Pacini Editore & AU CNS

Regular article

Heroin Addict Relat Clin Probl 2015; 17(6): 23-30

HEROIN ADDICTION & RELATED CLINICAL PROBLEMS
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Is there any relationship between drug users' bereavement and substance consumption?

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Summary

Background: People with substance use disorders frequently present life stories marked by suffering and loss. Few studies have assessed the role of bereavement of a significant person in the drug dependent population. Aim: This study explored the loss of a significant person among 196 bereaved drug dependent patients before and after the age when they consider that their drug consumption increased. **Methods:** Socio-demographic characteristics, bereavement and drug related variables were examined. Perceived relationship between the significant loss and drug consumption was also assessed. Complicated grief symptomatology was measured by the Spanish version of the Inventory of Complicated Grief (ICG). **Results:** 83.2% of all participants stated that, after suffering the loss, they increased drug consumption. 12.3% of the patients who first increased drug consumption and after suffered the loss of a significant person reported a relapse after the loss. However, 54% of the participants who first experienced the loss and after increased their drug consumption did not perceive any relationship between the loss and their own drug consumption. The most frequent losses were the parents (father and mother), sibling being the third most significant loss. 34.2% of patients reported symptoms of complicated grief. **Conclusions:** Results show a relationship between the loss and the important increase of substance consumption. This study suggests the importance of including the process of grief psychotherapy within the treatment of drug dishabituation for those cases which presented symptoms of complicated grief.

Key Words: Substance use disorder; complicated grief; bereavement.

1. Introduction

Addiction is a mental health problem implicating issues at different levels, such as traumatic experiences during childhood [10], economic instability, unemployment [34], marital problems, accidents [23, 24], social exclusion [3, 9], physical complications, as well as medical difficulties and high psychiatric comorbidity [1, 30]. These biopsychosocial factors could raise the vulnerability and even exacerbate the prognosis of the addiction. Substance abusers and the drug dependent population frequently present life stories marked by suffering and loss [29]. The loss of a significant person due to death is one of the most stressful life-events [16, 17, 29]. Although the vast majority of people are able to manage the loss, a considerable minority is predisposed to express persistent and disabling symptoms [20, 36]. Complicated grief (CG) has been defined as a deviation from the normal (in cultural and societal terms) grief experience in either time course, intensity, or both, entailing a chronic and more intense emotional experience or an inhibited response, which either lacks the usual symptoms or in which onset of symptoms is delayed [33].

Accordingly, different studies have reported a link between losing a significant person and drug consumption among substance users [2, 11, 21, 38]. Some researches show an incidence of early loss of at least one of the parents among addicted patients [8,

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15, 37]. In this regard, a study from the comparison between heroin consumers and non-consumers, observed that one of the main differences between the two groups is that heroin users have experienced the loss of one of their parents before the age of 16 [14]. In another study, half of opioid-dependent patients and 40% of cocaine-dependent patients experienced the loss of both parents before the age of 21 [12]. Furthermore, different authors based on a descriptive study reporting family characteristics of drug-related deaths examined at the Viennese Institute of Forensic Medicine, stated that 80% of addicted patients have experienced at least one traumatic event during their childhood, such as the loss of a parent [27]. Likewise, several authors have noted the possible relationship between loss of a significant other and drug consumption among substance dependence [13, 21, 38]. In the same view, 20% of individuals diagnosed with an alcohol dependence disorder start drinking alcohol after a loss [6]. After studying the reasons for relapse in 270 heroin addicts, users who have experienced stressful life events, such as a recent loss, show greater difficulty in adapting to a new lifestyle without drugs [18]. According to the study, almost half of the respondents (48%) used heroin as an adaptive attempt to regulate and control high anxiety and at the same time as a way of managing stressful life events. The link between bereavement and alcohol problems was corroborated among a sample of a bereaved 4457 patients who had lost a close relative in the past three years [25]. In the same vein, 93.9% of after the dependence age of onset reported the death of a close friend or relative among 82 heroin-dependent patients. According to these authors, the addiction might be affected by traumatic life events but it also impacts their development [29]. Life events in drug-dependent people can prompt the initial contact with the substance but at the same time, it could also affect the course of the disease by intensifying craving [32].

Taking into account these studies, it is important to establish the relationship between the loss of a significant one and drug consumption among bereaved people diagnosed with substance use disorder in order to address this issue in treatment. However, the above studies have not paid close attention to the course over time of bereavement experiences in relationship to changes in drug consumption. For that reason, the current study aims to shed light on the differences in bereavement, addiction, as well as sociodemographic variables, between persons who first lost a significant person and afterwards increased drug consumption ("B-A"), and those individuals who started using drugs before experiencing the loss of a significant person ("A-B").

2. Methods

2.1. Participants

The participants in this study were patients receiving treatment at the Public Addiction Treatment Centre in Girona (Catalonia, Spain). The sample consisted of 196 adults (78.1% male). The inclusion criteria were 1) they had a diagnosis of alcohol, cocaine or heroin dependence carried out by clinical specialists in the centre according to DSM-IV-TR criteria, 2) they suffered a loss of a significant person (family, best friend or partner) at some time in their life, but at least a year previously to the interview, and any bereavement within the year previous to the interview would exclude them from this study and 3) abstinence during the last month to avoid toxic effect of drugs.

This study is part of a wider investigation based on symptomatology of CG among drug dependent people. For this reason, the sample size was calculated based on the estimated prevalence of CG in the general population and an assumed prevalence of 15%, with an alpha level of 0.05 for a precision of ± 0.05. In order to retain the required number of participants, we had to interview 205 patients because 9 cases were rejected for not fulfilling the criteria.

We divided the sample into two groups ("B-A" and "A-B") in order to assess the possible effect of bereavement on drug consumption. These categories were made from the difference between how old the patient was when the significant person died and at what age the patient recalled that they increased the frequency of consumption of primary drug. Participants classified in "B-A" (preaddiction bereavement) had a significant loss (at an average of 21 years, SD= 10.7) before the age in which they increased the consumption of drugs (M=30.8; SD=11.02). Hence, they suffered a bereavement process before increasing drug consumption. The average age of onset of the drug consumption was 18.5 years (SD=8.7). Patients who first increased drug consumption (M=22.23; SD=8.40) and after suffered the loss of a significant person (at 37.9 years and SD= 10.53) were grouped in "A-B" (post addiction bereavement). The average age of onset of drug consumption was 15.62 (SD= 5.28). Most of the participants were categorised in the second one "A-B" (74.9%).

2.2. Instruments

We used a self-constructed questionnaire to measure sociodemographic variables, drug use-related variables as well as bereavement-related characteristics.

Several sociodemographic characteristics were assessed: age, gender, marital status (single, married or with partner, separated or divorced, widowed), education (primary or college education), and work status (working, or retired, unemployed, or on disability aid).

The drug use-related variables determined were: main drug dependence (alcohol, cocaine or heroin), age at onset of, and age at increase in the consumption of the drug (determined by the question of how old the patient was when he/she first increased consumption of the main drug). The participant was asked if she/he took prescribed pills. The perceived relationship between the death of a significant person and drug consumption was also inquired into (the relationship was determined by asking if the participant considered that there was a relationship between the loss and that person's main substance consumption).

Bereavement-related variables asked about were: the most significant/closest loss experience, time since death (in years), what age the participant was when they had lost the significant person, and circumstances of death (natural or illness-related and traumatic). Level of current of the significant loss was reported on a subjective 10-point Likert scale (0–no effect to 10–maximum level of effect exerted by the loss as evaluated at the moment of the interview).

Complicated grief was assessed using the Spanish version of the Inventory of Complicated Grief (ICG) [17]. It comprises 19 items. Responses are provided on a 5-point Likert scale to assess an increase in severity (0–never, 1–seldom, 2–sometimes, 3–often and 4–always) (maximum score: 76). The cut-off point was 25, and it was based on the English version of the ICG [24]. We categorized a respondent as having symptoms of CG if the total score was higher than 25. The internal consistency of the Spanish version was high (Cronbach's alpha = .88; test-retest reliability = .81).

2.3. Procedure

Participants who met the three inclusion criteria were informed by their therapist about possible participation in the study. If patients agreed to collaborate, the psychologist (who is the first author) called each patient to arrange an appropriate time for an interview in the centre. All participants were informed about the study procedure as well as terms of confidentiality. The average time for each interview was one hour and a half in total. Informed consent was obtained from all participants and the protocol was approved by the Institutional Ethics and Research Review Board of Institut Assistència Sanitària (IAS).

2.4. Statistical Analyses

In order to compare "B-A" group and "A-B" group we used chi-square tests, to identify relationships between the categorical variables (applying the Yates correction when necessary) and the Student's t-tests, to determine the relationship between the quantitative and the qualitative variables. The results are expressed as absolute numbers, percentages, as well as showing the means and standard deviations. The categorization of questions about the relationship between the loss and the drug itself was based on five possible answers (No; Yes, increase; Yes, relapse; Yes, abstemious and Yes, initiation). A statistical significance of 0.05 was set for testing the hypotheses. All analysis were conducted with the Statistical Package for the Social Sciences (SPSS 21.0) for Windows.

3. Results

3.1. Sociodemographic characteristics

Gender proportions were different between the groups. There were more women in the "B-A" group (pre-addiction bereavement). Almost half of the B-A participants were married or with a partner and 10.3% of "A-B" participants were widowed.

Related to the level of education, more "B-A" participants stated of having secondary-level education, compared to the "A-B" group. The majority of participants had no working status which means that they were either unemployed, retired or with disability aid (Table 1).

3.2. Drug-related characteristics

As Table 2 shows, the first main diagnosis was alcohol dependence. One difference between the groups is that the secondary main diagnosis was 22% having cocaine dependence in "B-A" group, whereas in the "A-B" group the secondary main diagnosis was heroin dependence (19.9%). The relationship be-

Table 1. Sociodemographic characteristics of the bereaved sample

	B-A (n=50)	A-B (n=146)	p
Age, M (SD)	43.32 (9.86)	46.35 (10.15)	0.06[a]
Gender, N (%)			0.046[b]
Man	34 (68)	119 (81.5)	
Woman	16 (32)	27 (18.5)	
Marital status, N (%)			0.184[b]
Single	9 (18)	35 (24)	
Married/Partner	21 (42)	52 (35.6)	
Separated/Divorced	19 (38)	44 (30.1)	
Widowed	1 (2)	15 (10.3)	
Education, N (%)			0.179[b]
Primary	10 (20.4)	49 (34.5)	
Secondary	38 (79.6)	90 (65.5)	
Working situation, N (%)			
Work	19 (38)	53 (36.3)	0.830[b]
Others*	31 (62)	93 (63.7)	

* Retired, unemployed, inactive, on invalidity benefit; [a] t-test test; [b] chi-square test

tween prescribed medicine and "B-A" and "A-B" was statistically significant (p=.019). More than a half of the individuals of "A-B" reported taking prescribed pills.

In Table 3 the subjective answer of the participants relating to whether they consider that any relationship exists between the loss of the significant person and their own drug consumption is displayed. There was a statistically significant difference: In the "B-A" group almost half of the individuals considered that there was no of relation between the loss and their consumption of drugs, while a significantly larger proportion - 66.4% - of the participants in the "A-B" reported a significant relationship. In this regard, the loss negatively affected their drug consumption, with 45.2% increasing their consumption and 12.3 suffering a relapse after the loss. However, it should be noted that 8.9% of individuals of "A-B" reported being abstemious after the loss.

3.3. Bereavement characteristics

Almost half of the "B-A" individuals lost their father (44%), 16% lost their mother and 16% their sibling. Of the "A-B" participants, 30.8% lost their father, 19.9% lost their mother and 19.2% their sibling. With regard to circumstances of death, the majority of respondents in both groups reported natural circumstances. The mean time since the death of the significant person was 21.60 years for the "B-A" group and 8.42 years for the "A-B" group (Table 3). Participants also reported their level of upset on losing the significant person (M=6,83; SD=3.06). There was a significant difference (p=.007) between "B-A" group

Table 2. Addiction variables of the participants.

	B-A (n=50)	A-B (n=146)	P
Main diagnosis, N (%)			0.066[a]
Alcohol	32 (64)	103 (70.5)	
Cocaine	11 (22)	14 (9.6)	
Heroin	7 (14)	29 (19.9)	
Age increment, M (SD)	30.82 (11.2)	22.23 (8.40)	<0.001[b]
Prescribed medication, N (%)			0.019[a]
Yes	31 (62)	115 (78.8)	
No	19 (38)	31 (21.2)	

[a] chi-square test; [b] t-test test.

Table 3. Perceived relationship between the significant loss and drug consumption. (n (%))

	B-A (n=50)	A-B (n=146)	p
No	27 (54)	49 (33.6)	<0.001
Yes, increase	19 (38)	66 (45.2)	
Yes, relapse	0 (0)	18 (12.3)	
Yes, abstemious	0 (0)	13 (8.9)	
Yes, initiation	4 (8)	0 (0)	

(M=5.81; SD=3.47) and "A-B" group (M=7.17; SD=2.83). The "A-B" group reported a higher level of suffering related to the death at the time of the interview. Similarly, the symptoms of CG were significantly different between the groups (p=.021). The "A-B" participants reported higher scores in the CG test (M= 24; S.D.= 17.12) than the "B-A" individuals (M= 15.26; S.D= 13.54). 39% of the "A-B" patients reported CG-level of symptomatology.

4. Discussion

The current study aimed to increase knowledge about relationships between bereavement, addiction, and sociodemographic variables among persons who suffered bereavement before becoming addicted, compared with those whose bereavement experience occurred after their addiction had begun. The larger group was the "A-B" group (74.9%). These persons, reported an earlier occurrence of the increase of drug consumption and higher symptomatology of CG than "B-A". 39% of the "A-B" group showed symptoms of CG, which means that almost four out of ten of those patients who were in treatment and experienced a death of somebody significant, presented symptomatology of CG. In both groups the most frequent loss was the father which was the same in line with other studies [27]. Related to gender issue, more women were in the "B-A" group which indicate an earlier bereavement. In this regard, several studies underlined differences between women and men [31, 35].

Turning to the perceived relationship between loss and their own drug consumption, 54% of "B-A" participants did not perceive any relationship between

Table 4. Bereavement characteristics of the participants.

	B-A (n=50)	A-B (n=146)	p
Relationship profile of deceased, n (%)			0.062[a]
Father	22 (44)	45 (30.8)	
Mother	8 (16)	29 (19.9)	
Sibling	8 (16)	28 (19.2)	
Grandparent	6 (12)	5 (3.4)	
Spouse	1 (2)	18 (12.3)	
Friend	3 (6)	11 (7.5)	
Others	2 (6)	10 (19.1)	
Circumstances, n (%)			0.880[a]
Natural	36 (72)	106 (73.1)	
Traumatic*0	14 (28)	39 (26.9)	
Time since loss□, M (SD)	22.32 (12.51)	8.42 (7.89)	<0.001[b]
Age patient±, M (SD)	21 (10.73)	37.92 (10.52)	<0.001[b]
Symptoms of CG, n (%)			0.014[a]
Yes	10 (20)	57 (39)	
No	40 (80)	89 (61)	
Symptoms of CG, M (SD)	15.64 (13.74)	23.82 (17.18)	0.001[b]

[a] chi-square test; [b] t-test test. * Traumatic: accident, suicide, homicide and overdose; □ time since loss in years; ± age of the participant when the lost happened.

loss and their own drug use. Regarding resilience, it should be noted that 8.9% of all participants reported being abstemious after the loss. However, 83.2% of all participants reported that after the loss they increased their drug consumption. Regarding this, more than a half of the "A-B" individuals reported a negative relation, 45.2% informed that they increased consumption after the loss, and 12.3% suffered a relapse. This underlines the vulnerability of the participants to addiction and also psychiatric comorbidity. In this regard, high psychiatric scores among an alcoholic sample are directly linked with the number of stressful life events experienced [5]. 60% of 384 opiate addicts had experienced one traumatic event in childhood (before age 15) and 30% at least two traumatic events [28]. These authors also found that patients whose drug use followed early childhood trauma are characterised as having the most severe psychopathology and the lowest indices of social strengths and probably represent the clients with the poorest prognosis in treatment. Drug abusers may be people with a variety of background traumas and these accumulated traumas could influence high risk behaviour [8]. In similar vein, a relationship between life events and substance dependence clearly exists [29].

5. Conclusions

This study highlights the relationship between drug users' bereavement and their substance consumption. Losing a significant person was perceived as a risk factor to increase drug consumption, especially among those participants who first increased drug consumption and after suffered the loss. At a therapeutic level, it would be appropriate to take into account whether the patients have experienced the loss of a significant person in their life and how the factors could affect them.

6. Clinical Implications

These results show the need for further investigation of the relationship between the experience of a loss among the drug dependent population on the one hand and the importance of including the process of grief psychotherapy and psychopharmacological treatment when it is needed within the treatment of drug dishabituation on the other, especially for those cases in which symptoms of CG were present. Several authors have indeed noted the need for grief psychotherapy [4, 7, 11, 22, 25] in addiction treatment, in order to achieve the maintenance of abstinence, as loss appears to be an "obstructive" factor to abstinence, and also the need for adaptive coping strategies and tools for recovery.

Limitations

This study had a number of limitations. We relied exclusively on self-report measures. The age of onset of increased drug consumption as well as the age when the participant lost the significant person was based on retrospective recall. Moreover, it was difficult to ensure abstinence, especially from secondary addictions such as tobacco or cannabis, of participants. The present research had a cross-sectional design, with no control group, hence causal inferences cannot be made.

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Acknowledgements

We would really thank the valuable contribution of Dr. Stroebe and Dr. Schut. The authors also thank Dr. Pons, Dr. Beceiro and Ma. Dolors Bosch for his support. The authors appreciate the collaboration of professionals from CAS Teresa Ferrer (IAS) for their help in the collection of data and to the respondents for their participation.

Role of the funding source

Authors state that this study was financed with internal funds. No sponsor played a role in study design; in the collection, analysis and interpretation of data; in the writing of the report; and in the decision to submit the paper

for publication.

Contributors

All authors were involved in the study design, had full access to the survey data and analyses, and interpreted the data, critically reviewed the manuscript and had full control, including final responsibility for the decision to submit the paper for publication.

Conflict of interest

The authors report no conflicts of interest. The authors alone are responsible for the content and writing of the article.

Ethics

Authors confirm that the submitted study was conducted according to the WMA Declaration of Helsinki - Ethical Principles for Medical Research Involving Human Subjects. The study was approved by the Institutional Ethics and Research Review Board of Institut Assistència Sanitària (IAS). All patients gave their informed consent to the anonymous use of their clinical data for this independent study.

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Received June 12, 2015 - Accepted August 11, 2015