



THE JOURNAL OF CLINICAL PSYCHIATRY

THE OFFICIAL JOURNAL OF THE AMERICAN SOCIETY OF CLINICAL PSYCHOPHARMACOLOGY

Supplementary Material

Article Title: The Relationship Between Mental Pain, Suicide, and Childhood Traumatic Experiences: Results From a Multicenter Study

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DOI Number: 10.4088/JCP.21m14176

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METHODS

Assessment

C-SSRS. A rating scale evaluating suicidal ideation in individuals aged 12 years and older.¹ The C-SSRS rates an individual's degree of suicidal ideation on a scale from 'wish to be dead' to 'active suicidal ideation with a specific plan and intent'. The C-SSRS begins with two items assessing the respondent's wish to be dead (e.g. 'I wish I were dead') and non-specific active suicidal thoughts (e.g. 'I've thought about killing myself'). If the participant responds positively to one of these items, then three additional items are used to assess: active suicidal ideation either with any method but no plan or intent to act; active suicidal ideation with some intent to act but no plan; and active suicidal ideation with a specific plan and intent. According to the protocol of this instrument, we used past month ratings for all analyses involving suicidal ideation and intent, whereas past three month ratings for those involving suicidal behaviour.

BDI-II. A 21-item self-report instrument evaluating the presence/severity of depressive symptoms during the previous 14 days.² Each item is scored from 0 to 3 to evaluate symptom severity, with total scores of 0–63. A score of ≥ 20 is suggestive of moderate to severe depression. Internal consistency and concurrent validity have been documented in clinical/non-clinical samples.³ Cronbach's alpha in the present sample was 0.94.

CTQ. A 28-item self-report questionnaire assessing physical, emotional and sexual abuse and also emotional and physical neglect.⁴ Each item begins with the anchor 'when I was growing up' and respondents indicate the frequency of a particular incident on a five-point

Likert scale (1 = *never true*; 5 = *very often true*). Consistent with the original factor structure, we considered a five-factor model: emotional neglect (EN), emotional abuse (EA), sexual abuse (SA), physical abuse (PA) and physical neglect (PN). The CTQ has been shown to have solid psychometric properties.⁵⁻⁷ Cronbach's alpha values in the present sample were 0.52 for PN, 0.89 for EN, 0.91 for SA, 0.81 for PA and 0.83 for EA.

OMMP. A 44-item self-report measure of mental pain.⁸ Each item is self-scored on a five-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Higher OMMP scores reflect higher levels of mental pain. Cronbach's alpha in the present sample was 0.98.

PPPS. A self-administered questionnaire that evaluates the intensity of physical and mental pain on a dimensional scale from 0 (*none*) to 10 (*maximum possible pain*):⁹ the current intensity of pain, the usual pain during the last 15 days and the maximum pain always experienced in relation to the last 15 days (PPPS worst). Cronbach's alpha values in the present sample were 0.91 and 0.92, respectively, for physical and mental pain dimensions.

RESULTS

Differences between in- and out-patients

658 participants (410 women and 248 men) were currently admitted to inpatient units, and 1479 (902 women and 576 men) to outpatient units. Inpatients and outpatients differed for several sociodemographic and clinical variables (see Table S1), including age (40.77±14.78 vs. 43.82±14.98, respectively for inpatients and outpatients, $t_{2093}=4.32$, $p<0.001$), suicide ideation in the last month ($\chi^2=277.71$, $p<0.001$), lifetime suicide attempts (48.8% vs. 33.1%, respectively for inpatients and outpatients, $p<0.001$), and diagnoses of schizophrenia (20.8% vs. 12.3%, respectively for inpatients and outpatients, $p<0.001$), anxiety disorders (11.7% vs. 21.0%, respectively for inpatients and outpatients, $p<0.001$), and personality disorders (8.5% of BPD and 21.0% of other personality disorders vs. 8.1% of BPD and 9.7% of other

personality disorders, respectively for inpatients and outpatients, $\chi^2=51.40$, $p<0.001$).

Supplementary Table 1. Differences between inpatients and outpatients (N=2137)

Variables	Inpatients N=658	Outpatients N=1478	test	Significance	Effect size
Sex – n (%)				0.30 ^a	phi=-0.01
Men	248(37.7%)	576(39.0%)			
Women	410(62.3%)	902(61.0%)			
Age – M SD	40.77±14.78	43.82±14.98	t ₂₀₉₃ =4.32	<0.001	d=0.20
Marital status – n (%)			χ ² ₂ =27.40	<0.001	v=0.11
Married	167(25.4%)	532(36.5%)			
Divorced or widowed	107(16.3%)	235(16.1%)			
Single	383(58.3%)	691(47.4%)			
Job – n (%)			χ ² ₂ =36.53	<0.001	v=0.13
Employed	279(43.0%)	795(54.9%)			
Unemployed	291(44.8%)	453(31.3%)			
Other	79(12.2%)	200(13.8%)			
School attainment – n (%)			χ ² ₂ =11.33	0.003	v=0.07
≤8 yrs	244(37.3%)	436(30.0%)			
=13 yrs	309(47.2%)	744(51.2%)			
>=16 yrs	102(15.6%)	272(18.7%)			
Living accomodation – n (%)			χ ² ₂ =24.87	<0.001	v=0.11
Alone	162(24.6%)	253(17.3%)			
Family or friends	434(66.0%)	980(67.1%)			
Other	62(9.4%)	227(15.5%)			
Diagnosis – n (%)					
Schizophreni	137(20.8%)	182(12.3%)		<0.001 ^a	phi=-0.11

a

BD	138(21.0%)	314(21.2%)		0.47 ^a	phi=-0.003
MDD	192(29.2%)	429(29.0%)		0.49 ^a	phi=0.002
Anxiety disorders	77(11.7%)	311(21.0%)		<0.001 ^a	phi=-0.11
Personality disorders – n (%)			$\chi^2_2=51.40$	<0.001	v=0.16
BPD	56(8.5%)	120(8.1%)			
Others	138(21.0%)	144(9.7%)			
Substance abuse – n (%)	64(9.7%)	126(8.5%)		0.21 ^a	phi=0.02
Mental illness in the family members – n (%)	308(47.6%)	717(50.7%)		0.10 ^a	phi=0.03
Suicide ideation, last month – n (%)			$\chi^2_5=277.71$	<0.001	v=0.36
None	295(44.8%)	1097(74.2%)			
Wish to be dead	68(10.3%)	153(10.4%)			
Suicidal thoughts	33(5.0%)	60(4.1%)			
Suicidal thoughts with method (but without specific plan or intent to act)	55(8.4%)	71(4.8%)			
Suicidal intent	69(10.5%)	49(3.3%)			

(without specific plan)					
Suicidal intent	138(21.0%)	48(3.2%)			
with specific plan					
Suicide attempts, lifetime – n (%)	321(48.8%)	489(33.1%)		<0.001^a	phi=-0.15
OMMP Psychological pain – M SD	119.96±38.5 8	107.74±40.8 3	t ₂₁₂₉ =6.49	<0.001	d=0.31
PPPS worst Psychological pain – M SD	7.33±2.96	5.31±3.40	t _{1395.63} = 13.75	<0.001	d=0.63
PPPS Physical pain – M SD	11.05±8.72	9.73±8.48	t ₂₁₀₁ =3.26	0.001	d=0.15
CTQ PN – M SD	8.20±3.22	8.19±3.16	t ₂₁₁₈ =0.10	0.92	d=0.003
CTQ EN – M SD	12.92±5.62	13.12±5.75	t ₂₁₁₈ =0.77	0.44	d=0.04
CTQ SA – M SD	7.00±4.21	6.50±3.70	t _{1101.40} =2.63	0.009	d=0.13
CTQ PA – M SD	7.30±3.99	6.44±2.94	t _{964.69} =4.93	<0.001	d=0.25
CTQ EA – M SD	10.16±5.01	8.99±4.62	t _{31145.87} =5.0 8	<0.001	d=0.24
BDI – M SD	24.01±13.87	18.49±13.50	t ₂₁₃₀ =8.64	<0.001	d=0.40
BDI≥20 - n (%)	381(58.1%)	638(43.2%)		<0.001^a	phi=0.14

^aOne-way Fisher exact test. Bonferroni correction for multitesting: p=0.05/24=0.002; In bold test significant after correction for multitesting.

BD=Bipolar disorder; MDD=Major depressive disorder; BPD=Borderline personality

disorder; OMMP=Mental Pain Questionnaire; PPPS=Physical and Psychological Pain Scale; CTQ=Childhood Trauma Questionnaire; PN=Physical neglect; EN=Emotional neglect; SA=Sexual abuse; PA=Physical abuse; EA=Emotional abuse; BDI=Beck Depression Inventory-2.

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