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Study of the Antecedents of Suicide Attempts in Patients Suffering from Schizophrenia and Hospitalized at the Ar-Razi Hospital in Salé, Morocco

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Abstract **Original Research Article**

Understanding suicidal behaviors in patients with schizophrenia is essential. Our study aims to examine the history of suicidal patients with schizophrenia at Ar-RAZI Hospital in Salé. This is a retrospective analytical descriptive study conducted on a sample of 430 patients. We found that 50.6% of the cases were repeat offenders. In addition, substance use was observed in 65% of the cases. We also noted that 23.1% of the patients had suffered physical and/or sexual violence, 24.6% had a criminal history, and 45.7% had a family psychiatric history. History of sexual violence was found to be the main risk factors in our study. Our results are in line with existing literature, although some differences may be explained by sample-specific characteristics. Therefore, a multidisciplinary approach is needed for the prevention and management of suicidal behavior.

Keywords: Suicide Attempt, Psychiatric History, Medical-Surgical, Psychoactive Substances, Schizophrenia, Suicide Risk.

I. INTRODUCTION

Schizophrenia is a chronic disease, with variable phenotypic expression, the cornerstone of which is the dissociative syndrome and which manifests itself by delusions, hallucinations, disorganized speech and behavior and negative symptoms.

Its global prevalence is estimated at around 1% [1].

Every year, nearly 703,000 people commit suicide and many more attempt suicide, which is estimated to be 10 to 20 times more numerous than suicides [1].

Individuals with schizophrenia face a series of challenges, among which the risk of suicide is particularly worrying. The suicide rate among schizophrenic patients is twenty times higher than in the general population [2, 3].

Psychotic symptoms are among the causes of this phenomenon, and the presence of psychiatric comorbidities such as depression and the use of psychoactive substances are also incriminated.

It is therefore important to identify all the contributing factors that predict the transition to suicidal action in order to prevent it.

Objective of the Study
Our Work Aims To

- To determine and describe the epidemiological and clinical characteristics of patients suffering from schizophrenia who attempted suicide and were hospitalized at Ar Razi hospital.
- To study the relationship between the different characteristics of TS.
- Establish a correlation between the different parameters and the suicide risk.

II. MATERIALS AND METHODS

- This is a retrospective analytical descriptive study conducted within the Ar-RAZI hospital center in Salé. The duration of the study is 5 years;
- A total of 431 patients were included.
- We included in our study:

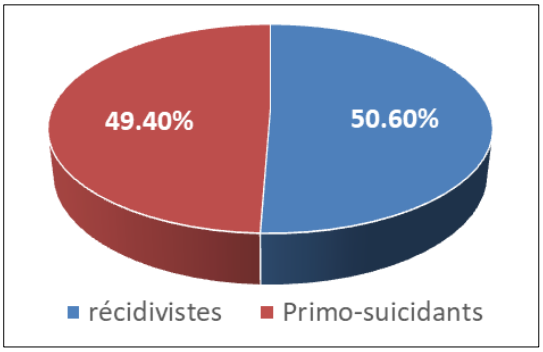
Hospitalized patients with schizophrenia who have attempted suicide.

- The following were excluded from our study:
  - θ Patients with confusional syndrome
  - θ Or seriously disorganized or unstable
  - θ Patients who have experienced superficial self-mutilation.
- Clinical and sociodemographic data were entered on a pre-established operating sheet, then collected from medical records.
- Data entry and analysis were done using Microsoft Excel software.
- The descriptive and analytical results were made with SPSS software.

III. RESULTS

1. TS History

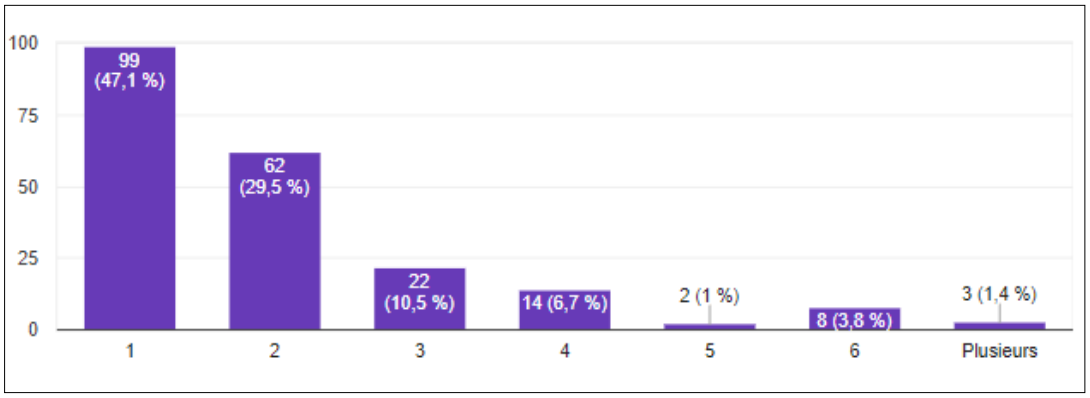
Distribution of Patients According to History of TS



Half of the patients (50.6%) were repeat offenders

2- The Number of TS

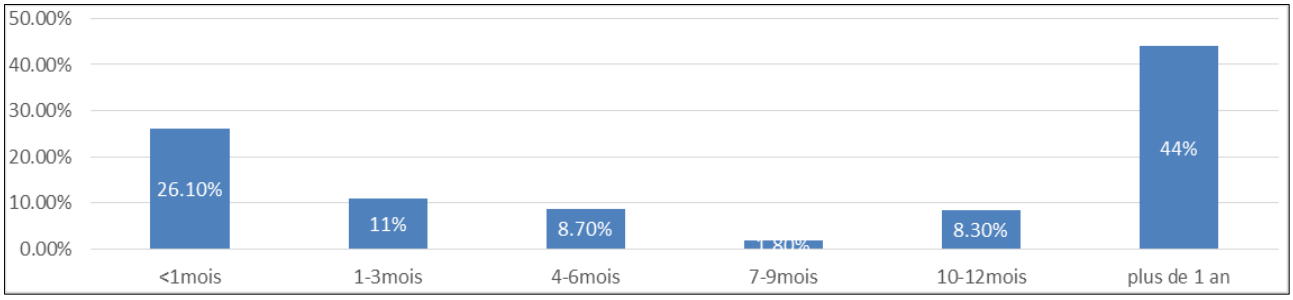
Distribution of Patients According to the Number of TS



In recidivist patients, almost half had performed only one TS before, and ¼ of patients had performed more than 03 TS

3- Last TS Delay

Distribution of Patients According to the Time of the Last TS in Months



In relapsed patients, the last TS was performed more than a year ago in 44% of cases, and less than <1 month ago in 26% of cases

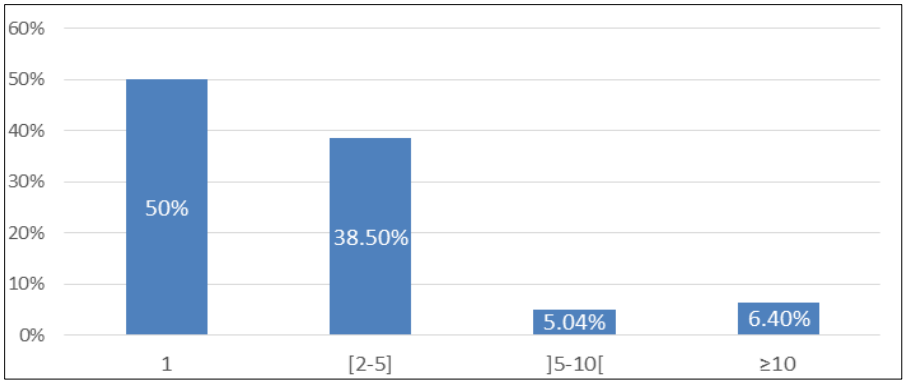
4. History of Psychiatric Consultation And Hospitalization

Distribution of Patients According to the ATCD of Psychiatric Consultation and Hospitalization

Background	Percentage
Psychiatric consultation	92.1%
Hospitalization in the psychiatric department	50.7%

The majority (92.1%) of patients had already consulted a psychiatrist, and half had at least one psychiatric hospitalization.

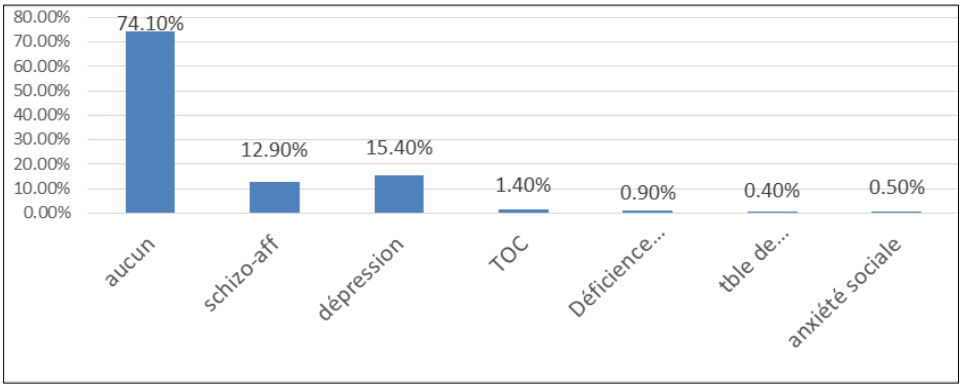
Distribution of Patients According to the Number of Hospitalizations



Note that 50% of these patients were hospitalized only once, and that 11.4% were hospitalized >5 times

5- Comorbidity

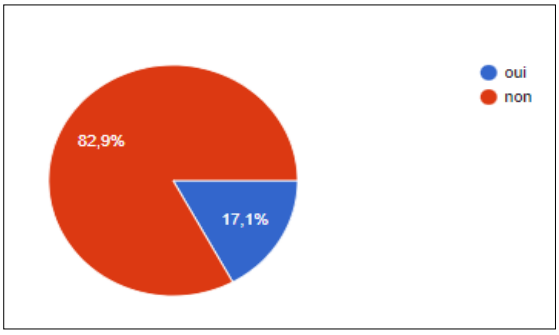
Distribution of Patients According to Comorbidity



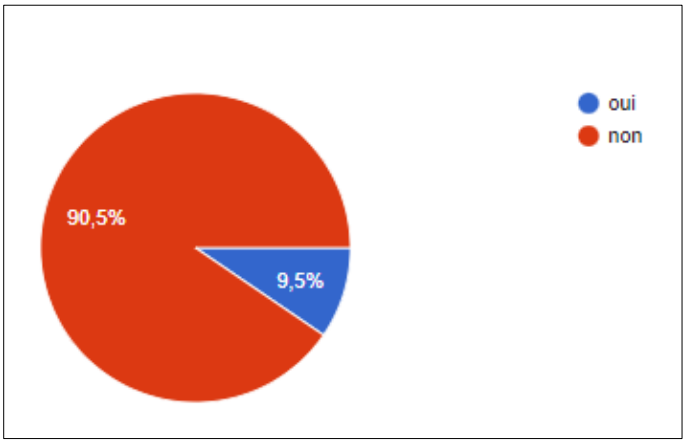
74.1% of patients had no associated psychiatric disorders. 12.9% had schizoaffective disorder, 15.4% had associated depressive disorder.

6. Medical and Surgical History

Distribution of Patients by Medical History



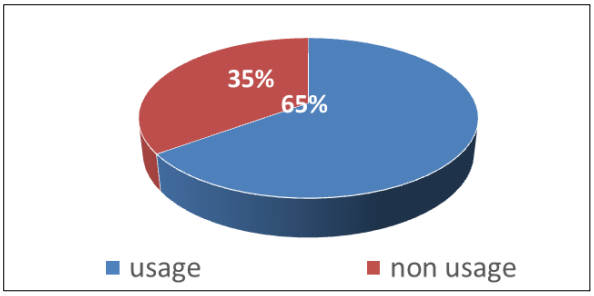
Distribution of Patients According to Surgical History



The majority of patients had no medical or surgical history.

7 Consumption of Psychoactive Substances

Distribution of Patients According to Consumption of Psychoactive Substances



65% of patients consumed at least one psychoactive substance

The most used psychoactive substances were tobacco 95.4%, and cannabis 88.7%.

Distribution of Patients According to Consumption of Psychoactive Substances

Psychoactive substances	% at user level
Tobacco	95.4%
Cannabis	88.7%
Alcohol	23.7%
Benzodiazepine	17.7%
organic solvent	10.3%
Maajoun	4.3%
Cocaine	2.9%
Crack	0.8%
MMDA	0.8%
Ecstasy	0.8%
Kif	0.4%
Heroin	0.4%

8. Negative Life Events

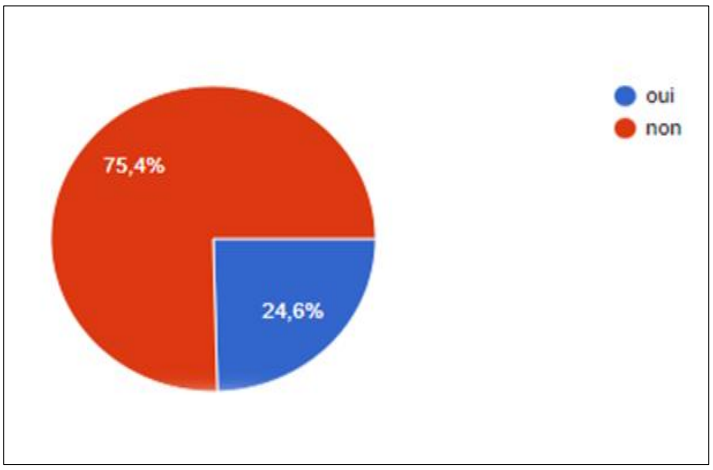
Distribution of Patients According to Negative Life Events

Event	Percentage
Physical violence	20.5%
Sexual violence	2.6%

20.5% of patients reported experiencing physical violence and 2.6% of patients experienced sexual violence

9. Criminal Record

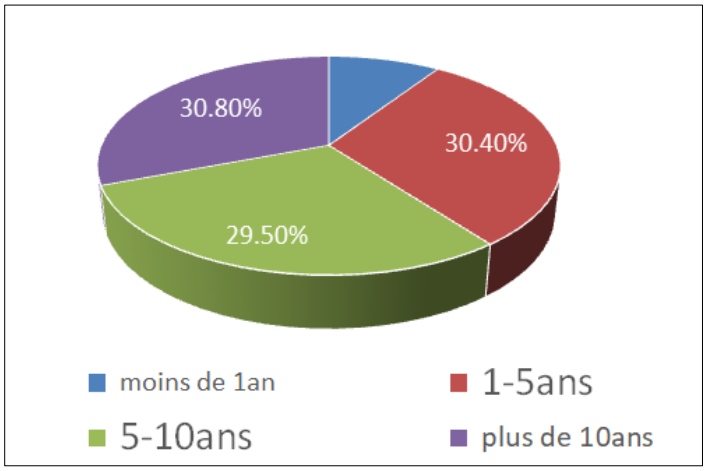
Distribution of Patients According to Judicial History



24.6% of patients have at least one criminal record, the most common cause of incarceration in our study was hetero-aggression.

10. Duration of Onset of Disturbances

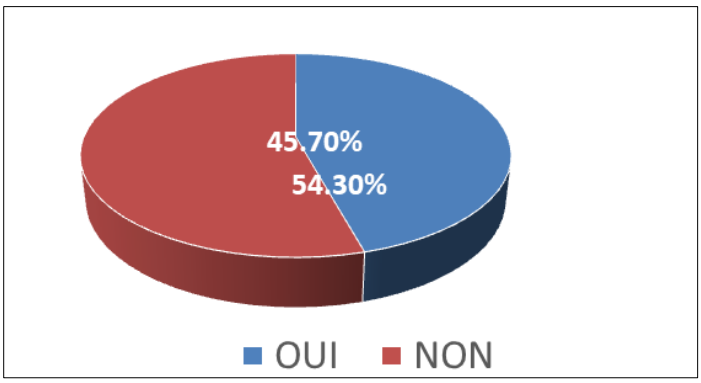
Distribution of Patients According to the Duration of the Onset of the Disorders



The onset of symptoms in 30.8% of cases was more than 10 years ago, for 29.5% of cases it was between 5-10 years,

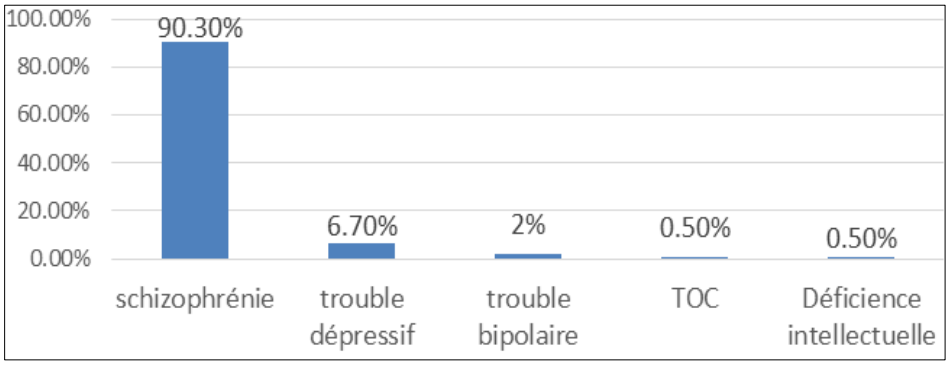
11. Family History

Distribution of Patients According to the Presence of Family Psychiatric History



45.7% of patients had a family history of psychiatric disorder.

Distribution of Patients According to the Type of Family Psychiatric Disorder



The most common family psychiatric disorders were schizophrenia

VI. DISCUSSION

We will compare our results from the antecedent study with data from the literature.

Features	Our study	Consistent results	Controversial results
History of TS and suicidal ideation	ATCD of TS (50%) Suicidal ideation (54.2%)	Hawton K [4], Altamura AC [5], Carlborg A [6], De Hert M [7]	----------
History of psychiatric consultation and hospitalization	Consultation (92.1%) hospitalization (50.7%)	Walsh E, Qin P [8], Siris SG [9], Pompili M [10]	----------
Comorbidities	schizoaffective disorder (12.9%), depressive disorder (15.4%)	Altamura AC [11], Harkavy-Friedman JM [12]	----------
Consumption of psychoactive substances	Consumption (65%)	Iancu I [13], Rihmer *et al*., [14], Haukka *et al*., [15]	Murphy G [6], Nock MK [16]

In our study, 65% of patients consumed at least one psychoactive substance. In the current state of research, it is difficult to conclude whether substance use disorders constitute an independent risk factor for suicide, or whether they contribute to increasing this risk by increasing the frequency of hospitalizations, worsening social isolation and reducing compliance with care.

Features	Our study	Consistent results	Controversial results
Life events	Judicial ATCD 24.6% physical violence 20% Sexual violence 2.6%.	Kaslow NJ, [17] Pompili M [18], Roy A [19]	Flisher AJ [20] Spirito A, [21]
Evolution of schizophrenia	over 10 years 30.8% between 5 and 10 years 29.5% in less than a year in 9.3%	Radomsky ED [22], Palmer BA [23], Roy A [24]	----------
Medical-surgical history	no medical-surgical history	---------	Conwell Y [25]

Judicial history with a history of impulsivity, aggression and/or violence signals the presence of potentially dangerous suicidal possibilities in our study as well as in several previous studies.

Old trauma such as physical abuse or sexual abuse is also identified as a vulnerability factor. According to the literature, most suicides in this population occur within the first ten years following the onset of the disease. This risk is considered particularly high, especially during the first year.

– The majority of our patients had no medical or surgical history.

The impact of these somatic pathologies on people with schizophrenia remains uncertain, especially when adjusted for level of depression, but the relationship remains worthy of exploration.

In our study, 50% of patients had already had at least one previous attempt. This result is consistent with the recurrence rates reported in the literature, which vary from 53.5 to 61%;

1. The results of previous studies suggest that suicide risk increases in cases of hospitalization and frequent consultations, which is also the case in our work

2. Many studies suggest the prominent role of depression in triggering suicidal behaviors in patients with schizophrenia. Thus, the assessment and treatment of depressive symptoms is crucial.

In addition, the risk of suicide would be multiplied by 2.28 in the case of schizoaffective disorder.

Table I: Comparison of different ATCDs between the two sexes

Background	Workforce (N=430)	Women	Man	P
TS History				
Yes	50.6%	63 (29.03%)	154 (70.97%)	
No	49.4%	68 (32.23%)	143 (67.77%)	0.473
Last TS deadline				
<1 month	26.1%	17 (29.82%)	40 (70.18%)	
1-3 months	11%	9 (37.5%)	15 (62.5%)	
4-6 months	8.7%	6 (31.58%)	13 (68.42%)	
7-9 months	1.8%	0 (0%)	4 (100%)	
10-12 months	8.3%	3 (16.67%)	15 (83.33%)	
More than 1 year	44%	30 (31.25%)	66 (68.75%)	0.551
Consultation history				
Yes	92.1%	119 (30.2%)	275 (69.8%)	
NO	7.9%	13 (37.14%)	22 (62.86%)	0.394
History of hospitalization				
YES	50.7%	58 (26.73%)	159 (73.27%)	
No	49.3%	74 (25.96%)	137 (54.54%)	0.062
Medical history				
Yes	17.1%	28 (38.36%)	45 (61.64%)	
No	82.9%	104 (29.3%)	251 (70.7%)	0.127
Surgical history				
Yes	9.5%	125 (32.3%)	262 (67.7%)	
No	90.5%	7 (16.67%)	35 (83.33%)	0.037
Drug use:				
Yes	65%	102 (68%)	48 (32%)	
No	35%	30 (10.75%)	249 (89.25%)	**<0.001**
Physical violence				
Yes	20.5%	95 (27.94%)	245 (72.06%)	0.011
No	79.5%	37 (42.05%)	51 (57.95%)	
Sexual violence				
Yes	2.6%	8 (66.67%)	4 (33.33%)	0.006
No	97.4%	124 (29.74%)	293 (70.26%)	
Judicial ATCD				
Yes	24.6%	3 (2.83%)	103 (97.17%)	
No	75.4%	128 (39.88%)	193 (60.12%)	**<0.001**
Duration of onset of disturbances				
Less than 1 year	9.3%	19 (47.5%)	21 (52.5%)	
1-5 years	30.4%	41 (27%)	111 (73%)	
5-10 years	29.5%	24 (22.86%)	81 (77.14%)	
More than 10 years	30.8%	48 (36.36%)	84 (63.64%)	0.01
Family history of psychiatric illness:				
Yes	45.7%	62 (31.63%)	134 (68.37%)	
No	54.3%	70 (30.17%)	162 (69.83%)	0.744

Table II: Multivariate analysis between the two groups of patients

Features	P	Odds ratio	95% Confidence Interval Lower upper	
Consumption of psychoactive substances Yes – no	< .001	22.1526	10.1837	48,188
ATCD of sexual violence No – yes	0.007	25.0845	2.3947	262,755
JUDICIAL ATCD No - yes	0.002	0.0966	0.0219	0.426

Consumption of psychoactive substances multiplies the risk by 22

History of sexual violence suffered during life multiplies it by 25

V. CONCLUSION

The alarming increase in suicidal behaviour is now a major public health issue, particularly among young people, where it has overtaken road accidents as the leading cause of death.

Understanding suicide attempts in people with schizophrenia is essential to improving interventions and care. In Morocco, suicide remains a sensitive subject, full of fear and mystery. Although the law prohibits it, the State does not communicate precise figures, which makes it difficult to assess the true extent of the phenomenon and complicates the development of prevention strategies.

The prevention of suicidal behavior must be a constant priority, both for psychiatrists and for relatives and various stakeholders in the care network.

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