

Economic Costs of Psychological Injuries¹

Psychological injuries are not trivial. Psychological injuries can be arbitrarily broken down into the following clusters; (a) anxiety disorders, (b) depression, and (c) posttraumatic stress disorder (PTSD) – an anxiety disorder that often occurs simultaneously with other anxiety disorders, depression, and chronic pain. There are three primary types of situations from which psychological injuries may arise: (1) workplace injuries; (2) motor vehicle accidents (MVAs); and, (3) criminal victimization. Anxiety disorders (e.g., Panic Disorder), Major Depressive Disorder, and chronic pain complaints often occur simultaneously with PTSD. For example, industrial accidents and MVAs may result in an individual subsequently meeting criteria for PTSD, and having some orthopedic injuries that do not fully resolve leaving him/her with a chronic pain condition. Over 40 percent of such cases will have troubles with depression as well.

The direct and indirect costs of mental health conditions have been most extensively studied in the United States.² In 1990, the total economic cost of mental illness in the US was estimated to be \$147.8 billion, with the breakdown of costs by disorder being as follows: anxiety disorders -- \$46.6 billion; schizophrenic disorders -- \$32.5 billion; affective disorders -- \$30.4 billion; and, other disorders - \$38.4 billion. The indirect costs of mental illness (\$79 billion) were estimated to be higher than the direct costs (\$69 billion), with the bulk of the indirect costs being attributable to loss of productivity in usual activities.³

Estimates of the lifetime prevalence of Major Depressive Disorder (MDD) range from 10 to 25 percent for women and between 5 and 12 percent for men. The total annual costs of depression in the US have been estimated to be upwards of \$43 billion.⁴ Over half of this figure (\$23.8 billion) is attributable to absenteeism from work or reduction in work productivity. Health care costs per person are almost five times as high for depressed or anxious patients than for non-distressed patients.⁵ Costs of depression for any one case will increase with longer, or repeated episodes. While the course of depression is variable, any one episode may last for 6 months or longer, and 20-30% of cases of depression persist for months or years. Even cases of depression that do not meet formal diagnostic criteria (“sub-threshold depression) have higher rates of disability and lost work days, increased usage of mental health services, poorer self-ratings of

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² Much of this discussion is taken from Samra-Grewal, J. & Koch, W.J. (in press). The monetary worth of psychological injury: What are litigants suing for? To appear in J. Ogloff (Ed.) *Law and Psychology: The Future of the Discipline*

³ Rice, D. P., & Miller, L. S. (1998). Health economics and cost implications of anxiety and other mental disorders in the United States. *British Journal of Psychiatry*, 173(suppl. 34), 4-9.

⁴ Greenberg, P.E., Stiglin, L.E., Finkelstein, S.N., & Berndt, E.R. (1993). The economic burden of depression in 1990. *Journal of Clinical Psychiatry*, 54, 405-418

⁵ Simon, G., Ormel, J., VonKorff, M., & Barlow, W. (1995). Health care costs associated with depressive and anxiety disorders in primary care. *American Journal of Psychiatry*, 152, 352-357.

emotional health, and increased likelihood of suicide attempts⁶ Therefore, depressive affect, whether of diagnostic severity or merely of sub-threshold intensity, has substantial negative economic effects.

The total cost of anxiety disorders in the US in 1990 was \$46.6 billion.⁷ The bulk of these costs appear to relate to increased health care utilization. PTSD and panic disorder are two prominent anxiety disorders.

As PTSD is a common consequence of MVAs, sexual harassment, and sexual assault⁸ - all being events for which restitution for psychological injuries may occur, it is important to know the costs of PTSD. PTSD is frequently comorbid with other mental health and physical conditions. For example, it has been reported that 40-50%, or more, of PTSD patients have comorbid depression.⁹ Thus, PTSD patients with comorbid depression will be at risk for the negative economic consequences of depression as well. The negative impact of PTSD upon employment has been relatively well established. A recent review of the labor force participation research for individuals who have suffered traumatic exposure (i.e., to combat, childhood abuse, concentration camp experiences, and refugee status,) found a consistent pattern whereby exposure to traumatic stress is associated with reduced labor market outcomes.¹⁰

Panic Disorder (PD) is an anxiety disorder with a lifetime prevalence rate estimated as being between 1.5 and 3.5 percent of adults¹¹. Individuals with PD consume higher rates of medical care resources than do individuals without PD.¹²) Physical functioning, bodily pain, and general health scores for panic disorder patients are similar to scores obtained from patients with chronic medical conditions.¹³ As most individuals with PD do not seek treatment, the bulk of the economic costs relate to indirect costs.¹⁴

⁶ Judd, Paulus, Wells, & Rapaport, 1996 Judd, L. L., Paulus, M. P., Wells, K. B., & Rapaport, M. H. (1996). Socioeconomic burden of subsyndromal depressive symptoms and major depression in a sample of the general population. *American Journal of Psychiatry*, 153, 1411-1417.

⁷ Rice, D. P., & Miller, L. S. (1998). Health economics and cost implications of anxiety and other mental disorders in the United States. *British Journal of Psychiatry*, 173(suppl. 34), 4-9.

⁸ For example - Taylor, S. & Koch, W.J. (1995) Anxiety disorders due to motor vehicle accidents: Nature and treatment. *Clinical Psychology Review*, 15, 721-738. Douglas, K., Nichols, T., & Koch, W.J. (under revision). Forensic assessment of sexual harassment litigants.

⁹ Blanchard, E. B., & Hickling, E. J. (1996). *After the crash: Assessment and treatment of motor vehicle accident survivors*. Washington, DC: American Psychological Association.

¹⁰ See review by Fairbank, J. A., Ebert, L., & Zarkin, G. A. (1999). Socioeconomic consequences of traumatic stress. In P. A. Saigh & J. D. Bremner (Eds.), *Posttraumatic stress disorder: A comprehensive text* (pp. 180-198). Allyn & Bacon: Needham Heights, Massachusetts.

¹¹ American Psychiatric Association. (1994). *Diagnostic and Statistical Manual of Mental Disorders: Fourth Edition*. American Psychiatric Association: Washington: D.C.

¹² Siegel, L., Jones, W.C., & Wilson, J.O. (1990). Economic and life consequences experienced by a group of individuals with panic disorder. *Journal of Anxiety Disorders*, 4, 201-211.

¹³ Candilis, P.J., & Pollack, M.H. (1997). The hidden costs of untreated anxiety disorders. *Harvard Review of Psychiatry*, 5(1), 40-42.

¹⁴ Edlund, M. J., & Swann, A. C. (1987). The economic and social costs of panic disorder. *Hospital and Community Psychiatry*, 38(12), 1277-1279.

There is also evidence that individuals with PD have higher rates of work disability than do non-afflicted individuals.¹⁵

¹⁵ Siegel, L., Jones, W.C., & Wilson, J.O. (1990). Economic and life consequences experienced by a group of individuals with panic disorder. *Journal of Anxiety Disorders*, 4, 201-211.