

Suicidal ideation or non-suicidal self-harm? A mismatch between the DSM-IV criterion and PHQ-9 item nine

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Background

- People with diabetes are almost twice as likely to experience depression as the general population, and comorbid diabetes and depression is associated with suboptimal self-care and health outcomes¹
- International guidelines recommend routine screening for emotional distress in people with diabetes so that common problems, including depression, can be detected and treated
- The 9-item Patient Health Questionnaire (PHQ-9)² is a commonly used screening tool for this purpose

The problem with the PHQ-9

- According to its developers, the PHQ-9 constitutes “the actual nine criteria upon which the diagnosis of DSM-IV depressive disorders is based”²
- We query this claim, as item nine does not assess suicidal ideation alone
- The PHQ-9 asks for the frequency with which respondents have experienced the nine diagnostic symptoms of depression over the past two weeks (0=not at all; 3=almost every day)
 - Items are summed to form a total score (range: 0-27)
- Item 9 is intended to assess suicidal ideation, defined in the DSM-IV as “recurrent thoughts of death (not just fear of dying), recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide”³
- However, the wording of item 9 (“thoughts that you would be better off dead or of hurting yourself in some way”) reveals a mismatch with the diagnostic criterion
 - The item assesses both thoughts of death/suicide *and* self-harm, without distinguishing between them
- “Thoughts of self-harm” is not a DSM-IV diagnostic criterion for depression

Interpretation difficulties due to the wording of item 9

- The poor wording of item 9 causes interpretation difficulties, illustrated in Table 1 using data from the Australian⁴ and Dutch⁵ Diabetes MILES studies (N=7019)
 - The Diabetes MILES studies were national surveys of people with diabetes about psychosocial and behavioral aspects of living with the condition
- 10% (n=701) of participants endorsed item 9 (indicated by a score ≥ 1) (Table 1)
 - Of those, 29% (n=206) did not meet the criteria for (sub-threshold) depression based on their PHQ-9 total score (≥ 10)
- It is possible that these people have suicidal thoughts as a result of other physical condition(s) or mental disorders (e.g. personality disorder)
- However, it seems more likely that many are responding to the “hurting yourself in some way” portion of the item, and are having non-suicidal thoughts of self-harm (e.g. cutting), which is not exclusively associated with mental illness, and occurs in nonclinical populations⁶
- This may explain the unexpectedly large size of this group

Table 1. Participants meeting/not meeting criteria for depression in the group endorsing PHQ-9 item 9, stratified by diabetes type

	Endorse PHQ-9 item 9* (“thoughts that you would be better off dead or of hurting yourself in some way”)		
	Type 1 diabetes n=284	Type 2 diabetes n=417	Total n=701
Meet criteria for depression [#]	199 (70)	296 (71)	495 (71)
Do not meet criteria for depression [^]	85 (30)	121 (29)	206 (29)

*Item score of >0. [#]PHQ-9 total score of ≥ 10 (possible score range 0-27). [^]PHQ-9 total score of <10.



Diabetes
MILES
Study

The Diabetes MILES Study is an international research initiative that constitutes national surveys of people with diabetes in different countries. The surveys focus on the psychological, social and behavioural aspects of living with the condition.

Discussion and conclusions

- The concerns outlined here apply to use of the PHQ-9 in any population, and authors outside the diabetes field have previously noted some of these issues^{7,8}
- Our large scale Diabetes MILES dataset has enabled confirmation of this problem in an international dataset
- In clinical practice, health professionals need to be aware of the need for careful interpretation of responses to item 9, to minimise over-estimation of depressive symptoms and, in particular, suicidal ideation
- Future research needs to assess the strength of the correlation between scores on PHQ-9 item nine and true suicidal ideation in a diabetes population

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