Characteristics of Attempted Suicide in the Middle East and North Africa Region: The Mediating Role of Arab Culture and Religion

Sarah El Halabi¹, Rawad El Hayek², Karine Kahil³, Marwa Nofal⁴, Samer El Hayek³

¹Columbia University Program in Narrative Medicine, Columbia University, New York, United States
²Faculty of Medicine, American University of Beirut, Beirut, Lebanon
³Department of Psychiatry, American University of Beirut, Beirut, Lebanon
⁴Helwan Mental Health Hospital, Cairo, Egypt

Abstract

The general lack of awareness of mental health in the Middle East and North Africa (MENA) region, particularly within its Arab countries, accounts for limited mental health services and stigmatization of psychiatric conditions in the region. Suicide is a drastic consequence of mental health neglect. Suicidal attempts are one form of presentation to emergency departments (ED) in healthcare centers across the Arab countries in the MENA region. We collected data from various research studies in the MENA region to narrate such presentations. This epidemiological country-by-country summary includes the characteristics of suicidal attempts in the Arab countries of the MENA region, with a focus on methods, causes, and management of cases. This overview demonstrates that suicidal attempts in this part of the world share sociocultural and logistic grounds. The prominent archetypes of suicidal attempts are middle-aged Arab women ingesting poisonous substances secondary to familial or interpersonal stressors. We also link these presentations to the Arab communities of the MENA region through the common aspects of their cultural history, habits, norms, and beliefs, which at times can dictate privacy and stigmatization of mental health and suicide. Even though religion plays a role in mollifying suicidal attempts, it might exacerbate stigma regarding suicide among MENA communities. Lastly, we recommend management measures that enhance suicide risk detection in the ED and provide an improved understanding of suicidal ideations and behaviors of patients in the countries of the MENA region.

Keywords: suicide, Middle East, North Africa, religion, emergency department

INTRODUCTION

In the Arab Middle East and North Africa (MENA) region, psychiatric disorders contribute to 5.6% of the total disease burden, with depressive disorders accounting for most of the disability-adjusted life years.1 Almost all countries in the MENA region have a more elevated mental disorder burden compared to international levels.1 These Arab countries have also been burdened by suicide, with 26,000 individuals dying from suicide in the Eastern Mediterranean Region in 2016 alone.2 Nevertheless, the delivery of mental health services within the region remains suboptimal, with an estimated 7.3 mental health workers and 4.2 hospital beds per 100,000 heads of population as opposed to 43.5 and 35, respectively, in Europe.3 In this part of the world, religion and culture play pivotal roles in the modeling of societal views and attitudes towards mental illness in general, and suicide in particular.4,5 This study aims to summarize data about suicide presentations to the emergency departments (ED) of hospitals in the Arab countries of the MENA region with an Islamic majority. It also aims to focus on the role of religion and culture in shaping societal views on suicide and to provide recommendations that optimize emergency psychiatric care of the suicidal Arab patient in this region of the world.
METHODS

The MENA region refers to a group of countries in the Middle East and North Africa territories, grouped together for geopolitical reasons, and for sharing similarities at sociocultural, religious, economic, and environmental levels. For the sake of this review, the authors restricted their search to the Arab countries of the MENA region, i.e., those nations of Arab heritage that follow Islam as their central doctrine. The countries of interest included Algeria, Bahrain, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Qatar, Kingdom of Saudi Arabia (KSA), Syria, Tunisia, United Arab Emirates (UAE), and Yemen. To conduct a comprehensive search of the topic, the authors checked different search engines (PubMed, Medline, and Scopus), from inception until March 5, 2020, for references about suicide presentation to the ED of hospitals in the abovementioned Arab countries of the MENA region. Terms used in the search included “suicide”, “emergency department”, and “Arab countries”, along with the names of the different Arab countries of the region. The authors then reviewed relevant references for the articles of interest and only included those published in English.

RESULTS

Many studies emanating from Arab countries of the MENA region assessed the characteristics of patients who presented to the ED for suicidality (Table 1). Below is a summary of these studies, stratified by country of origin. Figure 1 displays all Arab nations of interest for this review, including those with no currently available English-language studies about the topic, to the best of our knowledge.

Iraq and Syria

A study conducted at the ED of a teaching hospital in Karbala, Iraq, registered 113 patients presenting for deliberate self-harm as a suicide attempt. Patients were mostly young adults. The most common method used was drug ingestion or poisoning. Female patients tended to use poison ingestion more frequently than males. The latter resorted to more aggressive methods, such as stabbing and hanging. Those at the highest risk for a suicidal attempt were single females who attributed the cause of their attempt to familial problems. Another study conducted in Ankara, Turkey, compared the frequency of forensic medical events between Turkish and non-Turkish patients, predominantly Iraqi and Syrian refugees. Out of a total of 15,529 cases admitted to the ED, 32 cases were attributed to suicidal attempts by patients from Iraq and Syria. Most of these patients were females (78%). Nevertheless, this study did not provide further information on the profile of suicide attempters and the methods used. A third study conducted in a small city in Iraq during the last half of the sanctions period consisted of 90 patients who...
<table>
<thead>
<tr>
<th>Study</th>
<th>Country</th>
<th>Study design</th>
<th>Recruitment site</th>
<th>Year frame</th>
<th>Aim(s) of study</th>
<th>Suicide definition</th>
<th>Sample size</th>
<th>Age (years) and gender</th>
<th>Study (mean)</th>
<th>Gender distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Al-Amin &amp; Ghuloum (2019)</td>
<td>Qatar</td>
<td>Cross-sectional</td>
<td>Emergency department of a secondary care center (Hamad Medical Corporation), Doha</td>
<td>July 2011 - June 2012</td>
<td>Study the correlates of suicidal attempts in a secondary care center</td>
<td>Act of self-harm* that leads to death; intentional damage to vital organs; lethal self-poisoning</td>
<td>N = 165</td>
<td>Age: 26-40 (mean)</td>
<td>M: 49.69%</td>
<td>F: 50.31%</td>
</tr>
<tr>
<td>Al-Haidary &amp; Al-Badri (2014)</td>
<td>Iraq</td>
<td>Retrospective cohort</td>
<td>Emergency department of Al Hussein General Teaching Hospital, Karbala</td>
<td>May 2011 - January 2012</td>
<td>Study the socio-demographic characteristics of patients with deliberate self-harm*, the methods used, and causes in a teaching hospital</td>
<td>Drugs, burn, poisoning, electrical injury, stabbing, or hanging</td>
<td>N = 113</td>
<td>Age: 24.68 (mean)</td>
<td>M: 20.35%</td>
<td>F: 79.65%</td>
</tr>
<tr>
<td>Alghamdy et al. (2016)</td>
<td>Kingdom of Saudi Arabia</td>
<td>Cross-sectional</td>
<td>Emergency Department of King Fahd University Hospital, Dammam</td>
<td>January 2012 - December 2012</td>
<td>Report the frequency, type, and severity of drug-related problems at a university hospital</td>
<td>Intentional drug overdose</td>
<td>N = 7</td>
<td>Age distribution N/A</td>
<td>M: 39.3%</td>
<td>F: 60.7%</td>
</tr>
<tr>
<td>Bakhaidar et al. (2014)</td>
<td>Kingdom of Saudi Arabia</td>
<td>Cross-sectional</td>
<td>King Khalid National Guard Hospital Emergency Department, Jeddah</td>
<td>January 2008 - December 2012</td>
<td>Describe the current patterns and assess risk factors of a drug overdose and chemical poisoning in an emergency setting</td>
<td>Intentional drug overdose or chemical poisoning</td>
<td>N = 34</td>
<td>Age: 12-35 (range)</td>
<td>M: 29.05%</td>
<td>F: 70.95%</td>
</tr>
<tr>
<td>Dabbas et al. (2008)</td>
<td>Jordan</td>
<td>Cross-sectional</td>
<td>Emergency department of King Hussein Medical Center, Amman</td>
<td>September 2003 - August 2004</td>
<td>Examine the causes and methods used for deliberate self-harm*, in a teaching hospital</td>
<td>Analysis of outcomes of deliberate self-harm, poisoning, or suicide attempts</td>
<td>N = 62</td>
<td>Age: 34.06 (mean)</td>
<td>M: 35.8%</td>
<td>F: 64.2%</td>
</tr>
<tr>
<td>El Halabi et al. (2019)</td>
<td>Lebanon</td>
<td>Cross-sectional</td>
<td>Academic emergency department of King Khalid National Guard Hospital, Amman</td>
<td>July 2016 - December 2016</td>
<td>Identify the characteristics of psychiatry-related visits presenting to the emergency department</td>
<td>Suicide attempt by poisoning or ingestion of poisons, substances</td>
<td>N = 195</td>
<td>Age: 34.06 (mean)</td>
<td>M: 33.8%</td>
<td>F: 66.2%</td>
</tr>
<tr>
<td>Hameed et al. (2014)</td>
<td>United Arab Emirates</td>
<td>Cross-sectional</td>
<td>Rashid Hospital Trauma Center, Dubai</td>
<td>January 2012 - December 2012</td>
<td>Profile acute poisoning presentations to the emergency department at a medical facility</td>
<td>Intentional drug overdose or chemical poisoning</td>
<td>N = 89</td>
<td>Age: 22-49 (average)</td>
<td>M: 28.6%</td>
<td>F: 71.4%</td>
</tr>
<tr>
<td>Hitti et al. (2020)</td>
<td>Lebanon</td>
<td>Cross-sectional</td>
<td>Medical toxicology service of a large tertiary care center (American University of Beirut Medical Center), Beirut</td>
<td>March 2015 - December 2018</td>
<td>Explore the epidemiology and characteristics of all adult and pediatric toxicology cases at the emergency department over 46 months</td>
<td>Suicide attempt by poisoning or ingestion of poisons, substances</td>
<td>N = 477</td>
<td>Age distribution N/A</td>
<td>M: 37.2%</td>
<td>F: 62.8%</td>
</tr>
<tr>
<td>Majzoub et al. (2018)</td>
<td>Lebanon</td>
<td>Cross-sectional</td>
<td>Academic emergency department of King Khalid National Guard Hospital, Amman</td>
<td>December 2009 - December 2015</td>
<td>Explore the epidemiology and characteristics of patients presenting to the emergency department at the hospital</td>
<td>Suicide attempt by hanging, suffocation, submersion, fall, poison, overdose, or others</td>
<td>N = 188</td>
<td>Age distribution N/A</td>
<td>M: 37.2%</td>
<td>F: 62.8%</td>
</tr>
</tbody>
</table>
presented to the ED for a suicide attempt. Most attempters were single females residing in rural areas. Self-poisoning with organophosphates or drugs was the most prominent method of attempt. Notably, there was a statistically significant peak in suicide attempts in the year 1997 (p=0.001). Winter and spring were the seasons with the highest numbers of suicide attempts among males and females, respectively (p=0.03).

**Jordan**

Based on data collected from King Hussein Medical Center in Amman, 62 cases were admitted to the ED for self-harm related to suicide. More than half of the subjects were young adults between 20 and 30 years of age. Most of the patients were single females, while less than half were given psychiatric diagnoses, mainly adjustment disorder and major depressive disorder. A higher vulnerability for deliberate self-harm was noted in housewives (85%). The main precipitating factor for self-harm related to suicide was family violence, including physical and psychosexual abuse. In terms of methods used, most of the patients had overdosed, mostly on analgesics (paracetamol and ibuprofen) and non-medicinal agents (household detergents and organophosphorus solvents).

**Lebanon**

Three studies recently emerged in Lebanon that tackle suicide presentation to an emergency setting. All studies were done at the same ED of a tertiary medical center in Beirut. In a study of patients presenting for suicide, most patients were female, between 22 and 49 years of age, unemployed, single, living with family members who brought them to the emergency, and having symptoms of depression. Two-third of patients were self-payers. One-third of them noted an interpersonal problem, such as relationship or marriage, to be directly associated with their suicidal attempt. In terms of characteristics of the suicidal attempts, most were carried out at home, on a weekday, and via overdose on prescription drugs (mainly benzodiazepines). One-third of patients had at least one prior suicide attempt. In terms of disposition, the majority of patients were admitted to the psychiatry ward of the hospital. Discharged patients had lower odds of
being insured (p=0.07) as compared to being self-payers and higher odds of having family members oppose their hospital admission (p<0.0001). Lastly, the main predictor of admission in this study was found to be prescription medications overdose (odds ratio 9.25; 95% confidence interval 2.12-40.42). In another study, Faris et al. showed that over 6 months, 6.7 per thousand ED visits involved patients with chief psychiatric complaints requiring a formal psychiatry consultation. Almost half of them were not financially covered. Depression was the most common disorder in these cases, followed by anxiety. Having suicidal ideation was significantly associated with increased hospital admission (odds ratio 12.949; 95% confidence interval 4.905-34.190). Indeed, 61.7% of patients had suicidal ideations and were admitted, whereas 10.2% were discharged. Alternatively, all patients who had suicidal attempts (35.5%) were admitted. Lastly, in a recently published study assessing telephone consultation services at the medical toxicology center of the institution, approximately half of consultations were secondary to intentional exposures. The most common reason for intentional exposure was suspected suicide (37.7%). Most of these patients were females between 20 and 50 years of age.

**Morocco**

In a Moroccan study assessing the epidemiological aspects of suicidal attempts among children, 66 patients were identified. They were mostly females and averaged 13 years of age. The cause of the suicide attempt was not found in two-third of cases. When identified, the most frequently reported reason was family conflict. The used method of suicide in more than half of cases was the consumption of pharmaceutical drugs, including anxiolytics and analgesics. Rat poison or organophosphate products were used in one-third of cases. While presenting to the ED, most children were asymptomatic. Main clinical manifestations, when present, were neurological manifestations, such as consciousness disorders. Other signs included dizziness, aphasia, nausea, and abdominal pain. Almost all patients were hospitalized, with the majority admitted to a general pediatric ward.

**Qatar**

In a Qatari retrospective study of psychiatric admissions to the ED for suicidal attempts, the most common methods included hanging (42.6%) and jumping from heights (19.1%), referred to as Near-Fatal Deliberate Self-Harm (NFDSH). Post hoc comparisons showed that males were significantly more likely to engage in NFDSH (p<0.001). Besides, those who attempted NFDSH were significantly more likely to be above 41 years of age (p<0.05). In contrast, those under 25 were significantly more likely to engage in non-serious suicidal behaviors and were less likely to live with family (p<0.001). Lastly, the NFDSH group was significantly more likely to present with psychotic disorders ($\chi^2=6.59$; p=0.038). The authors concluded that men over the age of 25 years, widowed or divorced, and having a psychotic disorder were those most at risk of NFDSH attempts.

**Kingdom of Saudi Arabia**

Two studies from KSA tackled attempted suicide in the context of chemical poisoning and drug-related problems. According to a study assessing ED presentations secondary to chemical and drug ingestion, intentional poisoning accounted for 26.4% of cases, predominantly within the age group of 12 to 35 years (odds ratio 13.75; 95% confidence interval 2.59-75.02). Female patients were significantly more likely to attempt suicide compared to male patients (odds ratio 7.22; 95% confidence interval 1.70-30.62). In another study analyzing drug-related presentations to the ED, 26 out of 253 drug-related admissions were attributed to accidental and suicidal drug ingestions, with the latter exclusively involving female patients.

**Tunisia**

A retrospective cohort study conducted in Monastir compared the profile of patients with first-time suicide attempts versus repeated suicide attempts presenting to the ED of a university hospital center. In this study, most patients were females, and 57.8% of attempters had a first suicide attempt. Those who had multiple suicide attempts were more likely to be divorced or separated (p=0.05), not working (p=0.01), have a past
psychiatric history (p<0.005), have a family history of mental illness (p=0.03), or score higher on the Montgomery-Asberg Depression Rating Scale (p=0.01). No differences in the characteristics of the suicide attempt were found between the two groups, the most common method being pill ingestion and the most common motive being interpersonal problems.17

United Arab Emirates

Overall, 163 patients were studied in a research study exploring the characteristics of adults and adolescents presenting to the ED of a hospital in Dubai for poisoning. Suicide was the most common intention behind poisoning (54.6%). Suicidal poisoning mostly included chemicals such as sodium hypochlorite (Clorox), chloroxylenol (Dettol), various acids, alkali, and carbon monoxide, and was significantly more common in women (p<0.001).18

DISCUSSION

Figure 2 Schematic of the bidirectional effect of culture and religion on suicide in the Arab communities of the Middle East and North Africa region.

The Arab Middle East and North Africa context

There seems to be homogeneity between studies assessing the characteristics of individuals attempting suicide in the Arab countries of the MENA region. Most of these individuals are young adults, particularly females, using intentional drug ingestion as the suicide method of choice. In terms of possible reasons behind suicidal attempts, many of the studies identify family conflicts, violence, and problems with interpersonal relationships as potential driving forces for suicide. This casts light on the importance of relationships in the MENA region, particularly with family members, and their impact on suicide rates. Family relationships and attitudes can have a crucial role in dictating a person’s views and behaviors in Arab societies, notably about suicide. The importance of family in Arab countries stems in part from the values and socio-cultural background of the region, as well as religion, both being prominent factors that shape the individual’s views on suicide. We thereby provide an overview of the intertwining relationship between suicide and culture on the one hand, and suicide and religion on the other (Figure 2), within the context of the Arab countries of the United Arab Emirates.
Culture and suicidality

To begin with, culturally held views about mental health can significantly affect attitudes regarding suicide. A study by Rayan and Fawaz found that Lebanese culture shaped society’s opinions of mental illness. For instance, many of the participants held culturally derived beliefs about the possible source of mental illness, such as the evil eye. This led participants astray about the possible methods available to treat mental disorders. These culturally-derived beliefs are crucial to be recognized as they manifest abundantly in the Arab world, albeit in different forms, as explanations behind mental health disorders at large. They, therefore, may shape the Arab individual’s understanding of seeking mental health care in both chronic conditions and acute situations, such as suicide.

It is also noteworthy to mention that participants in that same study deemed mental health treatment to be too expensive to be attainable. This comes on top of a burden of mental illness in Lebanon, where associated services remain poorly financed and account for only 5% of the total health budget. Given the lack of governmental funds and the reservations of insurance companies, the burden typically falls on the private sector, non-governmental organizations, and an albeit limited out-of-pocket expenditure. The culturally-held beliefs about accessibility to mental health care are crucial, not only for the Lebanese society but also for the Arab world at large, since mental health services are still underutilized in many Arab countries in the MENA region.

Finally, while participants in the Lebanese context held beliefs particular to the state of their country and the sub-cultures that pertain to it, they also shared the Arab-held belief of privacy and keeping mental illness hidden from society by family members. The privacy of the nuclear family is held sacred in the Arab world, and the words of Meles and La Fever (1984) still hold today: “Arabs value their privacy and guard it vehemently”. As such, the stigma surrounding mental illness is ample in the Arab world, especially within the confines of a nuclear family. For instance, secrecy, isolation, misery, and helplessness while caring for a family member with a psychiatric disorder were commonly reported among families in Jordan and Morocco. Arabs often perceive the experience of caring for a relative with mental illness with dread, loss, embarrassment, and shame, with chronic mental illness mostly contributing to families’ perception of stigma. Alternatively, the stigma surrounding suicide may be co-created by two factors at hand: the attitudes towards not only suicide but also the suicidal individual. Eskin and colleagues demonstrate the opposing effects of these factors on suicide rates. Indeed, increasing stigma towards suicide itself is associated with a decreased likelihood that a person commits suicide, while stigma towards the suicidal individual leads to a higher willingness to commit suicide.

This does not, however, repudiate the benefits of living in closed and homogenous communities that provide continuous social supervision and support. Most Arab youths live with their parents until marriage. This tightly knit social construct offers more sustenance to its kin than any other available support system, which can become protective against suicide. Going along these lines, a cross-sectional study targeting medical students in Egypt, revealed a highly significant difference in the prevalence of suicidal ideations when comparing students who lived with their parents to those residing in a different city. Alternatively, El Halabi et al. discussed the case of a Lebanese Arab man whose wife asked his brothers to direct him to seek mental health care when he refused. With this, we argue that the ties of Arab nuclear families may be harnessed to help patients with mental illness, especially suicidal patients, if disclosure of the illness is not met with stigma or blame.

Religion and suicidality

The stigma surrounding suicide in the Arab countries of the MENA region is mostly related to religious doctrines and attitudes. All religions in the Arab world forbid self-killing, with Islam having the most prohibitive attitude towards suicide. Religious beliefs and attitudes can lead to less acceptability of suicide. It seems that this increased
intolerance is associated with a higher likelihood of helping individuals, particularly friends, who have a propensity to commit suicide.\textsuperscript{27,32}

Previous studies have shown that countries whose main practice of religion is Islam seem to have the lowest rates of suicide.\textsuperscript{33} Islamic faith, specifically intrinsic religiousness, has been shown to play a protective role against suicide attempts.\textsuperscript{34} For instance, in Tunisia, a recent cross-sectional study showed strong negative correlations between suicidal ideations and behavioral religiosity, affective religiosity, and the general level of faith in university students. These associations remained significant after controlling for various psychosocial variables.\textsuperscript{35} Alternatively, in studies conducted in several Arab MENA countries, among which Algeria, Egypt, Kuwait, Qatar, and Saudi Arabia, lower scores of religiosity predicted higher levels of anxiety, depression, hopelessness, and suicidal ideations.\textsuperscript{36}

It is wise, however, not to assume an overall protective effect of religion when discussing suicide in the Arab countries of the MENA region. For instance, Rezaeian found completed suicides to be more prevalent in a sample of Muslim women from the Middle East.\textsuperscript{37} A review of 89 studies found religion to be protective against suicide attempts but not against suicidal ideations.\textsuperscript{38} This may be explained by the fact that each individual subjectively reports suicidal ideation. Therefore, suicidal thoughts can be unintentionally repressed if they conflict with religious beliefs.\textsuperscript{39} They can also be intentionally masked or denied due to the fear of stigma and seeking of “social desirability”.\textsuperscript{32} Cases of individuals at risk for suicide can, as such, be missed if one inquires about suicidal ideations and assumes that religiosity is solely a protective factor.\textsuperscript{39}

The findings mentioned above imply a double-edged sword effect of religion on suicide. Eskin et al. suggested that “freedom of choice is essential for religion to exercise its protective factor”.\textsuperscript{40} As such, the relationship between religion and suicide seems to be partially determined by whether religious affiliation is based on choice and true beliefs as opposed to coercion and social or cultural norms.\textsuperscript{40}

This study has few limitations. First, this is a non-systematic review of the literature; the authors might have missed other studies of interest, particularly those published in non-English languages. They tried to overcome this limitation by using a comprehensive search strategy and checking three search engines. Second, the authors restricted their analysis to those nations of Arab heritage that have Islam as their primary religion. Other countries in the MENA region not fulfilling these two criteria, including Israel, Turkey, and Iran, were therefore not included in the analysis. These countries, even if on a geographical continuity with Arab Muslim nations, have different sociocultural norms and values. As such, the authors excluded them to maintain homogeneity in the profile of suicidal individuals seeking help. The authors only included the Turkish study by Yüzbaşıoğlu and Işık as it directly looked into Iraqi and Syrian refugees.\textsuperscript{8} Lastly, most of the included studies were cross-sectional, limiting any deduction of causality. Even though Arab women seem at higher risk of suicide, one study identified men as the most vulnerable group.\textsuperscript{14} Variation in the results probably stem from several factors, including the study design and sample size. More importantly, stigma towards mental illness and suicide might have accounted for this variation, mainly via an underestimation of the actual number of individuals with suicidal thoughts.

CONCLUSION

The picture of suicide presentations in the ED of hospitals throughout the Arab world suggests an epidemiology that is concordant with that found in the West.\textsuperscript{41,42} Attempted suicide seems to be typically carried-out by young single women, who often use “soft” methods such as drug poisoning, frequently in the setting of familial and interpersonal stressors. With regards to the medico-legal framework, leaving the hospital against medical advice does occur in some instances, and it seems to be, at times, dependent on the patient and the family’s attitude towards mental illness. Therefore, it is crucial to come up with specific measures that can minimize the effect of family, as well as religion and culture, on a hospital’s ability to deliver the required psychiatric care and ensure the safety of...
suicidal patients. For example, we recommend giving special consideration to asking patients about their suicidal ideation in a neutral atmosphere that does not hold their religiosity and their suicidal thoughts at conflicting odds. Furthermore, we suggest asking patients if they would like to involve their families in their care, knowing the role that the Arab nuclear family plays in the care of the individual. Other recommendations that might be implemented for a certain subset of patients include incorporating spiritual and religious practices into therapy and allowing patients to view religion as a source of comfort and solace in the therapeutic space. It is also essential to tackle the barriers towards hospital admission, notably financial and familial limitations. The financial barrier can be addressed by the establishment of non-governmental organizations that provide financial assistance to patients who cannot afford mental health treatment. It can also be ensured by lobbying with the insurance companies to cover psychiatric admissions. Along the same lines, family and socio-cultural barriers can be mitigated by raising awareness towards mental health in the MENA region, particularly by dispelling any legends and myths that surround mental disorders in general and suicide in particular. Suggestions to increase awareness include holding educational workshops in collaboration with social media outlets to disseminate accurate information about mental health, psychiatric disorders, and available treatments in the Arab world. In addition, it is essential to maintain a high suspicion index for suicide to enhance suicide risk detection. We, therefore, suggest the implementation of a thorough suicide screening protocol in the ED of hospitals in our region, with more scrutiny towards patients with a high-risk profile. On an academic level, we recommend more research about suicide in the region, with a special emphasis on the association between psychiatric disorders, suicidal behaviors, and the cultural and religious backgrounds of the Arab society. Lastly, more research is needed to elaborate on the demographic subgroups that are at a higher risk of suicide in the Arab countries of the MENA region. We believe that addressing those concerns can legitimize mental disorders as a serious public health problem that requires diligent attention and care.

**Conflicts of Interest:** The authors declare no conflicts of interest or sources of funding.

**REFERENCES**


12. Hitti E, El Zahran T, Hamade H, et al. Toxicological exposures reported to a telephonic consultation service at...


