



LeMSIC

Lebanese Medical Students'
International Committee

اللجنة الدولية لطبية الطب في لبنان

LeMSIC Policy Document

Suicide and Suicide Prevention in Medical Students

Proposed by: the National Public Health Officer and the Vice-
President for External Affairs 2020-21

Adopted by the Team of Officials in August 2021

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Policy Statement

Introduction

Suicide is a public health issue that leads to loss of life, especially in youth. Worldwide, one person dies of suicide each 40 seconds. In Lebanon, suicide is still considered a taboo topic, never be spoken about aloud. This leads to the alienation of people suffering suicidal ideations and prevents them from seeking help. With this said, multiple suicide prevention efforts are emerging in Lebanon and the general trend in society is shifting towards destigmatizing mental health. However, huge strides are still needed, especially in medical schools, where medical students are faced with higher risk of mental health disorders and death by suicide than the general population. In the past 5 years, there has been a number of deaths by suicide in medical schools in Lebanon with school administrations barely or not taking any actions to prevent further loss of life. Preventing suicide in medical schools starts by bettering the mental health situation in them, as 90% of people who die by suicide have a diagnosable mental health disorder. The situation is currently deteriorating, and responsibility and response is still lacking. Shouldn't the health of future healthcare professionals be a priority?

LeMSIC Position

LeMSIC recognizes the burden of suicide on its members, medical students, youth, and the community as a whole and believes that further steps should be taken to prevent it. LeMSIC, therefore, calls upon the ministry of public health, non-governmental organizations dealing with mental health, healthcare professionals, medical school administrations, medical students, and the community as a whole to actively and loudly advocate for mental health, a step towards destigmatization. LeMSIC further affirms the need for affordable and confidential mental health services in medical schools as well as the need for a suicide prevention framework to be put in place.

Calls to Action:

The Lebanese Government to:

1. Fund research that looks into the accessibility of mental health services in the country and the help-seeking behaviors among the population, and especially among medical students.
2. Establish a national strategy to promote mental health in collaboration with different governmental bodies, including the Ministry of Public Health and the Ministry of Social Affairs, in order to safeguard against suicidal ideation and reduce mortality in addition to transition from primarily clinically focused approaches to population-based approaches of prevention.
3. Construct and finance appropriate social security networks in order to alleviate the financial burdens off of the population in times of crisis.
4. Provide funding, especially within the National Mental Health Program at the Ministry of Public Health, to manage the National Emotional Support and



Suicide Prevention lifeline in Lebanon to be free of charge when someone in need calls for support.

Medical Schools to:

1. Incorporate the recognition of signs of depression, burnout and other common mental disorders among medical students, in addition to integrating suicide risk assessment into the medical curricula.
2. Establish a university center and specific mental health clinics where mental services are offered in addition to appropriate referral networks to ensure such services are easily accessible to medical students.
3. Incorporate mindfulness training and assertiveness training into the medical and clinical training of medical students.
4. Survey physicians and medical students regularly, through a mental health watch in order to detect any early signs of depression, burnout and other mental stresses and study the trends.
5. Implement the PEACE model, where PEACE proposes to aid medical students to be prepared for the emotional toll of their future career.

Non-Governmental Organizations to:

1. Advocate for the drafting and implementation of evidence based mental health policies and initiatives.
2. Train medical students, in collaboration with medical schools, on the recognition of signs of mental illness and suicide ideations in addition to empower them to seek appropriate professional help, interventions and psychological first aid.
3. Raise awareness among the public generally and healthcare workers specifically on the currently present services that are offered like the National Emotional Support and Suicide Prevention Helpline in Lebanon.

Media Outlets to:

1. Urge adequate suicide representation in collaboration with the Ministry of Information and media outlets in the country to prevent further discrimination and avoid stigmatizing language and portrayal.
2. Teach, in collaboration with non-governmental organizations concerned with mental health and suicide, media users to share their knowledge about suicide prevention, and how to recognise suicidal thoughts.
3. Advocate the responsibilities of social media platforms to promote awareness on suicide and suicide prevention for the public.
4. Supply proper transition from primarily clinically-focused approaches to population-based approaches of suicide prevention by educating the community on policies that would improve mental health, implementing campaigns to reduce stigma on suicide and highlighting accountability.
5. Provide regulations to tackle social media bullying and discrimination among social media users especially those that are most vulnerable.

Hospitals and Healthcare Centers to:



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1. Ensure the integration of mental health, more specifically suicide and suicide risk assessment, within primary healthcare.
2. Provide trainings to healthcare staff to be able to properly identify the signs and symptoms of burnout, emotional distress, and suicide assessment amongst colleagues and staff members.



Position Paper

Background:

Suicide is the 10th leading cause of death worldwide and the second cause of death among youth aged 15-29, following accidents.[1] In Lebanon, approximately 1 person each 6 hours attempts suicide and 1 person in 2.5 days dies by suicide. This is an underestimate as many change the cause of death on death certificates due to the stigma surrounding the topic and mental health in general.[2] The national hotline for emotional distress and suicide prevention in Lebanon has received about 6000 calls during 2020, about triple the calls it received during 2019.[3,4] While some lives have been saved, many, including medical students, continue to die by suicide due barriers in seeking healthcare services.[5]

It is well-known that medical students are at a higher risk for mental health disorders and suicide.[6] In Lebanon, more than 90% of medical students screen positive for mental health symptoms and may need further mental health evaluation by professionals. Major barriers to seeking mental health services in medical students in Lebanon were finances and stigma.[7] Despite these alarming rates, little has been done to improve the situation in medical schools, which could lead to further precipitation or worsening of psychiatric disorders that may culminate in suicide attempts and death by suicide.[8,9]

Discussion:

Suicide in Medical Schools

There is currently no research conducted which measures the rates of suicide among medical students. This is due to the infrequent reporting of the suicide rates in international literature, in addition to the inconsistency of data collection techniques [10]. However, medical students were identified as a population that is highly vulnerable to mental health disorders and/or their symptoms [11,12], increased rates of burnout [13], and suicidal ideation [14]. This was consistent with the studies carried out in Lebanon where medical students showed higher rates of burnouts, depressive symptoms and suicidal ideations when compared to the general population [15]. Despite that, gaps still persist in research tackling suicide rates among medical students, especially in the Arab region, creating barriers to understanding suicide risks in this population in order to formulate the best intervention strategies.

Stigma

Stigma is defined as a set of negative stereotypes and views that are ascribed to a person or a group of people who possess or share a certain characteristic, viewed by society as deviating from the social norms [16]. The contexts relevant to the stigma vary a lot and can include race, gender, sexual orientation, mental health and substance use disorders. Several types of stigma have been identified [17], including two main concepts:

1. **Public stigma:** The general perpetuation of negative stereotypes against minority groups, sometimes accompanied with the support of prejudice and discrimination against them.
2. **Self-stigma:** The agreement and internalization of negative views and stereotypes by the stigmatized through applying them to one's self and life.

Goffman identified stigma associated with mental health to be one of the three main types of stigma. Given that mental disorders are among the leading risk factors of suicide [18], the stigmatization of such disorders have far reaching consequences on the exacerbation of the problem at hand. In fact, the stigmatization of mental health was identified as one of the barriers preventing the access to mental health and psychosocial support in Lebanon among the general public [19].

When it came to accessing such services among medical students who reported symptoms of depression, self-stigmatization played a significant role. One meta-analysis study identified a negative association between self victimization and help-seeking attitude and behaviour among medical students. This meant that students who internalized and endorsed the stigma against mental health were less likely to seek help leaving many students untreated.[20] The meta-analysis included 27 studies. However, all studies but one were carried out in Western societies. Unfortunately, there has not been a national or regional research study that looked into the association between self stigmatization and seeking help in Lebanon or the Arab region, and thus accurate statistical evidence regarding a relationship (or the lack thereof) between these two variables remains missing.

Suicide as a Public Health Issue

Although suicide is not a disease, it is a tragic endpoint of complex etiology. Retrospective studies have identified mental disorders and substance use disorders, as risk factors associated with suicide, with particular emphasis on depression, intoxication and chemical dependency, comorbid medical conditions, social isolation, unemployment and poverty, and stressful life events. Moreover, the economic costs, in the billions of dollars, says the World Health Organization (WHO), and human cost of suicidal behavior to individuals, families, communities, and society makes suicide a serious public health problem around the world [21].

Over the course of years, international and national strategies have been calling and taking action towards reducing mortality and morbidity related to suicide and suicidal behaviour. These improvements come within an environment with strong limitations: suicide prevention strategies have been focusing on individual-level risk factors rather than focusing on population-wide mental health englobing complex social and ecological relations. Just as the equivalence of a myocardial infarction, previously portrayed as a "silent killer", focusing on detecting or intervening just before or during the suicidal event (e.g., telephone crisis hotlines). In the United States, the status of suicide prevention is analogous to preventive cardiology during the middle of the last century [22]. Suicidal behaviour has a large number of complex underlying causes, including poverty, mental disorders, unemployment, loss of loved ones, breakdown in relationships and legal or work-related problems. A family history of suicide, as well as alcohol and drug use, and childhood abuse, social isolation, physical illness, and disabling pain also increase suicide risks. Currently attention is focused on

encouraging a reduction in access to pesticides and encouraging enhanced surveillance, training, and community action on their use as they represent one of the most common methods in suicide and suicide attempts. Early identification and appropriate treatment of mental disorders remain the most efficient preventive methods along with quality education and trained healthcare personnel. Consequently, suicide is a huge, but preventable, public health concern that can not be ignored.

Data in Research

Estimates suggest fatalities could rise to 1.5 million by 2020. Globally, suicides represent 1.4% of the Global Burden of Disease, In 2001 the yearly global toll from suicide exceeded the number of deaths by homicide (500 000) and war (230 000). There are estimated to be 10-20 times the number of deaths in failed suicide attempts, resulting in injury, hospitalization, emotional and mental trauma, although no reliable data is available on its full extent. Rates tend to increase with age, but there has recently been an alarming increase in suicidal behaviours amongst young people aged 15 to 25 years, worldwide. With the exception of rural China, more men than women commit suicide, although in most places more women than men attempt suicide [23].

A century ago, a JAMA editorial noted that “Suicides of physicians far exceed the average ratio of suicides in the general population in the United States of America alone”. Nowadays, suicide among physician and medical student remain a major public health issue. It is noted that suicide ratio to be 1.41 (95% CI = 1.21–1.65) among male physicians and 2.27 (95% CI = 1.90–2.73) among female physicians [24], compared to the general population. Rotenstein et al. [25] explored medical students before residency and found 167 cross-sectional studies totaling 116,628 individuals and 16 longitudinal studies totaling 5728 individuals from 43 countries. The prevalence of current depression or depressive symptoms was 27.2% (CI, 24.7–29.9%) and the prevalence of suicidal ideation was 11.1% (CI 9.0–13.7%). The prevalence did not significantly differ between studies of either preclinical or clinical students. In addition to that, Frajerman et al. [26] found, in a meta-analysis study, that the prevalence of current burnout to be 44.2% [33.4–55.0] among medical students.

In Lebanon, several studies were conducted to assess depression in some medical schools, but the data remain restrained. In a study conducted on Lebanese University medical students, [27] current depression was reported in 117 students out of 340 (34.4%) and t tests showed female predominance. Depression varied significantly among the different academic years ($P < .001$) and it peaked in the third-year students. This study showed that depression was highly prevalent among students of the Faculty of Medicine at the Lebanese University.

Furthermore, another study in a Lebanese Academic Medical Center [28] showed the prevalence of depressive symptoms in residents was estimated to be 22 %. Stressful personal life events and burnout were significantly associated with depression. 27% of the residents met criteria for burnout. Additionally, 13 % of residents had suicidal ideation, which was significantly associated with the severity of depression and not using mental health services.

Role of the Youth in Suicide Prevention

The best solution for a problem is tackling it at its roots. Suicide is one of the leading causes of death among the youth [29], mostly due to the social expectations set on youth to achieve excellence and the shame in case of failure to meet these expectations. [30] This makes implementing an action plan for suicide prevention best to be targeting, first and foremost, the youth. Listening to the youth and their suggestions to build their community, suicide-free, is at the core of further engaging them in increasing their awareness on their mental health as well as increasing their resilience, where the youth are, thus, able to find their own voices in promoting life and preventing suicide. [31] Nurturing on the importance of mental health in education promotes self-esteem, communication and emotional expression, decreases bullying, and ensures adequate intervention in cases of suicide ideations and/or attempts. [32] With that being said, schools are at the basis on implementing a safe environment for its students including suicide awareness and assessment; policies and workshops can also increase the readiness pertaining to suicide prevention and response and decreasing stigma surrounding it. [33]

Most at risk-youth do not have the means to seek professional mental health services, thus, confide in their peer and social clusters, who might not be familiar with suicide warning signs to be able to respond to their friends' need efficiently. [34] Therefore, training the youth and increasing their involvement in suicide prevention has been indicated to have a greater intention to use their acquired skills and promote emotional bond among their peers; with that, adolescents were able to identify red flags among their colleagues and feel empowered to improve suicide safety in their schools. [34,33] Noting that suicide risk assessment is crucial and should be assessed by mental healthcare professionals; however, school personnel, parents, and peers need to familiarize themselves with suicide and emotional awareness to be able to offer support, access to suicide hotlines, and decrease stress. [35] Additionally, not only will the youth have increased readiness in suicide prevention and response towards others, but they would also be able to be more in tune with their own mental health and be able to prioritize it over academics. [33]

Role of Medical Schools in Suicide Prevention

Suicide is a major public health problem in many countries, and Lebanon is no different [36]. For that reason, integrating suicide education in the medical curricula is crucial as primary healthcare centers play an important role in suicide prevention where approximately 70% of suicide patients have visited a primary care physician at least one year prior to their suicide attempt. [37] This shows the crucial role of general practitioners in proper suicide risk assessment and intervention. A great number of suicide patients present for care in the Emergency Department of a hospital; a study showing the administering of Safety Planning Intervention in these emergency settings and proper follow-up for these patients greatly decreased their suicide behavior and promoted coping mechanisms as outpatient services [38]. This indicates that suicide risk assessment and management in primary healthcare settings and integrating it in medical education have a key role to play in reducing suicide rates, and the core to properly prepare and capacitate future health practitioners for the times where they would encounter suicide patients throughout their clinical practices, thus being able to provide the needed care for their patients by identifying and properly intervening if

needed. [39,40] Additionally, a study showed that properly managing and counseling depressed patients in primary healthcare facilities can greatly decrease suicide rates in these at-risk individuals. [36]

Furthermore, the prevalence of depression in medical students was found to be 27.2% with a greater prevalence of depressive symptoms in medical students compared to the general population, and 11.1% had suicidal ideations, of which only 15.7% sought help. [25] In addition to the fact that medical students are at a high risk for burnout, depression, anxiety, substance use, and suicide, in turn, suggests that stress and anxiety from their demanding and competitive program and the high expectations in their field guarantee such findings. [41,25] However, the never-ending stigma on mental health still prevailing among medical students [42] can create several setbacks in relation to properly managing suicide and suicidal ideations, as well as setbacks in promoting their own mental well-being, those of their peers, and later on, those of their patients. Therefore, illustrating mental health and suicide awareness topics in the medical education is not only crucial but a must. A cross-sectional study in the Czech Republic identified that medical students had a change in attitude towards mental health disorders after being introduced to their psychiatry course in their university. [43] In fact, designing a curriculum that promotes peer-to-peer support, provides physical and mental well-being promotion, as well as suicide preventive measures allows medical students to graduate understanding the realities of the workplace and decreases burnout and suicide rates among medical students. [44]

In fact, medical schools are able to integrate the PEACE model (Professional counseling and support structures, Engagement with social activities and peers, Active mind and psychological wellbeing, and Curriculum Efficiency and academic support). It states that the students are at the center of the goal, surrounded by the curriculum/course and promoting its efficacy as it is the one that directly affects medical students. Following that, active mind and psychological well-being, capacitates individuals with proper coping mechanisms, cognitive and behavioral actions needed to overcome and surpass the burdens of their demanding education and future careers. It is, then, followed by the social engagement and support that is a huge building block in bettering a person's mental health. And finally, professional counseling and other support have a role to provide the necessary mental health support for students in cases of mental health disorders or even psychological symptoms. [45]

Suicide in times of Crisis

The COVID-19 pandemic has been strongly associated with high levels of mental distress and exhaustion which in many cases reached the baseline for clinical significance. [46] The pandemic had especially taken a huge toll on the mental wellbeing of healthcare professionals who were the first line of defense against the virus. [47] In Lebanon, what was particularly concerning was the risk of post-traumatic stress syndrome (PTSS) and other psychological manifestations among healthcare workers, and especially nurses, during the pandemic. [48] This was consistent with international findings which identified an association between the pandemic and the risk of healthcare workers reporting high scores of depression, anxiety and other manifestations during the outbreak. [49] This was mainly attributed to a large increase

in working hours and a decreased logistic support available. [48] Professionals working in wards directly dealing with COVID-19 patients reported higher levels of depressive symptoms and Post Traumatic Stress Disorder (PTSS) when compared to healthcare professionals who are responsible for other hospital units, which would explain why nurses were especially at risk. This was attributed to the nature of the nurse's work, the long exposures to deaths of patients and colleagues to COVID-19 and other traumatic events, compounded with the insufficient rest and irregular sleep patterns to which an association with increased PTSS was identified. [50,51] In Lebanon, this risk was accentuated by the current economic crisis the country has been going through. [48] A preliminary study conducted in Lebanon showed an association between lower incomes and higher risks of suicidal ideation. [52] This was consistent with studies conducted in other countries which looked into the relationship between suicide rates and the rising rates of unemployment and decreased income within both Europe and the USA. [53] Hence, the effect of the economic crisis compounded that of the pandemic and led to the increased risk of reported signs and symptoms of psychological distress and other mental illness among healthcare professionals in Lebanon.

Role of Media in Suicide

Evidence has shown that media in general, whether traditional or modern, has played a major role in the increase number of reported suicide cases, especially through the dramatization and romanticization of suicidal deaths' descriptions. [54] The reporting of suicide cases through the media, especially cases of public and well-known figures and celebrities, appeared to have had significant impact on the total number of suicide cases in the general population, with this significance increasing for suicides carried out using the same method as that reported. [55]

Social media and the Internet constitute an integral part of general media nowadays, with the Internet garnering more than 4.5 billion users, among which 3.7 billion active social media users. There has been an increasing body of evidence for social media and the Internet specifically, that suggested these platforms were able to influence suicidal and suicide-related behavior. [56] Among the major concerns was the media contagion effect when it came to suicide, as plenty of evidence from present studies on suicide clusters was found to support the notion that the act of suicide in one way or another "contagious", where the extent of increase of suicide rates following the reporting of a suicide story depended on the "amount, duration and prominence of media coverage", in what was a dose-response relationship. [57] The Internet, and specifically social media, were found to be major sources of suicide stories, especially among young people, with online discussion forms being associated with an increase in suicidal ideation among this demographic. [58]

Despite that, media and particularly social media, can be included in the efforts to prevent suicide and decrease suicide rates as such platforms have huge reach within a certain population and can thus provide accessibility to inaccessible individuals and those at risk. [59] These platforms also provided a space for individuals to express themselves and discuss their feelings and experiences with others who had similar ones with the fear of being judged or criticized. [60] When it came to media reporting, recommendations were introduced by a consensus panel consisting of e American

Foundation for Suicide Prevention, the Office of the Surgeon General, the Centers for Disease Control and Prevention, and the National Institute of Mental Health, among others, providing specific guidelines and proposals on how to report suicide events.

Suicide in the Global Scene

As aforementioned, suicide is the second leading cause of death in youth globally, yet, lack of awareness, stigma and other factors still stand in the way of those who are suffering to reach out for help. One of these factors is the lack of representation of suicide in the global scene. Out of the 17 Sustainable Development Goals, 169 targets, and 231 indicators, suicide was mentioned only as one of the indicators: 3.4.2, the goal 3 being to ensure healthy lives and promote well-being for all at all ages and the target 3.4 to reduce by one third premature mortality from non-communicable diseases. [61] However, the adoption of suicide mortality rate as an indicator lacks precision and specificity of evaluation methods. The methodology used relied mainly on countries' registration data, which explains the results obtained on a regional level. Statistics in the Eastern Mediterranean Region show lower suicide rates than other regions worldwide. [62] A possible reason for the low rate is changing the cause of death in death reports to something other than suicide as suicide brings "shame upon the family". [63]

Reducing mental health to one indicator, knowing that suicide mortality was associated with climate conditions and subjective wellbeing which were also tackled in the SDGs (goals 7, 8, 13, and 15) might hinder the focus that should be given to a topic as essential as mental health and suicide prevention for sustainable human development. [61]

Additionally, the first ever Global Report of a suicide case was in 2014, which has been long-overdue to be mentioned and shed light upon. Global awareness, lack thereof, has been a massive obstacle before mental health especially suicide awareness and prevention. This Global Report, showcased how much we lack planning to reduce deaths by suicide, stating that only 28 countries, came up with a series of strategies in order to achieve this goal. It emphasized on the proper management of mental and substance use disorders as well as reduction in the access to means such as guns, pills, etc. It also stressed on the presence of laws that ban suicide which prevent people suffering from seeking the help that they need, and thus, further increasing suicide rates. [64]

The WHO mental health Global Action Programme also includes suicide prevention but the gap is still there, these plans lacking a focus on suicide specifically. The WHO media center is the global target to ensure widespread awareness concerning this topic and it is providing with booklets and resource series regarding suicide prevention. However, "Think Globally, Act Locally" still applies in suicide and its prevention as in any public and mental health topic, where actions within one's own community create a snowball effect that resonates globally. [65]

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