing homelessness directly address the specialised needs of trauma survivors [16]. However, in an effort to respond to the needs of those who have experienced trauma, some programs that service clients who experience homelessness are developing trauma-informed services. These services recognise the significance of violence and trauma exposure in understanding client problems. The critical need to deliver services that are trauma-informed has been recently recognised [7, 133, 134], however the wider adoption across the Australian homelessness service is still in its infancy [135].

Trauma-informed care (TIC)

At a minimum, trauma-informed services aim to provide an increased sense of safety, and strive to avoid any re-traumatisation of their service users [4]. In the past, the nature of trauma-informed care (TIC) was ill-defined. Recently, however, in a seminal peer-reviewed article by Hopper, Bassuk and Oliver [16], a consensus based definition of TIC within homelessness service settings was developed:

> *Trauma-informed Care is a strengths-based framework that is grounded in an understanding of and responsiveness to the impact of trauma, that emphasizes physical, psychological and emotional safety for both providers and survivors, and that creates opportunities for survivors to rebuild a sense of control and empowerment* ([16], p.82)

Within the practice literature, being trauma-informed requires that the whole approach to service delivery is aware of the trauma history an individual presents with. The themes encompassed by this consensus based definition can be broken down into some greater detail. The key themes include:

- **Trauma awareness:** Trauma-informed service providers incorporate an understanding of trauma into their work. This may mean that it is necessary to alter *staff perspectives* on how to understand various symptoms and behaviours. This can occur through *staff training, consultation,* and *supervision*.

Organisational changes may also be made, such as routine screening for histories of trauma and assessment of safety. The *self-care* of staff is also an essential element of trauma-informed services [16].

- **Emphasis on safety:** Trauma survivors can feel unsafe and at times may actually be in danger (e.g., victims of domestic violence), therefore TIC works towards building *physical and emotional safety* for both *service users and providers*. Because interpersonal trauma often involves boundary violations and abuse of power, systems must be developed that take into account trauma dynamics, and *clear roles, responsibilities and boundaries* must be delineated. *Privacy, confidentiality and mutual respect* must be maintained to develop an emotionally safe atmosphere, and *cultural differences and diversity* (e.g., gender, ethnicity, sexual orientation) must be respected [16].
- **Opportunities to rebuild control:** Control is often taken away in traumatic situations, and homelessness itself is disempowering, therefore TIC emphasises the *importance of choice* for service users. Trauma-informed services create *predictable environments* and allow individuals to rebuild a sense of *efficacy and personal control* over their lives. This includes involving service users in the design and evaluation of services [16].
- **Strengths-based approach:** Finally, TIC is *strengths-based,* rather than deficit-orientated. Individuals are assisted by the service in identifying their own strengths and developing their own coping skills. TIC service settings are *focussed on the future* and utilise *skills-building* to further develop resiliency [16].

The scientific evidence related to TIC

A small number of studies have examined TIC in relation to psychiatric symptoms and substance use, which provide evidence on the *outcomes* for TIC [e.g., 136]. A meta-analysis of a nine-site quasi-experimental study of comprehensive trauma-informed and consumer-involved service for women with mental health problems [137], found that sites which provided more integrated counselling produced more favourable results for mental health symptoms six-months post-program. Early indications also suggest that TIC may have a positive effect on housing stability. A multi-site descriptive evaluation of trauma-informed services for homeless families found that almost 90% of participants

had either remained in government subsidised housing or moved to permanent housing [138] 18 months after engaging with the program. Although this research suggests that TIC may be effective for those who experience homelessness, there have yet to be any rigorous quantitative studies exploring outcomes within homelessness service settings [16].

From this review of both quantitative and qualitative studies, there is evidence to suggest TIC is generally viewed favourably by service users and providers and there is some evidence linking it to more effective outcomes across several areas including increased rates of housing stability [16]. There are, however, significant gaps in current knowledge for homelessness specific models and further research is necessary to examine its effectiveness [16].

Corroborative evidence related to TIC

Due to the fact that the area of TIC is still in its infancy, a review of the grey literature in this area yields a wealth of information about current practices and policy initiatives. Many of the models of TIC that are currently in use in the "real-world" emphasise staff education, involving consumers and transforming systems to be responsive to the needs of trauma survivors, e.g., A Long Journey Home [139] and Phoenix Rising [140]. Organisational self-assessments can be a starting point for system change, indicating how a service delivery model might be adapted to an organisation's unique needs. A number of trauma-informed organisational self-assessments are currently available including the 'Trauma-informed Organisational Self-Assessment for Programs Serving Homeless Families' [141], and the 'Trauma-Informed Facility Assessment' [142]. The development of these models and self-assessment tools have facilitated the development of a number of TIC programs within the homelessness service system in the US [16].

Given that the majority of people who experience homelessness have also experienced trauma, it is of critical importance to provide a service response that is trauma-informed. There is currently a scarcity of rigorous research in the area of TIC, however this is an area that shows great promise. Future research investigating attitudes, implementation and outcomes of TIC will shed light on this under-researched area.

Conclusion

In this review, the literature on the nature of the relationship between traumatic events in people's lives and homelessness has been examined. A rigorous review methodology was employed to examine topics including: the types of traumatic events that are experienced by people who also experience homelessness; the mental health disorders that are prevalent amongst people experiencing homelessness; risk factors that contribute to recurring homelessness; the impact of trauma exposure and resulting mental health problems upon homelessness; the barriers experienced by people who experience homelessness in receiving mental health interventions; and the evidence to support a trauma-informed practice model.

The content of this review will be used to assist in the development of a research project that investigates the nature of the relationship between traumatic events in people's lives and their state of homelessness. It will also assist in the development of a trauma-informed framework that will guide practice and service delivery of agencies who work with people who are homeless.

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