

	<p><b>Annals of Social Sciences and Perspective</b></p> <p>ISSN (Print): 2707-7063, ISSN (Online): 2788-8797                  Volume 4, Number 1, January-June 2023, Pages 61-64                  Journal homepage: <a href="http://assap.wum.edu.pk/index.php/ojs">http://assap.wum.edu.pk/index.php/ojs</a></p>
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## Presence and Prevalence of Depression, Anxiety and Stress among Patients with Dengue Fever

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ARTICLE DETAILS	ABSTRACT
<p><b>History:</b></p> <p>Received: December 20, 2022                      Accepted: March 06, 2023</p> <p><b>Keywords:</b></p> <p>Depression                      Anxiety                      Stress                      Dengue Fever                      mental health                      Dengue</p> <p><b>DOI:</b></p> <p>10.52700/assap.v4i1.224</p>	<p>This study was conducted to explore stress, anxiety, and depression in dengue patients. The sample of this study consisted of 200 patients with dengue fever admitted to DHQ Shahbaz Sharif Hospital Multan. There were 130 males and 70 females included in the sample. The sample was selected through purposive sampling. The Depression, Anxiety and Stress (DASS-42) scale was utilized as research instrument to collect the data. The simple Correlation was used to analyze the data. The results revealed a strong positive association between depression (<math>r = .43</math>), anxiety (<math>r = .48</math>) and stress (<math>r = .41</math>) in dengue patients. The overall combined effect of DASS (.45) was found in dengue patients. Depression, anxiety, and stress are all prevalent in dengue patients, which drastically affect their mental health of patients. There is a need to focus on the mental health of individuals suffering from dengue fever.</p> <p>© 2021 The Authors, Published by WUM. This is an Open Access Article under the Creative Common Attribution Non Commercial 4.0.</p>

### 1. Introduction

Throughout Asia and Latin America, dengue fever has emerged as a major health problem. The World Health Organization (WHO) reports that over the past two decades, dengue fever has become an increasingly serious problem, putting half of the global population at risk. (WHO, 2021). On May 19, 2021, the WHO declared that 100 or more countries had endemic levels of this disease spread by Aedes mosquitoes. Approximately 96 million individuals worldwide require clinical interventions for dengue fever each year, out of a total of 400 million annual cases, as reported by Bhatt et al. The number of dengue-related deaths more than quadrupled from 960 in 2000 to 4032 in 2015 Up to 70% of the world's infectious disease burden is borne by developing Asian countries, particularly those with weak healthcare infrastructures. During the monsoon season (July–October), Dengue Fever spreads quickly throughout Pakistan. Dengue fever transformed into a pandemic in Pakistan over the past four years and has been the most frequently reported form of fever in recent years. The state of one's body is indicative of one's mental well-being. Depression, anxiety, stress, and other psychiatric conditions are increasingly seen in patients

with a variety of illnesses. Khan et al. (2012) found that anxiety and depression were common among dengue patients. Dengue fever patients are at increased risk for developing psychiatric and mental health conditions due to witnessing mortalities during treatment in hospitals which leads them to develop a fear of death, PTSD and other mental health conditions.

A more severe type of dengue is known as dengue shock syndrome which is connected to the clinical depression that frequently appears in individuals with dengue fever at the time of infection. Similarly to this, worry makes it difficult for a patient to focus on other things. Stress, worry, and depression all play important roles in dengue hemorrhagic fever. During their disease, dengue patients exhibit irritation, anxiety, and stress, which also has an impact on their mental health and other personalized features. According to Stoppler (2011), stress is a factor that affects both an individual's internal and outward condition. It can result from any circumstance that puts the person in a challenging, irate, or anxious condition. Our immune system and consciousness are both impacted by stress. Frequent stressful events damage our physiological system and make already-complicated diseases worse. Stress significantly contributes to patients' psychological health degrading, as well as to patients' bodies becoming more feverish (Cohen, Tyrrell, & Smith, 1991).

Hashmi et.al (2012) in their study found that 60% of patients with dengue fever met the criteria of anxiety and 62.2% of patients with dengue fever met the criteria of depression in the sample of 531 patients with dengue fever and they stressed the mental health evaluation of patients with dengue fever. One of the illnesses that have recently spread like wildfire and posed the greatest challenge to Pakistan's healthcare system is dengue. The emotional and psychological characteristics of the condition are frequently ignored by doctors, which has a significant impact on the patient's mental health. Instead, they tend to emphasize the medical components of the sickness (Mushtaq, & Najam, 2014). The present study was designed to study how mental health is affected in dengue patients and how much depression anxiety and stress are prevalent among them.

## 2. Research Methodology

It was a cross-sectional study and the sample of the study consisted of 200 dengue patients of which 130 were males and 70 were females. The purposive sampling technique was used to select the sample. The data was collected from DHQ Shahbaz Sharif hospital Multan from September to January 2021. The DASS-42 created by Lovibond and Lovibond (1995) was utilized as a research instrument for data collection. Institutional approval and consent of participants were taken before the research and data collection. Confidentiality of the information gathered from them was guaranteed. To ensure that each questionnaire was answered properly, they were interviewed individually.

## 3. Results

**Table 1: Correlation of depression, anxiety and stress among dengue patients**

Variables	DASS	Depression	Anxiety	Stress	M	SD
SE						
DASS	-	.80**	.89**	.83**	99.25	22.1
Depression		-	.74**	.62**	30.11	9.2

Anxiety	-	.66**	32.04	8.17
Stress		-	35.95	9.14

\*\*p < .01.

The findings of table 1 revealed that depression, anxiety and stress are positively correlated with overall DASS scores among dengue fever patients.

**Table 2: Depression, anxiety and stress among patients with different types of dengue fever**

Type of Dengue	N	Depression M (SD)	Anxiety M (SD)	Stress M (SD)	P
Simple Dengue Fever	100	11.43 (4.20)	19.28 (4.42)	29.14 (4.44)	.001
Dengue Hemorrhagic Fever	65	29.34 (10.17)	43.10 (8.41)	41.14 (8.26)	.001
Dengue Shock Syndrome	35	44.16 (6.19)	54.17 (8.26)	49.13 (7.29)	.001

According to the findings of the table2, the patients with SDF have less depression anxiety and stress as compared to patients with DHF and DSS. Further findings revealed that the patient’s dengue shock syndrome have more depression, anxiety and stress than patients with other types of dengue fever.

#### 4. Discussion

The present study aimed to explore the presence and prevalence of depression, anxiety and stress among patients with dengue fever. The findings revealed a strong correlation between depression, anxiety, stress and dengue fever. The findings also showed that patients' levels of depression, anxiety, and stress rise alongside the severity of their dengue infection as it becomes chronic. The findings also revealed that depressive symptoms, anxious thoughts, stress, and lack of confidence all have a negative impact on dengue patients' ability to cope with their illnesses.

This study's results are in line with those of others that have found an inverse relationship between depression anxiety and stress among dengue patients (Mushtaq, & Zahir, 2016). Dengue patients' confidence would drop if their depression worsened. When a person is physically healthy, their mental health benefits as well. The likelihood of feeling capable of dealing with a health problem effectively decreases while you are ill. Existing studies' data came from public hospitals, where large numbers of patients are treated every year. People with dengue fever often experience feelings of depression after seeing the deaths of other sufferers (Gulati, & Maheshwari, 2007).

Dengue patients suffer from depression and anxiety, as demonstrated by Mushtaq, & Zahir (2016). Stress in human life also has negative impacts on a person's coping abilities. Coping abilities gradually decreases when stress and despair are present. Patients with dengue fever often lack self-assurance and worry that they won't be able to handle challenging circumstances (Mushtaq, &

Najam, 2014). The findings of this study are also consistent with the study of Jhanjee et al. (2013) who reported that Many dengue fever patients also showed severe psychological complications. Acute dengue fever is characterized by a dread of dying, followed by anxiety and other symptoms. Compared to the control group, people with dengue fever were more likely to have a depressive condition diagnosed by a psychiatrist by clinical assessment, but the difference was not statistically significant. This study was conducted with a very limited sample size and this study was conducted only in one hospital.

## 5. Conclusion

Depression, anxiety and stress were significantly associated with dengue fever. The main reason for the mental health effects of dengue fever is witnessing mortalities during hospitalization which leads to phobia, death anxiety and other mental health related problems in patients with dengue fever. Patients with dengue shock syndrome were found to have a higher level of depression, anxiety and stress as compared to other types of dengue fever. There is a need to establish mental health interventions for dengue patients along with medical treatment.

## References

- Bhatt, S., Gething, P. W., Brady, O. J., Messina, J. P., Farlow, A. W., Moyes, C. L., & Hay, S. I. (2013). The global distribution and burden of dengue. *Nature*, 496(7446), 504-507.
- Cohen, S., Tyrrell, D. A., & Smith, A. P. (1991). Psychological stress and susceptibility to the common cold. *New England journal of medicine*, 325(9), 606-612.
- Gulati, S., & Maheshwari, A. (2007). Atypical manifestations of dengue. *Tropical Medicine & International Health*, 12(9), 1087-1095.
- Hashmi, A. M., Butt, Z., Idrees, Z., Niazi, M., Yousaf, Z., Haider, S. F., & Bhatti, M. R. (2012). Anxiety and Depression Symptoms in Patients with Dengue Fever and Their Correlation with Symptom Severity. *The International Journal of Psychiatry in Medicine*, 44(3), 199–210. <https://doi.org/10.2190/PM.44.3.b>
- Jhanjee, A., Bhatia, M. S., Srivastava, S., & Rathi, A. (2013). A Study of Psychiatric Symptomatology in Dengue Patients.
- Khan, M. A., Ahmad, M., Mir, S., Iftikhar, F., Fahad, M., & Khalid, M. (2012). Anxiety and depression in patients of dengue fever. *Rawal Medical Journal*, 3, 239-242.
- Lovibond, P. F., & Lovibond, S. H. (1995). The structure of negative emotional states: Comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventories. *Behaviour research and therapy*, 33(3), 335-343.
- Mushtaq, M., & Najam, N. (2014). Psychological distress and components of anger: Predictors of hypertension development. *Science Journal of Psychology*, 2014.
- Mushtaq, M., & Zahir, M. (2016). Depression, anxiety, stress and their effect upon the self-efficacy in dengue patients. *Journal of Postgraduate Medical Institute*, 30(1).
- Stoppler CM. (2011). What is stress. Available from URL:[http://www.medicinenet.com/stress\\_managementtechniques/article.html](http://www.medicinenet.com/stress_managementtechniques/article.html)
- World Health Organization. (2021). <https://www.who.int/news-room/factsheets/detail/dengue-and-severe-dengue>.