Socio-demographic characteristics and clinical profile of suicide attempters attending the Emergency Department at a Tertiary Care Hospital in Oman: a retrospective study

Abstract

Objective: This study examined socio-demographic and clinical characteristics of individuals who attended the emergency department (Muscat, Oman) following a suicide attempt.

Methods: A retrospective study (n= 154) was conducted between January 2015 and June 2018. Information accrued included socio-demographic variables (age, nationality, sex, marital status, and occupation), risk (medical co-morbidities, psychiatric history, substance misuse, alcohol consumption, and previous history of suicide attempts), and precipitating factors, as well as the chosen methods of the suicide attempt.

Result: 83.1% were Omanis and women constituted 69.5% of the sample with a mean age of 27 years. 40.9% of the sample had a history of psychiatric disorders. 30% were students, and 42% were unemployed. Family conflict, suffering from chronic illness, and having social problems were the most common precipitating factors for the suicide attempt. The most common method used in the suicide attempt was drug overdose (48.1%) and mainly paracetamol (40%). Significant gender differences emerged to precipitating factors, a history of substance misuse, and methods of suicide.

Conclusion: The present data aligns with international trends that suggest that women and younger age groups are the most vulnerable to suicide attempts. Although in its infancy, the present research's findings could lay the groundwork for preventative interventions and programs.

Keywords: Suicide attempt, gender, mental health, cross-cultural, Oman

Background:

Suicide is one of the leading causes of death worldwide [1] and the second leading cause of death amongst individuals ranging from 15-29 years of age [2]. According to the World Health Organization (WHO), by the end of 2020, approximately 1.53 million people will have died from suicide and up to 20 times that figure will have attempted to kill themselves [1, 3]. However, these figures are likely to be at the tip of the iceberg [4]. Social stigma, religious and cultural factors, as well as the lack of formal procedures and resources to document the causes of injuries and fatalities may all well contribute to the under-reporting [5].

Although the reported incidence of suicide/ suicide attempts is relatively low in Arab countries, there is evidence to suggest that the incidence of suicidal behavior is progressively rising [6], despite social and cultural constraints which are believed to act as protective factors [7, 8, 9]. Suicide attempts, some leading to death, have been reported in various Arab countries including Jordan [10, 11], Saudi Arabia [12], Kuwait [13], Egypt [14], Bahrain [15], and United Arab Emirates [16, 17]. While these studies have been very welcome, more attention is needed to decipher the socio-demographic and clinical characteristics of people who attempt suicide. This information will provide valuable data to develop targeted preventative programs.

Studies from different populations suggest that various variables are associated with an increased risk of suicide, with no predominant risk factor [18]. sociodemographic and socioeconomic factors have also been suggested [19]. Gender, for example, has been considered a substantial risk factor for suicide since the time of Durkheim's famous study back in 1897 [20], with women being responsible for higher rates of non-fatal suicide attempts and men engaging in more completed suicides [21]. Moreover, research also reveals that an increase in unemployment rates is accompanied by an increase in suicide [22] According to the literature, the strongest risk factor for suicide is a previous suicidal attempt and figures suggest that 31.33% of suicide attempters re-attempted suicide within the follow-up period [23] .

The most common method of a suicide attempt is drug poisoning whereas hanging is the most frequent method amongst fatal suicides [24]. Easy access to highly lethal means such as toxic substances, medications, and firearms has been shown to affect the rate of suicide [25]. This is especially true among those individuals characterized by poor impulse control [26]. Numerous studies worldwide have examined sociodemographic characteristics, precipitating factors, and suicide methods used amongst suicidal individuals of different age groups [27, 28, 29, 30]. However, these factors have not received enough attention in the context of societies in transition such as Oman. Located in the southern tip of the Arabian Peninsula, Oman has experienced recent affluence triggered by rapid modernization and acculturation. This has rapidly transformed the Omani society and its landscape, hence precipitating the development of some of the risk factors associated with raising suicide rates [31]. In addition, Oman's population is predominantly comprised of youths, which – as mentioned above- are vulnerable to suicide.

In an attempt to set the groundwork for targeted preventative interventions in the country, the current study aims to build on the literature by addressing the paucity of studies on suicide and its associated factors. This study aims to explore the: (i) socio-demographic and clinical characteristics, (ii) precipitating factors, (iii) chosen methods, and (iv) gender differences in socio-demographic and clinical characteristics of individuals(v) explore the factors associated with the choice of lethality methods of suicide and factors contribute to repeating of suicide attempts among patients who presented at a tertiary care setting[1] following a suicide attempt. The results have the potential to be used as a platform for decision-makers in strategic planning for patients attending with repeated suicide and tailoring further interventions.

Methodology:

Taxonomy and operationalization of the term "suicide attempt"

Given the lack of a consistent taxonomy and operational definition of 'suicide attempt' in the literature [32], this study used the criteria described by the International Statistical Classification of Diseases and Related Health Problems (ICD10) [33]. The term

[1] Sultan Al Qaboos University Hospital is a tertiary hospital in Muscat, Oman.

"suicide attempt" was used to encompass different types of intentional self-harm acts with lethal intent. These included intentional self-poisoning by medicinal agents and pesticides, intentional self-harm by hanging, strangulation, and suffocation, intentional self-harm by drowning and firearm discharge, intentional self-harm by sharp objects, intentional self-harm by jumping from a high place, and/or jumping or lying before moving object and intentional self-harm by crashing of the motor vehicle.

Study design and Setting

This was a retrospective cross-sectional study that included a convenience sample of individuals aged 18 and above who presented to the emergency department (ED) at a single tertiary hospital between January 2015 and June 2018 following a suicide attempt. The present tertiary has several specialties, including psychiatry. Its ED provides a 24-h walk-in service in which emergency and urgent cases are accepted from all over the country for assessment. Patients are brought to the present hospital either by the ambulance services or family members, after being triaged by the ED triage nurse in a case of emergency, upon arrival at the emergency department the patient is promptly attended to by the emergency physicians. In the case of a suicide attempt, after stabilization of the patient's condition, the mental health team is called to attend to the victim of the suicide attempt. Upon stabilization, the patients were admitted to the psychiatry department. In some cases, the patients refused further intervention and decided to leave the hospital against medical advice. A mental capacity assessment will be done for all patients before signing the form to leave the hospital. Due to the lack of mental health act in Oman, involuntary admission is not yet permissible. Doctors and nurses working in the ED department are trained in general mental health as part of their training programs. To date, special training on risk assessment or dealing with suicidal attempts is lacking as practiced elsewhere [34].

Data collection and participants:

For the present study, we included all referrals with a suicidal attempt from the ED to the Department of Behavioral Medicine which was carried out during the period of the study. All patients aged 18 years and above who were referred to psychiatry for assessment after suicide attempts were included in the study. The targeted individuals aged less than 18

years, with insufficient data, that is, no detailed data in the medical report according to the information sought in the study proforma, were excluded from the study. Thus, out of the 240 attendees with the label of suicide attempters, 154 fulfilled the study criteria. Being a retrospective study, data were extracted from the patients' electronic medical records and reviewed by the authors. A data collection sheet – proforma-was designed to gather patients' information including patient's age, gender (Male, Female) Nationality (Omani, non –Omani), Marital status (married, single, divorced) occupation (student, employed, and unemployed), level of education (grade1-6/ Grade 7-12and higher education). Clinical factors, including the history of abuse of illicit drugs (Yes, No), alcohol-consuming (Yes, No), Psychiatric disorders before the suicide attempt was determined after reviewing medical records for all previous visits (Yes, No), medical co-morbidity (Yes, No) and Presence of precipitating factors and the method used for a suicide attempt. Suicide methods were categorized into low lethality and high lethality methods. Low lethality methods include overdose and self-harm by cutting or piercing. High lethality methods, for example, hanging, drowning, jumping from a high place, or fire and flames.

Ethics and consent approval

Ethical approval was granted by the College of Medicine and Health Sciences at Sultan Qaboos University, Muscat, Oman (MREC#1653). The study was conducted in adherence to the Declaration of Helsinki and the American Psychological Association with regards to ethical human research, including confidentiality, privacy and data management.

Data analysis

Data were analyzed using descriptive statistics. Continuous variables were analyzed using the mean and the standard deviation, whereas categorical variables were analyzed using the frequency and percentage. A Chi-square test (Fisher's exact/Likelihood ratio) was employed to investigate the association between gender and sociodemographic/clinical characteristics. The two-tailed significance level was set at 0.05. All statistical analyses were carried out using the IBM SPSS [35].

Results:

Sociodemographic and clinical characteristics of the sample (Table 1)

A total of 154 participants fulfilled the inclusion criteria. Table 1 shows the demographic and clinical variables of the sample, which consisted primarily of Omanis (83%; n=128). Women were overly represented (n=107; 69.5%) compared to men (n=47; 30.5%) and the average age was 27.03 (SD=8.25 years) years (age range from 18 to 61). A total of 55 subjects (35.7% of the respondents) had attempted suicide in the past, 54.5% (n=84) had grade 7-12 education and more than 42% (n=65) were unemployed, 83% (n=128). Out of 154, only 40.9% of the participants had a formal psychiatric diagnosis that anteceded the suicidal attempt. Almost 14% (n=21) of the sample disclosed a history of substance misuse and 13.6% (n=21) had misused alcohol in the previous month.

Psychosocial factors and Methods of suicide attempts

The most common precipitating factors for the suicide attempt were family conflict (29%, n=45), suffering from a chronic illness (27%, n=41), and social stress (21%, n=33). Approximately half (48%, n=74) of the sample attempted suicide by drug overdose, 20.8% (n=32) employed a sharp object, 11%, (n=17) exposed themselves to corrosive substances, and 11% (n=17) attempted to hang, strangulate, and/or suffocate themselves. Paracetamol was the single most common drug used for overdoses (40.5%, n=30), followed by antipsychotics (14.9%, n=11) and by non-steroidal anti-inflammatory drugs (10.8%, n=8)(**Table 2).**

Gender difference in demographic and clinical characteristics among suicide attempters

A significantly larger percentage of female than male patients between ages 18 and 30 years were found three times more likely to attempt suicide **(p=0.017).**

Unemployed women were found 10 times more likely to attempt suicide than unemployed males and the difference was statistically significant **(p=0.001).** As compared

to male patients with low educational attainment, female patients were significantly more likely to attempt suicide **(p=0.041).**

In regards to the clinical variables, results showed that 14% of the participants had a history of alcohol consumption and substance misuse. Among these, 80% (n=17) of them were male and the difference between gender was statistically significant (**p=0.009**) **and (p<.0001**) for alcohol and substance misuse respectively. The chosen mean of suicide attempt also precipitated a statistically significant difference between men and women (**p=0.0001**), with the former using more violent methods (e.g. cutting, hanging, and jumping from height) than the latter. Women relied more on drug overdose (60.7% of the attempts). There was also a statistically significant difference in the precipitating factors between men and women **(p=0.004)** with the most common precipitating factor for men being the presence of a chronic illness (29.8%), whereas family conflict is the most common precipitating factor was family conflicts (34.6%) **(Table 3).**

Suicide re-attempt and demographic and clinical characteristics. (table 4)

Table 4 showed, the association between the sociodemographic and clinical variables with the present history of past attempts. A significant association was found between having a psychiatric disease (p<.001) and the presence of the psychosocial stressor (p<.001), and previous attempts of suicide. No other significant association was found with the history of suicide except job status which shows marginality associate (p=0.075).

Comparison between the high lethality methods and low lethality methods groups

We categorized patients into a high lethality methods group (n = 26) and a low lethality methods group (n = 128) and examined the sociodemographic characteristics of each. The average ages of patients in the high lethality methods group and the low lethality methods group were 25.79±8.9 and 28.62±9.3 years, respectively; male patients were more likely to choose high lethality methods (p =0.021), presence of Psychosocial factors (p =0.036) was significantly higher with attempted suicides using low lethality methods. There were no significant differences between the two groups regarding age,

presence of previous attempted suicides, occupation, and history of past psychiatric disorders. (Table 5)

Discussion

In a quest to lay the groundwork for targeted, preventative interventions against suicide, this study set to explore socio-demographic characteristics, precipitating factors, chosen method of suicide, and gender differences in socio-demographic and clinical characteristics among a sample of individuals who attended the emergency department for acute medical and psychiatric management following medically injurious suicide attempts.

Some indicators of maladjustment among young people are becoming increasingly common in Oman [36]. The sociological and demographic patterns in Oman suggest that the country is bracing itself to face the social and economic consequences of a preponderantly youthful population [37]. In line with the demographic trend in the country [38, 39, 40], the present sample consisted mainly of young adults (73.4% under 30 years of age). A higher incidence of suicide attempts in younger age groups appears to echo the trend documented by the World Health Organization [41].

There are speculations that, as a result of the high rates of participation in education in Oman, the country is pumping a far greater number of job-seekers into a slower labor market than it can absorb [42]. The majority (42%) of the suicidal attempters were job-seekers and, thus, unemployed. This is also in line with the literature that suggests a correlation between unemployment and suicide attempts [19, 43]. In addition, the traditional passage to adulthood is also changing as young people tend to marry later and procreate at an age well into their twenties [18]. Congruent with this, the present study showed that approximately 57% of the participants were single and female. In a systematic review and meta-analysis of medically injurious suicide attempts via self-immolation in Iran, Parvareh et al [44] have reported 70% of those who employed such types of self-harm were female. Seo et al.[45] have conducted a systemic on suicidal ideation and suicide attempts among medical trainees from search-engine up to March 19, 2021. This review suggests that females are more prone to suicidal ideation and suicide attempts. In the general population, various studies have shown the suicide attempt hazard rate for females was significantly higher than their male counterparts [46-49]. Overall, the present finding

appears to echo the international trend in the preponderance of females in medically injurious suicide attempts. Another factor is lethality and gender. Previous studies have surveyed gender differences in the lethality of suicide attempts. These studies appear to suggest males choosing more lethal suicide methods even if the same method is employed by females [50,51]. The present study was not equipped to capture variation in lethality among Omani attending emergency departments for acute care for medically injurious suicide attempts.

Compared to the general population in Oman, the rate of engaging in drug misuse among the sample was high. This is also in line with evidence from the literature that suggests that substance misuse has recently been rising amongst the Omani youths [52]. Consistent with such a trend, 17% of the sample had misused substances before the suicide attempt. The relationship between substance misuse—especially alcoholism—and increased risk of suicide is well known [53]. One of the proposed explanations for this association is the immediate and long-term impact of substance misuse. Although substance misuse might be associated with short-term self-medicating gains, it is also correlated with impairing judgment during intoxication and long-term effects in deteriorating pre-existing mood disorders and conflict.

Various studies have suggested that the act of suicide may have some mechanisms to thwart existing stress and distress. Thus, some authors have suggested cathartic effects of suicide include prompt amelioration of existing stress and distress [54-56]. While the present study was not equipped to examine whether the act of suicide did lead to cathartic effects, it did explore stress and distress associated with suicide including past psychiatric disease and adverse psychosocial factors. Interestingly, the present study reported family conflicts, as well as the presence of a chronic illness, as the most common reasons for attempting suicide. Only approximately 41% of the cohort reported a history of psychiatric disorders, a percentage that although higher than the general population in Oman [36], suggests that other issues might also be at play. The possibility of psychiatric illnesses having been missed due to the stigma of presenting to a doctor with psychiatric complaints cannot be excluded. At the same time, it is also crucial to continue to investigate the impact that factors such as family discord or chronic illness might have on women's sociotropic tendencies and men's idea of masculinity. Studies from Europe, Saudi Arabia, and Pakistan

have consistently confirmed family conflicts and social stresses as some of the most common reasons for a suicide attempt [57, 58, 59]. Future studies ought to explore the cathartic effect of the suicide attempt.

This study suggested that intentional misuse of medicinal agents was the most frequent method of the suicide attempt. Drug overdose—especially with paracetamol—was used by 40.5% of the sample, a trend consistent with previous studies in the 1990s [25]. Easy accessibility of paracetamol as over-the-counter medication could explain the reason for drug overdose as being the most common method for attempting suicide. Moreover, most of the suicidal attempters in this study were females who tended to use less painful and non-violent methods to attempt suicide [60]. The second most commonly-used mean of suicide attempts were sharp objects (21% of the sample), whilst approximately 32 % of the sample used corrosive or burning substances, hanging, strangulation, suffocation, or jumping from a high place. Similar trends have been documented in Italy [61], Germany [62], and Japan [63].

This study showed that approximately 70% of the suicide attempters were women and that women outnumbered men with a ratio of 2.3, a finding which is also congruent with the literature [64]. While gender-specific factors associated with suicide attempts are well established in the Euro-American [65] in the Asian [66] and in the Indian [67] population, there is a dearth of studies that have examined such links in the Arabian Gulf population. Hence, to clarify the link between gender and other sociodemographic and clinical factors in suicide attempts, the present study set out to investigate these variables.

The findings reported a statistically significant difference amongst gender in precipitating factors such as chronic disease, family conflict, social stress, financial problem, and work-life balance. Except for financial problems, women appear to outstrip men in all precipitating factors examined in this study. The recent rapid economic development and the spread of education have resulted in the advancement of opportunities for women. Nevertheless, although education and opportunities arguably empower and encourage women to leave behind traditional roles, they also often require them to shuffle between the emerging roles- newly acquired opportunities- and the atavism of their traditional roles [68].

In their ‘two worlds hypothesis’, Katzman and Lee [69] have hypothesized the challenge of society moving ’between two worlds’ and to raise awareness of the implications of attempting to satisfy all previous expectations, whilst simultaneously attempting to adhere to new images of womanhood. The authors suggest that this pressure often comes at the expense of women’s relationship with their bodies, which becomes ‘the battle ground’. Furthermore, social changes and changes in social roles are often accompanied by a loss of social capital and social cohesion [70] which often impacts women the most, especially in traditional societies where women might still be required to juggle childcare, work, and house chores [71]. Given the utmost importance of this topic and the consistently higher incidence of suicide attempts in women worldwide, more studies are warranted to shed light on the interplay between some of the changes precipitated by modernity and suicide attempts. Furthermore, targeted systemic preventative interventions ought to take into consideration these issues.

Consistent with some of the values upheld in a conservative society such as Oman, but also with the literature at large [72], substance misuse has so far remained a problem found primarily in men [52], with significant gender differences. Similar gender differences were found in the choice of methods of suicide attempts. As noted in the previous studies, women tend to resort to deliberate self-poisoning and in contrast, the methods of suicide for men tend to be more brutal and more lethal [73]. As a result, there is a need to devise mechanisms to reduce access to targeted methods of attempted suicide in the Omani population.

The current study suggests that a past psychiatric illness and psychosocial stressors are significant risk factors for re-suicidal attempts. A study from Spain found that the presence of personality disorders and younger age were significant risk factors for suicide re-attempt [74], this is in concordance with findings of our study, which showed a significant association between the presence of a psychiatric disorder to re-attempts.

In our study, gender was associated with the use of high lethality methods. This is in line with the previous study that showed males have more propensity to choose more fatal methods when attempting suicide[75].According to our results, the presence of

psychosocial factors was associated with choosing lethality methods, which is consistent with the literature [76].

Strengths and limitations:

The present study has several strengths. First of all, this project is the first of its kind in Oman and the larger Arabian Gulf, hence paving the way for further research and setting the groundwork for preventative, culturally-specific prevention and interventions. At the same time, many limitations will need to be built upon in subsequent studies. For example, this is a retrospective study and although its design has the potential to provide critical descriptive data regarding suicide in a population in Arab/Islamic population that is not well-represented in existing suicide literature, the generalization of the present study is hampered. Hence, future studies could account to address the present meager sample size. The employed screening tool should have included structure or semi-structured psychiatric assessments to establish the diagnosis at par with international psychiatric and medical nomenclature. Relevant to this, include protracted clinical risk factors that could have improved the quality of the present data. Therefore, future studies could employ a more robust prospective and longitudinal methodology. Secondly, in a society where suicide attempts are shunned, there are likely to be missing suicide attempts among persons who did not present to the ED after their attempt. Relevant to this, it appears that individuals who died by suicide (whether after arrival at the hospital or otherwise) were not included in this study, as only those who attempted and were subsequently referred to psychiatry were included. This is an important limitation of this study. Thirdly, psychiatric history is likely limited by underreporting of psychiatric symptoms/failure to seek treatment for psychiatric disorders due to stigma and lack of access to services. Fourthly, the sample size is relatively small and may not be representative of all Suicide attempts. The final is the issue of disposition after acute management following medically injurious suicide attempts. Oman has a universal free healthcare system divided into primary, secondary, and tertiary. All the citizens are required to meet their basic healthcare needs in primary health and then referred to the secondary and tertiary for more specialized medical care. In case of emergency as suicide attempt, the victims are taken nearest hospital with emergency

services such as the present tertiary care. For theoretical interest, it would have been interesting in this study has also included discharge disposition after acute management following medically injurious suicide attempts. Due to existing infrastructure and the fact that this was a retrospective study, it was not feasible to document the disposition of discharged service users. A prospective study is therefore warranted to document discharge disposition.

Conclusion:

In light of the terrible burden that suicide attempts to place on society and in light of the increased incidence of reported suicides and suicide attempts worldwide, the current authors set out to fill a gap in the literature and contribute to the discussion by investigating this topic in Oman. The project was a retrospective study that covered data from January 2015 to June 2018. One hundred and fifty-four participants fulfilled the inclusion criteria with women constituting the majority of the sample. Precipitating factors for the suicide attempt were: a history of psychiatric disorders, unemployment, family conflict, chronic illness, and social stresses. Drug overdose, mainly paracetamol, constituted the most utilized method to attempt suicide and there were significant gender differences amongst sociodemographic and clinical correlates. Although further studies are required to build on these findings, the present data provide important information to start devising preventive and educational measures.

Consent for publication

Consent for publication was obtained through ethics approval and consent to participate.

Competing / Conflicts of Interest

The authors declare that there are no conflicts of / or competing interests.

Funding

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Acknowledgments

The authors thank the study staff and the staff at Sultan Qaboos University Hospital for their support.

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Table 1: Demographic and clinical data among suicide attempters seeking consultation at tertiary care hospital in Muscat, Oman (N=154)		
Variables		Total (n=154) n (%)
***Demographic* Variables**		
Gender	Male	47 (30.5)
	Female	107 (69.5)
Nationality	Omani	128 (83.1)
	Non-Omani	26 (16.9)
Marital status	Single	88 (57.1)
	Married	57 (37.0)
	Divorced	9 (5.8)
Job	Unemployed	65 (42.2)
	Employed	43 (27.9)
	Student	46 (29.9)
Educational level	Illiterate/grade1-6	39 (25.3)
	Grade 7-12	84 (54.5)
	Higher education	31 (20.1)
Age Mean ± SD	Mean ± SD	27.03 ± 8.25
Clinical Variables		
Medical Co-morbidity	Yes	12 (7.8)
	No	142 (92.2)
Previous history of suicide attempts	Yes	55(42.7)
	No	99 (57.3)
Past Psychiatric disease	Yes	63 (40.9)
	No	91 (59.1)
Alcoholic	Yes	21 (13.6)
	No	133 (86.4)
History of substance misuse	yes	21 (13.6)
	No	133 (86.4)
Psychosocial factors	Family Conflicts	45 (29.2)
	Social Stress	33 (21.4)
	Suffering from chronic illness	41 (26.6)
	Marital Discord	14 (9.1)
	Others (*e.g.* Financial problems, occupational problem, work-life balance, loneliness)	21 (13.7)
Methods of suicide attempt	Intentional exposure to medicinal agents	74 (48.1)
Methods of suicide attempt	Intentional self-harm by a sharp object	32 (20.8)
	Intentional exposure to corrosive aromatics, acids, and caustic alkalis	17 (11.0)

	Intentional self-harm by hanging, strangulation, and suffocation	17 (11.0)
	Others (e.g. Intentional exposure to organic solvents, Intentional self-harm by smoke, fire and flames or, Intentional self-harm by jumping from a high place)	14 (9.1)

Table 2: The type of intentional self-poisoning by and exposure to medical agents among attendees seeking consultation at tertiary care hospital in Muscat, Oman (N=74)

Type (s) of drug overdose	n (%)
Paracetamol	30 (40.5)
Non-steroidal anti-inflammatory drugs	8 (10.8)
Antihistamine drugs	5 (6.8)
Anti-psychotic drugs	11 (14.9)
Anti-epileptic medication	4 (5.4)
Anti-hypertensive Drugs	3 (4.1)
Others	5 (6.8)
Multidrug overdose	8 (10.8)

Table3: Difference in the demographic and clinical characteristics by gender among suicide attempters seeking consultation at tertiary care hospital in Muscat, Oman (N=154)

Variable		Males (n=47)	Females (n=107)	
		n (%)	n (%)	p value
Age group	18-30 years	28(18.2)	85 (55.2)	0.017*
	31-61 years	19(12.3)	22(14.3)	
Nationality	Omani	38(24.7)	90(58.4)	0.389
	Non-Omani	9(5.8)	17(11.1)	
Marital status	Single	26(16.9)	62(40.2)	0.950
	Married	18(11.7)	39(25.3)	
	Divorced	3(1.9)	6(3.9)	
Job	Unemployed	4(2.6)	42(27.3)	0.001*
	Employed	18(11.7)	25(16.2)	
	Student	25(16.2)	40(26)	
Educational level	Illiterate/grade1-6	6 (3.9)	33(21.4)	0.041*
	Grade 7-12	31(20.1)	53(34.4)	
	Higher education	10(6.5)	21(13.6)	
Medical co-morbidities	Yes	2 (4.0)	10 (9.0)	0.347
	No	45 (96.0)	97 (91.0)	
Past psychiatric History	Yes	20 (43.0)	43 (40.0)	0.859
	No	27 (57.0)	64 (60.0)	
History of substance misuse	Yes	17(36.0)	4 (4.0)	0.0001*
	No	30(64.0)	103(96.0)	
History of Hazardous and harmful alcohol consumption	Yes	12 (25.5)	9 (8.0)	0.009*
	No	35(74.5)	98 (92.0)	
Previous history of suicide attempts	Yes	20 (42.6)	35 (33.0)	0.275
	No	27 (57.4)	72 (67.0)	
Psychosocial factors	Chronic disease	14 (29.8)	27 (25.2)	0.004*
	Family conflict	8 (17.0)	37 (34.6)	
	Marital disharmony	1 (2.1)	13 (12.1)	
	Social stress	12 (25.5)	21 (19.6)	
	Others	12 (25.5)	9 (8.0)	
Methods of suicide attempt	Intentional exposure to medicinal agents	9 (19.1)	65 (61.0)	0.0001*
	Intentional self-harm by a sharp object	19 (40.4)	13 (12.1)	
	Intentional exposure to corrosive aromatics, acids, and caustic alkalis	2 (4.3)	15 (14.0)	
	Intentional self-harm by hanging, strangulation, and suffocation	11 (23.4)	6 (5.6)	
	Others	6 (12.8)	8 (7.5)	

*Statistically significant, Test: Fisher's Exact Test/Likelihood Ratio Test

Table 4: Difference in the demographic and clinical characteristics by previous history of suicide attempt among suicide attempters seeking consultation at tertiary care hospital in Muscat, Oman (N=154)				
Variable		Previous history of suicide attempts		
		Yes (n= 55) (%)	**No (n= 99) (%)**	**p value**
Age	Age, mean±SD	26.47±7.12	26.15±9.96	0.833
Gender	Male	20 (36.4)	27 (27.3)	0.275
	Female	35 (63.6)	72 (72.7)	
Nationality	Omani	49 (89.1)	79 (79.8)	0.180
	Non-Omani	6 (10.9)	20 (20.2)	
Marital status	Single	31 (56.4)	57 (57.6)	0.446
	Married	19 (34.5)	38 (38.4)	
	Divorced	5 (9.1)	4 (4.0)	
Job	Unemployed	16 (29.1)	30 (30.3)	0.070
	Employed	10 (18.2)	33 (33.3)	
	Student	29 (52.7)	36 (36.4)	
Educational level	Illiterate/grade1-6	5 (10.9)	8 (9.8)	0.239
	Grade 7-12	28 (60.9)	56 (68.3)	
	Higher education	13 (28.3)	18 (22.0)	
Medical co-morbidities	Yes	5 (9.1)	7 (7.1)	0.756
	No	50 (90.9)	92 (92.9)	
Psychiatric diseases	Yes	36 (65.5)	27 (27.3)	<0.001*
	No	19 (34.5)	72 (72.7)	
History of substance misuse	Yes	11 (20.0)	10 (10.1)	
	No	44 (80.0)	89 (89.9)	
History of Hazardous and harmful alcohol consumption	Yes	9 (16.4)	12 (12.1)	0.093
	No	46 (83.6)	87 (87.9)	
Psychosocial factors	Chronic disease	24 (43.6)	17 (17.2)	0.011*
	Family conflict	10 (18.2)	35 (35.4)	
	Marital disharmony	6 (10.9)	8 (8.1)	
	Social stress	8 (14.5)	25 (25.3)	
	Others	7 (12.7)	14 (14.1)	
Methods of suicide attempt	Intentional exposure to medicinal agents	26 (47.3)	48 (48.5)	0.617
	Intentional self-harm by a sharp object	12 (21.8)	20 (20.2)	
	Intentional exposure to corrosive aromatics, acids, and caustic alkalis	4 (7.3)	13 (13.1)	
	Intentional self-harm by hanging, strangulation, and suffocation	8 (14.5)	9 (9.1)	
	Others	5 (9.0)	9 (9.0)	
*Statistically significant, Test: Fisher's Exact Test/Likelihood Ratio Test				

Table5: Table 5: Difference in the demographic and clinical characteristics by lethality among suicide attempters seeking consultation at tertiary care hospital in Muscat, Oman (N=154)				
Variable		**Low lethality (n= 128)**	**High lethality (n= 26)**	
		n (%)	**n (%)**	**p value**
Age	**Age, mean±SD**	**25.79±8.94**	**28.62±9.27**	**0.146**
Gender	**Male**	**27 (24.3)**	**9 (52.9)**	**0.021***
	Female	**84 (75.7)**	**8 (47.1)**	
Nationality	**Omani**	**98 (88.3)**	**16 (94.1)**	**0.692**
	Non-Omani	**13 (11.7)**	**1 (5.9)**	
Marital status	**Single**	**71 (64.0)**	**10 (58.8)**	**0.919**
	Married	**34 (30.6)**	**6 (35.3)**	
	Divorced	**6 (5.4)**	**1 (5.9)**	
Job	**Student**	**43 (38.7)**	**3 (17.6)**	**0.170**
	Employed	**23 (20.7)**	**6 (35.3)**	
	Unemployed	**45 (40.5)**	**8 (47.1)**	
Educational level	**Illiterate/grade1-6**	**10 (9.0)**	**3 (17.6)**	**0.372**
	Grade 7-12	**73 (65.8)**	**11 (64.7)**	
	Higher education	**28 (25.2)**	**3 (17.6)**	
Medical co-morbidities	**Yes**	**8 (7.2)**	**1 (5.9)**	**1.000**
	No	**103 (92.8)**	**16 (94.1)**	
Psychiatric diseases	**Yes**	**43 (38.7)**	**11 (64.7)**	**0.064**
	No	**68 (61.3)**	**6 (35.3)**	
History of substance misuse	**Yes**	**12 (10.8)**	**4 (23.5)**	**0.227**
	No	**99 (89.2)**	**13 (76.5)**	
History of Hazardous and harmful alcohol consumption	**Yes**	**15 (13.5)**	**3 (17.6)**	**0.707**
	No	**96 (86.5)**	**14 (82.4)**	
Previous history of suicide attempts	**Yes**	**38 (34.2)**	**8 (47.1)**	**0.416**
	No	**73 (65.8)**	**9 (52.9)**	
Psychosocial factors	**Chronic disease**	**25 (22.5)**	**16 (37.2)**	**0.036***
	Family conflict	**38 (34.2)**	**7 (16.3)**	
	Marital disharmony	**11 (9.9)**	**3 (7.0)**	
	Social stress	**24 (21.6)**	**9 (20.9)**	
	Others	**13(11.7)**	**8 (18.6)**	
***Statistically significant, Test: Fisher's Exact Test/Likelihood Ratio Test**				