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Case Report

Autopsy of a Suicide Note: When Final Words Reveal the Suffering of a Suicidal Crisis – A Forensic Case Study

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Abstract: Background/Objectives: Suicide is a deliberate act of ending one's life, often driven by suffering perceived as insurmountable. Suicidal thoughts serve as warning signs that require urgent intervention. Some individuals leave farewell messages in the form of letters or other media, revealing their psychological state. This study aims to analyze a suicide note from a forensic and psychological perspective to enhance the understanding of suicidal crises. **Methods:** We present a forensic case involving a civil servant who was dismissed after a workplace accident that led to neurological complications. Forced to return to work despite his physical incapacity, he experienced a profound sense of injustice. The forensic examination included an autopsy, toxicological analysis, and psychological interpretation of the suicide note. Family interviews were conducted to assess prior distress signals. **Results:** The forensic analysis of the suicide note revealed intense psychological distress and a deep sense of injustice regarding his situation. After the failure of his legal proceedings, his despair worsened. His family reported previous suicidal warning signs that had been overlooked. The autopsy confirmed the cause of death as hanging, with no evidence of external intervention. **Conclusions:** This case highlights the importance of recognizing distress signals during a suicidal crisis—a reversible period if appropriate interventions are implemented. It underscores the medico-legal relevance of suicide notes in forensic investigations and emphasizes the necessity of integrating mental health strategies to strengthen suicide prevention efforts.

Keywords: Suicide note; Forensic analysis; Suicidal crisis; Suicide prevention

1. Introduction

Suicide, defined as the deliberate act of ending one's own life, is a major public health concern. According to the World Health Organization (WHO), more than 800,000 suicides are recorded each year, making it the thirteenth leading cause of death worldwide and one of the primary causes of mortality among young people [1–2]. Additionally, suicide attempts are estimated to range between ten and twenty million per year, highlighting the magnitude of this issue [3].

In approximately 25% to 30% of cases, individuals who die by suicide leave farewell messages, commonly referred to as suicide notes [4–5]. These notes, in various forms (handwritten letters, audio recordings, emails), often reveal the suffering and motivations of the individuals. Their prevalence can reach up to 50% in certain cultures, highlighting their significance as psychological and social documents [5].



This manuscript aims to explore, through a forensic case study, the content of a suicide note to better understand the psychological mechanisms underlying it. The objective is to contribute to a more accurate identification of distress signals associated with suicidal crises and, consequently, to promote more effective prevention approaches.

2. Case Report

Context and Body Examination

In early April 2021, a judicial requisition was issued to conduct a body examination as part of a forensic investigation. The victim, a quadagenarian, was found lifeless in his home. His body was discovered early in the morning by his wife. Our mission was to confirm and estimate the time of death, determine the medico-legal classification of the death, examine the scene for potential evidence or suspicious traces, and guide sample collection for further analysis.

Scene Investigation

Accompanied by forensic police officers and civil protection agents, we conducted a thorough inspection of the scene after securing it to prevent any contamination. The forensic team documented the state of the premises with photographs and a detailed site plan. No signs of disorder or forced entry were observed: the furniture and objects remained intact, and no suspicious substances were found. The deceased was discovered inside his residence, with no signs of external intervention. The forensic examination concluded that the death resulted from a vital hanging. The victim's feet touched the ground, indicating an incomplete hanging. Observed signs included facial and extremity cyanosis, tongue protrusion, slight leftward head deviation, and signs of muscle relaxation.

External Examination and Autopsy

The body was transported to the Department of Forensic Medicine at the University Hospital Center (CHU) of Sidi Bel Abbès, Algeria, for a thorough examination.

The external examination revealed cyanosis of the face, ears, lips, and nails, along with bilateral subconjunctival hemorrhage. A high, oblique, and incomplete cervical groove was observed, deeper at the loop, consistent with hanging. The internal examination showed deep lesions, including tissue and muscular bruising in the neck region, as well as multivisceral congestion accompanied by petechiae in organs such as the heart and lungs. Ecchymotic subpleural spots were also present. These findings confirmed a vital hanging, with no evidence of external or internal violence. No spinal injuries were identified.

Additional Investigations

Blood, urine, and gastric content samples were collected for toxicological analysis. The results of these tests could help rule out the influence of a toxic substance in triggering the suicidal act. The victim's clothing was examined; no notable findings were observed, except for the presence of semen stains on the underwear, a phenomenon frequently observed in cases of asphyxial syndromes.

Psychological and Social Analysis

An in-depth interview with the victim's relatives helped identify several contextual factors. He experienced personal and professional difficulties, including a sense of devaluation linked to financial problems. These circumstances contributed to a gradual psychological distress, marked by increasing isolation.

The suicide note, written in Arabic and found in the right pocket of his trousers, contained details about his marital struggles and professional frustrations. It conveyed a sense of injustice and deep distress, with reproaches directed at certain individuals in his entourage.

All the observed elements – scene inspection, external and internal signs, and psychosocial context – point to a vital hanging. This death occurred in a context of acute psychological distress, characterized by a sense of personal failure and an accumulation of stress factors.

3. Discussion

The World Health Organization (WHO) defines suicide as a deliberate act intended to end one's own life. Each year, approximately 800,000 people die by suicide worldwide, equating to one death every 40 seconds [6]. This figure surpasses the combined number of deaths caused by wars, terrorism, and homicides [7–8]. Suicide is a universal phenomenon that affects all social classes, although it is particularly prevalent among individuals suffering from psychiatric disorders [9].

Suicide, often a taboo subject, is perceived differently across cultures. In African countries, including Algeria, it is sometimes associated with religious and social stigmas, which hinder prevention efforts [10]. According to a study conducted in North Africa, suicide is frequently underreported, primarily due to cultural norms, making it difficult to assess its true impact [11–12].

Analysis of Causes and Risk Factors

The causes of suicide remain complex, involving interactions between biological, social, and psychological factors [13]. Studies show that over 90% of individuals who die by suicide had a psychiatric disorder, notably depression, schizophrenia, and bipolar disorders [13].

In this case, several vulnerability factors appear to have contributed to the suicidal crisis. Among them, financial instability, family difficulties, and a sense of social isolation are commonly observed in similar situations. These elements, combined with severe depression, illustrate the interaction between individual and social factors as documented in the literature.

In Africa, suicide is closely linked to unemployment and family conflicts. A study conducted in northern Benin revealed that poverty (32.7%) and family tensions (26.9%) are major contributing factors, highlighting the impact of economic and social pressures [14]. In Algeria, where the unemployment rate remains high, these elements can become significant triggers, particularly in rural areas where mental health resources are limited [15].

Analysis of Warning Signs

The analysis of our case highlights the importance of warning signs. Although he verbally expressed his intention to die by suicide, these signals were not taken seriously by those around him. This oversight, common in contexts where suicide is stigmatized, underscores the need for greater awareness.

Psychological autopsies indicate that behavioral signs, such as social isolation, pessimistic discourse, or the writing of suicide notes, often precede the act. In Algeria, studies highlight that the majority of suicides are preceded by warning signs, particularly verbal cues. However, their recognition and the implementation of appropriate interventions remain insufficient [16].

Role of the Suicide Note

The suicide note in our case reflects the individual's motivations and emotional state, expressing a profound sense of injustice and suffering. These elements fit within a context of intense psychological distress, characteristic of severe depressive disorder [17]. Suicide notes serve as a valuable source for understanding the underlying mechanisms of suicide. A study conducted in Morocco revealed that 60% of suicide notes contained accusations against the individual's social circle, highlighting the complexity of interpersonal relationships in such acts [18].

Perspectives and Prevention

This case highlights several avenues for prevention. First, recognizing warning signs is crucial. Family members, who are often on the front lines, must be educated to detect these signs and encourage early intervention. The lack of an adequate response in our case demonstrates the severe consequences of such inaction.

Next, access to mental health services is crucial. In Africa, psychiatric care remains insufficient, with a ratio often below 2 psychiatrists per 100,000 inhabitants in several countries. In Algeria, this figure was estimated at approximately 2.3 psychiatrists per 100,000 inhabitants in 2016, reflecting a shortage of specialists relative to the population's needs [19]. Developing community support networks and awareness programs can help mitigate these shortcomings.

Finally, combating stigma is a priority. Negative perceptions of suicide often prevent individuals from seeking help. Awareness campaigns tailored to cultural contexts can help break these taboos and promote prevention [8].

Our case illustrates the complex interactions between individual, social, and cultural factors in the genesis of suicide. It highlights the importance of recognizing warning signs, analyzing the motivations expressed in suicide notes, and the necessity of a prompt and appropriate intervention. Prevention efforts must also incorporate community-based approaches and adequate resources to reduce the burden of suicide [20].

5. Conclusions

Suicide is a complex phenomenon with multifaceted causes, involving psychological, social, and biological factors. This study underscores the importance of recognizing warning signs and taking any expression of distress seriously. Prompt and appropriate intervention can prevent the act from occurring. Suicide notes are a valuable analytical tool for better understanding these crises and refining prevention strategies. In contexts where mental health resources are limited, strengthening community-based approaches and destigmatizing suicide remain critical levers for improving care and reducing this burden.

Impact and Relevance of the Case

This case study provides critical insights into the forensic and psychological aspects of suicide, emphasizing the role of suicide notes in medico-legal investigations. It highlights the necessity of recognizing suicidal warning signs and underscores the forensic importance of analyzing such letters as psychological evidence. By detailing the contextual factors leading to the act, this case contributes to a better understanding of psychological distress preceding suicide and reinforces the need for early intervention.

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Institutional Review Board Statement: All necessary precautions were taken to ensure data anonymization in compliance with the ethical principles of forensic medicine and scientific publication guidelines. Any information that could lead to direct or indirect identification was deliberately omitted or modified to preserve the confidentiality and dignity of the deceased and their family. This study aims to enhance the understanding of the psychological mechanisms underlying suicidal crises and to reinforce prevention strategies within a non-stigmatizing approach that promotes public health awareness. It strictly adheres to current ethical and professional standards.

Informed Consent Statement: Informed Consent Statement: Patient consent was waived due to the retrospective nature of the study and the full anonymization of the data.

Data Availability Statement: No new data were created or analyzed in this study. Data sharing is not applicable.

Conflicts of Interest: The authors declare no conflicts of interest.

References

1. Organisation mondiale de la Santé. Prévention du suicide : l'état d'urgence mondial [Internet]. Genève: Organisation mondiale de la Santé; 2014 [cité 8 mars 2025]. 89 p. Disponible sur: <https://iris.who.int/handle/10665/131801>
2. Premier rapport de l'OMS sur la prévention du suicide [Internet]. [cité 8 mars 2025]. Disponible sur: <https://www.who.int/fr/news/item/04-09-2014-first-who-report-on-suicide-prevention>
3. Bertolote JM, Fleischmann A. Suicide and psychiatric diagnosis: a worldwide perspective. *World Psychiatry*. oct 2002;1(3):181-5.
4. Encyclopédie sur la mort [Internet]. [cité 8 mars 2025]. Encyclopédie sur la mort | Lettres d'adieu. Disponible sur: http://agora.qc.ca/thematiques/mort/dossiers/lettres_dadieu
5. Shioiri T, Nishimura A, Akazawa K, Abe R, Nushida H, Ueno Y, et al. Incidence of note-leaving remains constant despite increasing suicide rates. *Psychiatry Clin Neurosci*. avr 2005;59(2):226-8.
6. Si Hadj Mohand D. AUTOPSIE MEDICO-LEGALE DES SUJETS SUICIDÉS : EXPLORATION DES DONNEES MEDICALES, EPIDÉMIOLOGIQUES ET SOCIOPSYCHOLOGIQUES [Internet]. Faculté de médecine université Mouloud Mammeri de TIZI OUZOU; 2020 [cité 8 mars 2025]. Disponible sur: <https://dspace.ummto.dz/handle/ummto/11820>
7. Le suicide fait plus de morts que les guerres, le VIH ou les homicides (Analyse) [Internet]. [cité 8 mars 2025]. Disponible sur: <https://www.aa.com.tr/fr/analyse/le-suicide-fait-plus-de-morts-que-les-guerres-le-vih-ou-les-homicides-analyse/2361163>
8. Krug EG, éditeur. Rapport mondial sur la violence et la santé. Geneve: Organisation mondiale de la santé; 2002. 376 p.
9. Hawton K, van Heeringen K. Suicide. *Lancet*. 18 avr 2009;373(9672):1372-81.
10. Chachoua K. L'ordre des suicides en Algérie : les femmes « avant », les hommes « devant ». In: De Gourcy C, Arena F, Knibiehler Y, éditeurs. Familles en mouvement : Migrations et parentalité en Méditerranée [Internet]. Aix-en-Provence: Presses universitaires de Provence; 2013 [cité 8 mars 2025]. p. 201-12. (Penser le genre). Disponible sur: <https://books.openedition.org/pup/28218>
11. Bernard JC. Épidémiologie et représentations du suicide en Afrique sub-saharienne. *European Psychiatry*. nov 2014;29(S3):641-641.
12. Code Pénal [Internet]. [cité 8 mars 2025]. Disponible sur: https://droit.mjustice.dz/sites/default/files/portail/legisl_nouveau/code_penal_2010/fr/index.html?n=440.htm
13. Vandevoorde J. Psychopathologie du suicide. 2013 [cité 8 mars 2025]; Disponible sur: <https://shs.cairn.info/psychopathologie-du-suicide--9782100598212>
14. Tognon F, Djidonou A, Biaou C, Kpatindé F, Gandaho P, Charlier P. Suicide en Afrique Sub-Saharienne : étude descriptive à Cobly (Nord Bénin) sur une période de 5 ans. *Psy Cause*. 17 août 2019;77:43-7.
15. Chachoua K. Le suicide en Algérie. In: Politique et Religion en Méditerranée [Internet]. Éditions Bouchène; 2008 [cité 8 mars 2025]. p. 387-412. Disponible sur: https://shs.cairn.info/article/BOUCH_COLL_2008_01_0387
16. Abdelhamid DA. LA MORT VIOLENTE SUICIDAIRE DANS LA RÉGION DE SÉTIF : APPROCHE MÉDICO-LÉGALE ET ÉPIDÉMIOLOGIQUE.
17. CIM-11 pour les statistiques de mortalité et de morbidité [Internet]. [cité 9 mars 2025]. Disponible sur: <https://icd.who.int/browse/2024-01/mms/fr#1563440232>
18. Assia K. Mémoire de Master de Littérature Générale et Comparée.

19. Serid MEM, Belaadi B. État des lieux des troubles mentaux et de leur prise en charge en Algérie. *East Mediterr Health J.* 30 juill 2022;28(7):532-8.
20. L'OMS lance une campagne de prévention du suicide en Afrique [Internet]. [cité 9 mars 2025]. Disponible sur: <https://www.aa.com.tr/fr/afrique/loms-lance-une-campagne-de-prevention-du-suicide-en-afrigue/2704601>

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