Journal of Substance Abuse Treatment 93 (2018) 57–63

Contents lists available at ScienceDirect

Journal of Substance Abuse Treatment

journal homepage: www.elsevier.com/locate/jsat

Differential relationships of PTSD and childhood trauma with the course of substance use disorders

Michaela Mergler[a,*,1], Martin Driessen[b], Ursula Havemann-Reinecke[c], Dirk Wedekind[d], Christel Lüdecke[e], Martin Ohlmeier[f,2], Claudia Chodzinski[g,3], Sibylle Teunißen[h], Steffen Weirich[i,4], Ulrich Kemper[j], Walter Renner[k], Ingo Schäfer[l], TRAUMAB Studygroup[5]

[a] Alpen-Adria-Universitat Klagenfurt, Klagenfurt, AT 9020, Universitätsstraße 65-67, Austria
[b] Department of Psychiatry and Psychotherapy Bethel Clinics, Bielefeld, DE 33617, Remterweg 69, Germany
[c] Department of Psychiatry and Psychotherapy, University of Göttingen, DE 37075, Von-Siebold-Straße 5, Germany
[d] Universitatsklinikum Göttingen, Göttingen, DE 37075, Von-Siebold-Straße 5, Germany
[e] Lower Saxonian Psychiatric Hospital, Goettingen, DE 31515, Rosdorfer Weg 70, Germany
[f] Department of Psychiatry, Social Psychiatry and Psychotherapy, Hannover Medical School, Hannover, DE 30625, Carl-Neuberg-Str. 12, Germany
[g] Department of Psychiatry, Social Psychiatry and Psychotherapy, Hannover Medical School, Hannover, DE 30625, Carl-Neuberg-Str. 1, Germany
[h] Private Practice, Wuppertal, DE 42289, Albertstr. 49 a, Germany
[i] Department of Psychiatry and Psychotherapy, University of Rostock, DE 18147, Gehlsheimer Str. 20, Germany
[j] Westfalian Clinic of Psychiatry and Psychotherapy, Guetersloh, DE 33334, Gütersloh, Buxelstraße 50, Germany
[k] Pan European University Bratislava, Bratislava, SK 82102, Tomášikova 150/20, Slovakia
[l] Department of Psychiatry and Psychotherapy, University Medical Center Hamburg-Eppendorf and Center for Interdisciplinary University of Hamburg, DE 20246, Martinistraße 52, Germany

ARTICLE INFO

Keywords:
Posttraumatic stress disorder
Childhood trauma
Substance use disorder

ABSTRACT

A large body of research documents the link between Posttraumatic Stress Disorder (PTSD) and the course of Substance Use Disorders (SUD). Similar relationships have been reported between Childhood Trauma (CT) and the course of illness in patients with SUD even in the absence of PTSD, but few studies have examined differential effects of PTSD and CT (independent of PTSD) in this population.

We used the International Diagnostic Checklist (IDCL) and the Posttraumatic Diagnostic Scale (PDS) to diagnose PTSD in a sample of patients with SUD ($N = 459$). The Childhood Trauma Questionnaire (CTQ) and the European Addiction Severity Index (EuropASI) were administered to assess childhood trauma and addiction related problems including comorbid psychopathological symptoms. The sample was divided into three groups: patients with experiences of CT and PTSD (CT-PTSD), experiences of CT without PTSD (CT-only), and neither experiences of CT nor PTSD (No trauma) to examine their differential associations with the course and severity of SUD.

Patients of both the CT-PTSD ($n = 95$) and the CT-only group ($n = 134$) reported significantly higher levels of anxiety and depression as well as more suicidal thoughts and suicide attempts during their lifetime than the No trauma group ($n = 209$). Regarding most variables a graded association became apparent, with the highest level of symptoms in the CT-PTSD group, an intermediate level in the CT-only group and the lowest level in the No

* Corresponding author at: Hochriesstr. 12, 84419 Schwindegg, Deutschland, Germany.
E-mail address: mmergler@edu.aau.at (M. Mergler).
[1] Presently: Kbo Isar Amper Klinikum Taufkirchen (Vils), Taufkirchen (Vils), Germany, DE 84416, Bräuhausstraße 5.
[2] Presently: Kassel GmbH Kassel, Germany, DE 34125, Dennhäuser Straße 156.
[3] Presently: Frauennotruf Hannover e.V., Hannover, Germany.
[4] Presently: Department of Psychiatry and Psychotherapy, University of Rostock, Germany im Kindes-und Jugendalter, Rostock, Germany, DE 18147, Gehlsheimer Str. 20.
[5] The TRAUMAB-Group consists of: Gertrud Koesters, Drug Counselling Center, Hannover; Christian Dette, Clinic of Forensic Psychiatry, University of Rostock, Rostock; Olaf Reis, Clinic of Child and Adolescent Psychiatry and Psychotherapy, University of Rostock, Rostock; Elisabeth H. Sylvester, Clinic Nettetal, Wallenhorst; Martin Hoppe, Clinic Freiherr von Lepel, Freistatt; Markus Stuppe, Clinic of Psychiatry and Psychotherapy, Schwerin; Thomas Broese, Clinic of Psychiatry and Psychotherapy, University of Rostock, Rostock; Udo Schneider, Clinic of Psychiatry and Psychotherapy Lübbecke, Lübbecke; Christina Pletke, Lower Saxonian Psychiatric Hospital, Goettingen.

https://doi.org/10.1016/j.jsat.2018.07.010
Received 20 March 2018; Received in revised form 20 July 2018; Accepted 20 July 2018

trauma group. The CT-PTSD group also differed in almost all substance use variables significantly from the No trauma group, including a younger age at first use of alcohol and cannabis, more cannabis use in the last month, and more lifetime drug overdoses.

Our results confirm the relationships of both CT and PTSD with psychiatric symptoms in patients with SUD. Thus, it seems important to include both domains into the routine assessment of SUD patients. Specific treatments for comorbid PTSD but also for other consequences of childhood trauma should be integrated into SUD treatment programs.

1. Introduction

Many patients with substance use disorders (SUD) have a history of childhood trauma (CT) and Posttraumatic Stress Disorder (PTSD) is one of the most frequent comorbidities in this group of patients (e.g. Flynn & Brown, 2008; Ramos et al., 2016; Saladin, Brady, Dansky, & Kilpatrick, 1995). The prevalence of CT in SUD patients ranges from about 20% to 90% (Lawson, Back, Hartwell, Maria, & Brady, 2013; Sacks, McKendrick, & Banks, 2008; Simpson & Miller, 2002) and 37% to 52% have a lifetime diagnosis of PTSD (Gielen, Havermans, Tekelenburg, & Jansen, 2012; Reynolds et al., 2005).

Both, a history of CT and a diagnosis of PTSD have been reported to influence the course and outcome of SUD. Childhood trauma is a predictor for a younger age at the onset of SUD (e.g. Carliner et al., 2016), more psychiatric symptoms (e.g., anxiety, depression; Evren, Kural, & Cakmak, 2006) and more suicide attempts in patients with SUD (e.g. Roy, 2004), but also for more alcohol craving (Schumacher, Coffey, & Stasiewicz, 2006), earlier drop-out from SUD treatment (e.g. Kang, Deren, & Goldstein, 2002) and higher rates of relapse (e.g. Umut, Evren, & Unal, 2017). Some studies reported gender differences with respect to the influence of CT on the course of SUD. For instance, CT severity was an influencing variable for the risk and duration of relapse in female, but not in male SUD patients (Hyman et al., 2008). Similar relationships with the course and outcome of SUD have been reported with a comorbid diagnosis of PTSD. SUD patients with PTSD suffer from more depression, anxiety and emotional dysregulation (Rash, Coffey, Baschnagel, Drobes, & Saladin, 2008; Sippel et al., 2015), and they have a markedly increased suicide risk as compared to SUD patients without this comorbidity (Torchalla et al., 2014). Moreover, patients with PTSD have an earlier onset of substance abuse, report more polydrug use (Mills, Lynskey, Teesson, Ross, & Darke, 2005; Dragan & Lis-Turlejska, 2007) and show a greater severity of current substance use (Clark, Masson, Delucchi, Hall, & Sees, 2001; Mills et al., 2005).

While many studies focused either on the potential influence of CT on the course of SUD or on potential effects of PTSD, both CT and PTSD are often interrelated. Many studies reported that a history of CT increases the risk for PTSD in patients with SUD (e.g. Khoury, Tang, Bradley, Cubells, & Ressler, 2010; Wu, Schairer, Dellor, & Grella, 2010) and childhood traumatic events are the cause of this disorder in a substantial proportion of patients (Epstein, Saunders, Kilpatrick, & Resnick, 1998; Raghavan & Kingston, 2006). Studies that considered differential effects of CT and PTSD on the course of SUD reported inconclusive results. The findings of Fetzner, McMillan, Sareen, and Asmundson (2011) suggest that CT is a predictor for the course of SUD even independent of comorbid PTSD. Similarly, Zlotnick et al. (2006) reported relationships between CT and more psychiatric problems in patients with SUD as well as an earlier onset of the disorder that was not mediated by lifetime PTSD status. In contrast, Tate, Norman, McQuaid, and Brown (2007) found the highest rates of chronic health stressors in SUD patients with PTSD, patients with neither PTSD nor a history of childhood trauma had the lowest and patients with SUD and CT fell in between these two groups. Ullman, Relyea, Peter-Hagene, and Vasquez (2013) found that PTSD symptoms only partially mediate the association between child sexual abuse severity and substance use coping. The latter finding would be consistent with the view that CT can be related to feelings of distress in patients with SUD even independent from PTSD, predisposing them to use substances for “self-medication” and coping (e.g. Berg, Hobkirk, Joska, & Meade, 2016). For instance, El-Sawy and Elhay (2011) reported that coping with stress is the motive for substance abuse in 93% of SUD patients with PTSD, but also in 79% of SUD patients with CT. Given the potential influence of CT even independent from PTSD, some researchers suggested an independent screening for both CT and PTSD in SUD patients as a basis for differential treatment (e.g. Müller et al., 2015). Even in the absence of PTSD, it could be important that SUD treatment programs address frequent consequences of CT such as emotional dysregulation, interpersonal problems, or the risk of revictimization in the patients concerned.

Given that only few studies addressed the differential impact of PTSD and CT (independent of PTSD) on SUD so far, we aimed to examine the associations of both issues with important clinical parameters in a group of SUD patients with and without CT, PTSD, and CT plus PTSD. We hypothesized that (i) patients with CT and PTSD would report an earlier onset and a higher severity of SUD as well as a higher level of comorbid psychopathology as compared to patients with CT-only and patients of the No trauma group. We further hypothesized that (ii) patients with CT-only would report an earlier onset and a higher severity of SUD as well as a higher level of comorbid psychopathology compared to patients of the No trauma group.

2. Material and methods

2.1. Participants and procedure

In a multi-center cross-sectional study, patients were recruited from 14 addiction treatment centers in Germany that are all members of the Northern German Council on Addiction Research (www.nsfev.de). Assessment was conducted from July 2005 to March 2006. The final sample comprised $N = 459$ patients with a substance dependence (alcohol, drug, or alcohol and drug) according to DSM-IV-TR who were abstinent for at least two weeks at the time of the assessment. The participants were between 15 and 60 years of age and literate in German, exclusion criteria were a current psychotic disorder or symptoms of organic brain syndrome. All participants gave their written informed consent. 73.4% of the sample were inpatients, 9.8% day clinic and 16.8% outpatients, all of them were abstinent for at least 2 weeks (without showing withdrawal symptoms), 4% of the patients were treated with opioid agonist treatment. Further details on the sample and the sampling procedure have been published elsewhere (Driessen et al., 2008; Schäfer et al., 2010). The assessment procedures took between 60 and 120 min and were carried out by psychiatrists, psychologists, or social workers who were familiar with structured interviews and had received further training in the context of the study. The responsible Ethics Committee (University of Muenster, Germany) approved the study.