



STATE OF THE ART

TICSS

Towards Trauma-Informed Care and Support for persons who use Substances

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Keywords

Substance use, trauma, recovery, treatment, trauma-informed care

Introduction

The TICSS project will primarily reproduce existing findings from the international literature for the Belgian context, but will also add new dimensions both in terms of the topic and methodology. The TICSS project will use the widely accepted SAMHSA framework for trauma-informed care (TIC) and will implement and adapt it to the Belgian/European context. We will also generate (new) findings on trauma and substance use in Belgian alcohol and drug treatment and prison settings and present an internationally relevant umbrella review of available trauma-informed methods and approaches. We choose for traditional quantitative and qualitative research methods (interviews, systematic review, ...) in terms of methodology, but complement these with an innovative, co-creative approach in WP4 through installing several learning communities on trauma-informed care in prison and treatment settings and with the body mapping technique in WP3, which is an arts-based participatory research method. Also, the choice for an umbrella review in WP1 can be considered innovative.

State of the art

There is a strong bidirectional relationship between trauma and SUD. On one hand, experiencing trauma increases vulnerability to developing SUD. This is influenced by alterations in the brain's stress circuitry caused by early life stressors [1], as research indicates that both acute and chronic stress impact the Hypothalamic-Pituitary-Adrenal axis, altering the reinforcing effects of drugs [2]. Additionally, stressors can result in the development of maladaptive coping strategies, including substance use [3,4]. Stress is believed to facilitate all stages of drug use, from initiation to dependence and relapse [2]. On the other hand, SUD can also heighten the risk of experiencing trauma [5], as SUD is associated with more impulsive behavior and riskier lifestyles [6].

Understanding Trauma: Definition, types and diagnoses

According to the Substance Abuse and Mental Health Services Administration (SAMHSA), "Trauma results from an event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or threatening and that has lasting adverse effects on the individual's functioning and physical, social, emotional, or spiritual well-being" [7]. Several types of trauma are known, including interpersonal trauma, mass trauma, political violence, sexual trauma, etc. When a person has been exposed to multiple or chronic traumatic events, they may suffer from complex trauma. Moreover, individuals exposed to traumatic events may experience a range of posttraumatic psychophysiological reactions, which, if these persist, may turn into Acute Stress Disorder (ASD) or Posttraumatic Stress Disorder (PTSD) [7]. Trauma is a widespread, harmful and costly public health issue. Its effects heavily burden individuals, families, and communities while posing significant challenges for public institutions and service systems. These institutions are increasingly recognizing that many individuals have extensive trauma histories, which, if unaddressed, can hinder their ability to achieve good health and well-being [7].

Trauma-informed care

Organizations can support individuals with extensive trauma histories and prevent re-traumatization by embedding trauma-informed care (TIC) principles. SAMHSA [8] developed a protocol to implement TIC. While there is no universal definition, TIC refers to “a service delivery approach whereby programs (i) recognize the high rates of exposure to trauma (ii) recognize how trauma affects all individuals involved in the organization, including its workforce, and (iii) respond by putting this knowledge into practice” [9].

SAMHSA’s concept of trauma-informed care is grounded in a set of four assumptions, the four R’s: “A program, organization, or system that is trauma-informed **realizes** the widespread impact of trauma and understands potential paths for recovery; **recognizes** the signs and symptoms of trauma in clients, families, staff, and others involved with the system; and **responds** by fully integrating knowledge about trauma into policies, procedures, and practices, and seeks to **resist** re-traumatization actively” [7].

Furthermore, trauma-informed care is guided by six basic principles, namely safety; trustworthiness and transparency; peer support; collaboration and mutuality; empowerment, voice and choice; and cultural, historical, and gender issues. Systematic alignment with these principles is necessary to develop or implement trauma-informed care. Additionally, change at multiple levels of an organization is required. SAMHSA [7] described ten implementation domains: Governance and leadership; Policy; Physical Environment; Engagement and Involvement; Cross-Sector Collaboration; Screening, Assessment, and Treatment Services; Training and Workforce Development; Progress Monitoring and Quality Assurance; Financing; and Evaluation.

Trauma and substance use

Research over several decades shows that individuals with SUD experience both a higher frequency and greater severity of lifetime trauma compared to the general population [9]. Consequently, PTSD and SUD often co-occur [10,3]. It is estimated that the prevalence of SUD among individuals with PTSD is 46%, and among individuals with SUD the prevalence of PTSD is estimated to be between 25% and 34%, with the highest rates in both alcohol and drug use disorders [11]. In addition to a higher-risk lifestyle, research suggests that efforts to self-medicate symptoms of PTSD can contribute to the development of SUD [12]. Furthermore, the onset and persistence of both SUD and PTSD may be linked to shared underlying factors, such as shared genetic vulnerability [6]. Furthermore, the social stress theory [13] suggests that individuals with disadvantaged social status face more stressors, which may increase their vulnerability to maladaptive responses due to the chronicity of these stressors and strained coping resources [14,15].

Despite being highly prevalent, the treatment of individuals with comorbid PTSD and SUD is highly challenging, as both conditions influence one another. More specifically, individuals with both conditions often experience more severe impairment in daily functioning, reduced overall well-being, more psychosocial problems, and generally have poorer treatment outcomes compared to those with PTSD or SUD alone [16]. Furthermore, untreated PTSD heightens the risk of relapse in individuals with SUD and increases the likelihood of developing additional mental health problems. Notably, dropout rates are also higher among patients with both PTSD and SUD compared to those with SUD alone [17,6].

Trauma and substance use in the context of prison

Research indicates that trauma and substance use are interrelated factors that can result in contact with the criminal justice system [18]. Additionally, PTSD symptoms can be exacerbated by substance use, increasing the risk of offending behavior [19,20]. Indeed, numerous studies have found that incarcerated individuals exhibit significantly higher rates of traumatic exposure, compared to the general population [19,21]. A meta-analysis reported the prevalence of PTSD to be 6.2% in male prisoners, and 21.1% in female prisoners [22]. Moreover, 45% of inmates report childhood trauma, which is in turn associated with an increased likelihood of substance use disorder [23]. Furthermore, studies point to the fact that PTSD may impact the individual's ability to benefit from rehabilitative prison-based programs [19], a significant number of cases of trauma and PTSD go undetected and thus untreated in incarcerated individuals [24], and there is an association between PTSD and higher rates of re-offending [19]. Consequently, there is growing attention internationally on the challenges of implementing standardized methods for screening and assessing PTSD and an increasing need for improved treatment within custodial settings [21], and a call for the implementation of "Trauma-informed Correctional Care", which highlights how prison environmental factors may trigger or exacerbate prior trauma, or place prisoners at risk of further traumatization [25,26,27].

In sum, there is a need for increased awareness and understanding of how trauma and SUD interact, how addressing one in treatment may impact the other, what the most effective treatment pathways are for individuals with both SUD and trauma, and whether it is necessary to treat trauma and SUD simultaneously and/or if specific models should be used for this dual diagnosis [19]. In other psychiatric comorbidities that often co-exist with SUD such as ADHD, it is well established that treatment of both conditions should occur in parallel and simultaneously which reflects directly in the treatment outcome of SUD [28]. Also, as the prison environment provides a potentially unique opportunity to intervene, research on trauma-focused treatment and effective clinical pathways in correctional facilities is imperative [19,21]. Consequently, in this project, we aim to:

- Study the relationship between substance use and trauma in treatment and prison settings and effective approaches and methods to deal with it in these facilities
- Map and model trauma-informed care and support services along the intervention spectrum
- Assess current practices and needs regarding trauma-informed support in Belgium and provide recommendations for improving the extent of trauma-informed care and support in prison and treatment settings in Belgium for persons with substance use problems

Value and impact of the research

In recent years, alcohol and drug services have become more aware of the specific needs of some groups of service users, clearly challenging the one-size-fits-all approach that has dominated for long, primarily in residential treatment facilities. In particular, the needs of women in substance use treatment and prevention have often been neglected. More recently, gender-responsive and gender-transformative approaches have been introduced to better respond to the needs of women who use drugs. Similarly, research around trauma and the lack of attention for trauma in substance use prevention and treatment has increased interest in trauma-responsive and trauma-informed approaches. The negative, pervasive and cumulative impact of adverse childhood experiences and other forms of trauma has been documented extensively (Felitti, 1998;

Madigan et al., 2023; Shevlin, 2008), resulting in the development and implementation of methods and therapies to overcome trauma (e.g. EMDR) and approaches and methods to better deal with individuals who have experienced trauma, without necessarily treating trauma.

The US-based SAMHSA (Substance Abuse and Mental Health Services Administration) published a Treatment Improvement Protocol (TIP Series) on trauma-informed care in 2014, indicating 10 areas to be addressed when providing trauma-informed care, as well as 6 key principles to be taken into account. This landmark publication has influenced service provision in the United States beyond the areas of behavioural health care and was recently updated/complemented by a Practical Guide for Implementing a Trauma-Informed Approach (2023) that specifically focuses on tools and strategies for implementing a trauma-informed approach (TIA). While the focus of this practical guide is on organizational readiness and capacity for providing trauma-informed care, it addresses various elements of trauma-informed care and support that are relevant for direct service provision and service users' treatment experience. This protocol and practical guide have also been picked up by European researchers and practitioners, but so far it has not been widely implemented nor adapted to the European context. Consequently, TIA framework developed by SAMHSA will be used as a frame of reference for collecting and analysing the data from this study.

The international context will be taken on board in this research project by providing a state of the art on trauma and substance use and effective interventions based on the international literature and by performing an umbrella review of trauma-informed methods and approaches in WP1. The interview questions in WP3 and formulation of recommendations in WP4 will be inspired by the SAMHSA (2014) protocol mentioned above. Alternately, the umbrella review and assessment of the SAMHSA principles in the Belgian context will generate international attention. Furthermore, the secondary analysis of PROM and PREM data in relation to trauma (PTSD) and of mental health and substance use problems among female prisoners will be of interest to an international audience.

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