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Diagnostic and psychosocial differences in psychiatrically hospitalized military service members with single versus multiple suicide attempts

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Abstract

Introduction: Individuals with multiple versus single suicide attempts present a more severe clinical picture and may be at greater risk for suicide. Yet group differences within military samples have been vastly understudied.
Purpose: The objective is to determine demographic, diagnostic, and psychosocial differences, based on suicide attempt status, among military inpatients admitted for suicide-related events.
Method: A retrospective chart review design was used with a total of 423 randomly selected medical records of psychiatric admissions to a military hospital from 2001 to 2006.
Results: Chi-square analyses indicated that individuals with multiple versus single suicide attempts were significantly more likely to have documented childhood sexual abuse ($p = .025$); problem substance use ($p = .001$); mood disorder diagnosis ($p = .005$); substance disorder diagnosis ($p = .050$); personality disorder not otherwise specified diagnosis ($p = .018$); and Axis II traits or diagnosis ($p = .038$) when compared to those with a single attempt history. Logistic regression analyses showed that males with multiple suicide attempts were more likely to have problem substance use ($p = .005$) and a mood disorder diagnosis ($p = .002$), while females with a multiple attempt history were more likely to have a history of childhood sexual ($p = .027$).
Discussion: Clinically meaningful differences among military inpatients with single versus multiple suicide attempts exist. Targeted Department of Defense suicide prevention and intervention efforts that address the unique needs of these two specific at-risk subgroups are additionally needed.
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1. Introduction

Suicide is a significant public health problem within the United States (U.S.) and remains a critical concern for the Department of Defense (DoD). The suicide rate has increased since 2007, bringing suicide from the 11th leading cause of death to the 10th leading cause of death within the country and the 3rd leading cause for those between 15 and 24 years of age [e.g., 1,2]. Similar to the national increase in suicide deaths, the U.S. military has also seen increases in suicide deaths. The rate of suicide in the Armed Forces for 2008 was 15.8 per 100,000 [3] and has continued to increase to 18.0 per 100,000 in 2011 [4].

Epidemiological studies have identified a number of demographic, psychosocial, and psychiatric risk factors for suicide. Among these, a history of suicide attempt has been recognized as one of the most robust and clinically meaningful risk factors for death by suicide [5]. Additionally, there is some evidence to suggest that individuals who make more than one suicide attempt are at even greater risk for dying by suicide compared with individuals who have only one prior suicide attempt [e.g., 6]. This increased risk may be accounted for by a more severe clinical picture [e.g., 7].

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Multiple suicide attempts have been associated with psychosocial stressors such as childhood abuse, family history of psychopathology, and higher levels of hopelessness and suicide ideation [e.g., 8]. Furthermore, those with multiple suicide attempts demonstrate difficulties managing internal and external stressors, more severe psychiatric symptomatology, comorbidity of psychiatric diagnoses, and specific Axis I and Axis II diagnoses including alcohol and drug abuse [7]. These studies, however, all focused exclusively on civilian samples.

Studies on suicide attempts in the U.S. military have been startlingly sparse. Until 2008, the military did not have a systematic way to track suicide attempts. Suicide attempts are now captured for all branches of military service through the Department of Defense Suicide Event Report (DoDSER) system [4]; however a careful review of the reported data indicates some inconsistencies may exist in suicide attempt reporting [9,10]. This inconsistency of reporting is particularly problematic given the scope and magnitude of suicide attempts within the military population. Based on a survey of health related behaviors among military members in 2008, 2.1% of Service Members reported making a suicide attempt within the past year, 1.1% reported a suicide attempt while serving in the military, and 2.5% reported making a suicide attempt before joining the service [11]. In regard to repeat suicide attempts, Rudd and colleagues [12] conducted the only study which investigated demographic and psychiatric similarities and differences among young active duty military members with suicidal ideation, a single suicide attempt, and multiple suicide attempts. Findings support the theory that multiple attempt individuals present with a more severe clinical picture; which includes more severe symptoms, such as depression, and increased likelihood of Axis I diagnoses, such as anxiety disorders and alcohol abuse [12].

Despite the potential high risk for suicide, differences between single and multiple attempt status individuals within a military sample have been vastly understudied. Determining the factors that are similar and/or different between these two groups will begin to fill the sizeable gap in the military research literature on this topic. Such an understanding would provide a solid framework for suicide prevention efforts at the primary, secondary, and tertiary levels. Therefore, the purpose of this study was to determine demographic, psychosocial, and psychiatric differences, based on suicide attempt status, among military inpatients admitted for suicide-related events in order to inform future targeted intervention efforts.

2. Methods

2.1. Case selection

Suicide attempt cases were drawn from electronic medical records (EMRs) obtained from a large U.S. Army hospital. The EMRs are part of a clinical documentation database that houses patient information including care received within military medical facilities. Documentation is provided by psychiatrists, psychologists, social workers, psychiatric nurses, and other clinical staff. All patient records who were admitted for a suicide attempt between the years of 2001 and 2006 were considered for inclusion in the current study. Given the retrospective nature of the study, suicide attempts were defined as specific documentation of behavior with the intention of suicide as a reason for admission in admission notes written by a provider. A total of 463 suicide attempt cases were identified. Out of the 463 suicide cases, suicide attempt status was unable to be determined in 40 cases, therefore a total of 423 cases of suicide attempt were used in the analyses. The suicide attempt cases were a subset of cases selected as part of a larger chart review study conducted including cases of individuals admitted to the inpatient psychiatric unit for suicide ideation, suicide attempt, or an adjustment reaction.

2.2. Measure

This study employed the use of a Microsoft Access electronic medical record coding form developed by Ghahramanlou-Holloway and colleagues and reviewed by an expert suicidologist and other research collaborators [13]. Each chart was coded in five domains: (1) demographic information; (2) military-specific information; (3) suicide behavior information; (4) psychiatric history information; and (5) psychiatric treatment received and diagnoses.

2.3. Procedure

IRB approvals were obtained from all appropriate regulatory boards prior to study commencement. All coding personnel were individually trained on the use of the coding form, data extraction procedures from the EMRs, and on issues pertaining to confidentiality. Coders first conducted a general review of the case and began coding each file during a second review, if the case met inclusion criteria for the study. Of particular relevance to this study was the collection of the number of previous suicide attempts, demographic, psychosocial, and psychiatric variables. Demographic variables collected for this study included age, sex, race/ethnicity, and marital status. Additionally, military pay grade or rank was collected as an indicator of income. Psychosocial variables included (1) interpersonal precipitant for index suicide attempt (i.e., the suicide attempt which lead to the identified psychiatric hospitalization); (2) legal precipitant for index suicide attempt; (3) work related precipitant for index suicide attempt; and (4) history of childhood sexual abuse. Psychiatric variables included (1) substance-related issues (i.e., substance abuse/dependence diagnoses and/or problem substance use; (2) DSM-IV Axis I diagnoses, as documented in the EMR; and (3) DSM-IV Axis II diagnoses, as documented in the EMR.

A random sampling procedure was used in the larger sample to select coded cases for an inter-rater reliability check. For the current sample, the random sampling procedure resulted in approximately 3% of coded cases double coded for an inter-rater reliability check. Reliability for the suicide attempt status variable was high with a kappa coefficient of 0.84.

2.4. Data analytic strategy

Suicide attempt status was divided into two groups consisting of "Single Suicide Attempt" and "Multiple Suicide Attempt". All psychosocial and psychiatric variables were dichotomous yes/no variables. Rarely, if ever, was there explicit evidence in the record that a psychosocial or psychiatric variable did not exist in the individual's life. For this reason all variables coded as "unknown" were recoded as "no". This method of coding restricts our interpretation to mean either, "yes", the coder found evidence in the record pertaining to the existence of this variable or "no", the coder did not find any evidence in record pertaining to the specific variable.

Bivariate analyses using Chi-square (χ^2) tests and Fisher's exact tests (two-tailed) were conducted to determine if relationships exist between suicide attempt status and demographic, psychosocial, and psychiatric factors. In order to reduce the likelihood of making a Type I error; a binary logistic regression was then conducted using variables significant in the bivariate analyses, as well as variables suggested by the suicide attempt literature and clinical relevance (i.e., sex and variables highly prevalent in the sample). The logistic regression was used to determine the best model for explaining the associations between suicide attempt status and the demographic, psychosocial, and psychiatric factors. Analyses were performed using SPSS 19.0 for Windows and SAS 9.3.

Table 1
Cases of suicide attempt demographic characteristics (N = 423).

Characteristics	*n*	%
Demographic		
Age		
17–24 Years	244	57.7
25–34 Years	133	31.4
35–44 Years	37	8.7
45–54 Years	7	1.7
55–64 Years	2	0.5
Sex		
Male	263	62.2
Female	160	37.8
Ethnicity		
Caucasian	272	64.3
African–American	92	21.7
Hispanic/Asian/Other	59	13.9
Marital Status		
Married	152	35.9
Divorced/Separated/Widowed	61	14.4
Never Married	210	49.6
Rank		
E1–E3	203	48.0
E4–E6	183	43.3
E7–E9	15	3.5
O1–O3	12	2.8
O4–O6	9	2.1
Unknown	1	0.2

Ranks of "E" indicate enlisted service members followed by their pay grade, with 1 being the lowest. Ranks of "O" indicate military officers followed by pay grade, with 1 being the lowest.

3. Results

3.1. Descriptive statistics

Of the 423 suicide attempt cases analyzed, 39.5% (n = 167) had a multiple suicide attempt status and 60.5% (n = 256) had a single suicide attempt status. The mean age of the sample was 25.61 years (SD = 7.23) and a large portion of the sample was male (62.2%), Caucasian (64.3%), never married (49.6%), and enlisted service members of the lowest three ranks (E-1 through E-3; 48.0%). Table 1 presents a summary of demographic characteristics of the sample. Well over half of the sample had evidence indicating a trigger or direct precipitant for the index suicide attempt was interpersonal in nature (68.1%) and/or work related (63.6%). Almost the entire sample had documentation of at least one Axis I disorder (95.3%), with mood disorder (53.2%) and adjustment disorder (53.3%) occurring most frequently. A diagnosis of a substance use disorder (30.5%) and indication of problematic substance use (33.85) occurred in approximately one third of the sample. A large portion of the sample had either a personality disorder diagnosis or listing of personality disorder traits (64.1%). Additional details regarding psychosocial and psychiatric characteristics of the sample can be found in Table 2.

3.2. Bivariate analyses

Chi-square analyses were conducted to determine if relationships exist between suicide attempt status (single suicide attempt or multiple suicide attempts) and a number of demographic, psychosocial, and psychiatric variables. Results indicated that none of the demographic variables were

Table 2
Sample cases of suicide attempt psychosocial and psychiatric characteristics (N = 423).

Characteristics	*n*	%
Psychosocial		
Interpersonal Trigger	288	68.1
Legal Trigger	38	9.0
Work Trigger	269	63.6
Childhood Sexual Abuse	86	20.3
Psychiatric		
Alcohol Trigger	47	11.1
Drug Trigger	9	2.1
Problem Substance Use	143	33.8
Mood Disorder	225	53.2
Anxiety Disorder	78	18.4
Adjustment Disorder	225	53.2
Substance Disorder	129	30.5
Other Axis I Disorder	25	5.9
Any Axis I Disorder	403	95.3
Personality Disorder Not Otherwise Specified	101	23.9
Narcissistic Personality Disorder	4	0.9
Dependent Personality Disorder	3	0.7
Borderline Personality Disorder	49	11.6
Axis II Traits	114	27.0
Any Axis II Traits or Disorder	271	64.1

related to suicide attempt status. In terms of psychosocial and psychiatric variables, psychiatrically hospitalized military patients with multiple prior suicide attempts compared with those with a single prior attempt were more likely to demonstrate (1) a documented history of childhood sexual abuse ($\chi^2 = 5.00$, $p = .025$); (2) a documented problem substance use ($\chi^2 = 10.68$, $p = .001$); (3) either an admission or discharge diagnosis of mood disorder ($\chi^2 = 7.98$, $p = .005$); (4) either an admission or discharge diagnosis of substance disorder ($\chi^2 = 3.84$, $p = .050$); (5) either an admission or discharge diagnosis of personality disorder not otherwise specified ($\chi^2 = 5.58$, $p = .018$); and (6) any documented Axis II traits or disorder ($\chi^2 = 4.31$, p = .038). Additional details regarding bivariate analyses can be found in Table 3.

3.3. Test of binary model

All six variables significant in the bivariate analyses were added to the logistic regression model. Additionally, adjustment disorder was included in the model because it was trending toward significance in the chi-square analysis ($\chi^2 = 3.10$, $p = .078$) and because over half of the sample (53.2%) had a diagnosis of adjustment disorder. Given this high prevalence, it was clinically relevant to include adjustment disorder in the model. Although sex and suicide attempt status did not have a significant relationship, sex was related to childhood sexual abuse ($\chi^2 = 34.19$, $p < .001$), problem substance use ($\chi^2 = 7.70$, $p = .006$), a substance disorder diagnosis ($\chi^2 = 7.76$, $p = .005$), and an adjustment disorder diagnosis ($\chi^2 = 3.95$, $p = .047$). For this reason and due to well-established literature on sex differences in suicide attempt prevalence, separate regression models were run for males and females.

3.4. Males

The overall model for males consisted of the independent variables of childhood sexual abuse, problem substance use, substance disorder diagnosis, mood disorder diagnosis, adjustment disorder diagnosis, a diagnosis of personality disorder not otherwise specified, and any Axis II traits or disorder with a dependent variable of suicide attempt status. The model for males was significant ($\chi^2 = 31.91$, $p < .001$). Psychiatrically hospitalized military male patients with multiple prior suicide attempts compared with those with a

Table 3
Frequency of demographic, psychosocial, and psychiatric variables in individuals with a single suicide attempt (n = 256) and multiple suicide attempt (n = 167) in cases of suicide attempt.

Variables	Single Suicide Attempt (n = 256)		Multiple Suicide Attempt (n = 167)		$x^2(1)$	p[a]
	n	%	n	%		
Demographic						
Age	256	61	167	39	–	.902[b]
Male	160	63	103	62	0.03	.864
Race/Ethnicity	256	61	167	39	–	.819[b]
Marital Status	256	61	167	39	–	.552[b]
Pay grade	256	61	167	39	–	.781[b]
Psychosocial						
Interpersonal Trigger	176	69	112	67	0.13	.716
Legal Trigger	26	10	12	7	1.09	.296
Work Trigger	164	64	105	63	0.06	.804
Childhood Sexual Abuse	43	17	43	26	5.00	.025
Psychiatric						
Alcohol Trigger	30	12	17	10	0.24	.622
Drug Trigger	6	2	3	3	–	1.00[b]
Problem Substance Use	71	28	72	43	10.68	.001
Mood Disorder	122	48	103	62	7.98	.005
Anxiety Disorder	41	16	37	22	2.53	.111
Adjustment Disorder	145	57	80	48	3.10	.078
Substance Disorder	69	27	60	36	3.84	.050
Other Axis I Disorder	13	5	12	7	0.81	.369
Any Axis I Disorder	244	95	159	95	0.02	.961
Personality Disorder Not Otherwise Specified	51	20	50	30	5.58	.018
Narcissistic Personality Disorder	1	0	3	2	–	.305[b]
Dependent Personality Disorder	2	1	1	1	–	1.00[b]
Borderline Personality Disorder	28	11	21	13	0.27	.607
Axis II Traits	71	28	43	26	0.20	.653
Any Axis II Traits or Disorder	154	60	117	70	4.31	.038

PD = Personality Disorder; NOS = Not Otherwise Specified.

[a] Chi-square or Fisher's exact tests (for analyses in which the expected count was less than 5 in 20% of cells).

[b] Fisher's exact test.

Table 4
Summary of logistic regression analysis predicting suicide attempt status in male cases of suicide attempt.

Variable	*B*	*SE*	*OR*	95% CI	Wald Statistic	*p*
Childhood Sexual Abuse	0.19	0.43	1.20	[0.52, 2.77]	0.19	.663
Problem Substance Use	0.89	0.31	2.43	[1.31, 4.50]	7.97	.005
Mood Disorder	1.06	0.34	2.88	[1.49, 5.59]	9.83	.002
Adjustment Disorder	0.22	0.34	1.25	[0.64, 2.43]	0.44	.510
Substance Disorder	0.13	0.32	1.14	[0.61, 2.12]	0.16	.688
Personality Disorder Not Otherwise Specified	0.51	0.34	1.66	[0.85, 3.23]	2.24	.135
Any Axis II Trait or Disorder	0.52	0.33	1.69	[0.89, 3.19]	2.58	.108

Note. OR = Odds Ratio; CI = Confidence Interval.

single prior attempt were almost two and a half times more likely to have problem substance use (OR = 2.43, p =.005) and almost three times more likely to have a mood disorder diagnosis (OR = 2.88, p = .002). The remaining variables in the model were not significant predictors of suicide attempt status in males. Table 4 presents a summary of logistic regression analysis for males predicting suicide attempt status.

3.5. Females

A similar regression model was run for females. However, the overall model was not significant (χ^2 = 10.46, p = .164). The only significant variable in the model was childhood sexual abuse; therefore the logistic regression analysis was rerun with childhood sexual abuse as the only independent variable. Childhood sexual abuse was a significant predictor in that psychiatrically hospitalized military female patients with multiple prior suicide attempts compared with those with a single prior attempt were over twice as likely to have a history of childhood sexual abuse than those with a single attempt status (OR = 2.12, p =.027). Table 5 presents a summary of logistic regression analysis predicting suicide attempt status in females.

4. Discussion

Among the cases of suicide attempts, 39.5% (n = 167) had documentation of a multiple suicide attempt history. A number of differentiating factors emerged after examining the characteristics of those with single versus multiple suicide attempt histories. In particular, all psychiatric variables investigated were predictive of a multiple attempt status with the exception of an anxiety disorder diagnosis. Individuals with a documented lifetime diagnosis of a mood disorder, substance use disorder, personality disorder traits, or a personality disorder diagnosis were significantly more likely to have multiple suicide attempts. All of these findings are supported by previous literature indicating multiple attempt status equates to a more severe clinical picture [7,12,14–17].

Moreover, upon further sex stratified regression analyses, substance use and personality disorders or traits did not remain as significant predictors of attempt status when accounting for a mood disorder diagnosis and problem substance use among males. It is possible that these changes in predictability are an artifact of a higher threshold for the diagnosis of substance use disorders and personality disorders. It is likely that most individuals with a diagnosis of a substance use disorder also had indications in their medical record of problematic substance use, but not all problematic substance users were given a formal diagnosis. The diagnosis of a "personality disorder" or "personality disorder traits" in a military setting has a unique set of clinical and professional implications. Given the potential negative outcomes with this diagnosis, it is probable that this diagnosis is given sparingly in the context of short term inpatient hospitalization. Furthermore, it is possible that the presence of a mood disorder is a more salient contributor to the acute suicide related crisis when compared to the trait personality variables that may remain consistent through ones adult life. These differences in state versus trait variables along with the expected decrease in diagnosis rates could account for the predictive significance of mood disorders in the absence of support for documented Axis II pathology as a significant predictor.

Several other single versus multiple suicide attempt studies have found personality disorders to be a significant predictor of multiple attempt status. As the current study was a retrospective chart review, our research team was not able to independently determine a diagnostic classification using a standardized measure. The diagnoses in this study were charted by inpatient providers at a military treatment facility, based on a clinical interview, and then extracted from

Table 5
Summary of logistic regression analysis predicting suicide attempt status in female cases of suicide attempt.

Variable	*B*	*SE*	*OR*	95% CI	Wald Statistic	*p*
Childhood Sexual Abuse	0.750	0.339	2.12	[1.09, 4.11]	4.91	.027

Note. OR = Odds Ratio; CI = Confidence Interval.

electronic medical records. The previously reviewed studies employed some iteration of a researcher determined diagnosis [7,16] or a single personality assessment [12]. Issues such as mental health stigma and/or perceived impact of mental health diagnoses on military career progression may be associated with reluctance on the part of the patient to disclose accurate information and/or the provider to document a more severe diagnosis — both scenarios making the threshold for giving a personality disorder diagnosis higher.

Furthermore, there were no demographic predictors of suicide attempt status within this sample. This finding is not surprising giving the inconsistencies and null findings in the literature on demographic factors. Sex [7,12,15,18], race/ethnicity [7,12], and age [7,8,12,18] have all been non-significant findings in previous work on single versus multiple suicide attempts. Of the psychosocial predictors, childhood sexual abuse was found to be a significant predictor of suicide attempt status. In females, childhood sexual abuse was the single significant predictor of multiple attempt status. Females with a history of childhood sexual abuse were twice more likely to have a history of multiple versus single suicide attempts. This finding is in accord with two studies [e.g., 14,19] that have found childhood abuse to be predictive of a multiple attempt status primarily in females. Similar to what has been explained previously, childhood sexual abuse may not be commonly assessed and/or self-reported in military male inpatients.

Although interpersonal, work-related, and legal stressors were expected to be related to multiple attempt status, the insignificant findings in our study may be related to the nature of the variables collected. The current study used primary and secondary triggers for the index suicide attempt, while Pompili and colleagues [20] used a stressful life events assessment measure, capturing all stressful life events occurring within 6 months prior to the index suicide attempt. It is possible that our limited definition of a suicide trigger or precipitant limited the range of potential triggers accounted for in our analysis.

4.1. Limitations and contributions

Despite the unique nature of this study, there are some limitations to consider. First, this study employed a retrospective chart review methodology; data were extracted from the electronic medical records at a military treatment facility requiring third-party involvement which highlights the potential for recall bias and documentation inaccuracy. The original collection of information was conducted by admitting provider(s) and other medical staff who were not likely to use structured clinical interviews for arriving at the notes placed in charts. Our data were limited by the information the medical team deemed important, what questions were asked, the materials disclosed to these individuals, and subsequently, the information documented in the medical records. Due to this method of data collection, it is possible that information relevant to this study was not gathered. Taken together, any variables coded as "no" or any null findings cannot be interpreted as a non-existence of such variables or differences, but as a non-existence of documentation.

Many of the studies investigating single versus multiple suicide attempt status have employed measures of symptomatology to determine whether individuals with multiple suicide attempts have a greater risk profile associated with subsequent suicide [12]. A limitation of the current study is that specific symptomatology such as hopelessness was not directly assessed by psychometrically robust measures. Instead, only information documented in records of those with a suicide attempt was obtained. As a result, the categorical record review variables can only be expected to provide a narrow perspective on the true characteristics of these individuals. Similarly, the retrospective cross-sectional design does not allow for a direct investigation of a cause and effect relationship, limiting the study's findings in relation to risk factors associated with multiple suicide attempts.

Despite the limitations of this study, there are a number of strengths emphasizing the overall importance of this area of research. At the time of this writing, this is only the second military study to investigate the differing characteristics of suicide attempt history among a psychiatrically hospitalized military population. The study makes use of existing information collected in medical military settings to generate lessons learned. Study findings clearly demonstrate that clinically meaningful psychiatric differences exist among individuals with single versus multiple attempts and have important implications for future research and clinical practice in suicide prevention.

4.2. Future research and clinical directions

Future research on suicide attempt status in the military will be imperative to continue to address this important research gap. First, it would be extremely useful to conduct a direct comparison of military versus civilian samples to fully understand if the single versus multiple suicide attempt status differences found as a result of this research are generalizable to the civilian suicidal individuals. Second, an adequately powered longitudinal study is expected to provide the best design to identify potential differences between single versus multiple attempt status suicidal patients and associated risk as well as protective factors.

One important recommendation for the DoD is to improve the surveillance efforts on suicide attempts, particularly collecting data on single versus multiple attempt status both in the context of suicide death investigations and in the context of behavioral health and primary care. Having accurate knowledge of an individual's suicide attempt history will be critical to conceptualization and delivery of effective treatment. Differences between a first suicide attempt and a second or later attempt exist among individuals, indicating that treatment should also be different for those with differing suicide attempt histories.

To date, there is ample literature indicating that those with multiple suicide attempts versus single attempts present a more severe clinical picture — a factor that may increase risk for eventual death by suicide. One clinical implication may be that the more substantial the symptomatology, the more intense the treatment must be. Therefore, one long-term recommendation is to formulate evidence-informed clinical assessment and practice guidelines that take into account the unique needs of individuals with single versus multiple suicide attempts and deliver services accordingly. However, to move in this direction, additional research in this area is much needed. Furthermore, two additional clinically-related issues must be noted. First, in utilizing a retrospective chart review methodology to look at suicide attempt status in military members, our study team became familiar with documentation practices of medical providers within a selected military inpatient setting. An important piece of information for suicidal patients – specifically their history of suicide-related behaviors – was not consistently commented upon. If documentation does not exist, the general implication is that the information was not collected. Clinically, if documentation does not exist, it may imply that the provider did not assess or failed to document the results of his/her assessment. One important recommendation is that medical treatment facilities develop and implement a structured template to gather pertinent clinical information from every single patient — especially those at risk for suicide and those psychiatrically hospitalized for a suicide-related event. This clinical information can be used to inform treatment providers about both past patterns of behaviors and possible effective future treatment options.

Finally, there is substantial evidence to indicate that differences exist among suicidal individuals with or without a prior suicide attempt. Yet, current clinical suicide risk assessment and management practices continue to primarily focus on the presenting problem and psychiatric diagnosis of the patient. Clinicians, as a result, may be overlooking the various typologies or subgroups that may exist among those who are at risk for suicide and in fact, providing treatment services that are not tailored to the individual psychiatric history-related characteristics of their patients. Future work in enhancing services provided to suicidal patients must involve empirically-supported methods of screening and treating those with and without a suicide attempt history.

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