

Attempted Suicide: Factors Leading to Hospitalization

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Objective: This study analyzes how sociodemographic and clinical characteristics influence the treatment decision for patients referred to a university hospital emergency room (ER) owing to attempted suicide.

Method: Using a cross-sectional design, we monitored all patients admitted to a university hospital ER after attempting suicide, over a 3-year period ($n = 404$). Treatment decisions were categorized into 3 groups: inpatient treatment, outpatient treatment, and no further treatment.

Results: Older patients were more likely to be hospitalized, while women and patients with regular occupational activity were more likely to receive outpatient treatment. In logistic regression analysis, attempted suicide using aggressive methods, history of psychiatric inpatient treatment, and psychotic disorders were associated with inpatient treatment. Adjustment and neurotic disorders were related to outpatient treatment.

Conclusions: The decision to hospitalize can be satisfactorily predicted by means of sociodemographic and clinical characteristics, while the number of patients assigned to outpatient treatment is underestimated. A triage that relies only on sociodemographic and clinical data as well as risk factors could result in too frequent admissions of patients after attempted suicide.

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Clinical Implications

- Treatment decisions based solely on sociodemographic and clinical data could result in too frequent admissions to inpatient treatment.
- A better understanding of treatment and disposition decisions is important for both teaching purposes and for optimizing the aftercare of persons who have attempted suicide.

Limitations

- We limited analyses to a dichotomous treatment decision (that is, inpatient vs outpatient treatment) and therefore did not fully represent the whole spectrum of possible treatment options.
- Psychiatric diagnoses were based on routine clinical diagnostics.
- The study did not address the quality of care provided for the patients.

Key Words: *attempted suicide, psychiatric emergency services, decision making*

Managing suicidal crises and assessing the suicide risk of patients admitted to the emergency room (ER) after attempted suicide are common but challenging tasks requiring profound clinical experience. Though proposed long ago, generally accepted guidelines for dispositional decisions in psychiatric emergency services have yet to be developed (1,2).

Attempted suicide is the strongest predictor for suicide or parasuicide. In the year following attempted suicide, the average rate of repeated nonfatal attempts was reported to be 17% (3). In follow-up studies conducted 5 to 9 years after attempted suicide, 3% to 13% of patients eventually committed suicide (4–8). The risk for suicide among self-harm

patients is estimated to be 40 times higher than among the general population (9).

In light of these data, the importance of a diligent assessment and treatment decision following an episode of attempted suicide is obvious. The menace of repeated self-harming behaviour could mislead clinicians into routinely referring patients to inpatient treatment after a suicide attempt. In an emergency situation, inpatient treatment might be a relatively safe way to handle the suicidal risk, but this could also induce a false sense of security in the clinician and could serve as a guarantee against legal liability. Inappropriate admission, especially referral against the patient's will, might have negative effects on the patient and his or her family, as well as on the therapeutic alliance and the adherence to subsequent outpatient treatment. Conversely, a missed hospitalization might result in the repetition of suicidal behaviour, including suicide, or cause increased distress for the family and the support system.

Many predictors for inpatient treatment of psychiatric emergency patients have been described. These criteria can be divided into patient variables, therapist variables, and patient-therapist relationship variables (10). Patient variables identified as predictive for admission to inpatient facilities are, for example, a current diagnosis of a psychotic disorder or severe depression, danger to self or others, a previous psychiatric hospitalization, and referral by the police (2,11-13). However, the decision to hospitalize a patient also depends on the clinical experience of the psychiatrist (14), and there are differences among clinicians regarding their weighing of clinical information for the disposition decision (15).

Though active suicidal ideation and the risk of self-harm are among the strongest predictors for the decision to hospitalize psychiatric emergency patients (2,12,13) and are among the most common reasons for compulsory inpatient treatment in a psychiatric hospital (16), most studies dealing with disposition decisions in the psychiatric emergency ward investigated general psychiatric emergencies and did not focus on persons who attempted suicide. In a previous study, we compared the characteristics of persons who had attempted suicide with those of psychiatric emergency patients without self-harming behaviour and found that patients referred because of attempted suicide were more likely to be hospitalized, even though they were better integrated in both their professional and private lives (16).

In managing attempted suicide, the repetition risk is a crucial factor. Long-term risk factors for suicide are well known (17), and although there are differences in the risk pattern of persons who attempt suicide and persons who complete suicide (18), those who attempt suicide whose characteristics most resemble those of completed suicides are at highest risk for eventual suicide (19). However, it remains unclear whether

long-term risk factors also predict the short-term suicide risk. Therefore, several assessment instruments for self- and clinician rating of suicide risk have been proposed (20). Because the risk of suicide or parasuicide is one of the major reasons for psychiatric inpatient treatment, some of these clinical rating scales have been evaluated to predict hospital admission among patients referred to psychiatric emergency services (21). Rating scales were sensitive but much less specific and, therefore, cannot replace the individual psychiatric assessment. To avoid unnecessary hospital admissions, clinicians should not rely exclusively on strict cut-off scores in the decision to hospitalize a patient.

The objective of this cross-sectional study was to describe the sociodemographic and clinical characteristics of a large sample of patients referred to a Swiss University Hospital emergency service after attempted suicide and to examine the associations with the main emergency interventions (that is, compulsory or voluntary admission to psychiatric hospitals and outpatient psychiatric treatment).

Material and Methods

Setting

The city of Zurich has approximately 335 000 inhabitants. Most psychiatric emergencies in Zurich and the surrounding suburbs are referred to the emergency services of the University Hospital of Zurich. The emergency department is open 24 hours daily, 7 days a week. A psychiatric resident is present at all times, and a senior registrar is regularly on duty. Patients who have attempted suicide are regularly seen and assessed by a psychiatric resident once somatic treatment has been given.

Regarding compulsory hospitalization, Swiss legislation provides for the involuntary admission of mentally ill patients to a psychiatric hospital when they present an acute threat to their own life or to the lives of others.

Sample

We conducted the study, performed in the emergency department of the University Hospital of Zurich, over a period of 3 years (from 1996 through 1998) and included all patients referred to the emergency ward after attempted suicide. Some patients were referred to the emergency service repeatedly during the observation period for attempted suicide or other reasons. For these patients, we included the data from the first consultation for attempted suicide within this period. Thus the sample includes individuals (cases) rather than consultations, to avoid an overrepresentation of persons who attempted suicide more than once. We collected a sample of 404 patients in this manner.

The psychiatric resident on duty collected detailed sociodemographic data, diagnostic and clinical data, former

psychiatric history, and characteristics of the suicide attempt. We collected information concerning the intervention strategies, using an adapted questionnaire, as applied in former studies (11,16). In Switzerland, the ICD-10 (22) is routinely used for clinical service provision. Diagnoses according to the ICD-10 criteria were based on a routine clinical interview by the resident and were supervised by a senior registrar. Diagnoses were either discussed by telephone or, if needed, the senior registrar examined patients personally. A main psychiatric diagnosis was given for each patient, with the option of up to 3 additional diagnoses. For further analyses, main diagnoses were divided into the following categories: the ICD-10 F1 mental and behavioural disorders due to psychoactive substance abuse (corresponding to the DSM-IV 291–293 and 303–305, 23); the ICD-10 F2 schizophrenia, schizotypal, and delusional disorders (corresponding to the DSM-IV 295 and 297–298); the ICD-10 F3 mood disorders (corresponding to the DSM-IV 296, 300.4, and 311); the ICD-10 F4/F5 neurotic, stress-related, and somatoform disorders/behavioural syndromes associated with physiological disturbances and physical factors (corresponding to the DSM-IV 300, but not 300.4, and to the DSM-IV 307 and 309); the ICD-10 F0 and ICD-10 F7–F9 other disorders and the ICD-10 F6 disorders of adult personality (corresponding to the DSM-IV Axis II).

Attempted suicide was defined according to the WHO/EURO multicentre study on parasuicide as

an act of nonfatal outcome, in which an individual deliberately initiates a non-habitual behavior that, without intervention from others, will cause self-harm, or deliberately ingests a substance in excess of the prescribed or generally recognized therapeutic dosage, and which is aimed at realizing changes which the subject desired via actual or expected physical consequences (24).

The method of self-harm was divided into 3 categories: first, “deliberate self-poisoning with medication” and second, “deliberate self-harm by cutting or piercing with a sharp instrument,” which are the most common methods of parasuicide and are sometimes apostrophized as “soft methods” (3). The third category, “other methods,” includes various methods often characterized by a greater level of aggressiveness and often followed by more serious injuries, for example, shooting, self-burning, or being run over by a train or vehicle.

Treatment Decision

The disposition decision was categorized into 3 treatment groups: inpatient treatment (208 patients, 51.5%), outpatient crisis intervention (116 patients, 28.7%), and no further intervention (80 patients, 19.8%). Some patients were hospitalized at one of the surgical or medical wards of the university

hospital but needed further provision of psychiatric care by the consulting psychiatrist during hospitalization. These patients were included in the inpatient treatment category. The no further intervention group was highly heterogeneous and included patients with no severe injuries, patients for whom a single consultation was considered sufficient, and patients who were hospitalized at the intensive care unit because of somatic consequences of self-harm and for whom psychiatric treatment was impossible at that time. Further, the mere fact that patients did not receive further treatment did not imply that no further treatment was recommended. Therefore, this category was omitted from further analyses. For 80% ($n = 324$) of all patients, a psychiatric treatment was implemented; further analyses and group comparisons refer to these 324 patients.

Statistical Analyses

Apart from descriptive statistics, we performed chi-square tests and *t* tests to assess any differences in sociodemographic characteristics of the comparison groups. In a further step, we performed logistic regression analysis, using clinical characteristics as independent variables and treatment decision as the dependent variable. For the categorical variables in this analysis, we used indicator-variable coding (that is, psychiatric history and method of attempted suicide) and deviation-variable coding (that is, psychiatric diagnosis). In indicator-variable coding, the coefficients represent the effect of each category compared with a reference category, while in deviation-variable coding, the effect of each category is compared with the average effect of all categories (25). We performed all analyses using SPSS 10 for Windows (25).

Results

Sociodemographic Variables

The mean age of the sample ($n = 324$) was 34.8 years, SD 14.5, range 15 to 88 years; 57.4% were aged 15 to 34 years; only 9.9% were aged over 55 years. There were no significant sex differences with regard to age. Of the patients, 120 (37.0%) were male and 204 (63.0%) were female; the female-to-male ratio was 1.70. In total, 93 (29.1%) patients were married; 176 (55.0%) were single; and 51 (15.9%) were divorced, separated, or widowed. There was no information about the marital status of 4 patients. Ninety-nine patients (32.1%) reported living alone, and 209 (67.9%) were living with others at the time of referral. For 16 patients, no information about living situation was available. A total of 178 (64.5%) patients had a full- or part-time job, including homemakers and persons in education; 98 (35.5%) were not integrated in occupational life. Data referring to professional status was missing for 48 patients. Of the patients, 139 (44.1%) reported no previous psychiatric treatment, 65 (20.6%) had been under psychiatric

Table 1 Sociodemographic characteristics of patients who attempted suicide, assigned to disposition decision

Variable	Total sample (n = 324)	Outpatient (n = 116)	Inpatient (n = 208)	χ^2 df 1	P
Sex, n (%)				6.92	< 0.01
Male	120 (37.0)	32 (27.6)	88 (42.3)		
Female	204 (63.0)	84 (72.4)	120 (57.7)		
Marital status, n (%)				0.01	0.94
Married	93 (29.1)	34 (29.3)	59 (28.9)		
Not married	227 (70.9)	82 (70.7)	145 (71.1)		
Missing	4 (—)	—	—		
Living arrangements, n (%)				1.57	0.21
Alone	99 (32.1)	32 (27.8)	67 (34.7)		
With others	209 (67.9)	83 (72.2)	126 (65.3)		
Missing	16 (—)	—	—		
Employment status, n (%)				18.5	< 0.001
Regular occupational activity	178 (64.5)	87 (79.8)	91 (54.5)		
No regular occupational activity	98 (35.5)	22 (20.2)	76 (45.5)		
Missing	48 (—)	—	—		

outpatient treatment earlier or at the time of referral, and 111 (35.2%) had a history of psychiatric hospitalization. Data relating to psychiatric history were missing for 9 patients.

Clinical Variables

The most frequent main diagnoses were either the ICD-10 F4/5, predominantly adjustment disorders (n = 118, 36.4%) or the ICD-10 F3 mood disorders (n = 108, 33.3%). A substance-related disorder (ICD-10 F1) was diagnosed in 37 patients (11.4%); a psychotic disorder (ICD-10 F2) was diagnosed in 30 patients (9.3%); in 10 patients (3.1%), another ICD-10 disorder was diagnosed. In 21 patients (6.5%), the main diagnosis was a personality disorder (ICD-10 F6). Overall, sex was significantly related to the main diagnosis ($\chi^2 = 16.64$, df 5, $P < 0.01$). Male patients were more often diagnosed with a substance-related disorder ($\chi^2 = 9.01$, df 1, $P < 0.01$), while female patients tended toward more adjustment or neurotic disorders (ICD-10 F4/5) ($\chi^2 = 3.39$, df 1, $P = 0.07$). Over 80% of the patients had no additional diagnosis. The most frequent additional diagnoses were substance-related disorders and personality disorders.

Methods of Self-Harm

In total, 170 patients (52.5%) were admitted for self-poisoning, 57 patients (17.6%) for self-harm by cutting, and 97 patients (29.9%) for self-harm by other methods. There was an overall significant difference ($\chi^2 = 12.72$, df 2, $P < 0.01$) between male and female patients. Self-poisoning occurred more often than statistically expected among female patients ($\chi^2 = 11.88$, df 1, $P < 0.001$), whereas other methods

were more frequent among male patients ($\chi^2 = 9.20$, df 1, $P < 0.01$).

Patient Characteristics Associated With Treatment Decision Bivariate Analysis (Table 1). Regarding age, there was a significant difference in the 2 treatment groups: older patients were more likely to be hospitalized (outpatient group mean age 30.8 years, SD 11.9; inpatient group mean age 37.1 years, SD 15.4; $t = -3.82$, df 322, $P < 0.001$). Female sex and regular occupational activity were significantly associated with outpatient crisis intervention, whereas there were no significant differences between the 2 groups regarding marital status and living arrangements (Table 1).

In the subgroup of hospitalized patients, 51.9% of hospitalizations were compulsory, and 48.1% were voluntary. We observed no significant sex differences with regard to the mode of hospitalization.

Patient Characteristics Associated With Treatment Decision Multivariate Analysis (Table 2). Finally, we performed a logistic regression analysis. The main psychiatric patient characteristics served as independent variables and treatment decision (that is, outpatient crisis intervention vs inpatient treatment) served as the dependent variable. We also entered sex into the multivariate analysis, because it was significantly related to the psychiatric diagnosis and to the method of self-harm. The method of self-harm, psychiatric history, and psychiatric diagnosis as a whole significantly contributed to the decision regarding whether outpatient crisis intervention or inpatient treatment was suggested. In particular, self-harm using methods other than self-poisoning or cutting (that is,

Table 2 Psychiatric characteristics of persons who attempted suicide as predictors of the treatment decision: outpatient crisis intervention vs inpatient treatment (logistic regression, $n = 315$).

Psychiatric characteristics	Significance	OR	95%CI	
			Lower	Upper
Sex	0.16			
Female (reference)	—	1.00	—	—
Male	0.16	1.49	0.85	2.62
Psychiatric history	0.05			
No previous treatment (reference)	—	1.00	—	—
Outpatient treatment	0.95	0.98	0.51	1.89
Inpatient treatment	< 0.05	2.10	1.09	4.02
Method of attempted suicide	< 0.01			
Deliberate self-poisoning (reference)	—	1.00	—	—
Cutting	0.38	0.74	0.38	1.44
Other methods	< 0.01	2.99	1.52	5.87
Psychiatric diagnosis	< 0.05			
Psychoactive substance abuse (ICD-10 F1)	0.40	0.71	0.32	1.59
Schizophrenia, psychotic disorders (ICD-10 F2)	< 0.05	4.09	1.12	14.99
Mood disorders (ICD-10 F3)	0.40	0.77	0.41	1.42
Adjustment and (or) neurotic disorders (ICD-10 F4/5)	< 0.01	0.41	0.23	0.76
Other ICD-10 diagnoses (ICD-10 F0, F7–9)	0.37	2.30	0.37	14.25
Personality disorders (ICD-10 F6)	0.11	0.47	0.19	1.18

Inpatient treatment: sensitivity = 80.5%, specificity = 52.2%, overall = 70.2%

For the categorical variables, we used indicator-variable coding (sex, psychiatric history and method of attempted suicide) and deviation-variable coding (psychiatric diagnosis). When using indicator-variable coding, the coefficients represent the effect of each category compared with a reference category, while in deviation-variable coding, the effect of each category is compared with the average effect of all of the categories.

involving more aggressive methods) was associated with inpatient treatment. Patients with a history of psychiatric inpatient treatment and a current diagnosis of schizophrenia or psychotic disorders (ICD-10 F2) were more likely to be hospitalized, whereas a diagnosis of adjustment or neurotic disorder (ICD-10 F4/5) was associated with outpatient treatment. In contrast to the bivariate analysis, sex no longer reached statistical significance in the multivariate analysis.

This regression model allowed correct overall classification of 70.2% of patients. Of the hospitalizations, 80.5% could be correctly classified, compared with only 52.2% of referrals to outpatient treatment.

Discussion

This study analyzes how sociodemographic and clinical characteristics influence the treatment decision of patients referred to a university hospital ER because of attempted suicide. By recording data of persons who attempted suicide over a period of 3 years, we were able to gather clinical and sociodemographic information from a large sample. Regarding the main sociodemographic data, the sample was typical

of ER patients who had harmed themselves (16,26). The wide range and distribution of diagnoses is also typical for a population of persons who had attempted suicide (16).

Several limitations ought to be considered. First, a possible selection bias may have occurred because the study was conducted in a large inner-city hospital, limiting generalizability to an urban patient population. We limited our analyses to a dichotomous treatment decision (inpatient vs outpatient treatment). Of course, this is a simplification and does not fully represent the whole spectrum of possible treatment options (27). However, in suicidal patients in particular, it is of utmost importance to decide whether a patient is in need of hospital admission, because admission is sometimes carried out against the patient's will. We relied on routine clinical diagnostic investigation for diagnoses. The limited reliability of emergency service diagnostics concerning psychopathology, severity of depression and psychosis, and danger to self and others has been shown by Way and others (28). However, the clinical psychiatric assessment on the level of diagnostic categories in the ER is generally sufficient for further triage (29,30), and the use of diagnostic instruments in the ER is

often not possible, resulting in missing data. For the same reason, we did not use self-rating instruments, which could have provided the patients' subjective view. Finally, this study investigated the influence of patients' characteristics on the treatment decision, but it did not address the quality of care provided for the patients.

After a suicide attempt, approximately one-half the patients were hospitalized. One of 5 patients did not receive an immediate therapeutic intervention. It is difficult to interpret this result because of the group heterogeneity. Some patients might have refused further treatment; others were in such a serious physical condition that any psychiatric intervention was not possible at the time. Compared with a previous study, this proportion is nearly identical (16). Of the remaining 324 patients (that is, those who received an immediate psychiatric intervention), 208 (64.2%) were admitted to inpatient treatment. This is more than in the previous study conducted in Berne (56.9%) (16). A possible explanation for the higher hospitalization rate in Zurich could be that there is no psychiatric nurse on duty in the ER, forcing the psychiatrist to reach an immediate disposition decision.

The pattern of diagnoses is characteristic of a psychiatric ER population, with mood disorders and adjustment disorders being the most common. Though one would expect more patients with personality disorder (31), it was diagnosed in only a few patients. This probably does not reflect the real prevalence, but in the course of a single emergency consultation, it is often impossible to ascertain this diagnosis. An additional diagnosis was made in less than 20% of all patients. Again, this probably does not reflect the true situation, as psychiatric comorbidity in persons who attempt suicide is very common (31). In clinical routine, psychiatrists probably tend to focus on the diagnosis most directly related to the suicide attempt. However, information about comorbid personality disorder or alcohol dependence, for example, is important for the quality of the treatment decision.

The overrepresentation of female patients with a female-to-male ratio of 1.70 is comparable to results from the European multicentre study, wherein the ratio was 1.58 (32). The differences between male patients and female patients regarding the method of self-harm could be interpreted as an indicator for a higher level of aggressiveness in men who attempt suicide. The category "other methods" comprises methods of self-harm that are more aggressive and bear a higher mortality risk. Men who attempt suicide are known to engage in more dangerous methods, often resulting in severe life-threatening consequences (32). This could explain why men who attempt suicide are more frequently admitted to inpatient treatment. The fact that patients in the "other methods" category more often required hospitalization owing to severe somatic injuries possibly confuses the issue.

According to the logistic regression analysis, 80.5% of the hospitalizations could be correctly classified, compared with only 52.2% of the patients referred to outpatient treatment. In clinical practice, this means that a patient's sociodemographic and clinical characteristics contribute much more to the decision to hospitalize than to the decision for outpatient treatment.

In view of the fact that outpatient treatment has been shown to be superior to inpatient treatment, regarding both symptom reduction and patient satisfaction (33), as well as from a cost-effectiveness perspective targeted at avoiding unnecessary hospitalizations (34), treatment decision making, in the context of psychiatric emergency services, remains a complex procedure (27). The dilemma is that, even though patients who attempted suicide are a high-risk group, later suicide and further attempted suicide, even among this group, are statistically rare events, and it is not possible to precisely predict suicide in the individual. As shown by Cochrane-Brink and others regarding clinical rating scales (21), our model cannot replace a careful and comprehensive individual psychiatric assessment. The aim is to not miss a patient in need of inpatient treatment and, at the same time, to hospitalize no more patients than necessary.

Conclusions

Psychiatric emergency service is one of the main points of entry to the network of the mental health system, and for many persons who attempt suicide, it is their first contact with a psychiatric institution. Thus accurate handling of suicidal crises is very important for successful aftercare. The ER psychiatrist's treatment choice will have an important impact on the patient's perception of the helpfulness of psychiatric interventions. A better understanding of the process of treatment and disposition decisions is therefore a crucial issue. However, neither the administration of checklists for risk factors nor clinical scales with cut-off scores can replace clinicians' judgment and responsibility in the treatment decision. Nevertheless, further research should focus on more differentiated treatment options, on the one hand, and on patient-related and clinician-related variables and variables concerning the patient-therapist relationship, on the other. This may lead to a better understanding of the patients who will best benefit from the different treatment interventions available.

References

1. Apsler R, Bassuk E. Differences among clinicians in the decision to admit. *Arch Gen Psychiatry* 1983;40:1133-7.
2. Way BB, Banks S. Clinical factors related to admission and release decisions in psychiatric emergency services. *Psychiatr Serv* 2001;52:214-8.
3. Schmidtke A, Bille-Brahe U, DeLeo D, Kerkhof A, Bjerke T, Crepet P, and others. Attempted suicide in Europe: rates, trends and sociodemographic characteristics of suicide attempters during the period 1989-1992. Results of the WHO/EURO Multicentre Study on Parasuicide. *Acta Psychiatr Scand* 1996;93:327-38.

4. Suokas J, Lonnqvist J. Outcome of attempted suicide and psychiatric consultation: risk factors and suicide mortality during a five-year follow-up. *Acta Psychiatr Scand* 1991;84:545-9.
5. Hawton K, Fagg J. Suicide, and other causes of death, following attempted suicide. *Br J Psychiatry* 1988;152:359-66.
6. Owens D, Horrocks J, House A. Fatal and non-fatal repetition of self-harm: a systematic review. *Br J Psychiatry* 2002;181:193-9.
7. Allgulander C, Fisher LD. Clinical predictors of completed suicide and repeated self-poisoning in 8895 self-poisoning patients. *Eur Arch Psychiatry Neurol Sci* 1990;239:270-6.
8. Johnsson Fridell E, Ojehagen A, Traskman-Bendz L. A 5-year follow-up study of suicide attempts. *Acta Psychiatr Scand* 1996;93:151-7.
9. Harris EC, Barraclough B. Suicide as an outcome for mental disorders. A meta-analysis. *Br J Psychiatry* 1997;170:205-28.
10. Gerson S, Bassuk E. Psychiatric emergencies: an overview. *Am J Psychiatry* 1980;137(1):1-11.
11. Schnyder U, Klaghofer R, Leuthold A, Buddeberg C. Characteristics of psychiatric emergencies and the choice of intervention strategies. *Acta Psychiatr Scand* 1999;99:179-87.
12. Rabinowitz J, Massad A, Fennig S. Factors influencing disposition decisions for patients seen in a psychiatric emergency service. *Psychiatr Serv* 1995;46:712-8.
13. Marson DC, McGovern MP, Pomp HC. Psychiatric decision making in the emergency room: a research overview. *Am J Psychiatry* 1988;145:918-25.
14. Mendel WM, Rapport S. Determinants of the decision for psychiatric hospitalization. *Arch Gen Psychiatry* 1969;20:321-8.
15. Rabinowitz J, Mark M, Slyuzberg M. How individual clinicians make admission decisions in psychiatric emergency rooms. *J Psychiatr Res* 1994;28:475-82.
16. Schnyder U, Valach L. Suicide attempters in a psychiatric emergency room population. *Gen Hosp Psychiatry* 1997;19:119-29.
17. Blumenthal SJ. An overview and synopsis of risk factors, assessment, and treatment of suicidal patients over the life cycle. In: Blumenthal SJ, Kupfer DJ, editors. *Suicide over the life cycle: risk factors, assessment, and treatment of suicidal patients*. Washington (DC): American Psychiatric Press; 1990. p 685-733.
18. Michel K. Suicide risk factors: a comparison of suicide attempters with suicide completers. *Br J Psychiatry* 1987;150:78-82.
19. Pallis DJ, Gibbons JS, Pierce DW. Estimating suicide risk among attempted suicides. II. Efficiency of predictive scales after the attempt. *Br J Psychiatry* 1984;144:139-48.
20. Range LM, Knott EC. Twenty suicide assessment instruments: evaluation and recommendations. *Death Stud* 1997;21(1):25-58.
21. Cochrane-Brink KA, Lofchy JS, Sakinofsky I. Clinical rating scales in suicide risk assessment. *Gen Hosp Psychiatry* 2000;22:445-51.
22. World Health Organization. The ICD-10 classification of mental and behavioural disorders: clinical descriptions and diagnostic guidelines. Geneva: World Health Organization; 1992.
23. American Psychiatric Association. *Diagnostic and statistical manual of mental disorders*. 4th ed. Washington (DC): American Psychiatric Association; 1994.
24. Platt S, Bille-Brahe U, Kerkhof A, Schmidtke A, Bjerke T, Crepet P, and others. Parasuicide in Europe: the WHO/EURO multicentre study on parasuicide. I. Introduction and preliminary analysis for 1989. *Acta Psychiatr Scand* 1992;85:97-104.
25. SPSS. *SPSS 10.0 syntax reference guide*. Version 10.0. Chicago (IL): SPSS Inc; 1999.
26. Runeson B, Scocco P, DeLeo D, Meneghel G, Wasserman D. Management of suicide attempts in Italy and Sweden. A comparison of services offered to consecutive samples of suicide attempters. *Gen Hosp Psychiatry* 2000;22:432-6.
27. Blitz CL, Solomon PL, Feinberg M. Establishing a new research agenda for studying psychiatric emergency room treatment decisions. *Ment Health Serv Res* 2001;3(1):25-34.
28. Way BB, Allen MH, Mumpower JL, Stewart TR, Banks SM. Interrater agreement among psychiatrist in psychiatric emergency assessments. *Am J Psychiatry* 1998;155:1423-8.
29. Lieberman PB, Baker FM. The reliability of psychiatric diagnosis in the emergency room. *Hosp Community Psychiatry* 1985;36:291-3.
30. Warner MD, Peabody CA. Reliability of diagnoses made by psychiatric residents in a general emergency department. *Psychiatr Serv* 1995;46:1284-6.
31. Suominen K, Henriksson M, Suokas J, Isometsa E, Ostamo A, Lonnqvist J. Mental disorders and comorbidity in attempted suicide. *Acta Psychiatr Scand* 1996;94:234-40.
32. Michel K, Knecht C, Kohler I, Sturzenegger M. Attempted suicide in the Bern region. *Schweiz Med Wochenschr* 1991;121:1133-9.
33. Merson S, Tyrer P, Onyett S, Lack S, Birkett P, Lynch S, and others. Early intervention in psychiatric emergencies: a controlled clinical trial. *Lancet* 1992;339:1311-4.
34. Merson S, Tyrer P, Carlen D, Johnson T. The cost of treatment of psychiatric emergencies: a comparison of hospital and community services. *Psychol Med* 1996;26:727-34.

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Résumé : Tentative de suicide : facteurs menant à une hospitalisation

Objectif : Cette étude analyse la façon dont les caractéristiques sociodémographiques et cliniques influencent les décisions de traitement pour les patients adressés à la salle d'urgence (SU) d'un hôpital universitaire en raison d'une tentative de suicide.

Méthode : Au moyen d'une méthode transversale, tous les patients admis à la SU d'un hôpital universitaire après une tentative de suicide ont été suivis sur une période de 3 ans ($n = 404$). Les décisions de traitement ont été classées en 3 groupes : traitement de patient hospitalisé, traitement de patient externe et aucun autre traitement.

Résultats : Les patients âgés étaient plus susceptibles d'être hospitalisés, tandis que les femmes et les patients ayant une activité professionnelle régulière étaient plus susceptibles de recevoir un traitement externe. Dans une analyse de régression logistique, les tentatives de suicide à l'aide de méthodes violentes, les antécédents de traitement des patients psychiatriques hospitalisés et les troubles psychotiques étaient associés au traitement de patient hospitalisé. Les troubles d'adaptation et névrotiques étaient reliés au traitement de patient externe.

Conclusions : La décision d'hospitaliser peut être prédite de façon satisfaisante au moyen des caractéristiques sociodémographiques et cliniques, tandis que le nombre de patients affectés à un traitement externe est sous-estimé. Un triage qui ne s'appuie que sur les données sociodémographiques et cliniques et sur les facteurs de risque pourrait entraîner des hospitalisations de patients trop fréquentes après une tentative de suicide.