A fellow psychiatrist once told an anecdote. He was at a conference about depression in developing countries. The essence of the lectures was that people in those areas commonly expressed depression as physical symptoms. They 'somaticize' their depression, to use the medical parlance, complaining of malaise, stomach aches, dizziness and other symptoms that are hard to pin down. Young psychiatrist from third world commented “it is not that we in the third world somaticize depression, but rather that you in the developed world psychologise it?" 

[Times of India, 8th Feb. 2004]

The relationship between physical symptoms and psychiatric disorders is widely recognized as complex (Mechanic, 1972; Goldberg, 1975). Most standard assessment instruments for evaluating psychiatric disorders inquire into the presence of multiple physical symptoms as an expected concomitant of psychiatric disturbance (Beck, 1974; Spitzer et al., 1978). Even within populations of ostensibly normal individuals, it has been demonstrated that for many physical complaints a significant association can be found between presence of diverse somatic symptoms and mental and emotional status (Costa and McCrae, 1985).

Somatization disorders reflect most directly a maladaptive preoccupation with diverse physical symptoms that are long-standing and poorly associated with confirmable physical abnormality. Characteristically, physical symptoms are reported that reflect disruption in multiple organ systems such as gastrointestinal nausea, cardiovascular palpitations, visual photophobia, neurological dizziness or tremors and musculoskeletal weakness or paralysis. Symptom diversity, combined with preoccupation with symptoms and absence of physical findings, characterize the presentation of the disorder.

Somatic presentation of psychiatric disorders particularly depressive disorder and anxiety disorder is quite common. Gada (1987) reported that 66% of his cases of depressive disorder presented with only physical symptoms and other 29% presented with both physical as well as psychological symptoms. Similar preponderance of somatic symptoms have been observed in Indian patients (Venkoba Rao, 1966; Sethi et al., 1973). Symptoms reported by more than 75% of these cases were weakness 96%, body ache 84%, giddiness 83%, chest pain 81%, heaviness of head 80%, headache 79%, and pain in abdomen 76% (Gada, 1990).

Silverstone (2004) reported that somatic presentation of depression is quite common. Simon (2003) looked at 1146 patients at 15 primary care centers and in 14 countries who were diagnosed with depression using a structured diagnostic instrument. Of these patients, 69% had visited a primary care physician reporting only physical complaints. Only 11% of these patients denied having depressed mood and feelings of guilt or worthlessness when questioned. The study concluded that patients with depression were more likely to report unexplained somatic symptoms than those without depression. In addition, the likelihood of depression appears to increase the number of physical symptoms presented, and reporting more than 3 physical complaints was associated with a greater than 50% chance of having a depressive illness. Knowles and colleagues (2004) reported results of 2 multicenter, prospective, observational studies examining the presence of painful, somatic symptoms associated with major depressive disorder. They found that painful somatic symptoms such as headaches, stomach pain, back pain, and poorly localized pain have been reported in depressed patients with a prevalence of up to 76%.

Katon et al. (1990) reported that 20% of high medical care users have somatization disorders. Kroenke et al. (1994) found that any physical symptom increased the likelihood of a diagnosis of a mood or anxiety disorder by as much as 3-fold in high medical care users. Physical symptoms account for half of all primary care physician visits (Kroenka, 2001). Most of these physical manifestations are never explained by a disease or injury. Katon et al. (2001) have reported that stressful life events, psychological distress and depressive and anxiety disorders are associated with a range of medical symptoms with no identified pathology. Patients with anxiety or depressive disorders are more apt
to complain of multiple symptoms (Kroenke et al., 1998).

Silverstone (2004) stated that major depression continues to be an unrecognized phenomenon. He stated that depressed patients were not more medically ill than nondepressed patients, but the risk of morbidity and mortality from medical illnesses was increased. Primary care clinicians often do not pick up the presence of depression because of the presence of these medical and somatic complaints.

Various authors (Knorring et al., 1983; Gada, 1990) have reported pain as symptom in 56% to 70% of patients with depressive disorders, while Ward et al., (1979) reported pain as symptom in 100% of their patients with anxiety-depression. Large (1980) described his pain clinic patients to be having depression as most common. Pain has been reported from India in patients suffering from such psychological disorders as depression, anxiety, hysteria (Agrawal et al., 1973; Prakash and Sethi, 1978; Gada, 1987).

Varma et al (1983) have studied 200 consecutive new cases with chronic intractable pain. In 50% of these patients, no organic illness could be detected by treating physicians (non-psychiatric doctors); 21% had musculoskeletal disorders such as arthropathies, arthritis or spondylodysis but this was not considered to be sufficient enough to explain the pain by treating doctors. 72% of the cases had identifiable psychiatric illness, the most common being depression and anxiety disorders. Gada (1990) has reported generalized body ache to be a part of depressive disorder: 84% of his cases reported body ache, 75% had backache and 79% had tingling and numbness in extremities. Studying psychiatric morbidity in orthopaedic out-patients, Vijay et al (1988) reported that 19% cases presented with pain who could not be assigned any organic diagnosis.

1-year prospective, observational, noninterventionist studies conducted by Knowles et al. (2004) with patients with major depressive disorder on 989 patients enrolled across 7 countries: Painful somatic symptoms were found in 72.6% of the enrolled patients, with muscle soreness (82.3%), neck pain (78%), and headache (77.6%) being the most common somatic complaints. The authors concluded that painful somatic symptoms were highly prevalent in patients with major depression, with 72.6% of the study patients reporting such symptoms. Of note, 13.8% of patients were given an analgesic to alleviate symptoms of major depressive disorder.

Contrary to common misbelief, somatic presentation of psychiatric disorders is common even in Western populations as is common in Eastern population.

Noradrenergic and serotonergic neurons, in addition to innervating the limbic and prefrontal regions of brain, are involved in a well-described pain-modulating circuit that includes the amygdala, periaqueductal gray, dorsolateral pontine tegmentum and rostroventral medulla (Blier and Abbott, 2001). Norepinephrine and serotonin are likewise important for functioning of the endogenous pain-suppressing descending projections (Fields, 2000). Animal models of persistent pain provide evidence for the involvement of serotonin and norepinephrine in the modulation and analgesia of chronic pain states.

In depressive disorder, metabolism and levels of norepinephrine and serotonin are affected. Probably same phenomena is happening for somatic symptoms and particularly painful somatic symptoms. Norepinephrine and serotonin effects are manifested at various levels resulting in multiple somatic complaints. Also antidepressant medications improve depressive disorders including somatic complains.

Summary

Physical symptoms including multiple pain symptoms are common symptoms of psychiatric disorders particularly depressive and anxiety disorders in all cultures. Biological and neurochemical changes may account for the same. Symptoms like weakness, palpitations, chest pain, heaviness of head, headache, giddiness, weight loss, bodyache, pain in abdomen require simultaneous psychiatric evaluation. Biological and neurochemical changes may account for the same.

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