

# Modalities for the management of suicidal patients in liaison psychiatry A one year retrospective study in a Moroccan general hospital

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**ABSTRACT**

Suicide is one of the leading causes of potentially preventable death among adolescents and young adults. Suicide attempts (SA) can occur within general hospital services. Liaison psychiatry is then at the forefront in the detection and evaluation of suicidal risk in patients treated for potentially disabling organic pathologies and/or for the somatic consequences of a suicide attempt. To determine the profile of suicidal patients seen in liaison psychiatry and the management modalities they underwent, we conducted a retrospective observational study during 2021, within the Mohammed V Military Hospital of Instruction of Rabat. A total of 40 suicidal patients were identified. The median age was 22 years, with a female predominance. Of all study participants, 47.5% had a psychiatric follow-up, 40% had already used psychotropic drugs and 20% had made a previous suicide attempt. Among the services seeking psychiatric consultation, medical-surgical emergencies accounted for 42.5% of cases, surgical services for 25% of patients, and intensive care units for 12.5% of cases. Suicidal thoughts were recorded in 72.5% of cases, verbalization of suicidal ideas in 22.5%, and suicidal behavior in 15%. The most frequently used means of suicide were drug ingestion in 30% of cases, rat poison ingestion in 20% of cases and defenestration in 17.5%. The most frequent diagnoses were adjustment disorder, followed by personality disorder and depressive disorder. Half of the patients had an indication for hospitalization and 47.5% had been kept in the hospital under medical supervision.

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## 1. INTRODUCTION

Suicide is identified by the World Health Organization (WHO) as a global public health issue. It represents one of the leading causes of potentially preventable mortality among adolescents and young adults [1]. Suicide attempts (SA) are about 20 times more frequent than completed suicide and represent the most powerful predictor of suicide [2]. Recent data consider suicidal behavior as the result of multiple bio-psycho-social interactions. Yet, the stress-vulnerability model of suicidal behavior assumes that only vulnerable

individuals, when subjected to stress, will die by suicide [3]. Thus, the COVID-19 crisis contributes to the exacerbation of suicidal behavior through its psychological, social, economic, or biological impact [4]. Indeed, the period of our study coincided with the outbreak of the COVID-19 pandemic that has not spared Morocco [5]. Liaison psychiatry is regularly solicited when physicians are faced with suicidal patients, whether they are admitted to the emergency room or already hospitalized in medical-surgical services for potentially disabling organic conditions. Therefore, our study has two main goals: First, to determine the profile of suicidal patients seen in liaison psychiatry, and to evaluate the modalities of care interventions they would receive.

## **2. Material and Methods**

### **2.1 Study design**

This is a retrospective observational study of suicidal patients who required liaison psychiatric care From November 2020 to December 2021 in the Mohammed V Military Hospital in Rabat. The data collection was carried out with the help of an exploitation form specifying the sociodemographic and clinical characteristics of the patients, the semiological description of the suicidal crisis as well as the care modalities deployed. The questionnaire also included items on patients' personal and family history, the requesting service and the type of organic condition for which the patient was hospitalized. Psychiatric diagnosis was based on the DSM-5 diagnostic criteria.

### **2.2 Inclusion criteria**

The following were included in our study:

- Patients admitted to the medical-surgical emergency room after a SA
- Patients admitted to general hospital wards for management of the somatic consequences of a SA
- Patients admitted to general hospital wards and/or having verbalized suicidal ideas, and/or having shown suicidal behavior.

### **2.3 Exclusion criteria**

The following were excluded from our study

- Subjects over 65 years of age and those under 16 years of age.
- Patients seen or initially admitted to the psychiatric department

### **2.4 Statistical analysis**

Statistical analysis was performed using JAMOVI software.

## **3. Results**

A total of 40 patients with suicidal behavior were identified during the study period. Socio-demographic and clinical characteristics of the study participants are presented in Table 1. The median age of our patients was 22 years [18.8, 37.3] ranging from 16 to 55 years, with a predominance of females (75%). 60% patients were single with an average socio-economic level and 57.5% had a secondary education. Regarding psychiatric history: 47.5% had a previous psychiatric follow-up, 7.5% had been hospitalized at least once in psychiatry, 40% had already used psychotropic drugs and 20% had previously attempted suicide. A history of substance use was found in 17.5% (tobacco in 17.5%, cannabis in 12.5% and alcohol in 7.5% patients).

Psychiatric intervention was requested by the medical-surgical emergency department for 42.5% of cases, by the intensive care unit for 12.5% of cases, via the surgical departments for 25% of patients (including 12.5% by the trauma department for pelvic fracture due to defenestration) and the medical departments for 20% of

patients (including 7.5% from the covid-19 units for difficulty in adapting). Most of psychiatric interventions were requested within 48 hours of hospitalization.

Among the reasons for requesting a psychiatric evaluation, we noted suicide attempts in 72.5% of cases, verbalization of suicidal ideas in 22.5%, and suicidal behavior in 15%. The most frequently used means were drug ingestion in 30% of cases, rat poison ingestion in 20% and defenestration in 17.5%. Impulsive (32.5%) and anxious (22.5%) contexts were more reported than depressive (15%) and hallucinatory (7.5%) contexts. No less than 30% patients suffered somatic consequences of their suicide attempt (Table 1). As for the rest of the psychiatric evaluation, 35% of patients had a sad mood with psychomotor slowing down and a tendency to isolate

Based on the DSM-5 criteria, the main diagnoses established were adjustment disorder in the majority of the cases followed by personality disorder (17.5% were histrionic and 7.5% were borderline), depressive disorder and schizophrenia in 4th rank, representing respectively 37.5%, 25%, 17.5% and 10% of diagnoses (Table 2).

In terms of management, all patients received supportive psychotherapy and psychoeducation focused on suicide. As for the medical treatment, it was based on benzodiazepines in 75% of cases with a combination of an antidepressant or a neuroleptic in 22.5%. It should be noted that in 25% of patients, no treatment had been prescribed. In terms of subsequent medical monitoring, 87.5% had been referred for further follow-up in psychiatry, half of the patients had an indication for hospitalization and 47.5% had been maintained in the hospital under medical supervision in the general medical services (Table 3).

Finally, the presence of a history of psychiatric care multiplied the risk of suicide attempt by 6.37 (OR) ( $p = 0.033$ ). While the verbalization of suicidal ideation seemed to decrease the risk of suicide attempt by 5% ( $p = 0.001$ ).

#### **4. Discussion**

In liaison psychiatry, the services most in need of psychiatric advice vary from one study to another. In our sample, 42.5% of suicidal patients were referred from medical and surgical emergencies, 25% from surgery wards, 20% from medicine wards and 12.5% from intensive care units. Our findings vary from the literature where medical services are the most frequent users of liaison psychiatry [6], [7]. This difference can be explained by the fact that 30% of our suicidal patients used lethal means likely to cause injuries requiring initial management in surgical or intensive care units.

The sociodemographic characteristics were similar to those described in the literature on hospitalizations for SA in medical-surgical services: women were more often hospitalized than men, and adolescent girls were particularly vulnerable [8].

To our knowledge, our study is the first in Morocco to draw up a profile of suicidal patients treated in liaison psychiatry in a general hospital. Two studies conducted in Morocco have shown that the evaluation of suicidal behaviors represented 17% and 19% of the reasons for soliciting liaison psychiatry [6], [9], which is in line with the literature where suicidal behaviors and depressive symptoms are at the top of the list of situations for which a consultation in liaison psychiatry is required [7], [9]. In our study, voluntary drug intoxication was the most lethal means (30%) used by suicidal patients. This result corroborates the data in the literature [10].

Suicidal ideation, especially when followed by verbalization, is not necessarily a predictor of suicide attempt [14]. In our sample, verbalization of suicidal ideation in general medical services seemed to be a protective factor against suicide. This result could be justified by the rapidity and effectiveness of the intervention of the liaison psychiatrist once the suicidal ideation is verbalized before the suicidal act.

Several studies have shown that suicidal behaviour is strongly linked to psychiatric disorders [12]. The latter were diagnosed in more than two-thirds of patients hospitalized for suicidal behaviour and depression was the most frequently noted pathology, followed by anxiety disorders and then alcohol-related disorders [10], [13]. In our study, most of the SA occurred in an impulsive context following a conflictual and/or stressful situation and were associated with an adjustment disorder (37.5%), whereas depression ranked third (17.5%) after personality disorders (25%). In two Moroccan studies, depressive disorder was the most frequently selected psychiatric diagnosis [6], [9], whereas adjustment disorder was the most frequent diagnosis in other studies concerning liaison psychiatry, all reasons combined [7], [14]. Depression affects 25% of the population hospitalized in general hospitals [15]. However, numerous studies have shown that depression is often under-diagnosed in this population [16], [17].

Concerning the modalities of applied care, the data in the literature had shown the benefit of psychotherapeutic intervention and pharmacotherapy in the management of the suicidal crisis and the prevention of suicide recurrences [6]. In our study, pharmacological treatment was prescribed in 75% of cases. Pharmaceutical prescriptions differed from one study to another, depending on the diagnoses made and the prescribing patterns [6], [9]. In other similar studies, anxiolytics were the most prescribed psychotropic drugs [18], [19]

## 5. Conclusion

The incidence of psychiatric disorders in suicide attempts should prompt clinicians to systematically search for these symptoms as soon as possible after the patient's arrival and argue for the place of liaison psychiatry in all inpatient departments [10]. The assessment of suicidal patients should always include clear recommendations regarding patient safety and treatment of the underlying condition as well as specific approaches to dealing with suicidal ideation. In this sense, liaison psychiatry allows active and early intervention with suicidal patients and helps prevent possible recurrences of suicidal ideation.

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**Table 1:** Characteristics of the study population

	Population N= 40
<b>Gender</b>	
Female	30 (75%) *
Male	10 (25%)
<b>Age (years)</b>	
	22 [18.8 ,37.3] °
<b>Marital status</b>	
Unmarried	24 (60%)
Married	16 (40%)
<b>Educational level</b>	
Illiterate	2 (5%)
Elementary school	7 (17.5%)
Secondary school	23 (57.5%)
Higher education	8 (20%)
<b>Socio economic level</b>	
Low	13 (32.5%)
Medium	24 (60%)
High	3 (7.5%)
<b>Psychiatric background</b>	
Follow up	19 (47.5%)
Previous Hospitalization	3 (7.5%)
Substance use	16 (40%)
Previous suicide attempt (s)	8 (20%)
<b>Substance use</b>	
Tobacco	7 (17.5%)
Alcohol	3 (7.5%)
Cannabis	5 (12.5%)
<b>Suicidal behaviour</b>	
Suicidal attempt	29 (72.5%)
Suicidal ideas	9 (22.5%)
Self harm	6 (15%)
<b>Somatic effects</b>	
	12 (30%)
<b>Lethal method used</b>	
Ingestion of drugs	12 (30%)

Ingestion of rats poison	8 (20%)
Ingestion of other toxic substances	2 (5%)
Defenestration	7 (17.5%)
Denial of care	2 (5%)
Self-inflicted scalding	1 (2.5%)
Other methods	4 (10%)
<b>Context of the suicidal attempt</b>	
Impulsivity	13 (32.5%)
Depression	15 (15%)
Anxiety	19 (22.5%)
Hallucination	3 (7.5%)
<b>Service seeking psychiatric intervention</b>	
Medical-surgical emergencies	17 (42.5%)
Resuscitation	5 (12.5%)
Surgery department	10 (25%)
Medical department	8 (20%)

**Table 2:** DSM-5 Diagnoses of the study population

<b>Diagnosis</b>	<b>Population N=40</b>
Adjustment disorder	15 (37.5%)
Personnality disorder	10 (25%)
Conduct disorder	3 (5%)
characterized depressive episode	7 (17.5%)
Schizophrenia	4 (10%)
Bipolar disorder	1 (2.5%)

**Table 3:** Modalities of Management of the study population

	<b>Population N= 40</b>
<b>Supportive psychotherapy</b>	40 (100%)
<b>Psychoeducation</b>	40 (100%)
<b>Indication for hospitalization in psychiatry</b>	20 (50%)
<b>Referral to psychiatric follow-up</b>	35 (87.5%)
<b>Continued hospitalization in general ward</b>	19 (47.5%)
<b>Drug prescription</b>	
Benzodiazepines	30 (75%)
Antidepressants	9 (22.5%)
Neuroleptics	9 (22.5%)