

Surveillance of depression in Karachi, Pakistan

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Depression is a common mental health problem, seen frequently in general medical settings. Major depressive disorder (MDD) was identified by the World Health Organization in 2001 as the fourth leading cause of disability and premature death in the world. It is estimated that by the year 2020 MDD would be second to ischemic heart disease in regard to disease burden. The symptoms of depression, such as poor concentration, low mood, and lack of interest, or pleasure affect the patient's capabilities for work and logical communication, and may lead to suicide. Various therapies are available to treat depression depending on the condition, including, pharmacotherapy, psychotherapy, exercise therapy, electro convulsion therapy (ECT), and so forth. This cross-sectional study was conducted to analyze the status of depression in the population of Karachi, Pakistan. The aim of the study was to carry out qualitative and quantitative "public health research" by designing innovative questions.

Data collection was carried out for 300 individuals from May to December 2007 from Karachi, Pakistan. The questionnaires were analyzed and interpreted. This study is "population focused". The area of work is surveillance, and the task is the monitoring of health status. The ethical committee of Ziauddin University, Karachi, Pakistan approved the study. Individuals were selected randomly from different areas of Karachi, belonging to different age groups categorized into 3 categories, namely, youngsters (16-18 years, n=40, 13.3%), adults above 18 years (n=186, 62%), and adults older than 50 years (n=74, 24.7%). They were given a structured questionnaire and informed verbal consent was obtained from all. The questionnaire comprised 28 close-ended items, plus 2 open-ended items. The demographic information of participants was limited to gender, educational level, and marital status. The survey form was specifically designed to obtain information on the prevalence, psychosocial correlates and motivational factors, socioeconomic factors, contribution of failures, marital status, and other factors (Table 1) for depression. All individuals participating in the study were informed of the objectives of the study, and information on the instrument was explained. The participation was entirely on a voluntary basis. Adults of ages ranging from 16-55 years were included. Children and severe depressive patients who are on continuous depressive therapy were excluded from the study. Results were analyzed statistically by calculating percentages (%) and probabilities (p) for significant parameters of the questionnaire (shown in Table 1).

The results of the study indicate a higher prevalence of stress in our society. The level of stress or depression varied between stages of life and different age groups. This increased level of stress indicates a decrease of psychological health in our population, which may impair psychosocial behaviors, spoil relations, diminish learning, and, ultimately quality of health and life. In addition, it may increase the economical burden due to the use of different therapies involved in treating depression. According to the survey, around 22% of the population are depressed at any time, 58% of individuals reported depression often in their lifetime. Depression is a definite problem with the elderly, but other age groups also showed significant degrees of depression. Hopelessness, helplessness, despair, sorrow, guilt, and sadness are all feelings that comprise the human experience. Unfortunately for some people, these feelings are not so short lived and can cause major problems in their lives. Approximately 33.7% of individuals experienced short-lived episodes of depression, and 37.3% experienced moderate episodes of depression, while 29% had prolonged depression.

Depression is already the fifth leading contributor to the Global Burden of Disease (GBD) among women in developmentally disadvantaged countries.¹ Depressions are a heterogeneous group of conditions that contribute significantly to impairments in quality of life, independent of the severity of neurological illness.² It is common, but often overlooked as patients with depression often present with somatic complaints rather than psychological ones. This survey reveals the fact that true clinical depression is a mood disorder in which feelings of sadness, loss, anger, or frustration interferes with everyday life. Depression may be brought on by: alcohol, smoking, or drug abuse, neglect or ignorance, chronic stress, death of a friend, or relative, disappointment at home, work, or school (in teens, this may be breaking up with a boyfriend or girlfriend, failing a class, or parents divorcing), medical conditions such as prolonged pain or having a major illness, hypothyroidism, cancer, or hepatitis, diabetes, or any life threatening disease, overly negative thoughts about one's self and life, self blame, and ineffective social problem solving skills, sleeping problems (changes in sleep pattern), socio economic reasons, and so forth. These causes were found to varying degrees among the respondents, for example, socio economic reasons and poor marital relations were found to be very common in our society. Even traffic jams, political condition of the country, and physical illness were also minor contributing factors of depression. Major depressive disorder often co-occurs with substance use disorders, especially alcohol use disorders. The greatest current challenge is to recognize and relieve symptoms of

Table 1 - Statistical analysis of characteristics variables.

Parameters	Number of individuals	(%)	Probability (p)
<i>Feelings of depression</i>			
Hopelessness and frustration	54	(18.0)	0.18
Lousy and negative	83	(27.6)	0.27
Extremism (feelings of suicide)	33	(11.0)	0.11
Feelings of anger (fighting, using slang)	92	(30.6)	0.30
Loss of appetite	38	(12.6)	0.12
<i>Causes of depression</i>			
Stressful life events	32	(10.6)	0.10
Illness	19	(6.3)	0.63
Socioeconomic causes	75	(25.3)	0.25
Poor marital relations	44	(14.6)	0.14
Failures in life	26	(8.6)	0.08
Poor parental relations	21	(7.0)	0.07
Political issues	17	(5.6)	0.05
Traffic jams	13	(4.3)	0.04
<i>Type of people suffering depression</i>			
Businessmen	44	(14.6)	0.14
Professionals/employed	71	(23.6)	0.23
Youngster/students	36	(12.0)	0.12
Housewives	93	(31.0)	0.31
General duty servants	56	(18.6)	0.18
<i>Type of disease related to depression</i>			
Diabetes	15	(5.0)	0.05
Hypertension/hypotension	73	(24.3)	0.24
Migraine/headache/vertigo	90	(30.0)	0.30
Insomnia/increased sleep	35	(11.6)	0.11
Mood disorder	67	(22.3)	0.22
CNS disorders	20	(6.6)	0.06
<i>Strategies to get rid of depression</i>			
Go outside (picnic point, shopping)	96	(32.0)	0.32
Take drink/ice-cream	35	(11.6)	0.11
Take favorite eatable	23	(7.6)	0.07
Watching interesting movies/reading novels	44	(14.6)	0.14
Hanging out with friends and families	102	(34.0)	0.34
<i>Changes in lifestyle during depression</i>			
Adaptation of smoking	131	(43.6)	0.43
Drinking alcohol	28	(9.3)	0.09
Smoking and drinking	87	(29.0)	0.29
Isolation	54	(18.0)	0.18
<i>Age group more prone to smoking</i>			
Teenagers	52	(17.3)	0.17
Between 20-40 years	169	(56.3)	0.56
Above 40 years	79	(26.3)	0.26
<i>Prevention of depression</i>			
Eating a balanced diet	61	(20.3)	0.20
Getting regular exercise	28	(9.3)	0.09
Maintaining regular sleep pattern	36	(12.0)	0.12
Avoiding drugs	23	(7.6)	0.07
Use of prophylactic treatment	54	(18.0)	0.18
Participate in religious/social activities	98	(32.6)	0.32
<i>Depression can be improved by</i>			
Antidepressants	75	(25.0)	0.25
Counseling	73	(24.3)	0.24
Combination of medication & psychotherapy	129	(43.0)	0.43
Other therapies	23	(7.6)	0.07

treatment-resistant depression.³ In the present survey, most of the respondents showed various symptoms of variable intensities. Most individuals experienced changes in sleeping cycle, like trouble sleeping or excessive sleeping. While some reported a dramatic change in appetite, often with weight gain, or loss, fatigue, and lack of energy. Around 39% expressed their views of self-hate, and inappropriate guilt, hopelessness, and helplessness, worthlessness, feelings of extreme difficulty concentrating, feeling of anger, agitation, restlessness, and irritability. The moderate type was most common in our society and 67% (n=202) of people reported moderate depression. The degree of depression can determine the type of therapy required. Treatment will vary according to the cause and severity of depressive symptoms, as well as personal preference. Some individual did not like to take a single therapy; they even did not recognize their depressive condition, rather considering it as mood disturbance. Cheung et al⁴ in 2007, reported that the most effective therapy for moderate or severe depression is a combination of antidepressant medication and psychotherapy. For mild depression, counseling and self-care measures without medication may be enough. Various individuals adopted “non medical therapy” to come out of the depressive phase, for example, changing lifestyle behaviors such as going outside, hanging out with friends and relatives, diverting concentration towards other activities, namely, social and religious, making phone calls to near and dear ones, and so forth. A high number of respondents showed a greater interest in spending time with their friends and families, possibly because of traditional and culture values. At the same time, a few individuals believed that having favorite eatables or watching movies and listening to music might provide respite from depression. Our study reveals that depression was found in every cadre of life. The highest degree of depression was found in housewives. It might be because of domestic violence and inter-personal

relationship troubles, duration of marriage, and lower income. The second leading category was professionals and the employed. Depression is associated with increased health service use. Clarifying the processes involved may offer strategies to reduce the disorder's individual and societal burdens, and with appropriate diagnosis and intervention, depression can be reversed and most patients return to normal functioning.⁵

It is concluded that depression is a burning hot issue in our community. The findings suggest that diagnosing and the treatment of depression is urgently needed, as it is a leading cause of death. However, more research is required to evaluate the factors preceding depression. For people who are so severely depressed that they cannot function, or who are suicidal and cannot be safely cared for in the community, psychiatric hospitalization may be necessary.

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Related topics

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Zahiroddin AR, Shafiee-Kandjani AR, Ghoreishi FS. Depression rate among 18-40-year-old patients suffering from generalized tonic-clonic epilepsy referred to Neurology Clinics in an Iranian Hospital. *Neurosciences* 2008; 13: 86-87.

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