Addictive Behaviors 39 (2014) 265–272

Contents lists available at ScienceDirect

Addictive Behaviors

# Characteristics and treatment interests among individuals with substance use disorders and a history of past six-month violence: Findings from an emergency department study

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## HIGHLIGHTS

- Violence is common among emergency department patients with substance use disorders.
- The findings have implications for emergency department protocols to reduce violence.
- Correlates of violence and victimization across relationship types were identified.

## ARTICLE INFO

*Keywords:*
Partner and non-partner violence
Substance use disorder
Emergency department

## ABSTRACT

The study examined clinical characteristics and treatment interests of individuals identified to have substance use disorders (SUDs) in an urban emergency department (ED) who reported past six-month history of violence or victimization. Specifically, participants were 1441 ED patients enrolled in a randomized controlled trial of interventions designed to link those with SUDs to treatment. To examine factors related to violence type, four groups based on participants' reports of violence toward others were created: no violence (46.8%), partner violence only (17.3%), non-partner violence only (20.2%), and both partner and non-partner violence (15.7%). Four groups based on participants' reports of victimization were also created: no violence (42.1%), victimization from partner only (18.7%), victimization from non-partner only (20.2%), and both partner and non-partner victimization (17.7%). Separate multinomial logistic regression analyses were conducted to examine which variables distinguished the violence and victimization groups from those reporting no violence or victimization. For violence toward others, demographic variables, alcohol and cocaine disorders, and rating treatment for psychological problems were higher for violence groups, with some differences depending on the type of violence. For victimization, demographic variables, having an alcohol disorder, and rating treatment for family/social problems were higher for violence groups, also with some differences depending on the type of violence. Findings from the present study could be useful for designing effective brief interventions and services for ED settings.


## 1. Introduction

Between 1997 and 2007, the total number of annual visits to the emergency department (ED) in the US increased by 23% for persons insured by Medicaid, particularly nonelderly adults, accounting for the largest proportion of this increase (Tang, Stein, Hsia, Maselli, & Gonzales, 2010). The ED visit may serve as a "teachable moment" in which patients might be receptive to health-based interventions (Cherpitel, 1997; Longabaugh et al., 2001). In particular, a focus has been placed on the role of the ED in identifying and intervening with individuals who have problems with substance use disorders (SUDs) (Cherpitel, 2007; Nilsen et al., 2008) and/or involvement with partner violence (Kendall et al., 2009; Krasnoff & Moscati, 2002). Research suggests that brief ED interventions can reduce alcohol use among adults (Blow et al., 2006) and adolescents with a history of alcohol misuse and violence (Walton et al., 2010). Currently, ED settings may be

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0306-4603/$ – see front matter © 2013 Published by Elsevier Ltd.
http://dx.doi.org/10.1016/j.addbeh.2013.10.004

missing important opportunities to screen and engage persons with active SUDs who also have a history of violence and/or victimization. To our knowledge, studies have not examined the development and evaluation of ED based interventions for adult patients with active SUDs and a history of violence and/or victimization. Additional research is needed to better understand the extent and correlates of violence involvement (violence with intimate partners as well as others) among ED patients with SUDs, including the identified treatment needs/interests of those involved with violence (e.g., treatment for factors associated with violence, such as alcohol-, drug-, family/social-, psychiatric- and medical-problems). The current study investigated the clinical characteristics and treatment interests of individuals identified to have a SUD in an urban ED who also reported a history of violence or victimization in the past six months. The present study is unique in that it involves assessing factors associated with both violence and victimization, includes measures of violence/victimization in both intimate partner and non-partner relationships, and examines participants' reported treatment needs.

Prior studies have revealed relatively high rates (~10–46%) of substance use disorders (SUDs) in ED samples (Cherpitel, 2007; Cunningham et al., 2009; D'Onofrio, Becker, & Woolard, 2006), and individuals with SUDs are up to three times more likely to use ED services than those without a SUD (D'Onofrio et al., 2006). In terms of violence involvement, studies of ED samples have revealed relatively high rates of intimate partner violence (IPV) (~9–46%) (Alexandercikova et al., 2013; Cunningham et al., 2009; Hofner et al., 2005; Lipsky & Caetano, 2011; Walton, Murray et al., 2009), with most studies focusing on partner violence victimization among female ED patients (Daugherty & Houry, 2008; Houry et al., 2008; Lipsky, Caetano, Field, & Larkin, 2005). Accordingly, the ED presents an opportunity to interface with those who are at high risk of involvement with violence and may serve as a critical location for violence intervention efforts (Alexandercikova et al., 2013; Choo, Nicolaidis, Jenkinson, Cox, & McConnell, 2010; Cunningham et al., 2009; Walton, Cunningham, Goldstein, et al., 2009). A recent study found that men who report IPV involvement were 1.5 times more likely than non-perpetrators to utilize the ED within a 12-month period (Lipsky & Caetano, 2011).

Given evidence from prior studies, it is important to assess IPV and non-partner violence (NPV) as clinical correlates of SUDs and potential treatment needs may differ on the type and the context of violence involvement [i.e., partner violence only, non-partner violence only, both; or the type of violence involvement]. For example, there is evidence that individuals involved with violence across both partner and non-partner relationships present with greater levels of clinical problem severity (i.e., higher levels of psychiatric distress, such as depression, substance use, antisocial behaviors, or use of less effective coping strategies) (Alexandercikova et al., 2013; Bonar, Bohnert, Ilgen, Sanborn, & Chermack, in press; Chermack et al., 2009; Holtzworth-Munroe & Meehan, 2004; Huss & Langhinrichsen-Rohling, 2006; Walton et al., 2007). There is also evidence of gender differences depending on the nature and type of violence involvement, with male gender being associated with greater participation in non-partner violence (Alexandercikova et al., 2013; Chermack, Walton, Fuller, & Blow, 2001; Cunningham, Walton, Maio, et al., 2003), both partner and non-partner violence (Chermack et al., 2009; Walton et al., 2007), and violence resulting in injury (Chermack et al., 2010; Felson & Cares, 2005; Walton, Cunningham, Chermack, et al., 2009). Studies have not examined the reported treatment needs of individuals with substance use and violence involvement across relationship types in ED or other settings. Assessing participant treatment needs and interests is important, given that several studies have shown that self-identified needs predict actual healthcare utilization. Matching treatment services to participant identified needs improves treatment engagement, compliance, and/or outcomes (Hser, Polinsky, Maglione, & Anglin, 1999; McLellan, Grissom, Zanis, et al., 1997; Shen, McLellan, & Merrill, 2000; Smith & Marsh, 2002). Therefore, identifying the treatment needs and interests of ED SUD patients involved with violence could inform screening and brief intervention protocols in ED settings that are more engaging and effective by being responsive to patients' stated treatment needs and interests.

It should be noted that most studies examining potential differences in characteristics associated with different types of violence involvement have been based on either samples of persons in treatment for SUDs (e.g., Chermack et al., 2001, 2009), or in samples of individuals identified specifically due to marital violence (Holtzworth-Munroe & Meehan, 2004; Huss & Langhinrichsen-Rohling, 2006). Studies that have taken place in healthcare settings have been limited by focusing primarily on IPV perpetration by men and victimization of women (e.g., MacMillan et al., 2009; Roche, Moracco, Dixon, Stern, & Bowling, 2007), by focusing solely on specific patient groups (e.g., injured, Cherpitel, 1997; cocaine chest pain patients, Cunningham et al., 2007), or by using a brief violence screening measures in the ED (e.g., Cunningham et al., 2009; Walton, Murray, et al., 2009). Thus, the present study builds upon prior research in several ways. First, the current study assessed both IPV and NPV perpetration and victimization among individuals in an ED setting with an identified SUD using a comprehensive measure of violence involvement (i.e., the modified Conflict Tactics Scale; Straus, 1979; Chermack et al., 2001). Second, this study assessed IPV and NPV perpetration and victimization in a high-risk sample, particularly, individuals with an active SUD. Third, prior ED-based studies have not asked participants involved with violence or victimization across relationships directly about their perceived treatment needs and interests.

In the present study, we examined the extent of past six-month violence (both perpetration and victimization) across partner and non-partner relationships among men and women with SUDs in an ED setting. Specifically, we investigated how potential demographic variables (i.e., age, gender, race, marital status, education), clinical correlates (i.e., alcohol, cannabis, and cocaine use disorders), and treatment needs and interests (i.e., participants' ratings of importance of treatment for alcohol, drug, psychological, family/social, and medical problems) might differ according to the type of violence involvement (i.e., partner only, non-partner only, both) compared to those participants with SUDs who did not report violence involvement. The current findings have implications for developing ED-based screening, intervention and referral protocols.

## 2. Method

### 2.1. Procedure

Participants (ages 19–60) entering the ED for injury or medical complaints were approached by research staff to participate in the current study. Participants initially completed a 10 minute computerized survey to determine eligibility to take part in a randomized controlled trial (RCT) examining interventions designed to help link patients with SUDs to a treatment referral center. Most ED patients were eligible for screening; exclusion criteria included being pregnant, being unable to provide informed consent, having abnormal vital signs, and seeking ED-care solely for psychiatric purposes. For the RCT, patients who screened positive for at least one SUD completed a baseline assessment. A positive screen for a SUD was included if they reported using alcohol in the past 30 days and had an alcohol use disorder and/or they reported cannabis, cocaine, stimulant, or opioid use in the past 30 days and had a drug use disorder. Participants were also only eligible if they had not received SUD treatment services in the three months prior to this study and were not injection drug users. Participants who agreed to take part in the RCT (75%, $n = 1441$) completed a computerized baseline survey that assessed areas such as substance use history, violence perpetration and victimization, and psychosocial factors (see Blow et al., 2010 for additional information regarding the recruitment procedures).