



### FACTORS ASSOCIATED WITH SUICIDE ATTEMPT AMONG YOUTH: A RETROSPECTIVE REVIEW OF PSYCHIATRIC INPATIENTS 15-24 YEARS OLD ADMITTED FOR SUICIDAL IDEATION AND BEHAVIOR AT THE MEDICAL CITY (TMC) FROM 2013-2017

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#### ABSTRACT

**OBJECTIVES:** This study aimed to determine the factors associated with suicide attempt among psychiatry inpatients aged 15 to 24 years old, admitted for suicidal ideations or behavior at The Medical City during a five-year study period, January 2013 to December 2017; to describe the demographic and clinical profile of these patients; and to determine if there was an association between demographic and clinical factors as well as suicidal attempt in this population.

**METHODOLOGY:** This retrospective chart review, investigated the association between demographic and clinical variables, and suicide attempt in a sample of suicidal psychiatry inpatients aged 15-24 years old, during a 5-year study period. The sample was subdivided into two subsets according to the presence or absence of suicide attempts in their lifetime. The demographic and clinical variables were then collected, analyzed, and compared between the two groups.

**RESULTS:** The present study reviewed 199 charts of suicidal psychiatry inpatients aged 15-24 years old hospitalized from 2013 to 2017 at The Medical City. The present study found an increasing trend in the number of psychiatric inpatients aged 15 to 24 who were confined for suicidal ideation and/or behavior over the course of the study period. Of the 199 subjects included in the study, 119 (59.8%) had attempted suicide, while 80 (40.2%) had not.

**CONCLUSION:** On comparison of the demographic and clinical factors among patients with a suicide attempt versus without an attempt, sex was found to be significantly associated with an attempt ( $p$ -value = 0.01). Specifically, the odds of a suicide attempt was twice higher among females (odds ratio = 2.27). Among the other demographic and clinical variables studied, no sufficient statistical evidence was found to declare significant statistical association with suicide attempt. This suggests that etiological factors related to suicide attempts for male and females may differ, hence such nuances need to be taken into account in the clinical assessment and design of interventions to prevent suicide.

**KEYWORDS:** Suicide Attempt, Suicidal Behavior, Youth

## INTRODUCTION

Suicide is emerging as a significant health concern among Filipino youth, but few local studies have investigated possible precursors of the act.

According to a Philippine time trend analysis study, rates of suicide has consistently increased from 1984 onwards. (1) Suicide incidence increased from 0.23 to 3.59 per 100,000 in males and 0.12 to 1.09 per 100,000 in females between 1984 and 2005. (1) More significantly, for most of the yearly periods studied in the time trend analysis, suicide rates were highest among those aged 15-24 years of age. (1)

The Young Adult Fertility and Sexuality survey, which is representative both at the national and regional level, also highlights the increasing threat of suicide among the Filipino youth. (2) The survey indicated that 8.7% of respondents reported to have thought of committing suicide, while 3.2%, reported to have attempted suicide at least once. (2)

Despite the rising suicide rates among Filipino youth however, substantive local studies on suicidal behavior and its precursors remain sparse. The current study aims to expand the present literature on suicide in the young by providing a descriptive profile of Filipino suicidal youth, as well as shed some light on the possible risk factors for suicide attempts. The seriousness of suicide among youth is undisputed, as it is the third leading cause of death among adolescents world-wide. (3)

According to the Center for Disease Prevention and Control, suicide accounts for 20% of all deaths among 15 to 24-year-olds annually. (4)

The World Health Organization defines “youth” as individuals in the 15 to 24-year age group. (5) This time period, which bridges childhood to adulthood, is a critical period characterized by changes in the body and brain, as well as by the need to face unique developmental and psychological challenges and tasks.

An American study showed, that suicide ideation is very low (1%) from birth to 10 years of age, then increases slowly through 12 years of age, and then more rapidly from 12 and 17 years of age. (6).

The prevalence of attempts, in comparison, remains very low (1%) until 12 years of age, then increases in a roughly linear fashion starting 15 years of age. (6) Several studies have reported a similar peak of hazard age of suicidal behaviors around 15 years old. (7-8)

Suicide attempts are comparatively high among youth compared to the older population. The Center for Disease Control and Prevention found that among 15 to 24-year-olds; there were approximately 100-200 attempts for every completed suicide. This is in contrast to the data among the older adults and the elderly, wherein there is 1 completed suicide for every 25 attempts. (4) Although the majority of these attempts were of low medical lethality, having made a past suicide attempt was the strongest predictor of both future suicide attempts and completions. (9)

In the country, 8.7% of Filipino youth reported to have thought of committing suicide, while 3.2%, reported to have attempted suicide at least once. (2) In the survey conducted, no suicide attempter reported negatively for suicide ideation, which means that all cases of suicide attempts followed the typical flow of thinking of suicide first before attempting the act. (10) The top 3 methods used for suicide attempt among Filipino youth were: slashing of wrist, 48.4%; ingesting substances, 26.9%; and hanging 12.2%. (2) Other means of suicide attempt included stabbing of oneself, jumping into a river, throwing oneself under a vehicle, jumping from a building, and starving oneself. (2)

Given the prevalence of suicide attempts among youth, numerous studies have tried to understand suicidal behavior and its predictors in more developed countries, however literature in the local setting is still limited.

Locally, the most extensive study exploring suicidal behavior among youth found significant relationships between integration in the family and suicide. (10) The study revealed that family problems, 69.8%, were cited as the most common reason behind suicide ideations among Filipino youth. This was followed by personal problems, which included economic loss and academic failure at 17.7%, and romantic problems at 7.5%. (10) Other possible correlates of suicidal ideation and

behavior, such as presence of a psychiatric disorder, chronicity of suicidal ideation, history of substance use prior to attempt, history of adverse childhood experiences (ACE), presence of psychiatric illnesses/suicide in the family, were not explored however.

Internationally, several researches have explored the link between demographic and clinical factors, and suicidal behavior in this critical phase of life. In a study conducted among South Korean adolescents, perceived low socio-economic status was associated with both increased rates of suicidal ideation and attempt. (11) Self-reported levels of academic performance that were fair or poor were also associated with an increased prevalence of suicidal behaviors. (11) Adverse family circumstances, such as low satisfaction with the family environment, low parental monitoring, and parental history of psychiatric disorder, were significantly associated with suicidal ideation and behavior among the adolescent population. (9)

Studies also showed that ACE, such as emotional abuse, physical abuse, sexual abuse, battered mother, household alcohol/drug abuse, mental illness in the household, parental separation or divorce, incarcerated household member, increased the risk of attempting suicide from 2- to 5-fold. With this, it is crucial to note that the risk of attempting suicide, increased dramatically, the more ACE a person was exposed. (12)

In terms of psychiatric co-morbidity, current research showed that majority of adolescents with a history of suicide ideation (89.3%) and attempts (96.1%) met the criteria for at least 1 psychiatric diagnosis. (6) Interestingly, most psychiatric disorders (major depressive disorder, dysthymic disorder, generalized anxiety disorder, panic disorder, attention-deficit/hyperactivity disorder, conduct disorder, and substance use disorder) were related to increased risk of attempts among the adolescent population. (13) This is an important finding, as it emphasized that although many suicide attempts occur in the context of depressive disorders, almost all psychiatric morbidity among young people is associated with increased risk for suicidal behavior. (13)

The current study was guided by an ideation-to-action framework as suggested by a Western study differentiating suicide attempters from suicide "ideators". (14) The study by Klonsky and May, revealed that close examination of the various suicide literature available revealed a key knowledge gap. (14) Specifically, often cited risk factors for suicide were, in actuality, risk factors for suicide ideation, and not for progression from suicide ideation to attempts. (14)

According to the study, many significant risk factors for suicide in literature were more strongly related to ideation than to progression from ideation to a plan or an attempt. (14) For example, depression, and hopelessness has long been emphasized as an important suicide risk factor. (15) However, careful examination of the literature indicated that, while elevated among suicide ideators relative to non-suicidal controls, these two factors failed to discriminate between suicide ideators and attempters. (14)

Considering the high rates of suicide attempts among youth and the fact that 40% of youth suicides had made a prior attempt, making it a strong risk factor for completed suicide. (16)

Information regarding possible precursors of suicide attempt is critical to develop effective suicide prevention programs in the country. It is with this notion in mind, that the present study was developed.

#### General Objectives

Determine the factors associated with suicide attempt among psychiatry inpatients aged 15 to 24 -years old, admitted for suicidal ideations or behavior at The Medical City during a five-year study period, January 2013 to December 2017.

#### Specific Objectives

1. Describe the demographic (age, gender, marital status, religion, educational attainment, work status, living arrangement) and clinical (inciting event, previous psychiatric consult, chronicity of suicidal ideation, substance use prior to current admission, history of suicide of an acquaintance or family, history of psychiatric illness in the family, history of non-suicidal self-injury, exposure to adverse childhood experiences, psychiatric

diagnosis) profile of patients aged 15-24 years old admitted for suicidal ideations or behavior at The Medical City from 2012 to 2017.

2. Determine if there is an association between demographic and clinical factors, and suicidal attempt, among psychiatry patients aged 15-24 years old admitted for suicidal ideations or behavior.

## METHODOLOGY

### Study Population

The medical records of all patients aged 15 to 24 years old admitted under or referred to psychiatry at The Medical City for suicidal ideations and/or behavior from January 2013 and December 2017 were reviewed.

### Sample Size Computation

Using Epi Info version 7, the minimum sample size requirement was at least 159 based on the percentage of youth with suicidal ideations who attempted suicide = 36.78% (DRDF & UPPI, 2014) with a margin of error= 7.5% and confidence level= 95%.

### Inclusion criteria

Patients aged 15 to 24 years old admitted or referred to psychiatry at The Medical City for suicidal ideations and/or behavior from January 2013 and December 2017.

### Exclusion criteria

The following were excluded from the study:

- Patients below 15 and above 24 years old
- Foreign / non-Filipino patients
- Incomplete medical records/chart
- Patients admitted for suicidal behavior but not referred to psychiatry service

### Sampling Method

A list of all patients aged 15 to 24 years old admitted under or referred to the psychiatry service from January 2013 to December 2017, were taken from the records section of The Medical City. The researcher reviewed these charts and included those that fulfilled the inclusion criteria.

The sample was subdivided into two subsets according to the presence or absence of suicide attempts in their lifetime. Those patients with a history of suicide attempt were assigned to the test group, while those patients without suicide attempt, to the control group.

For this study, the test group included those with a history of: an actual attempt (a potentially self-injurious act committed with at least some wish to die, as a result of act. There does not have to be any injury or harm, just the potential for injury or harm), an interrupted attempt (when the patient is interrupted by an outside circumstance from starting the potentially self-injurious act), and/or an aborted attempt (when a patient begins to take steps toward attempting suicide attempt but stopped themselves before they actually engaged in any self-destructive behavior).

On the other hand, the control group included those patients with: a wish to be dead, suicidal thoughts (thoughts of wanting to end one's life/commit suicide even without thoughts of ways to kill oneself/associated methods, intent, or plan during the assessment period), and suicidal thoughts with plan and intent (thoughts of killing oneself with details of plan fully or partially worked out and subject has some intent to carry it out).

### Data Collection & Monitoring

Data was collected using data collection forms and tabulated using Microsoft Excel. (Appendix 1)

The researcher was the only one who had access to the records, as permitted by the Medical Records Department. The researcher ensured the safe-keeping of data gathered and only the details needed for the study were collected and recorded.

The patient's names were not recorded on the data collection forms. A number (P001 to XXX) was used for each subject to ensure patient confidentiality. No other information was obtained except for the ones previously mentioned.

### Statistical analysis

Demographic data gathered from the medical records included: age, gender, marital status, religion, educational attainment, work status, living arrangement. Clinical data gathered from the database and history included: inciting event, previous psychiatric consult, chronicity of suicidal ideation, substance use prior to current admission, history of suicide of an acquaintance or family, history of psychiatric illness in the

family, history of non-suicidal self-injury, exposure to adverse childhood experiences (ACE), psychiatric diagnosis.

Data analysis was performed using SPSS version 23. Quantitative variables were summarized as mean and standard deviation, while qualitative variables will be tabulated as frequency and percentage. The significance of factors associated with suicide attempt among patients were analyzed using t-test for age, chi-square test. Odds ratio was used to measure the strength of association between exposure and outcome.

#### Ethical Considerations

The research was approved by the Institutional Review Board of The Medical City prior to data collection and conducted in accordance to the International Conference on Harmonization – Good Clinical Practice (ICH-GCP) ethical principles of respect, beneficence, non-maleficence, and justice. A letter for permission to access medical records of inpatients was submitted to the head of the Medical Information Department of the hospital. Once obtained, all electronic medical records of the subjects selected were reviewed at The Medical City Records Section. No physical medical records were taken out of the department.

The study was done by reviewing the patient's electronic medical records/charts. There was no direct contact or interaction with the patients, hence a transfer criteria was not applicable.

The study employed a review of patient's electronic medical records/charts and did not involve actual patients or patient interventions, hence adverse events reporting was not applicable.

#### RESULTS

A total of 209 of the 507 psychiatric inpatients aged 15 to 24 years old from January 2013 to December 2017, were included. Of the 209 charts reviewed, 10 charts were excluded from the study due to incomplete data (8 charts) and the nationality of the patient (2 charts), thus only 199 were analyzed. (Table 1)

There was an increasing trend in the number of youth psychiatric inpatients confined for suicidal

ideation and/or behavior during the five-year study period. In 2013, only 18% of youth psychiatric inpatients were confined for suicidal ideation and/or behavior, but this further increased to 29% in 2014, 31% in 2015, 52% in 2016, and 55% in 2017. (Table 1)

For the demographic characteristics, most of the patients were female (70.35%), and all were single. The mean age of the study population was 19.25. Majority were students (81.91%), and in college (70.85%) but a few were out of school (3.02%). There were the same number of employed (7.54%) and (7.54%) unemployed patients. The top religious affiliations, were Catholic, 78.89% and Born Again Christian, 12.06%. For living condition, 83.92% were living with family, while 12.06% were with non-family (friends, roommates, partners), and 3.52% were living alone (Table 2).

For the clinical data, the more common inciting event leading to confinement was academic/work related issues (35.18%), closely followed by family related problems (32.16%), peer related problems (25.63%) and romantic relationship problems (25.13%).

Most of the patients had prior psychiatric consultation prior to confinement (70.85%), and had presented with suicidal ideations of more than one year (55.78%). Almost half (49.25%) had a history of psychiatric illness in the family, and 37.69% had a history of non-suicidal self-injury.

A quarter (25.13%) of the study population had exposure to adverse childhood experiences (ACE). Among those with exposure to ACE, about a third experienced parental separation (38%), one fourth were victims of sexual abuse (24%) and a fifth suffered physical abuse (20%). The most common discharge diagnoses were Bipolar Disorder (46.23%), and Major Depressive Disorder (31.16%). (Table 3)

Of the 199 subjects included in the study, 119 (59.80%) had attempted suicide at least once, while 80 (40.20%) had never attempted suicide.

Notably, of those who attempted suicide, the most common methods were ingestion of substances (62.19%), followed by jumping from higher ground, (19.33%) and cutting (14.29%).

**Table 1. Yearly Census of Psychiatry Inpatients Aged 15 to 24 Years Old Admitted at TMC from 2013 to 2017**

Year	Total Number of Psychiatry Inpatients between 15-24yo	Total Number of Psychiatry Inpatients between 15-24yo Confined for Suicidal Ideations and/or Behavior	Percentage of Psychiatry Inpatients between 15-24yo Confined for Suicidal Ideations and/or Behavior
2013	68	12	17.64%
2014	76	22	28.94%
2015	90	28	31.11%
2016	106	55	51.88%
2017	167	92	55.08%
<b>Total</b>	<b>507</b>	<b>209</b>	

**Table 2. Demographic Characteristics of Psychiatry Inpatients 15 to 24 Years Old Hospitalized Due to Suicidal Ideation and/or Behavior at TMC from 2013 to 2017 (N=199)**

Demographic Characteristics	Frequency	Percentage (%)
Age	19.25 +/- 2.4 (Mean +/- SD)	
		(n = 199)
Gender	Male	59 29.64
	Female	140 70.35
Marital Status	Single	199 100
Educational Attainment	High school	53 26.63
	College	141 70.85
	Graduate Studies	5 2.52
Work	Student	163 81.91
	Out of school	6 3.02
	Employed	15 7.54
	Unemployed	15 7.54
Religion	Roman Catholic	157 78.89
	Born Again Christian	24 12.06
	Agnostic	10 5.03
	Atheist	4 2.01
	Methodist	2 1.01
	Jehovah's Witness	1 0.50
	Iglesia ni Cristo	1 0.50
Living Arrangement	Living alone	7 3.52
	With Non Family	24 12.06
	With Family	167 83.92

**Table 3. Clinical Characteristics of Psychiatry Inpatients 15 to 24 Years Old Hospitalized Due to Suicidal Ideation and/or Behavior at TMC from 2013 to 2017 (N=199)**

Clinical Characteristics	Frequency	Percentage (%)
Inciting Event		(n = 199)
<i>Academic/ Work Related Issues</i>	70	35.18
<i>Family Related Problems</i>	64	32.16
<i>Peer Related Problems (bullying etc.)</i>	51	25.63
<i>Romantic Relationship Problem</i>	50	25.13
<i>Loss or death</i>	12	6.03
<i>Sexual Identity Issues</i>	9	4.52
<i>Undetermined</i>	8	4.02
<i>Others</i>	13	6.53
(+) History of Previous Psychiatric Consult	141	70.85
(+) History of Suicidal Ideations of more than 1 year	111	55.78
(+) History of Substance Use prior to current admission	5	2.51
(+) History of suicide of acquaintance or family	11	5.53
(+) History of Psychiatric Illness in the Family	98	49.25
(+) History of Non-Suicidal Self Injury	75	37.69
(+) History of ACE	50	25.13
		(n = 50)
<i>Parental Separation or Divorce</i>	19	38.0
<i>Sexual Abuse</i>	12	24.0
<i>Physical Violence</i>	10	20.0
<i>Domestic Violence</i>	9	18.0
<i>Household Substance Abuse</i>	8	16.0
<i>Emotional Abuse</i>	7	14.0
Psychiatric Diagnosis Upon Discharge		(n = 199)
<i>Bipolar Disorder</i>	92	46.23
<i>Major Depressive Disorder</i>	62	31.16
<i>Persistent Depressive Disorder</i>	19	9.55
<i>Borderline Personality Disorder/Traits</i>	25	12.56
<i>Substance Related Disorders</i>	12	6.03
<i>Anxiety Disorder</i>	9	4.52
<i>Adjustment Disorder</i>	9	4.52
<i>Attention Deficit Hyperactivity Disorder</i>	8	4.02
<i>Post Traumatic Stress Disorder</i>	6	3.02
<i>Autism Spectrum Disorder</i>	4	2.01
<i>Obsessive Compulsive Disorder</i>	2	1.01
<i>Others</i>	5	2.51

**Table 4. Common Methods of Suicide Attempt among Psychiatry Inpatients 15 to 24 Years Old Hospitalized Due to Suicidal Ideation and/or Behavior at TMC from 2013 to 2017**

	Test Group		Female		Male	
	Frequency	Percentage (%)	Frequency	Percentage (%)	Frequency	Percentage (%)
<b>Method</b>		(n = 119)		(n = 92)		(n = 27)
Ingestion of substances	74	62.19	59	64.13	15	55.56
Jumping from higher ground	23	19.33	20	21.74	3	11.11
Cutting	17	14.29	14	15.22	3	11.11
Hanging	12	10.08	4	4.35	8	29.63
Self Strangulation	3	2.52	3	3.26	0	0.0
Running towards traffic	2	1.68	2	2.17	0	0.0
Inhalation of butane	2	1.68	0	0.0	2	7.4
Using a gun	1	0.84	0	0.0	1	3.7

**Table 5. Association of Demographic and Clinical Factors with Suicide Attempt**

Demographic & Clinical Factors		P Value	Remarks
Age		1.000	Not significant
Gender		0.011	Significant
Marital Status		No Test	-
Educational Attainment		0.415	Not significant
Work		0.615	Not significant
Religion		0.378	Not significant
Living Arrangement		1.000	Not significant
Inciting Event	<i>Family Related Problems</i>	0.644	Not significant
	<i>Peer Related Problems</i>	0.624	Not significant
	<i>Romantic Relationship Problem</i>	1.000	Not significant
	<i>Academic/ Work Related Issues</i>	1.000	Not significant
	<i>Sexual Identity Issues</i>	1.000	Not significant
	<i>Financial Problems</i>	1.000	Not significant
	<i>Spirituality</i>	1.000	Not significant
	<i>Loss or death</i>	0.743	Not significant
	<i>Remembering Trauma</i>	0.566	Not significant
	<i>Undetermined</i>	0.716	Not significant
Adverse Childhood Experience		0.415	Not significant
Previous Psychiatric Consult		0.139	Not significant
Chronicity of Suicidal Ideations		0.193	Not significant
Alcohol Intake Prior to Confinement		0.650	Not significant
Illicit Drug Use Prior to Confinement		0.402	Not significant
Family History of Suicide		0.317	Not significant
Exposure to Suicide of a Family Member or Acquaintance		1.000	Not significant
Family History of Psychiatric Illness		1.000	Not significant
History of Non-Suicidal Self Injury		0.235	Not significant
Discharge Diagnosis	<i>Schizophrenia / other psychotic disorders</i>	1.000	Not significant



Among females, the most common methods were ingestion (64.13%), jumping (21.74%) and cutting (15.22%); while for males, ingestion (55.56%) and hanging (29.63%). (Table 4)

The significance of factors associated with suicide attempt was analyzed using t-test for age, and chi-square test for the rest of the categorical variables. Among the demographic factors studied, only sex was significantly associated with suicide attempt, with a p-value = 0.011 (Table 4). Odds ratio was used to measure the strength of association between patient sex and suicide attempt. It was found that the odds of suicide attempt doubled among female patients (odds ratio = 2.27). No significant association was noted between suicide attempt and the other demographic factors studied, such as age, educational attainment, work status, religion, and living arrangement. Among the clinical variables and psychiatric diagnoses studied, no sufficient statistical evidence was found to declare significant statistical association with suicide attempt.

## DISCUSSION

All over the world, suicide among the young has emerged as a significant health issue, and the present study further emphasizes this problem. The findings of this study confirmed the rising trend of suicidal ideations and behavior among youth patients confined at The Medical City from 2013 to 2017.

The study also found that the most common diagnoses upon discharge among the study population were Bipolar Disorder and Major Depressive Disorder. This finding is similar to an earlier study which found that the most common psychiatric diagnoses among adolescents included were mood, disruptive, and substance abuse disorders (17);; although this study population had low rates of substance use (6.03%) and disruptive disorders (4.02%). Notably, earlier studies estimate a lifetime suicide attempt rate of 20% to 47% among youth with bipolar disorder, and psychological autopsy studies indicate that of all psychiatric diagnoses, bipolar disorder poses the greatest risk for completed suicide among youth. (18) Among the study population, a quarter of patients (25.13%) had exposure to adverse childhood experiences (ACE).

Of the adverse childhood experiences, parental separation (38%), sexual abuse (24%), and physical abuse (20%) were the most common. It is well studied that ACE is a significant risk factor for suicidal ideation and attempt. An American study conducted among a nationally representative population, found that ACE increased the risk of attempted suicide by 2-to 5-fold. (12)

Several explanations for this “gender paradox” have been proposed, including gender differences in the lethality of suicide attempt methods, accuracy and openness in reporting of past suicidal behavior, frequency of depression, and socialization regarding culturally acceptable forms of self-destructive behavior; but no single explanation appears to adequately account for these differences. (19)

## CONCLUSION

The present study demonstrates the incessant rise of suicidal ideation and attempt among the population studied, especially in the last 5 years. Every year the number of young patients hospitalized for suicidal ideation and behavior doubled. This suggests a call to action to enhance suicide prevention in the country.

The study was able to achieve its objective to give a descriptive profile of Filipino suicidal youth, as well as identify the female gender as a significant risk factor for suicide attempt in this population. The odds of a suicide attempt was twice higher among females in the population studied. This suggests that etiological factors related to suicide attempts for male and females differ, and such nuances need to be taken into account in the clinical assessment and design of interventions to prevent suicide.

## LIMITATION & RECOMMENDATIONS

While the present study was able to achieve its objectives it holds some limitations. Being a retrospective research design, the study was limited by the data recorded on the patients' charts. The information gathered in this research was lifted from the patient's admitting database, referral notes, and daily progress notes, which are mainly accomplished by psychiatry residents-in-training.

Hence, individual differences in history taking, record keeping styles, and assessment, may have affected the results of the study. It is possible that some risk factors present in these patients were either not reported by the informants providing the history, or not documented by the documenter. With this, some caution is warranted in terms of drawing negative conclusions concerning the demographic and clinical variables not found to be a statistically significant in the present study. It is postulated that due to the inherent limitations of a chart review, some risk factors were not found to be statistically significant. It may be fair to conclude however, that the variables not found to be statistically significant in this study, are not among the strongest predictors of suicide attempt among the sample population.

It may also be noted that the study population was limited to in-patients, taken from a private tertiary hospital with a particular clientele. As such, the study may provide a skewed profile of the Filipino suicidal youth. It is therefore recommended to have future studies conducted in a larger population to increase the study's generalizability. Perhaps expanding the study population to youth seen on an outpatient basis, as well as other institutions or clinics, both public and private. It is further recommended that the demographic and clinical profile of youth patients with suicidal ideation and/or behavior presented in this paper may be used to develop and enhance suicide prevention programs for the Filipino youth population.

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