V M

VIA MEDICA

Tytus Koweszko, Jacek Gierus, Anna Mosiołek, Agata Szulc Clinic of Psychiatry, Faculty of Health Sciences, Medical University of Warsaw, Poland

Considerations of suicidal behaviour in psychiatrically hospitalised patients. A psychological portrait of a suicidal female and male

Abstract

Introduction: The purpose of this study is to determine the psychological and clinical considerations of suicidal behaviour in psychiatrically hospitalised patients.

Material and methods: The participants of the study were 154 psychiatrically hospitalised patients, who were examined with th ACL, BPRS, WHOQOL-BREF, C-SSRS, and descriptive questionnaire. The scale results were subject to analysis with the use of Spearman's rho and the Mann-Whitney U test. The correlation analysis was carried out with reference to the number of earlier suicide attempts and the Mann-Whitney U test was used to determine intergroup differences depending on the presence or absence of suicidal behaviour over a lifetime and low/high suicide risk determined on the basis of the C-SSRS risk assessment. The authors conducted statistical analyses by the gender of the subjects.

Results: The obtained results permitted identification of the psychological variables and clinical features which could predispose to suicidal behaviour. Additionally, the study revealed the risk factors and protective factors which are different for each gender. **Conclusions:** Based on the obtained data, the researchers created profiles of a potential female and male suicide. A psychological profile of a potential suicide can be a useful tool aiding the psychiatric staff in preventing suicidal behaviour in psychiatrically hospitalised patients. A different profile for males and females shows how important the patient's gender is as a factor determining the specificity of suicidal risk.

Psychiatry 2018; 15, 1: 7-12

Key words: suicide, gender, psychiatry, risk factors

Introduction

A sufficiently quick identification of suicidal risk is a difficult task and constitutes a serious challenge for the medical staff. Preventing acts directed against one's life and health among psychiatrically hospitalised patients requires a complex analysis which, irrespective of its accuracy, can prove insufficient. The available observation--based risk assessment tools, such as NGASR [1] and SAD PERSONS [2], provide information about the risk level, yet their actual prognostic value often proves insufficient. Despite its highest effectiveness in predicting suicidal behaviour, the C-SSRS [3] requires an interview to be conducted by the staff, which — in the case of frequent changes of staff, insufficient information flow

Address for correspondence: Tytus J. Koweszko Clinic of Psychiatry Faculty of Health Sciences Medical University of Warsaw, Poland e-mail: koweszko@gmail.com and limitations arising from improper communication between medical staff members --- can easily lead to the situation where the crucial details are overlooked [4]. The contemporary methods treat a suicidal patient universally. The patient's gender is taken into account to a small extent. And it is gender that largely determines suicidal risk and the specificity of the actions taken [5]. Two/three times more males take their lives as a result of suicide, yet a higher number of unsuccessful suicide attempts are made by females. The relevant literature describes this phenomenon as a gender paradox [6–9]. Due to the differences in the occurrence and form of suicidal behaviour depending on gender, it is impossible to create a universal profile of a suicide without taking such a significant variable into account. A psychological profile enabling reliance on the information which can be obtained by a medical personnel based on an even superficial contact with the patient could contribute to a more efficient risk identification.

Purpose

The purpose set by the researchers was to distinguish psychological risk factors for suicidal behaviour which permit creation of a psychological portrait of a potential suicide depending on the patient's gender.

Material and methods

Examined groups

The participants of the study were 154 patients hospitalised psychiatrically in the Clinic of Psychiatry at the Faculty of Health Sciences of Medical University of Warsaw. Females constituted 45% of the subjects (N = 69), and males — 55% (N = 85). The mean age in the female group was M = 35.8, and in the male group M = 36.5. The patients differed in terms of education, psychiatric diagnosis and occurrence of suicidal behaviour in the past.

The researchers divided the subjects based on the presence or absence of suicidal behaviour over a lifetime and into low and high suicide risk groups. The high risk group included those who demonstrated any suicidal behaviour over the past three months and those who had suicidal ideation over the past month. Table 1 presents the exact sizes of the groups.

Diagnostic methods

In order to assess personality traits, the researchers used the Adjective Check List (ACL) scale. The tool was originally developed by Harrison G. Gough. This study applies the standard version, where the subjects' task is to select the adjectives which, in their opinion, describe them correctly from among 300 items. The List of Adjectives permits calculation of the results on 37 scales, including needs scales, thematic scales, transactional analysis scales, as well as creativity and intelligence scales, and control scales. Both the internal consistency of the scales and stability are high in the case of a majority of the scales. The correlations between the ACL scales and other personality measures (EPQ-R, IVE, STAI, MMPI-2, KPD), as well as the comparison of the results obtained by persons coming from different clinical and professional groups and differing in terms of demographic factors permitted the confirmation of the diagnostic significance of a majority of the scales. Sten norms were developed for females and males (aged 15–69) separately. The ACL is used in both the individual personality diagnosis, among others for clinical purposes, and scientific research [10, 11].

The WHO Quality of Life-BREF (WHOQOL-BREF) is an instrument created under the World Health Organization Quality of Life (WHOQOL) project, the aim of which was to develop an international method for assessing quality of life which would be universal in terms of culture. The instrument is intended for assessing quality of life. It was constructed based on the WHOQOL-100. The method is composed of 26 items and enables obtainment of a quality of life profile in four domains: physical health, psychological health, social relationships, and environment. The scale contains also items which are analysed separately: guestion 1 (regarding an individual's overall perception of quality of life) and question 2 (regarding an individual's overall perception of their health). The domain scoring reflects an individual's perception of quality of life within these domains. The domain scoring has a positive direction, which means that the higher the score the higher quality of life [12].

The Brief Psychiatric Rating Scale (BPRS) is a tool developed for the purpose of a psychiatric rating of clinical symptoms. The researchers used a full version of the reviewed original version by Overall and Gorham, containing 18 symptoms scored on a seven-point scale (0–7). The rating is preceded by an interview which permits you to direct the course of the study constituting the basis of the rating. The method is characterised by good psychometric properties. Owing to its simplicity and easy application, the BPRS is one of the most popularly used clinical scales for rating the intensity, profile, and dynamics of psychotic and schizophrenic disorders [13].

		Total (N = 154)		Male (N = 85)		Female (N = 69)
		Ν	%	Ν	%	Ν
Suicidal behaviour in the past						
1	No	53	34	30	35	23
	Present	101	66	55	65	46
Suicide risk						
1	Low	69	45	41	48	28
	High	85	_ 55	_44	_52 _	41

Table 1.	. Sizes o	of the grou	ps of sub	jects by	y suicidal	behaviour	in the	past and l	ow/high risk
					/				

The Columbia-Suicide Severity Rating Scale version (C--SSRS Suicide Risk Assessment Version (Excerpt)) was used to assess suicide risk. The method was developed at Columbia University by Kelly Posner's team and is one of the most popular diagnostic tools for assessing suicide risk. The tool permits risk assessment based on the analysis of current and previous threatening ideation and behaviour. The test items concern three areas: suicidal behaviour, suicidal ideation, and intensity of ideation. The application of the scale allowed the identification of patients with a low and high level of suicide risk in the examined group. The method is characterised by good psychometric properties [14–16].

The descriptive questionnaire permitted obtainment of data regarding the age, marital status, education, number of children, place of residence, number of psychiatric hospitalisation, and number of suicide attempts in the past.

Applied statistical methods

Due to the lack of normal distribution in the examined samples and presence of rank scales, it was decided to use the non-parametric Spearman's rank correlation coefficient (analysis connected with the number of suicides). The Mann-Whitney U test was used consistently in order to assess differences between groups divided in terms of high/low risk and presence/absence of suicidal behaviour over a lifetime and the results of the ACL, BPRS and WHOQOL-BREF tests. This semi-parametric statistical method serves the purpose of checking whether the values of the samples collected from two independent populations are the same. The Statsoft STATISTICA 13.1 software was used for statistical analyses.

Results

Correlations between the number of suicide at-

tempts and the ACL37, BPRS i WHOQOL-BREF results The correlation analysis was carried out after the division into sexes, for females and males separately. Variables related to suicide risk, which was determined based on the number of previous suicide attempts, were distinguished as a result of the correlation analysis conducted in both groups. Due to a high quantity of data, it was decided to present only statistically significant intergroup correlations and differences. The results are presented in Table 2.

The Mann-Whithey U test of intergroup comparisons in terms of suicide risk in the group of females and males

As a result of data analysis, significant intergroup differences were found depending on the low or high risk level and presence or absence of suicidal behaviour over a lifetime. Analyses with the Mann-Whitney U test were conducted in the group of females and males separately. Intergroup differences in the group of females occurred exclusively in the case of the BPRS results. For the ACL and WHOQOL-BREF, the differences proved statistically insignificant. The results are presented in Table 3.

Discussion

A suicidal act is a complex action composed of various variables some of which are unpredictable [17]. The available studies determine a range of psychological risk factors, such as impulsivity, psychological pain, depression [18], stressful life events, hopelessness, improper coping strategies [19], perfectionism or narcissism [20]. The obtained prognostic data point to certain tendencies

Table 2. Analysis	of Spearman's rho	(p <	0.05) in the	group of	females and males
-------------------	-------------------	------	--------------	----------	-------------------

		Females ($N = 69$)	Males ($N = 85$)
Measurement tool	Variable	Spearman's rho	(p < 0.05)
General questionnaire	Age	-0.32	0.24
	Number of children	-	0.36
	Number of hospitalisation	0.23	0.34
BPRS	Concern about the body	-0.33	-0.30
	Unusual content	-	-0.23
ACL	Ord — Need for order	-0.25	-
	Exh — Need for exhibition	-	0.24
	Def — Need for deference	-	-0.22
	S-Cn — Self-control	-	-0.22
WHOQOL-BREF	Psychological health	-0.24	

Abbreviations in the text

Measure-	Variable	Females (N = 69)	Males (N = 85)
ment tool		Mann-Whitney	U test
BPRS	Concern about the body Unusual content	M = p < 0.01*, p < 0.05** p < 0.01 *, **	p < 0.001*, ** p < 0.05*, **
ACL	Fav — Number of favourable adjectives	-	p < 0.05**
1	Com — Communality	—	p < 0.05**
I	Exh — Need for exhibition	—	p < 0.05*
	S-Cn — Self-control	—	p < 0.05*
	Iss — Ideal self scale	—	p < 0.05**
l i	Cps — Creative personality scale	—	p < 0.05**
	Mls — Military leadership scale	—	p < 0.05**
	A-4 — Low originality, high intelli-	—	p < 0.05**
	gence		
WHOQOL-	Somatic health		p < 0.05*
BREF	Psychological health		p < 0.05**

Table 3. Analysis of intergroup differences with the Mann-Whitney U test for each gender separately and presen-
tation of mean results for each gender and significance level

* Intergroup differences by presence/absence of suicidal behaviour over a lifetime; ** Intergroup differences by low/high suicide risk; abbreviations in the text

in persons at risk of a suicide, yet they cannot be hard evidence that an actual attempt to take one's life will be made. Based on the data obtained in this study, an endeavour was made to create a profile of a potential suicide being a conglomerate of variables. Its application in the psychiatric practice can enable the identification of patients from the high risk group exclusively based on the patient's behaviour.

Additionally, the researchers made a distinction into the potential suicide's gender. According to numerous reports from various regions of the world, gender plays a significant role in the context of the suicide risk [21–27]. Relying on the obtained results, the researchers created two profiles of a potential suicide, one for each gender.

Portrait of a suicidal female

A potential female suicide is a person who is quite expressive and uninhibited, yet at the same time less capable of a persistent and steady work towards longdistance goals. She desires an immediate gratification and prefers what is here and now [11].

A suicide risk factor is the number of earlier psychiatric hospitalisations, the growth in which increases the risk of taking one's life and a low perception of quality of life in psychological terms. Suicide risk decreases with age. Concern about the body, which could be connected with a neurotic somatisation tendency, also has a protective influence.

Portrait of a suicidal male

A potential suicidal male is a person who wants to draw other people's attention at any cost, responds to resistance or delay with impatience, has no scruples about using force or manipulation towards the person who he wants to win over. Impulses go beyond his control and his interpersonal relationships are characterised by unending series of offences, failures and arguments with those who refuse to satisfy his narcissistic claims. In his relationships with other people, he is ambivalent, he can express objection in a deviant manner, is quarrelsome, defence-oriented, and finds it hard to adapt to everyday expectations of the social life. He is characterised by discouragement, fear for the future, and submissiveness to the sense of being overwhelmed by changes in life. He can perceive himself as a person devoid of socially desired features. He has low morale, feels defeated, and finds it difficult to define and achieve goals. In certain circumstances, he can demonstrate traits such as kindness, modesty and respect for other people's needs and desires. He can seem smothered, inexpressive, conservative and not prone to take action in complex and indefinite situations. He is unsure about the value of self-discipline, he likes changes and diversity, he also

likes testing the limits to check if norms can be bent or breached. He does not control himself much, he is rather changeable and easily yields to the influence of illogical worries. He prefers lack of formalism and easiness. He could have a tendency for competition and be characterised by intransigence and impulsivity, which can often lead to conflicts with others [11].

Additionally, suicide risk increases with age, number of children, and number of psychiatric hospitalisations. What can be a sign of high risk is also a depressive mood and low perception of quality of life in psychological and somatic terms.

Protective factors include concern about the body and presence of unusual and odd content.

Conclusion

The described profiles of patients characterised by high suicide risk were presented as a form of support for the medical staff in psychiatric departments. Less experienced staff, having limited information about the patient's history and not having a broad knowledge of counteracting suicide behaviour, is particularly exposed to the threat of overlooking risk factors.

Limitations

A suicidal act is a complex action which can encompass numerous risk factors. Therefore, it is not possible to create a precise profile of a suicide, especially without a division into sexes. Collecting analogous data in the group of those at risk of a suicide and subjecting the files of the persons who made a successful suicide attempt could bring significant data for understanding the suicide process. However, such an undertaking is long-term and difficult to organise for objective reasons. Hence, the findings are limited to those attempting unsuccessful suicides.

References:

- Cutcliffe JR, Barker P. The Nurses' Global Assessment of Suicide Risk (NGASR): developing a tool for clinical practice. J Psychiatr Ment Health Nurs. 2004; 11(4): 393–400, doi: 10.1111/j.1365--2850.2003.00721.x, indexed in Pubmed: 15255912.
- Saunders K, Brand F, Lascelles K, et al. The sad truth about the SADPERSONS Scale: an evaluation of its clinical utility in self-harm patients. Emerg Med J. 2014; 31(10): 796–798, doi: 10.1136/ emermed-2013-202781, indexed in Pubmed: 23896589.
- Posner K, Brown GK, Stanley B, et al. The Columbia-Suicide Severity Rating Scale: initial validity and internal consistency findings from three multisite studies with adolescents and adults. Am J Psychiatry. 2011; 168(12): 1266–1277, doi: 10.1176/appi. ajp.2011.10111704, indexed in Pubmed: 22193671.
- Bolster C, Holliday C, Oneal G, et al. Suicide Assessment and Nurses: What Does the Evidence Show? Online J Issues Nurs. 2015; 20(1): 2, indexed in Pubmed: 26824260.
- Qin P, Agerbo E, Mortensen PBo, et al. Gender differences in risk factors for suicide in Denmark. Br J Psychiatry. 2000; 177(4): 546–550, indexed in Pubmed: 11104395.
- Lenz B, Thiem D, Bouna-Pyrrou P, et al. Low digit ratio (2D:4D) in male suicide victims. J Neural Transm (Vienna). 2016; 123(12): 1499–1503, doi: 10.1007/s00702-016-1608-4, indexed in Pubmed: 27565149.
- McLoughlin AB, Gould MS, Malone KM. Global trends in teenage suicide: 2003-2014. QJM. 2015; 108(10): 765–780, doi: 10.1093/ qjmed/hcv026, indexed in Pubmed: 25638789.
- Rhodes AE, Boyle MH, Bridge JA, et al. Antecedents and sex/gender differences in youth suicidal behavior. World J Psychiatry. 2014; 4(4): 120–132, doi: 10.5498/wjp.v4.i4.120, indexed in Pubmed: 25540727.
- Fond G, Zendjidjian X, Boucekine M, et al. The World Health Organization (WHO) dataset for guiding suicide prevention policies: A 3-decade French national survey. J Affect Disord. 2015; 188: 232–238, doi: 10.1016/j.jad.2015.08.048, indexed in Pubmed: 26368948.
- Gough H. A creative personality scale for the Adjective Check List. Journal of Personality and Social Psychology. 1979; 37(8): 1398–1405, doi: 10.1037//0022-3514.37.8.1398.
- Martowska KA. Lista przymiotnikowa. Harrison G. Gough, Alfred B. Heilbrun, Jr. Warsaw: Pracownia Testów Psychologicznych Polskiego Towarzystwa Psychologicznego. 2012.

- Skevington SM, Lotfy M, O'Connell KA, et al. WHOQOL Group. The World Health Organization's WHOQOL-BREF quality of life assessment: psychometric properties and results of the international field trial. A report from the WHOQOL group. Qual Life Res. 2004; 13(2): 299–310, doi: 10.1023/B:QURE.0000018486.91360.00, indexed in Pubmed: 15085902.
- Rybakowski J, Pużyński S, Wciórka J. Psychiatria. Podstawy psychiatrii. Tom 1. Elsevier Urban & Partner, Wroclaw 2010.
- Madan A, Frueh BC, Allen JG, et al. Psychometric Reevaluation of the Columbia-Suicide Severity Rating Scale: Findings From a Prospective, Inpatient Cohort of Severely Mentally III Adults. J Clin Psychiatry. 2016; 77(7): e867–e873, doi: 10.4088/JCP.15m10069, indexed in Pubmed: 27464320.
- Gipson PY, Agarwala P, Opperman KJ, et al. Columbia-suicide severity rating scale: predictive validity with adolescent psychiatric emergency patients. Pediatr Emerg Care. 2015; 31(2): 88–94, doi: 10.1097/PEC.00000000000225, indexed in Pubmed: 25285389.
- Posner K, Brown GK, Stanley B, et al. The Columbia-Suicide Severity Rating Scale: initial validity and internal consistency findings from three multisite studies with adolescents and adults. Am J Psychiatry. 2011; 168(12): 1266–1277, doi: 10.1176/appi. ajp.2011.10111704, indexed in Pubmed: 22193671.
- Sadock BJ. Inevitable suicide: a new paradigm in psychiatry. J Psychiatr Pract. 2012; 18(3): 221–224, doi: 10.1097/01. pra.0000415080.51368.cf, indexed in Pubmed: 22617088.
- Cáceda R, Durand D, Cortes E, et al. Impulsive choice and psychological pain in acutely suicidal depressed patients. Psychosom Med. 2014; 76(6): 445–451, doi: 10.1097/PSY.000000000000075, indexed in Pubmed: 24988311.
- Kattimani S, Sarkar S, Rajkumar RP, et al. Stressful life events, hopelessness, and coping strategies among impulsive suicide attempters. J Neurosci Rural Pract. 2015; 6(2): 171–176, doi: 10.4103/0976-3147.153222, indexed in Pubmed: 25883475.
- Freudenstein O, Valevski A, Apter A, et al. Perfectionism, narcissism, and depression in suicidal and nonsuicidal adolescent inpatients. Compr Psychiatry. 2012; 53(6): 746–752, doi: 10.1016/j.comppsych.2011.08.011, indexed in Pubmed: 22364727.
- Sun L, Zhang J. Gender differences among medically serious suicide attempters aged 15-54 years in rural China. Psychiatry Res. 2017;

11

252: 57-62, doi: 10.1016/j.psychres.2017.02.042, indexed in Pubmed: 28249203.

- Kodaka M, Matsumoto T, Yamauchi T, et al. Female suicides: Psychosocial and psychiatric characteristics identified by a psychological autopsy study in Japan. Psychiatry Clin Neurosci. 2017; 71(4): 271–279, doi: 10.1111/pcn.12498, indexed in Pubmed: 28004479.
- Karbeyaz K, Toygar M, Çelikel A. Completed suicide among University student in Eskisehir, Turkey. J Forensic Leg Med. 2016; 44: 111–115, doi: 10.1016/j.jflm.2016.09.010, indexed in Pubmed: 27744134.
- Halder S, Mahato AK. Socio-demographic and Clinical Characteristics of Patients who Attempt Suicide: A Hospital-based Study from Eastern India. East Asian Arch Psychiatry. 2016; 26(3): 98–103, indexed in Pubmed: 27703097.
- Paraschakis A, Michopoulos I, Christodoulou C, et al. Psychiatric Medication Intake in Suicide Victims: Gender Disparities and Implications for Suicide Prevention. J Forensic Sci. 2016; 61(6): 1660–1663, doi: 10.1111/1556-4029.13195, indexed in Pubmed: 27643812.
- Vasiliadis HM, Lamoureux-Lamarche C, Gontijo Guerra S. Gender and age group differences in suicide risk associated with co-morbid physical and psychiatric disorders in older adults. Int Psychogeriatr. 2017; 29(2): 249–257, doi: 10.1017/S1041610216001290, indexed in Pubmed: 27605541.
- Burns RA. Sex and age trends in Australia's suicide rate over the last decade: Something is still seriously wrong with men in middle and late life. Psychiatry Res. 2016; 245: 224–229, doi: 10.1016/j. psychres.2016.08.036, indexed in Pubmed: 27552673.