Diagnosing Depression

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The feeling of depression is one of the most ubiquitous symptoms of disease. Depression is generally judged to be appropriate or not appropriate. An appropriate depression is one where it accompanies or follows any physical condition such as a coronary, a serious infection, and so on. It may also follow severe misfortune, tragedy, and so on. If, however, a person is depressed in the absence of any environmental factors or in the absence of physical disease of the usual kind, then one can judge the depression to be inappropriate and it may become labeled as a disease. The patient is then said to have one of the variants of depression, i.e., endogenous, reactive, involutional, and so on.

However, in many patients it is difficult to determine whether environmental causes are severe enough to be responsible for the depression, or' whether there is a coexisting physical illness which is responsible. Conversely it is possible to suffer from depression without the patient being aware he is depressed. This does not mean that the patient is not suffering from acute discomfort, but this may be described as being anxious, worried, tense, restless, excessively tired, or having severe pain somewhere, like headache, backache. These patients may deny feeling sad or depressed, perhaps because they have suffered from their discomfort so long that they have no reference base, i.e., they cannot remember when they felt differently, or because they have no reason to be depressed and have accepted it as fact that depression must always follow trauma, misfortune, or tragedy.

It would, therefore, be very helpful to the physician to use a simple test which can indicate whether depression is present.

Several tests are now available. Of these, one developed by Popoff (1969) was distributed widely in Canada by Geigy, Dor-val 780, Quebec. Apparently very few physicians were impressed with the test, perhaps because they did not use it, or if they did, did not follow up with specific treatment for the depression. The Popoff test consists of 15 sets of three statements. The subject checks that statement which best describes his own symptoms. The first set of questions contains the following statements:

1. (O) Everything is an effort
   (H) I have a lot of energy
   (C) Maybe I am just getting older

If the patient is aware of his depression he will check off the first item which is a direct statement or an overt statement. If he does not equate depression with his feeling, he may check off the last statement. This indicates that he is aware he is not as active as he was, but considers this a normal function of aging. This is a covert statement. If he is not depressed, he will check the second statement. Each triad of statements is similarly constructed. The test is scored by

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adding the overt plus covert responses. Thus the maximum possible response is a score of 15, and the minimum score is 0. Out of a series of 171 patients Popoff found the following scores:

Depression from 96 between 10-15	**93 scored**
Anxiety reaction from 38 below 10	**All scored**
Normal controls from 37 under 5	**All scored**

The test takes a few minutes and is easily scored. It is a good test and deserves much wider use, because when depression is present there are a variety of good antidepressant programs which can substantially help the patient.

If this test, which correlates highly with depression clinically, also correlates highly with another test constructed differently, then both tests are shown to have more validity. Over 15 years ago Hoffer and Osmond (1961) constructed a simple card sort test which is a valuable aid in diagnosing schizophrenia (see Kelm et al., 1975). This test relies heavily on perceptual and thinking disorder symptoms and has 18 questions which plumb various aspects of depression. The test is scored by simply adding up the number of depression cards which are placed in the true box by the patient. It ranges from 0 to 18. This test is called the HOD test and is now used widely. Several thousand test kits have gone into use in North America, and it has been translated into several other languages. Since I frequently use the HOD test, it became possible to compare the depression score (hereafter DS) on the HOD against the score on the Popoff test.

Method

A series of patients in various phases of their psychiatric illness from initial contact to recovery were given both tests. No selection was made except that children were not tested. A few of the patients (N = 14) were seen for their last interview and were well. A large number were women seeking a therapeutic abortion. The remainder were depressed either with no other main symptoms, or as a result of being schizophrenic.

Results and Discussions

The mean age of the 94 patients was 28.3 (range 16-59 years). Of the group 76 were female. The mean DS (HOD test) was 8.2. Using the Popoff test the mean overt score was 6.71, the mean covert score 4.8, and the mean total score 11.5. The last score agrees with Popoff, whose pathological range was 10 to 15.

I then examined the individual scores using the published cutoff ranges as shown below.

Number of Patients Showing Scores Indicated

	Popoff Scores		**Total**
	0-9	10-15	
HODscores 0-3	19	3	22
Over 4	6	66	72
Total	25	69	94

It is amply clear that there is a significant and high correlation between both tests. This is so obvious that no statistical test is required.

Comparing the depression scores against each other, I found the following results:

1. **Depression (overt plus covert) on Popoff against DS (HOD).** Plotting DS (HOD) on abscissa with scores ranging from left to right and Popoff score on ordinate with scores running up the page, the line relating these scores was curvilinear, going up steeply at low DS (HOD) and then flattening out sharply at high DS (HOD) scores. The correlation was significant and on inspection was high.
2. **Covert depression and DS (HOD).** When this was done there was near-zero correlation indicating that the covert questions had no significant discriminant ability.
3. **Overt depression and DS (HOD).** Here there was a straight line relationship between these scores which cut the Y axis at 2 when X was O and Y was 10 when DS (HOD) was 12. The correlation on inspection was very high.

It is clear that both tests are very useful diagnostic tests and reinforce each other's validity. It is also clear that the covert questions are not particularly helpful and could easily be left out, but they do no harm, and in a few cases can be very helpful. This reinforces a belief I have long held

that direct (overt) questions of patients are more useful in obtaining information than are covert (indirect) questions. This may be surprising to many psychiatrists.

Since both tests are equally useful in measuring depression, then the HOD is to be preferred since it yields a vast amount of other data which is helpful in diagnosing schizophrenia and other perceptual conditions like delirium tremens, hallucinogenic reactions, etc. A number of general practitioners are using the HOD test in this way with great success. They have found it very valuable in indicating early schizophrenia and/or depression, and as a result have been able to initiate treatment early.

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