

THE SDDS-PC™: A NOVEL DIAGNOSTIC PROCEDURE
FOR MENTAL DISORDERS IN PRIMARY CARE

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INTRODUCTION

Recent developments in the organization of primary care have restricted patient access to specialty mental health services. As a result, primary care physicians increasingly find themselves as the sole providers of mental health care. In this context, strategies to improve the diagnosis of mental disorders become vital to the delivery of high quality clinical care.

Several screening questionnaires have been developed to facilitate the recognition of mental disorders in primary care. Many of these questionnaires are limited to distress which is independent of a specific diagnosis (e.g. Goldberg, 1972) or to a single disorder, such as depression (e.g. Zich et al, 1990). Only a few efforts have been made to screen for multiple mental disorders in primary care.

The Symptom Driven Diagnostic System for Primary Care (SDDS-PC™) was developed to improve the detection, diagnosis and ongoing management of mental disorders in primary care practice. This paper summarizes the conceptual development, operation, and scientific foundation of the SDDS-PC™. A full description of the SDDS-PC™ is provided elsewhere (Broadhead et al., in press, Weissman et al., submitted).

SDDS-PC™ CONCEPTUAL DEVELOPMENT

The concept of developing a technology to screen for multiple mental disorders in routine primary care practice was first discussed publicly in Chicago on June 12, 1991 at a joint meeting of representatives from the American Medical Association (AMA), the American Psychiatric Association (APA), and the committee developing the primary care edition of the Diagnostic and Statistical Manual, fourth revision (DSM-IV-PC). At that meeting,

encouragement was given to the SDDS-PC™ project and criteria for its development were established. Specifically, the general belief was that for a diagnostic system to have maximum utility in primary care, it should be "user friendly" for both the patient and the physician, and should not disrupt normal office procedures. It was advised that such a system avoid any semblance of "cookbook" medicine, but focus rather on assisting the physician in making a timely and accurate diagnosis while not interfering with physician prerogatives in diagnosis or treatment. The subsequent development of the SDDS-PC™ has been guided by these early recommendations.

COMPONENTS OF THE SDDS-PC™

SDDS-PC™ has three components: 1) a five-minute patient-administered screening questionnaire, 2) five to ten minute physician-administered diagnostic interview modules based on DSM criteria, and 3) a longitudinal tracking form.

Patients who screen positive for a disorder receive the corresponding diagnostic interview module. The interview modules contain questions necessary to make a DSM diagnosis, the DSM criteria, alternative diagnoses to consider for subsyndromal cases, and common medical "rule outs" which may mimic the mental disorder in question.

Patients who meet criteria for the mental disorder on the diagnostic interview module are then followed with the longitudinal tracking form. Minor or subsyndromal conditions are tracked at the physician's discretion.

THE SDDS-PC™ SCREEN

The SDDS-PC™ screen, which consists of 16-items, covers five types of mental disorders commonly seen in primary care - major depression, panic disorder, alcohol abuse and dependence, generalized anxiety disorder (GAD), and obsessive compulsive disorder (OCD) as well as suicidal ideation and attempts. The SDDS-PC™ screen is self-administered in the waiting room prior to the medical visit and is scored either automatically by computer or manually by office personnel. Table 1 presents the depression section screen items.

THE SDDS-PC™ DIAGNOSTIC MODULES

The SDDS-PC™ diagnostic modules, which can be administered by physicians or other health care professionals, are designed to facilitate communication between the physician and patient and to clarify the implications of the symptoms reported on the SDDS-PC™ screen. The structured diagnostic modules were developed for use with patients screening positive on the SDDS-PC™ screen scales (Figure 1). Each module is completed in less than 10 minutes and includes questions to determine the presence and duration of symptoms, the diagnostic algorithms, information about related subsyndromal conditions, and a list of common general medical disorders which may resemble the mental disorder in question.

The modules were originally based on DSM-III-R criteria (APA, 1993) and have been subsequently revised for DSM-IV criteria (APA, 1994). In the DSM-IV SDDS-PC™, module interview results are produced on a one-page "lab slip" for the physician to review during the office visit. The physician has wide latitude in accepting or rejecting criteria based diagnoses. It is recommended that clinical judgement, and knowledge of the individual patient be factored

into the diagnostic process, with the module serving as an aid in developing a final diagnosis.

THE SDDS-PC™ LONGITUDINAL TRACKING FORM

A longitudinal patient tracking system has been developed and is being pilot tested. The longitudinal tracking form charts the symptoms of patients who meet diagnostic criteria as well as patients with subsyndromal conditions who fail to meet full diagnostic criteria but nonetheless warrant clinical monitoring.

The tracking form is a computer-generated one-page symptom and impairment summary which is placed in the patient chart prior to each medical visit. It provides the physician with a current description of the patient's symptoms and an historical overview of how the symptom pattern has changed over time.

RESEARCH ON THE SDDS-PC™

Three major studies have been conducted with the SDDS-PC™. In each study, patients received the SDDS-PC™ and a structured interview administered by a mental health professional who was blind to the SDDS-PC™ results. The first study involved 937 screened patients in a Rhode Island family practice, 388 of whom received the SCID-P which is a full-length structured diagnostic interview (Spitzer et al., 1992, William et al., 1992). The second study involved 775 primary care patients in Rhode Island and South Carolina family practices, 257 of whom received the SCID-P. The third study, which has just recently been completed, involved 1,001 primary care patients at Kaiser Permanente in Oakland. In this study, each patient received the DSM-IV SDDS-PC™ and a comprehensive structured diagnostic interview based on

DSM-IV criteria.

Results from the first study indicate that agreement between the SDDS-PC™ screen and the structured diagnostic research interview varied by diagnostic group. Sensitivity was highest for major depression (90%) and GAD (90%) and somewhat lower for panic disorder (78%), OCD (65%), and alcohol abuse/dependence (62%). In contrast, specificity was highest for alcohol abuse/dependence (98%), panic (80%), major depression (77%), OCD (73%), but lower for GAD (54%). As expected when cross-validating an optimized scale, some attenuation was observed in the operating characteristics of the SDDS-PC™ screen during the second study.

The second study permitted an opportunity to examine SDDS-PC™ module assisted physician diagnoses in relation to diagnoses derived from the SCID-P. Overall, the diagnostic modules exhibited good agreement with SCID-P results. However, the operating characteristics varied across specific diagnoses.

In the second study, relationships of SDDS-PC™ aided mental disorder diagnoses to patient impairment ratings were examined. As compared with patients who did not receive a SDDS-PC™ module diagnosis, patients who received a module diagnosis missed work or school more frequently because of emotional problems, were not getting along as well with their partner, and more commonly rated themselves as in fair or poor emotional health. Moreover, a majority of patients who received a module diagnosis received some mental health intervention from their primary care physician during the index medical visit.

Following completion of the second study, participating physicians were queried about their experience with the SDDS-PC™. Nearly all (13 of 16) of the physicians stated that the SDDS-PC™ modules helped them to become aware of at least one previously unrecognized

psychiatric problem in their practice.

OVERVIEW

Expanding clinical roles of primary care physicians underscore the importance of developing brief and sensitive tests such as the SDDS-PC™ to identify, diagnose, and monitor mental disorders in primary care. Another system which includes clinician-administered diagnostic interviews has been developed by Spitzer (discussed in this issue). It differs from the SDDS-PC™ in that it is administered by pencil-and-paper rather than computer, covers different mental disorders, and is cross-sectional rather than longitudinal in scope. A third system, which includes a broad screening form and multiple diagnoses is currently being tested by the World Health Organization (Sartorius et al., 1993). This system does not include clinician-administered diagnostic interviews.

Criterion-based diagnostic systems have the potential to sharpen clinical management, improve patient outcomes, and thereby help contain the high health care costs associated with unrecognized or inappropriately treated mental disorders in general medical settings. The challenge ahead lies in examining the extent to which criterion-based diagnostic systems achieve these desired changes in the delivery of primary care medicine.

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TRADEMARK

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TABLE 1. SDDS-PC™ SCREEN ITEMS FOR DEPRESSION

In the LAST MONTH have you been bothered by any of the following?

Loss of pleasure No Yes

Unhappiness No Yes

Feeling blue No Yes

Crying No Yes

Feeling sad No Yes

FIGURE 1. DIAGNOSTIC MODULE - DEPRESSION

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