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Postdeployment Suicidal Ideations and Trajectories of Posttraumatic Stress Disorder in Danish Soldiers: A 3-Year Follow-Up of the USPER Study

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ABSTRACT

Objective: Suicidal ideation in veterans is of great concern. The objective of this study is to examine how heterogeneous posttraumatic stress disorder (PTSD) trajectories are associated with postdeployment suicidal ideation in veterans 2.5 years postdeployment to a combat zone in Afghanistan. If PTSD trajectories are associated with postdeployment suicidal ideations, then the accumulative knowledge on what characterizes veterans falling into different PTSD trajectories may provide better opportunities for early identification of suicidal high-risk veterans.

Method: In this prospective study of 743 Danish soldiers deployed to Afghanistan from February to August in 2009, we collected data at 6 time points from 6 weeks before deployment to 2.5 years after homecoming (total for this study: 456). At all assessments, the soldiers responded to a comprehensive questionnaire including measures of PTSD (measured by the PTSD Checklist, Civilian Version) and other mental and physical health variables, demographics, and social and combat-related factors. Suicidal ideation was measured by an item from the European Parasuicide Study Interview Schedule II. In a previous study based on soldiers from this cohort, we identified 6 PTSD trajectories using latent growth mixture modeling, which we have extracted and applied as independent variables in this study. Adjusted multivariable logistic regression analyses were applied to examine whether deployed soldiers with certain PTSD symptom trajectories were more likely to report suicidal ideation 2.5 years after homecoming.

Results: Two PTSD trajectories with high PTSD symptom level 2.5 years after return were significantly associated with suicidal ideation 2.5 years after homecoming. Thus, a relieved-worsening class, described by initial decreasing PTSD symptom levels followed by a steep increase in symptoms had higher risk of suicidal ideation (OR = 7.84; 95% CI, 1.68–36.6), which was also the case for a late-onset class (OR 5.2; 95% CI, 2.21–12.24) when compared to a low-stable class.

Conclusions: Heterogeneous PTSD trajectories are associated with suicidal ideation in veterans 2.5 years after homecoming.

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Suicidal ideation and behavior in veterans are problems of great concern.[1] From 2001 to 2008 the rate of suicide has risen across services (in particular in the Army) in the US Department of Defense from 10.3 to 15.8 per 100,000 people.[2] Suicidal ideation and behavior are strongly associated with psychiatric disorders,[3,4] including posttraumatic stress disorder (PTSD).[5–10] Especially among people with PTSD, it has been found that co-occurring suicidal ideation increases the likelihood

Clinical Points

- Heterogeneous trajectories of posttraumatic stress disorder (PTSD) were associated with suicidal ideations in veterans 2.5 years after homecoming.
- Screening for PTSD diagnosis at homecoming might not identify those who go on to develop critical PTSD symptomatology and suicidal ideation.
- Cumulative knowledge from future studies on veterans in high-symptom PTSD trajectories might enable early identification of suicidal high-risk veterans.

of suicidal behavior.[11] As veterans are at increased risk of developing PTSD and other mental disorders,[12] it is important to pay attention to the excess risk of progression to suicidal ideations and thus behavior, in particular as it has been noted that veterans to a higher degree than the general population have access to weapons and the knowledge on how to use them.[13]

So far, studies that have established an association between PTSD and suicidality (ideations and/or behavior) have compared the risk of suicidal ideation in people/soldiers with or without PTSD.[5] However, the relation between PTSD trajectories over time and suicidal ideation has, to the best of our knowledge, not yet been investigated. Whereas comparing PTSD cases and noncases provides useful insights on the relation between diagnostic categories and suicidal ideation, investigating relations between long-term trajectories and suicidal ideation gives a more detailed perspective on suicidal ideation as an outcome of heterogeneous fluctuations in traumatic stress responses over time. Lately, increasing evidence points to the existence of heterogeneous, prototypical trajectories of PTSD symptoms in deployed soldiers, and recent efforts in the literature[14–18] suggest that PTSD trajectories might be predictable at an early time point. Hence, we can, in theory, classify which soldiers are most likely to belong to the different PTSD trajectories from predeployment and deployment characteristics. If PTSD trajectories are indeed related to differences in suicidal ideation, as hypothesized in this study, early classification into long-term trajectories enables early identification of suicidal high-risk veterans. Awareness of this could prove useful for early risk assessment and for preventing suicide problems among deployed soldiers.

Recent findings from the USPER study of Danish soldiers have revealed heterogeneous trajectories of PTSD symptoms following deployment,[19] which is in line with studies[14–17] in military cohorts from other nations. Since the USPER study also demonstrated an increase in the prevalence of PTSD and suicidal ideation 2.5 years after homecoming,[20] an examination of the association between PTSD trajectories and suicidal ideation is required, given the above-mentioned higher risk for suicidal behavior in people with PTSD and co-occurring suicidal ideation.

By using data from a prospective, longitudinal soldier cohort (the USPER study), our purpose in this study was (1) to assess the prevalence of suicidal ideation 2.5 years after homecoming in the USPER cohort of Danish soldiers in the previously estimated PTSD trajectories and (2) to examine whether certain PTSD trajectories are associated with suicidal ideation 2.5 years after homecoming from a combat zone in Afghanistan.

METHOD

This study is based on a longitudinal cohort study of 743 Danish soldiers deployed to Afghanistan with the International Security Assistance Force to participate in Operation Enduring Freedom from February to August 2009. Data were collected at 6 time points from 6 weeks before deployment, during deployment, and at homecoming, as well as 3 months, 7 months, and 2.5 years after deployment. The study was approved by The Danish Data Protection Agency. At all assessments, the soldiers responded to a comprehensive questionnaire including measures of PTSD and other mental and physical health issues, demographics, and social and combat-related factors. In a previous study[19] based on the 561 soldiers from this cohort who provided predeployment data, we estimated PTSD trajectories by latent growth mixture modeling (LGMM). Of these soldiers, 456 also responded to suicidality questions at the last assessment 2.5 years after homecoming and were included in the present analysis. Hence, the overall response rate for this study was 61% (456/743).

Analyses of predeployment data comparing time 6 responders and nonresponders indicated that participating soldiers were significantly older and had a higher educational level and rank. Importantly, the analyses showed no significant differences between responders and nonresponders with regard to sex, marital status, alcohol intake, level of depression symptoms, suicidal ideation, or obtainment of psychological or psychiatric help before deployment.

Suicidal Ideation: The Outcome Variable

A selected question from the European Parasuicide Study Interview Schedule II (EPSIS)[21] was used to assess suicidal ideation. The soldiers were asked whether they had experienced suicidal ideation within the last 12 months at the postdeployment assessment 2.5 years after homecoming. The item responses were (1) *never*, (2) *once*, (3) *a few times*, (4) *often*, and (5) *very often*, and these responses were dichotomized into *never* versus *once or more*.

The Independent Variable: The PTSD Trajectory Variable

The PTSD Checklist, Civilian Version (PCL-C)[22] was used to obtain information on PTSD symptom levels at each assessment point. The PCL scale consists of 17 items, and each item is scored from 1 (not at all) to 5 (extremely), and, from these, a total score that ranges from 17 to 85 is computed. The PTSD trajectories based on the PCL were identified in earlier LGMM analyses performed on this soldier cohort using Mplus version 7.1[23] (for more details on the analytic approach, see Andersen et al[19]).

Table 1. The Characteristics of the Soldier Cohort Stratified by the Presence of Suicidal Thoughts 2.5 Years After Homecoming

Characteristic	No Suicidal Ideation (n = 394)	Suicidal Ideation (n = 62)	P[a]
Sociodemographics			
Male, n (%)	373 (94.7)	57 (91.9)	.39
Age, mean (SD) (SEM), y	26.7 (7.5) (0.38)	26.4 (6.0) (0.76)	.77
Living status n (%)			.57
Single	168 (42.6)	29 (48.3)	
Dating but living separately	74 (18.8)	11 (18.3)	
Married/cohabiting	142 (36.0)	20 (33.3)	
Divorced/separated	10 (2.5)	0 (0)	
Without children, n (%)	308 (78.6)	49 (79.0)	.93
Education level, n (%)			**.01**
Secondary school	95 (24.2)	25 (40.3)	
High school	258 (65.8)	29 (46.8)	
Bachelor degree or higher	39 (9.9)	8 (12.9)	
Military variables			
Rank, n (%)			**< .001**
Constable	255 (65.2)	56 (90.3)	
Sergeant	93 (23.8)	3 (4.8)	
Officer	43 (11.0)	3 (4.8)	
Employment status, n (%)			**.014**
Long-term contract	292 (74.7)	37 (59.7)	
Short-term contract	99 (25.3)	25 (40.3)	
Psychological/behavioral variables			
PCL score, mean (SD) (SEM)	21.6 (6.1) (0.31)	25.7 (8.7) (1.10)	**< .001**
BDI score, mean (SD) (SEM)	4.6 (5.1) (0.26)	6.8 (7.2) (0.94)	**.026**
BDI-9 suicidal thoughts, n (%)	10 (2.6)	9 (14.5)	**< .000**
Have seen psychologist/ psychiatrist, n (%)	62 (15.8)	22 (35.5)	**< .000**
No. of traumatic events, mean (SD) (SEM)	10.4 (9.1) (0.65)	15.4 (9.7) (1.74)	**< .000**
Weekly alcohol unit intake, n (%)			.95
< 21 units	363 (93.3)	58 (93.5)	
> 20 units	26 (6.7)	4 (6.5)	

[a]χ^2 test or *t* test.
Abbreviations: BDI = Beck Depression Inventory, PCL = PTSD Check List, PTSD = posttraumatic stress disorder, SEM = standard error of mean.

The previously carried out LGMM analyses identified 6 different classes of PTSD trajectories (see Figure 2 in Andersen et al[19]), with 78.1% of the soldiers falling into the low-stable class, which described soldiers with low levels of PTSD symptom (PCL score < 30) throughout the 6 assessments. The remaining 5 classes showed varying degrees of PTSD symptomatology. Briefly, 2 classes (the mild distress class [4.1%] and the late-onset class [5.7%]) had low levels of PTSD symptoms (mean PCL score < 30) at the predeployment assessment, whereas 3 classes (the low-fluctuating class [7.5%], the relieved-worsening class [2.0%], and the distressed-improving class [2.7%]) had moderate levels of PTSD symptoms (mean PCL score range, 30–43). At the last assessment 2.5 years after homecoming, the relieved-worsening class and the late-onset class both had high levels of PTSD symptoms (mean PCL scores above 43).

The Covariates

All covariates were obtained from self-report measures at the predeployment assessment and entered into the model to ensure that any significant association between PTSD trajectories and the outcome measure on suicidal ideation were not explained by other known predeployment risk factors of suicidal ideations. Soldiers provided information on sociodemographics such as gender, age, marital/cohabitation status, parenthood status, education level as well as military-related factors on rank (constable versus sergeant/officer), and employment status that indicates permanent or short-term employment at the time of deployment. Short-term hired soldiers are those who have been through a 1-year military educational training and, in most cases, these have 1 or 2 deployments and then leave The Danish Defense to return to civilian life. Predeployment psychological and/or behavioral problems were also evaluated through measures of depression symptoms (Beck Depression Inventory-II [BDI-II]),[24] whether they had ever received help for psychiatric or psychological problems, had suicidal ideation as measured by item 9 in BDI-II, experienced earlier traumatic events,[25] or had excessive drinking behavior (> 20 units of alcohol per week).

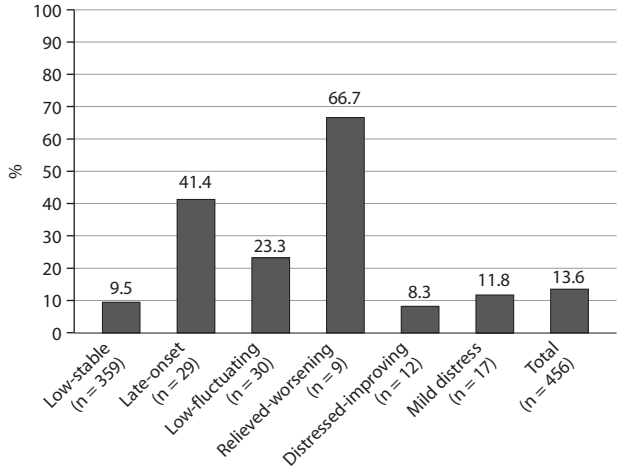
Statistical Analyses

To examine whether any of the 6 identified latent trajectories of PTSD were associated with suicidal ideation, we introduced presence or absence of suicidal ideation as the dependent variable in a logistic regression model, with the most likely class membership from the LGMM as the independent variable. Recent simulation studies have suggested that, for LGMM models with high entropy (> 0.80), outcome estimation based on most likely class membership is a viable alternative to including the outcome in the LGMM model.[26] Since our model had very high entropy (0.93), we computed odds ratios (ORs) for the latent classes on the outcome (suicidal ideation) based on the most likely class membership. In the logistic regression model, we also included covariates known to be associated with suicidal ideations to test the strength of association, if any, between different trajectories of PTSD and postdeployment suicidal ideation. Univariable and multivariable logistic regression analyses were applied to examine whether any of the fluctuating PTSD symptoms classes were more likely to report suicidal thoughts compared to the low-stable class. The multivariable analyses were carried out with backward elimination and included variables from the univariable analyses that were significant at the *P* value less than .10.

RESULTS

Table 1 shows the characteristics of the soldier cohort stratified by the presence of suicidal thoughts 2.5 years after homecoming. The proportion of male/female subjects, mean age, living status, parenthood status, and excessive drinking did not differ markedly between those with suicidal thoughts and those without. In general, the characteristics table shows that the cohort in overall demographic terms can be described as a rather young, male, and single population. As no one with suicidal thoughts fell into the category of being divorced/separated and the proportions of the other categories seemed not to differ between those with or without suicidal thoughts,

Figure 1. Percentage of Soldiers With Suicidal Ideation During 12 Months Before Last Assessment in Total and by Posttraumatic Stress Disorder Trajectory Class



it was consequently decided that living status would not be modeled in the logistic regression analyses. The prevalence of soldiers with the lowest educational level was higher in soldiers with suicidal ideation, which is consistent with findings on suicidal behavior in the Danish background population.[27]

Among the 456 soldiers, 13.6% (n = 62) had contemplated suicide 2.5 years after homecoming. More than half (52%) of those had thought of suicide more than once. The proportion with suicidal ideation differed greatly between the 6 classes of PTSD trajectories (χ^2 test; $P = .000$), as shown in Figure 1. In 3 classes (low-stable, distressed-improving, and mild distress), largely 10% of soldiers reported having thoughts of suicide, whereas, in the low-fluctuating class, this proportion was 23%. In the late-onset class and the relieved-worsening class, as many as 41% and 67% reported suicidal thoughts, respectively.

The results of the logistic regression analyses are shown in Table 2. We initially conducted a range of univariable analyses, the first one with the class variable as independent variable. We found that the soldiers falling into the classes of relieved-worsening (OR = 19.1; 95% CI, 4.57–79.9), low-fluctuating (OR = 2.91; 95% CI, 1.16–7.28), and late-onset PTSD (OR = 6.75; 95% CI, 2.98–15.3) had significantly higher risk of suicidal thoughts compared to soldiers in the low-stable class. The univariable analyses of demographic and psychosocial variables as independent variables also revealed significant associations to suicidal ideation, thus indicating that many variables known from research in civilian samples are also related to suicidal ideation in soldiers.

The multivariable logistic regression analyses showed that, when adjusted for the variables with significant univariable associations, the class variable was still statistically significantly associated with suicidal ideation 2.5 years after homecoming. Thus, the relieved-worsening class and the late-onset class had an OR equal to 7.84 (95% CI, 1.68–36.6) and OR equal to 5.2 (95% CI, 2.21–12.24), respectively, compared to the low-stable class. The final model was significant ($P = .000$) and showed a sensitivity of 14.5% and a specificity of 99.0%, with an overall prediction rate on 87.5%. The Nagelkerke (pseudo) R^2 showed that the model explained 22% of the variance. The final model included the variable rank, as it seemed to explain some of the variance and improve the model estimates, but the variable itself did not picture any significant difference in risk of suicidal ideation between the categories of constables and sergeant/officers.

DISCUSSION

The prevalence of suicidal ideation 2.5 years after homecoming was 13.6% in the total sample. Two classes showed especially high prevalence of suicidal thinking, with 66.7% in the relieved-worsening class and 41.1% in the late-onset class. The adjusted analyses indicated that these 2 classes also had a statistically significantly higher risk of suicidal ideation compared to the low-stable class.

In the scientific literature, the prevalence of suicidal ideation in deployed soldiers has been estimated to lie between 3% and 16%.[7,28–33] This variation is partly explained by dissimilar veteran cohorts, varying observation time since deployment, and differing ways of assessing suicidal ideation. To the best of our knowledge, there is yet no clear picture of how widespread suicidal thoughts are among soldiers who have deployed to a conflict zone. The prevalence of 13.6% reporting suicidal thoughts within the last year among Danish soldiers is twice as high compared to the 1-year prevalence of 7% in the Danish background population.[34] However, among younger male Danes in the age groups between 16–24 years and 25–44 years, the 1-year prevalence of suicidal ideation has been estimated to be 13% and 9%, respectively, which may be more comparable to the military cohort when taking the low mean age of the sample into consideration. As previously mentioned, the prevalence of suicidal ideation and PTSD has increased in the USPER cohort soldiers after deployment, but so far this does not seem to have affected an increase in suicidal behavior, as only 3 persons reported a nonfatal attempt and no death by suicide occurred.

The logistic regression analyses showed that, relative to the low-stable class, the risk of suicidal ideation was significantly higher in the 2 classes (relieved-worsening and late-onset) that were also described as having the highest mean PTSD symptom level at the last assessment. This finding was not surprising, as suicidal thoughts are strongly associated with present mental health problems. However, this analysis of PTSD trajectories provides a comprehensive clinical picture of how PTSD symptoms evolve over time prior to developing suicidal ideation. Importantly, our analysis shows that screenings at homecoming to determine PTSD diagnostic status might not identify those who go on to develop critical PTSD symptomatology and suicidal ideation. Indeed, the 2 groups with high prevalence of suicidal ideation in our study had very low levels of PTSD symptoms at homecoming and hence would not have been detected as at-risk individuals at homecoming screenings. It thus remains a central challenge to the field to identify individuals who might not show initial

Table 2. Univariable and Multivariable Associations Between Posttraumatic Stress Disorder (PTSD) Class Variables and Suicidal Ideations in Deployed Soldiers 2.5 Years After Homecoming

Characteristic	Univariable, OR (95% CI)	Multivariable, OR (95% CI)
Class variable		
Low-stable	1	1
Late-onset	**6.75 (2.98–15.3)****	**5.2 (2.21–12.24)****
Low-fluctuating	**2.91 (1.16–7.28)***	2.07 (0.80–5.38)
Relieved-worsening	**19.1 (4.57–79.9)****	**7.84 (1.68–36.6)****
Distressed-improving	0.87 (0.11–6.94)	0.52 (0.06–4.51)
Mild distress	1.28 (0.28–5.81)	0.90 (0.18–4.48)
Sociodemographics		
Gender		…
Female	1	
Male	0.6 (0.23–1.77)	
Age	0.99 (0.96–1.03)	…
Children		…
No	1	
Yes	1.03 (0.53–1.98)	
Education level		
Secondary school	1	NS
High school	**0.43 (0.24–0.77)****	
Bachelor degree or higher	0.78 (0.32–1.88)	
Military variables		
Rank		NS
Sergeant/officer	1	
Constable	**4.46 (1.99–10.0)****	
Employment status		NS
Long-term contract	1	
Short-term contract	**1.99 (1.14–3.48)***	
Psychological/behavioral variables		
PCL score	**1.07 (1.04–1.11)****	…
BDI score	**1.07 (1.02–1.12)****	NS
BDI-9 suicidal thoughts		
No	1	1
Yes	**6.49 (2.52–16.7)****	**3.65 (1.24–10.7)***
Have seen psychologist/psychiatrist		NS
No	1	
Yes	**2.94 (1.63–5.28)****	
No. of traumatic events	**1.05 (1.03–1.08)****	**1.02 (1.00–1.03)***
Weekly alcohol unit intake		
< 21 units	1	…
> 20 units	0.96 (0.32–2.86)	

*$P < .05$.
**$P < .01$.
Abbreviation: BDI = Beck Depression Inventory, NS = independent variable nonsignificant in final multivariate analyses, PCL = PTSD Check List.
Symbol: … = Not modeled in multivariate analyses.

symptomatology but nonetheless are at the highest risk for suicidal ideation according to our results. In a screening or preventive context, the high risk of suicidal ideation in the relieved-worsening class and the late-onset class after 2.5 years could potentially be identified early by the advancing research on classifying which soldiers are most likely to belong to which PTSD trajectory by predeployment and deployment characteristics.[14–18] For example, both the relieved-worsening class and the distressed-improving class were characterized as having a rather high PTSD symptom level before deployment. Thus, if it is possible to differentiate the relieved-worsening class from the distressed-improving by predeployment characteristics, this knowledge may eventually be used to improve the selection procedure of soldiers who are mentally fit to be deployed to a conflict zone. Dickstein et al[15] also identified a trajectory similar to our distressed-improving class and suggested from evidence in their data on stress-reactivity that the high predeployment level of PTSD symptoms in these soldiers may be better explained by a stress-reactive disposition than by actual preexisting PTSD.[15] In other words, the high level of predeployment stress may originate from causes other than trauma in this class. We did not have data on stress reactivity to test this hypothesis; however, it seems plausible that the reported predeployment high "stress symptoms" in our relieved-worsening class and the distressed-improving class may originate from differing causes or differing population characteristics, as they fluctuate in complete opposition to one another in PTSD symptom levels over time after the predeployment assessment. Future research examining this in more detail could bring knowledge on whether these trajectories really do represent different phenomena, ie, that the trajectories represent subpopulations with differing characteristics. Moreover, if these PTSD trajectories represent different phenomena as argued above, it would also seem reasonable in future studies to strive toward differentiating soldiers in the low-stable class from soldiers in the late-onset class, as they both show very low PTSD symptom levels predeployment. Until now, the emergent research on PTSD trajectories has showed that those with delayed onset of PTSD are more likely to have experienced predeployment traumas, notably childhood adversities[18] and high levels of daily hassles during deployment, depression at predeployment, and alcohol use[15] compared to soldiers in the low-stable class.

Overall, even if it proves difficult to characterize soldiers belonging to the identified heterogeneous PTSD trajectories, this study has provided better knowledge on how the PTSD symptom level fluctuated in those with the highest risk of suicidal ideation 2.5 years postdeployment. In practice, the clinical interview should focus on obtaining a detailed picture of how the soldiers' PTSD symptoms have evolved until now and add this information in a clinical assessment of suicidal risk.

This study was based on a rather large soldier cohort (n = 743) who participated in a comprehensive self-report, questionnaire-based survey. The response rate was moderately high on 61% after 2.5 years postdeployment, and the missing analyses indicated that those participating did not differ from nonparticipators with regards to important psychiatric/psychological predeployment measures as well as the presence of suicidal ideation. However, the results of the logistic regression analyses show wide 95% CIs in some cases, indicating that analyses were affected by power problems due to very low numbers of soldiers in some of the PTSD trajectories. In the analyses, suicidal ideation was dichotomized into *never* versus *once or more.* Including those who had thought of suicide only once last year could be considered including too many in the risk category representing those with suicidal ideation. Hence, we ran the regression analyses combining thinking of suicide

never/once versus *more times* to test whether the difference between classes would still be significant if we made a more conservative outcome measure of suicidal ideation. These analyses showed the same significant differences, indicating that soldiers in the relieved-worsening and late-onset classes probably have more than fleeting thoughts of suicide.

In this study, the outcome measure was suicidal ideation, which is a more prevalent phenomenon than suicidal behavior, the latter being our preferred measure of suicidality. However, major changes in suicidal behavior would probably have been detectable only in a much larger cohort sample or with a longer follow-up period. Furthermore, as the present study represents secondary analyses on a longitudinal dataset, some of the independent variables in the logistic regression model were chosen due to lack of better measures. For instance, a predeployment assessment of suicidal ideation equal to the suicidal ideation measure applied after deployment would have been optimal. However, such a measure was not assessed predeployment, and we therefore utilized the at-hand measure, BDI, to address suicidal ideation predeployment.

CONCLUSION

In summary, even if prediction of which soldier is likely to be part of which PTSD trajectories in future studies will turn out to be weak, this study has added detailed evidence on how the PTSD symptom picture evolved in those soldiers who had the highest risk of suicidal ideation 2.5 years after deployment. This information may help the clinician be alert to suicidal issues if a veteran describes a course of PTSD symptoms that seems to head in the direction of the late onset or the relieved-worsening trajectory.

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Posttest

To obtain credit, go to PSYCHIATRIST.COM **(Keyword: September) to take this Posttest and complete the Evaluation.**

1. In this cohort of veterans who had been home for 2.5 years after serving in a combat zone in Afghanistan, 14% had contemplated suicide within the past 12 months. When those with suicidal ideation were stratified by educational level completed, which group had a significantly *lower* rate of suicidal ideation than the others?

a. Bachelor degree or higher

b. High school

c. Secondary school

d. No difference was found by education

2. Among veterans in this cohort, 65% were ranked as constables, 24% were sergeants, and 11% were officers. Among those with suicidal ideation, 90% were at which rank?

a. Officer

b. Sergeant

c. Constable

d. No difference was found by rank

3. When posttraumatic stress disorder (PTSD) symptomatology was measured at 6 time points from predeployment to 2.5 years after homecoming, 6 PTSD trajectories were found. Which of the following statements about these trajectories is *true*?

a. The 2 trajectories that had the highest mean PTSD symptom level at the last assessment were the relieved-worsening group and the late-onset group

b. The low-stable trajectory showed low levels of symptoms at all time points, but this group had the fewest members of all of the trajectories

c. The mild distress trajectory showed mid-level symptoms at all time points

d. Veterans with the highest level of PTSD symptoms at homecoming also had the highest level of symptoms after 2.5 years

4. Several of your patients are veterans who came home from serving in a combat zone a little over 2 years ago. Using their scores on the PTSD Checklist, Civilian Version, in whom do you most expect to find suicidal ideation?

a. Mr A, who scored 50 at homecoming but then experienced a decline in symptoms (current score 20)

b. Mr B, who has chronically had low levels of PTSD symptoms since before deployment (scores of 17–25)

c. Mr C, who experienced a moderate level of symptoms (score 41) before deployment, had a low level (score 27) at homecoming, and has a high level now (score 62)