## **Depression: Somatization and Social Factors**

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In this issue of The Journal, Duer and colleagues report that 27 percent of 262 primary care patients scored in the depressed range on the Center for Epidemiologic Studies depression scale. None of the depressed patients gave depression as their reason for the visit, and self-reported depression scores were associated with reporting significantly more physical symptoms, chronic health problems, and recent stressful life events as well as the lack of a supportive relationship.

The findings by Duer and colleagues are supported by numerous studies that have reported that 12 to 25 percent of primary care patients appear depressed on patient selfrating depression scales (which are quite sensitive to the diagnosis of depression, but not highly specific), and 5 to 10 percent of primary care patients meet diagnostic criteria for major depression on structured psychiatric interviews.<sup>2</sup> Despite the high prevalence of depression, multiple studies have demonstrated that depression in one fourth to one half of depressed patients is not diagnosed.<sup>2</sup> The finding of Duer and colleagues that few depressed patients report depression, anxiety, or stress as their chief complaint is supported by a growing body of data suggesting that over 50 to 70 percent of depressed patients consult their physician with a somatic complaint.<sup>3,4</sup> The patient and physician's focus on that somatic complaint is the primary reason for the lack of diagnosis of the affective disorder.3 Bridges and Goldberg3 recently demonstrated that when patients with anxiety or depression expressed emotional complaints, 95 percent were accurately identified as depressed, whereas when they mentioned only somatic complaints or complaints about their chronic medical illnesses, the mental illness of 48 percent of them was not accurately perceived.

Other studies have determined that patients with depression have significantly higher rates of medical utilization<sup>5,6</sup> and significantly more physical complaints in multiple organ systems compared with controls. Wells

and colleagues<sup>8</sup> also demonstrated that both major depression and depressive symptoms caused marked impairment in a patient's social, vocational, and family roles as well as having significant effects on the patient's perceived physical health, physical functioning, and pain. These effects were similar to or larger than associations between these health variables and seven chronic medical conditions. Patients with one or more chronic medical illnesses also have a higher prevalence of depression than healthy patients, <sup>9</sup> and it has been determined that depression often leads to poor self-monitoring of chronic medical illness (eg, dietary compliance, exercise, urine and blood glucose checks)<sup>10</sup> as well as amplification of complaints about their chronic medical illness.<sup>3</sup>

Thus, the tendency to amplify minor somatic symptoms, the co-occurrence with chronic medical illness, and the stigmatization of mental illness in Western society often lead to a selective reporting of the somatic manifestations of depression. Freeling and colleagues<sup>11</sup> reported that primary care patients with unrecognized depression had fewer overt depressive symptoms, less overt mood and appearance, more chronic medical illnesses, less insight, and an increased likelihood of depression secondary to a physical illness than patients who had their depression accurately diagnosed.

Pain complaints seem especially common in patients with major depression.<sup>2</sup> Patients with chronic pain complaints such as headache, 12 back pain, 13 diabetic neuropathy, 14 chest pain, 15 and pelvic pain 16 have all been reported to have high prevalence rates of depression. Patients selected for depression have also been found to have high rates of pain complaints. Von Knorring et al<sup>17</sup> determined that 57 percent of psychiatric patients with major depression had one or more pain complaints for at least three months. It is unclear from these studies whether pain causes depression or depression causes pain. Probably both statements are true, and one author advocated the pragmatic clinical term pain-depression syndrome to suggest that the two problems frequently coincide and have a similar treatment response to tricyclic antidepressants, and that the question of which problem occurs first is for academic research and of less importance to the clinician. 18

In our unit, we have studied the psychiatric illnesses

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associated with a variety of pain complaints (chronic pelvic pain, 16 chest pain, 15 and back pain 13) as well as other nonspecific complaints (chronic tinnitus<sup>19</sup> and fatigue<sup>20</sup>) often associated with psychiatric illness. We are also currently studying patients who are high utilizers of two primary care clinics (in the top 10 percent of utilization).<sup>21</sup> In all six studies the National Institute of Mental Health Diagnostic Interview Schedule (DIS)<sup>22</sup> was utilized to study the lifetime Diagnostic and Statistical Manual of Mental Disorders, ed 3 (DSM-III) diagnoses associated with these disorders. In each study about one third of the patients who had chronic pain or nonspecific complaints or who were high utilizers had a current major depression, and approximately two thirds of these patients had one or more lifetime episodes of major depression. The patients with affective illness tended to have recurrent episodes with a median of 2.5 to 5.0 episodes of major depression in the six studies. Patients with one or more lifetime episodes of depression were found to have significantly more medically unexplained somatic complaints on medical review of symptoms on the DIS-structured interview than patients with no psychiatric diagnoses. An attractive hypothesis from these data is that depression causes amplification of nociceptive physiologic input by both increasing autonomic arousal, which augments the number and severity of somatic symptoms, and lowering the conscious threshold at which symptoms are perceived. The depressed patient's focus on somatic symptoms often leads to high utilization and potential harm to patients through inappropriate and invasive use of medical technology as well as fostering of dependence on health care providers to meet psychosocial needs redefined as health care needs.2,3

The findings of Duer and colleagues that an accumulation of life events, lack of social support, and a chronic physical illness combine additively to increase the risk of depression have been also found in several studies in Great Britain. 23,24 Brown and colleagues24 have determined that an increase in the predictive risk of depression could be accomplished in prospective longitudinal studies by measuring additional vulnerability factors such as low selfesteem, marked long-term difficulties (such as a chronically distressed marriage), and severe life events arising out of (or "matching") these difficulties. Thus, a poor marriage was often found to be a risk factor for poor self-esteem as well as a marked long-term difficulty. A divorce occurring in the context of this poor marriage and low self-esteem was much more likely to lead to depression than other events (ie, death in the family or a move to another city). The data of Brown and colleagues are important because family physicians often have had longitudinal experience with a family through important developmental phases (childbirth, marriage, death of parents) and are often aware of long-term marked psychosocial stressors. These data suggest that stressful events that arise out of these marked difficulties are especially likely to lead to depression.

## References

- Duer S, Schwenk TL, Coyne JC: Medical and psychosocial correlates of self-reported depressive symptoms in family practice. J Fam Pract 1988: 27:609–614
- Katon W: The epidemiology of depression in medical care. Int J Psychiatry Med 1987; 17:93–111
- Bridges KW, Goldberg DP: Somatic presentation of DSM-III psychiatric disorders in primary care. J Psychosom Res 1985; 29: 563–569
- Shurman RA, Kramer PD, Mitchell JB: The hidden mental health network: Treatment of mental illness by nonpsychiatrist physicians. Arch Gen Psychiatry 1985; 42:89–94
- Weissman MM, Myers JK, Thompson WD: Depression and its treatment in a US urban community 1975–1976. Arch Gen Psychiatry 1981; 38:417–421
- Katon W, Berg A, Robins AJ, Risse S: Depression: Medical utilization and somatization. West J Med 1986; 144:564–568
- Mathew RJ, Weinman ML, Mirofi M: Physical symptoms of depression. Br J Psychiatry 1981; 139:293–296
- Wells KB, Stewart A, Burnham A: Profiles of health and functioning for depressed and nondepressed adult outpatients of mental health and medical clinicians. Presented at the American Psychiatric Association Meeting, Chicago, Ill, May 9–14, 1987
- Wells KB, Golding J, Burnham MA: Psychiatric disorder in a sample of the general population with and without chronic medical conditions. Am J Psychiatry 1988; 145:976–981
- Surridge DHC, Williams Erdahl DL, Lawson JS, et al: Psychiatric aspects of diabetes mellitus. Br J Psychiatry 1984; 145:269–276
- Freeling P, Rao BM, Paykel ES, et al: Unrecognized depression in general practice. Br Med J 1985; 290:1880–1883
- Merikangas KR, Risch NJ, Merikangas JR, et al: Migraine and depression: Association and family transmission. J Psychiatr Res 1988; 22:119–129
- Katon W, Egan K, Miller D: Chronic pain: Lifetime psychiatric diagnoses and family history. Am J Psychiatry 1985; 142:1156– 1160
- Turkington RW: Depression masquerading as diabetic neuropathy. JAMA 1980; 243:1147–1150
- Katon W, Hall MP, Russo J: Chest pain: The relationship of psychiatric illness to coronary arteriography results. Am J Med 1988; 84:1-0
- Walker E, Katon W, Harrop-Griffiths J, et al: Relationship of chronic pelvic pain to psychiatric diagnoses and childhood sexual abuse. Am J Psychiatry 1988; 145:75–80
- Von Knorring L, Perris C, Eisemann M, et al: Pain as a symptom in depressive disorders I. Relationship to diagnostic subgroup and depressive symptomatology. Pain 1983; 15:19–26
- Lindsay PG, Wyckoff M: The depression-pain syndrome and its response to antidepressants. Psychosomatics 1981; 22:571–577
- Sullivan MD, Katon W, Dobie R, et al: Disabling tinnitus: Association with affective disorder. Gen Hosp Psychiatry 1988; 10: 285–291
- Katon W, Gold D, Riggs R, et al: Chronic fatigue syndrome: A collaborative virologic, immunologic, and psychiatric study. Presented at the American Psychiatric Association Meeting, Montreal, Canada, 1988
- Katon W, Von Korff M, Lin E, et al: Randomized trial of liaison psychiatry in primary care. Presented at The Treatment of Mental Disorders in General Health Care Settings: A Research Conference. Pittsburgh, Pa, June 15–17, 1988
- Robins LN, Helzer JE, Croughen J, Ratcliff KS: National Institute of Mental Health Diagnostic Interview Schedule: Its history, characteristics and validity. Arch Gen Psychiatry 1981; 38:381–389
- Murphy E: Social origins of depression in old age. Br J Psychiatry 1982; 141:135–142
- Brown GW, Bifulco A, Harris T: Life stress, chronic subclinical symptoms and vulnerability to clinical depression. J Affective Disord 1986; 11:1–19