

The ABC profile of the HAM-D₁₇

O perfil ABC da HAM-D₁₇

With the introduction of the new classification systems of psychiatric disorders (ICD-10 and DSM-IV) two decades ago it became impossible to distinguish between primary and secondary (stress-related) depression¹.

The stimulus-response models for both PTSD (one single, severe life event) and for exhaustion depression (multiple distressing life events) are placed within the anxiety disorders in the ICD-10 and DSM-IV, although the delayed distress response in these syndromes often progresses into the full clinical picture of depression when untreated. The most internationally valid measure of depressive states is the Hamilton Depression Scale (HAM-D₁₇)¹.

Figure 1 shows how the 17 items in the HAM-D can be re-allocated following the triangle corners so that “A” covers the core items of the depressive state (HAM-D₆), while “B” covers the unspecific stress (arousal) items with reference to Selye’s original definition of stress as the non-specific response of the body to any demand made upon it². Finally, “C” covers the items of suicidal thoughts and lack of insight. In a patient with primary or secondary depression, suicidal thoughts are often activated if there is a lack of insight on the part of the patient into his disorder³.

When Hamilton developed his scale⁴, he consulted Kraepelin’s original description of primary depression (manic-depressive illness), as well as Kraepelin’s description of secondary depression (exhaustion depression). However, Hamilton also made focus-interviews with his depressed patients and their relatives⁴. This was the background for his selection of the 17 items in the HAM-D.

Psychometric analyses with either principal component analysis or item-response theoretical models⁵ have shown that the HAM-D₆ (A in Figure 1) is a valid measure of depression and thereby the most specific outcome measure of the effect of antidepressant medication.

When evaluating the specific antidepressive effect of an intervention we need to focus on the HAM-D₆¹. The theoretical score range of the HAM-D₆ goes from 0 to 22, whereas the theoretical score range of the whole HAM-D₁₇ goes from 0 to 52. In other words, the explained variance of the HAM-D₆ theoretically covers no more than approximately 40% of the HAM-D₁₇. In patients with major depression, however, the HAM-D₆ typically explains over 50% of the total score of the HAM-D₁₇. For instance, in the STAR*D study the HAM-D₆ explained 53% of the variance in the baseline data set⁵.

The nine items covered by the HAM-D₉ (B in Figure 1) measure the unspecific stress reaction in the body. Antidepressants with antihistamine effects are often superior to selective serotonin reuptake inhibitors (SSRIs) on the HAM-D₉ items⁵. Activation of the hypothalamic-pituitary-adrenal (HPA) axis resulting in high cortisol levels in the body is a dysregulation that accompanies depression as an unspecific reaction, i.e., it should not be seen as the cause of primary depression. In the STAR*D study, the HAM-D₉ explained 41% of the variance⁵.

The discussion about the risk of suicide during initial SSRI treatment of depressed patients might be an activation on the HAM-D₉ compared to the HAM-D₆. When prescribing SSRIs, it is therefore important to assess the ABC profile of the HAM-D₁₇. In the daily routine therapy of patients with depressive illness the most valid way to monitor outcome is the ABC profile.

For the untrained young doctors educated in the use of the HAM-D₁₇, the ABC profile is a simple way of recalling how the items in the HAM-D₆, HAM-D₉, and HAM-D₂ are best applied. The interview is recommended to start from corner B, as these unspecific symptoms are easiest to capture, and then go on to A and finish with C. Actually, this order is also the way in which the spontaneous PTSD syndrome develops. During the first weeks, the HAM-D₉ symptoms develop, and after some months the symptoms covered by the HAM-D₆ appear. In PTSD cases that do not remit, symptoms in the HAM-D₂ should be carefully assessed.

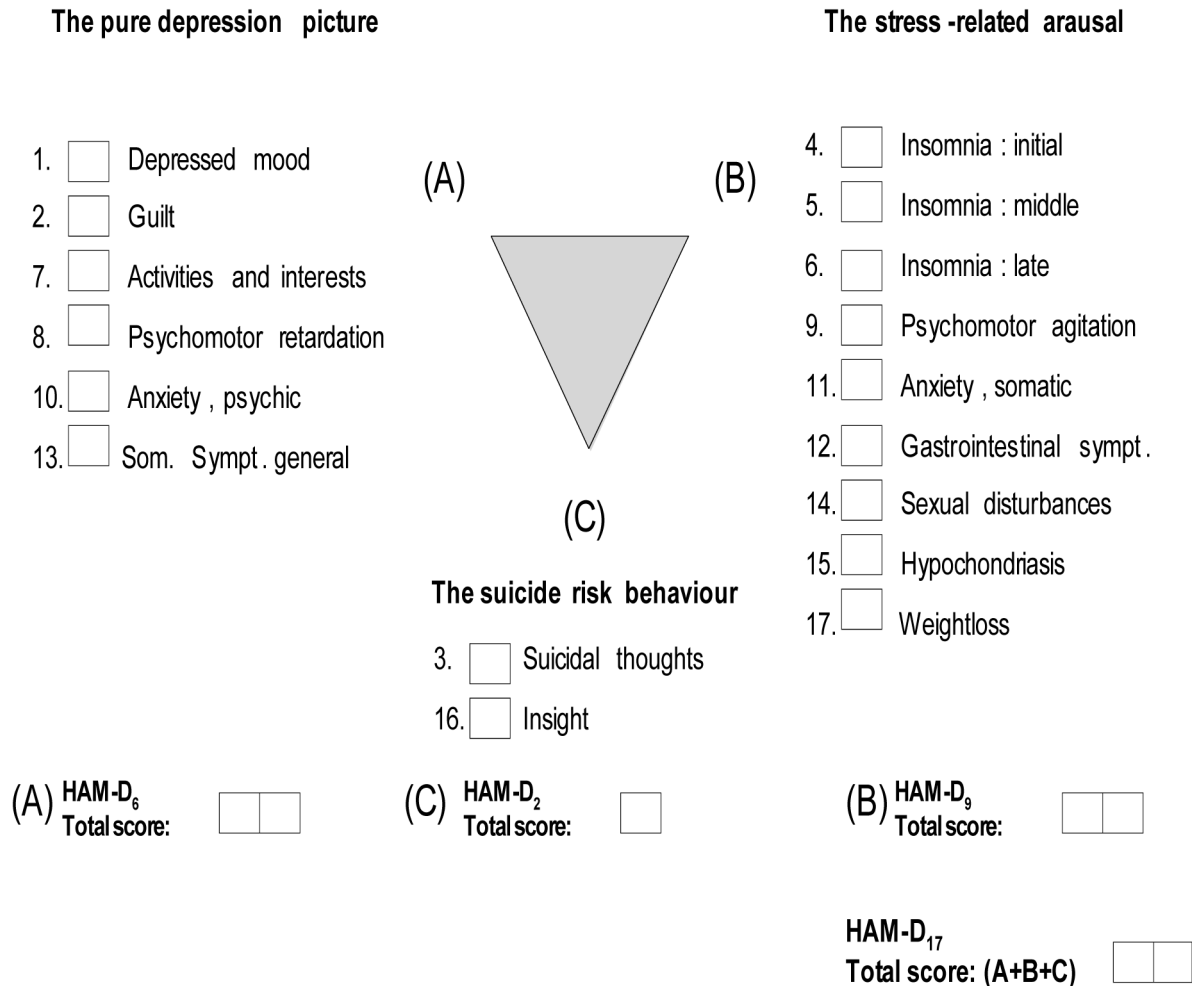
The use of the ABC profile in the HAM-D interview shall give the depressed patient a feeling of relief as the interviewer seems to be thoroughly familiar with the kind of illness that confronts him and to be acquainted with the kind of feelings and thoughts that depression brings to the patient. This is a vital start of the treatment process in the patient-doctor relationship. The evaluation of the HAM-D₉ items (unspecific arousal items) is important when measuring outcomes of antidepressive treatment because they might overlap with the side-effects of the medication prescribed. The use of a scale for the assessment of tolerable versus intolerable side-effects as in the STAR*D study is an important supplement to the ABC profile of the HAM-D₁₇.

Per Bech

Psychiatric Research Unit
Mental Health Centre North Zealand

Figure 1

ABC-version of the Hamilton Depression Scale (HAM-D)



Disclosures

Writing group member	Employment	Research grant ¹	Other research grant or medical continuous education ²	Speaker's honoraria	Ownership interest	Consultant/ Advisory board	Other ³
Bech P	-	-	-	-	-	-	-

* Modest

** Significant

*** Significant: Amounts given to the author's institution or to a colleague for research in which the author has participation, not directly to the author.

For more information, see Instructions for Authors.

References

1. Bech P. Struggle for subtypes in primary and secondary depression and their mode-specific treatment or healing. *Psychother Psychosom.* 2010;79(6):331-38.
 2. Selye H. The evolution of the stress concept. *Am Sci.* 1973;61:692-699.
 3. Bech P, Olsen LR, Nimeus A. Psychometric scales in suicide risk assessment. In: Wasserman D, editor. *Suicide - an unnecessary death.* London: Martin Dunitz; 2001. p.147-158.

4. Bech P. Fifty years with the Hamilton scales for anxiety and depression. A tribute to Max Hamilton. *Psychother Psychosom.* 2009;78(4):202-211.
 5. Bech P, Fava M, Trivedi MH, Wisniewski SR, Rush AJ. Factor structure and dimensionality of the two depression scales in STAR*D using level 1 datasets. *J Affect Disord.* In press 2011.