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ORIGINAL ARTICLES

Quality of the Written Information about Suicide Attempters

Marta Miret^{a,b}, Roberto Nuevo^{a,b}, Consuelo Morant^c, Enrique Sainz-Cortón^d, Miguel Ángel Jiménez-Arriero^{b,e}, Juan J. López-Ibor^{b,f}, Blanca Reneses^{b,f}, Jerónimo Saiz-Ruiz^{b,g}, Enrique Baca-García^{b,h,i} and José Luis Ayuso-Mateos^{a,b,*}

^aDepartamento de Psiquiatría, Universidad Autónoma de Madrid, Hospital Universitario de la Princesa, Madrid, Spain

^bInstituto de Salud Carlos III, Centro de Investigación en Red de Salud Mental, CIBERSAM, Spain

^cOficina Regional de Salud Mental, Comunidad de Madrid, Spain

^dDepartamento de Psiquiatría, Hospital Universitario Gregorio Marañón, Madrid, Spain

^eDepartamento de Psiquiatría, Hospital Universitario 12 de Octubre, Universidad Complutense, Madrid, Spain

^fInstituto de Psiquiatría y Salud Mental, Hospital Universitario Clínico San Carlos, Universidad Complutense, Madrid, Spain

^gDepartamento de Psiquiatría, Hospital Universitario Ramón y Cajal, Universidad de Alcalá, Madrid, Spain

^hDepartamento de Psiquiatría, Fundación Jiménez Díaz, Universidad Autónoma de Madrid, Spain

ⁱDepartamento de Psiquiatría, Columbia University, Nueva York, USA

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KEYWORDS

Deliberate self-harm;
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Abstract

Introduction: The aim of the study was to assess the quality of the clinical records of the patients who are seen in public hospitals in Madrid after a suicide attempt in a blind observation.

Methods: Observational, descriptive cross-sectional study conducted at four general public hospitals in Madrid (Spain). Analyses of the presence of seven indicators of information quality (previous psychiatric treatment, recent suicidal ideation, recent suicide planning behaviour, medical lethality of suicide attempt, previous suicide attempts, attitude towards the attempt, and social or family support) in 993 clinical records of 907 patients (64.5% women), ages ranging from 6 to 92 years (mean 37.1 ± 15), admitted to hospital after a suicide attempt or who committed an attempt whilst in hospital.

Results: Of patients who attempted suicide, 94.9% received a psychosocial assessment. All seven indicators were documented in 22.5% of the records, whilst 23.6% recorded four or less than four indicators. Previous suicide attempts and medical lethality of current attempt were the indicators most often missed in the records. The study found no difference between the records of men and women ($z = 0.296$; $p = 0.767$, two tailed

*Corresponding author.

E-mail: joseluis.ayuso@uam.es (J.L. Ayuso-Mateos).

PALABRAS CLAVE

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Mann-Whitney U test), although clinical records of patients discharged after an emergency unit intervention were more incomplete than the ones from hospitalised patients ($z = 2.731$; $p = 0.006$), and clinical records of repeaters were also more incomplete than the ones from non-repeaters ($z = 3.511$; $p < 0.001$).

Conclusions: Clinical records of patients who have attempted suicide are not complete. The use of semi-structured screening instruments may improve the evaluation of patients who have self-harmed.

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Calidad de los informes médicos sobre personas que han intentado suicidarse

Resumen

Introducción: El objetivo de este estudio fue evaluar, mediante una observación ciega, la calidad de los informes clínicos de los pacientes vistos en hospitales públicos de Madrid tras un intento de suicidio.

Método: Estudio observacional, descriptivo transversal llevado a cabo en cuatro hospitales generales públicos de Madrid (España). Se analizaron siete indicadores de calidad (antecedentes de atención psiquiátrica, intentos de suicidio previos, apoyo social o familiar, ideación suicida, planificación suicida, reacción frente al intento y grado de daño médico como resultado del intento actual), en 993 informes clínicos de 907 pacientes (el 64,5% mujeres), con edades comprendidas entre los 6 y los 92 (media, $37,1 \pm 15$) años, que acudieron al hospital tras un intento de suicidio o que lo intentaron cuando estaban en el hospital.

Resultados: De los pacientes que intentaron suicidarse, el 94,9% recibió una evaluación psicosocial. Los siete indicadores se documentaron en el 22,5% de los informes, mientras que en el 23,6% se registraron cuatro indicadores o menos. Los intentos de suicidio previos y la letalidad del intento actual fueron los indicadores que con mayor frecuencia faltaban en los informes. No aparecieron diferencias entre los informes de los varones y los de las mujeres ($z = 0,296$; $p = 0,767$, prueba de la U de Mann-Whitney bilateral), aunque los informes de los pacientes dados de alta tras la atención en urgencias estaban más incompletos que los de los pacientes ingresados ($z = 2,731$; $p = 0,006$), y los informes de las personas con intentos previos también estaban más incompletos que los de aquellos que no tenían intentos previos ($z = 3,511$; $p < 0,001$).

Conclusiones: Los informes clínicos de las personas que han intentado suicidarse no están completos. El uso de instrumentos de evaluación semiestructurados puede mejorar la evaluación de los pacientes que se han autolesionado.

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Introduction

Prevention of depression and suicide is one of the five priority areas of the European Pact for Mental Health and Well-Being, established by the European Commission.¹ To reduce the repetition of suicide attempts, it is important to make an adequate assessment of people who attempt suicide,^{1,2} which would also contribute to establishing the most suitable treatment. However, hospitals do not always use psychiatric services for psychosocial assessment following deliberate self-harm,³ and sometimes there are no mental health professionals available for evaluation of suicidal patients.⁴ Consequently, patients presenting with self-harm often leave the hospital without a psychosocial assessment.^{4,5} On the other hand, other studies have found higher percentages of patients evaluated; e.g. Nordentoft

and Sogaard⁶ reported that 95% of the patients seen in the emergency room or intensive care unit after a suicide attempt received a psychiatric evaluation, and the few patients for whom the evaluation was not arranged were because the patient had died or was transferred to another department for further treatment.

There are many guidelines for the general hospital management of self-harm patients,⁷⁻¹³ but none are universally accepted. After a suicide attempt, it is crucial to determine whether the patient needs hospitalization or not. Most guidelines recommend that direct discharge from the emergency room should only be considered if a psychosocial assessment and aftercare plan have been arranged before the patient leaves the hospital, whereas hospitalization is recommended if there is an imminent risk of suicide.¹⁴

The most robust predictor of future suicidal behaviour is a history of suicide attempts.^{15,16} Previous psychiatric treatment¹⁷ or diagnoses,¹⁸⁻²⁰ such as major depression,²¹ bipolar disorder,^{15,22} alcohol abuse,^{17,21,23} schizophrenia,¹⁹ and personality disorders²¹ also increase the risk of suicide. There is also evidence showing the predictive value of several sociodemographic variables: gender, with men having higher rates of suicide completion, whereas women present higher rates of attempts;^{24,25} age, with older adults being at significantly increased risk;²⁴ and living arrangements, such as not living with a close relative¹⁷ or living alone.^{16,18} Lack of social support is also commonly cited in the literature on suicide risk.²⁶ Other risk factors include suicidal ideation,¹⁵ plans,²⁷ and among patients who have recently attempted suicide, attitude toward the attempt.²⁸ Severity of the attempt is also a risk factor for repetition,²⁴ as well as physical health problems^{17,18} and avoiding discovery at the time of the attempt.¹⁷

Malone et al.²⁹ evaluated the accuracy of the documentation of the history of suicidal behaviour in routine inpatient clinical assessments. They found that a significant degree of past suicidal behaviour was not recorded during routine clinical assessment: clinicians failed to document past suicidal acts for 24% of the patients. Worse evaluations were found by Head et al. when they analysed the case notes of 338 deliberate self harm patients.³⁰ Only in 11% of conscious patients were adequate psychosocial assessment recorded in case notes. More recently, analysing data recorded on 70 admissions after deliberate self-harm, MacCauley et al.³¹ found that circumstances of the attempt, recent stressors, psychiatric diagnosis, immediate risk and follow-up arrangements were documented in the majority of cases. However, family psychiatric history, past suicidal behaviour, alcohol and drug abuse history, and previous violence were frequently not documented.

Given the apparent lack of agreement between clinical guidelines and real assessment practice, as well as the scant evidence on real practice,^{14,32} the present study aimed to analyse the quality of the clinical records of patients seen in public hospitals in Madrid (Spain) after a suicide attempt, in a blind observation.

Methods

Clinical records of all patients admitted to hospital after a suicide attempt, or who attempted suicide whilst in hospital, were analysed between 9 November 2007 and 8 March 2008 at four general public hospitals within the Spanish National Health System that provide free healthcare coverage to all Spanish citizens and immigrants living in the catchment areas. All medical expenses are paid for by the government through taxes. The hospitals (Gregorio Marañón University General Hospital, Ramón y Cajal University Hospital, San Carlos University Clinical Hospital, and Doce de Octubre University Hospital) are all in Madrid, and provide both paediatric and adult assistance. They are the referral hospitals for a population of 2,792,747 people.

There were 1009 identified suicide attempts. A protocol for each of them was filled out by a researcher independent

of the clinicians who recorded the information present in the clinical records. Clinicians were not informed about the study prior to collecting the data. For the purpose of these analyses, 16 cases in which the evaluation could not be carried out (because the patient fled or died) were eliminated, so that the final sample size was 993 clinical records. The confidentiality of all records was guaranteed. A code was assigned to each case, and no personal data that could identify the patient were recorded. Ethics approval was obtained by the ethics committee of each hospital.

Suicide attempts were defined according to the definition of the World Health Organization: "Those situations in which a person has performed a life-threatening act with the intent of putting his or her life into danger or giving the appearance of such an intent. It includes acts interrupted by others before the actual self-harm occurs.³³" This definition is the same as the one proposed in the last revised nomenclature for the study of suicide.³⁴

Clinical records from 993 suicide attempts committed by 907 people, age ranging from 6 to 92 years (mean age=37.1±SD=15.0), were analysed. Of these, 640 attempters (64.5%) were women (mean age 36.7±15.4), and 353 (35.5%) were men (mean age 37.9±14.3); 780 (86%) were Spanish; and 55 people (5.5%) committed more than one attempt (ranging from 2 to 10 attempts, mean 2.6±1.3).

The quality of the clinical records of the patients who had attempted suicide was also analysed. Based on current scientific evidence and recommendations from suicide prevention guidelines, and assuming that there are some demographic variables which are always evaluated (such as gender and age), seven indicators were selected to analyse the quality of the information present in the clinical records, considering that they are the minimum needed to evaluate the risk level of the patient who has attempted suicide. These indicators are: previous psychiatric treatment, recent suicidal ideation, recent suicide planning behaviour, medical lethality of suicide attempt, previous suicide attempts, attitude towards the attempt, and social or family support.

Statistical Methods

A protocol for each clinical record was filled out, coding whether each of the indicators were present. Then, the frequency distribution of each indicator was analysed to obtain the descriptive information indicating to what extent the clinical records covered this information. The addition of each of these dichotomous indicators—assigning 0 when the information was not present and 1 when it was collected—offers a total score of the quality of the information, ranging from 0 to 7. Mann-Whitney U tests were used to compare the composite quality scores across gender, decision regarding admission versus discharge, and recurrence of the attempt (only one attempt versus two or more), because the quality scores did not approximate a normal distribution. To make up the groups, some cases were eliminated. The admission *versus* discharge groups were formed using 958 cases, eliminating those patients who fled after the evaluation but before any referral was carried out, and the ones whose records fail to mention

whether the patient was admitted or discharged. The recurrence groups were formed with the 558 cases in which it was mentioned whether the patient had previous suicide attempts. Since this was also one of the quality indicators, this indicator was removed to make this analysis, making a range of scores from 0 to 6. Chi-square tests were also carried out, to compare the frequency of documentation of each indicator in the three groups. Analyses were performed using the Statistical Package for the Social Sciences (SPSS 15.0) and Stata 10.0.

Results

after analysing the 993 clinical records, it was found that 943 (94.9%) (95% CI=93.602–96.327) patients who attempted suicide received a psychosocial assessment. The other 50 (5.1%) (95% CI=3.673–6.398) were cases in which the patient was not evaluated, or it was not possible to find the clinical records and therefore to know whether the assessment had been done. Of the 94.9% evaluated, the evaluation was performed by a psychiatrist in 944 (99.8%) (95% CI=99.493–100) cases, and by the emergency room physician in 0.2% (2 cases) (95% CI=0–0.507). Checklists for the assessment of suicidal patients were not used in any case. Suicidal ideation scales were only used for one (0.1%) patient.

Only 223 (22.5%) (95% CI=19.857–25.057) records documented the seven indicators; 306 (30.8%) (95% CI=27.939–33.692) recorded six indicators; 229 (23.1%) (95% CI=20.437–25.686) recorded five; and 235 (23.6%) (95% CI=21.017–26.314) recorded four or less than four indicators.

Statistically significant differences ($z=0.296$; $p=0.767$, two tailed MannWhitney U test between groups) were not found on the total score of quality of the evaluation between men (5.26 ± 1.59) and women (5.30 ± 1.53). On the other hand, there were statistically significant differences ($z=2.731$; $p=0.006$, two tailed MannWhitney U test) on the total score for quality of the evaluation between the patients who were hospitalised after the emergency unit care, either in the psychiatric unit or in other medical units (5.50 ± 1.54) and those discharged from the emergency room department (5.28 ± 1.47). There were also statistically significant differences ($z=3.511$; $p<0.001$, two tailed MannWhitney U test) between the patients who had never attempted suicide before (5.27 ± 0.95) and those who had previous suicide attempts before the one evaluated in the study (4.93 ± 1.12).

Frequency of documentation of each indicator in each group and chi-square tests are shown in table 1. Medical lethality of the attempt was significantly more recorded in men than in women ($p=0.019$), in patients admitted to the hospital than in patients discharged ($p=0.001$), and almost significantly more recorded in people who attempted suicide for the first time than in repeaters ($p=0.053$). Recent suicide planning behaviour was less documented in admitted patients than in discharged ones ($p=0.040$) and in repeaters than in first time attempters ($p=0.009$). Attitude toward the attempt was also less documented in admitted patients than in discharged patients ($p=0.003$) and in

repeaters than in first time attempters ($p=0.028$). Previous suicide attempts were, on the contrary, more documented in admitted patients than in patients discharged after the emergency unit intervention ($p<0.001$).

Discussion

Limitations

The sample was made up of four university hospitals with 24-hour emergency and psychiatric services. The results may be different in smaller hospitals with fewer psychiatrists. Furthermore, since only the clinical records were analysed, but not the physicians' evaluations, it cannot be concluded that the information that was not present in the records was not explored during the evaluation. Nevertheless, we assume that the information that is not written in the records is indeed missing information, since no other health professional can have access to it.

Implications

Clinical guidelines specify the variables that should be registered in clinical records. However, these recommendations are not always followed, as shown by the 5% of patients in the present study who were, after a suicide attempt, discharged from a general public hospital in Madrid without having a psychiatric evaluation. This percentage is smaller than those found in some other studies,^{4,5} but still higher than in other countries.⁶

Given that all the indicators analysed in the present study can be considered as relevant and meaningful for a complete assessment of the risk of a future suicide attempt, and that clinical records are the only information available for professionals who could potentially treat the patient on future occasions, we believe that a conservative criterion of at least five of these seven indicators being present would be a minimum for considering the record adequate for purposes of prevention and treatment. By that standard, as many as 235 (23.6%) assessments could be considered incomplete. Moreover, if we use a more restrictive criterion (six to seven criteria included), only 529 (53.3%) could be considered adequate.

The number of previous suicide attempts was the indicator most often missed in the records, which might be explained because physicians mention it only when there have been previous attempts, but they fail to specify it when the patient has not had a previous attempt. If so, this could lead to confusion when other professionals examine the record, because it is impossible to know whether the history of suicide has been evaluated, and whether there have been any previous attempts. The lower rates for this indicator compared with those found by Malone et al.²⁹ can be due to the fact that the latter only analysed records of patients who were hospitalized, whereas most of the records analysed in the present study are emergency unit records, which are usually less detailed. Our results are more optimistic than the ones found by Head et al.,³⁰ which can be explained because of the different quality-assessment methods used.

Table 1 Percentage of clinical records documenting each indicator

Quality Indicator	Gender			χ^2 (p) ^a	Admitted / Discharged			Repeaters / Non-repeaters		
	Total n=993	Men n=353	Women n=640		Admitted n=250	Discharged n=708	χ^2 (p) ^a	Repeaters n=419	Non-repeaters n=139	χ^2 (p) ^a
Past psychiatric treatment	90.9%	89.0%	92.0%	2.62 (0.106)	93.6%	91.1%	1.52 (0.217)	95.9%	96.4%	0.06 (0.809)
95%CI	89.1-92.7	85.7-92.2	89.9-94.1		90.6-96.6	89.0-93.2		94.0-97.8	93.3-99.5	
Recent suicidal ideation	87.1%	86.4%	87.5%	0.24 (0.621)	86.4%	88.8%	1.06 (0.303)	90.7%	92.1%	0.25 (0.618)
95%CI	85.0-89.2	82.8-90.0	84.9-90.1		82.1-90.7	86.5-91.2		87.9-93.5	87.5-96.6	
Social or family support	78.5%	75.9%	80.0%	2.25 (0.134)	82.8%	78.4%	2.21 (0.137)	81.9%	87.1%	2.01 (0.157)
95%CI	76.0-81.1	71.4-80.4	76.9-83.1		78.1-87.5	75.4-81.4		78.2-85.6	81.4-92.7	
Recent suicide planning	75.6%	75.1%	75.9%	0.09 (0.761)	72.0%	78.4%	4.22 (0.040)	78.5%	88.5%	6.74 (0.009)
95%CI	72.9-78.3	70.5-79.6	72.6-79.3		66.4-77.6	75.3-81.4		74.6-82.5	83.1-93.9	
Attitude toward the attempt	73.4%	72.0%	74.2%	0.60 (0.440)	67.6%	77.1%	8.84 (0.003)	73.5%	82.7%	4.84 (0.028)
95%CI	70.7-76.2	67.2-76.7	70.8-77.6		61.8-73.4	74.0-80.2		69.3-77.7	76.4-89.1	
Medical lethality of attempt	67.0%	71.7%	64.4%	5.48 (0.019)	76.0%	64.1%	11.83 (0.001)	72.3%	80.6%	3.74 (0.053)
95%CI	64.0-69.9	66.9-76.4	60.6-68.1		70.7-81.3	60.6-67.7		68.0-76.6	73.9-87.2	
Previous attempts	56.2%	55.8%	56.4%	0.03 (0.856)	72.0%	50.6%	34.48 ($<.001$)	— ^b	—	—
95%CI	53.1-59.3	50.6-61.0	52.5-60.3		66.4-77.6	46.9-54.3		—	—	

^adf=1.^bIndicator removed for these analyses, since only those cases where it was recorded were included.

Medical lethality of current attempt was also frequently missing in clinical records, while previous psychiatric treatment and suicidal ideation were the most frequently recorded, although suicidal ideation scales were seldom used. These results are similar to those of MacCauley et al.³¹ with a smaller sample.

The quality of the evaluation was the same for men and women, but was worse for discharged patients than for admitted patients. This might reflect the longer time spent on the evaluation of patients who stay longer. Repeaters also had poorer records than non-repeaters. This can be explained because repeaters might be patients already known to the physicians, so they would provide fewer details in their clinical history.

Conclusions

Our study suggests that the clinical records of patients who have attempted suicide are incomplete.

Considering the importance of clinical records in decision-making regarding the treatment and follow-up of these patients, we suggest using semi-structured screening instruments to improve the evaluation of patients who have self harmed. Furthermore, these instruments could also guarantee the implementation of clinical guidelines.

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Disclosures of Conflicts of Interest

No interests to disclose.

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