

A study on Post-Dengue Depression

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ABSTRACT

Background: The depression and anxiety is almost double to the general population with people bearing a chronic physical health illness. We calculate depression score among post dengue population via standard DSM-IV tool and. This not only provides the information for the mode of dengue fever recovery, but also elaborates the long lasting impact of the dengue fever upon physical and mental health of a population.

Aim: To determine the distribution of depression in patients recovering from dengue fever.

Methods: This was across sectional observation study with total of 50 patients. The patients with history of depression prior to depression, with dengue encephalitis, below 12 years of age and patients with negative dengue serology or normal platelet counts were excluded, whereas patients of either sex, 12-70 years of age with recent history of dengue fever and patients with positive dengue serology were included in this study.

Results: The mean age was observed as 32±8.2 years. The patient age was stratified later, out of which 10(20%) patients were 12-19 years of age, 21(42%) patients were between 20-29 years, 10(20%) patients were 30-39 years of age, 7(14%) were 40-49 years of age and 2(4%) were of above 50 years of age. 40(80%) patients were male and 10(20%) patients were female.

Conclusion: The depression is high in young ages and more frequent in men. The patients recovered from dengue fever can still be victim of depression and should be screened for it.

Keywords: Depression, Dengue virus, DSM-IV, anxiety, physical health illness, dengue serology

INTRODUCTION

The disease caused by dengue virus is very infectious and acutely pyretic, named dengue fever. This virus transmitted through mosquito "Aegypti". Psychiatric symptoms may be exhibited in fraction of dengue and post dengue patient but very small of it is identifiable. The exact estimation of these symptoms is difficult^{1,2,3,4}. The major of the earlier said symptoms are un identified. This fact demands for more research in this field. That's why we planned and executed the present study. We calculate depression score among post dengue population via standard DSM-IV tool and. This not only provides the information for the mode of dengue fever recovery, but also elaborates the long lasting impact of the dengue fever upon physical and mental health of a population. The purpose of the study was to determine the distribution of depression in patients recovering from dengue fever.

MATERIAL AND METHOD

It was an observational cross sectional study, conducted at Department of Neurology, Mayo Hospital, Lahore. The study was three months long.

A total of 50 patients were enrolled for this study. The exclusion criteria include the patients with history of depression prior to depression, patients with dengue encephalitis, patients below 12 years of age and patients with negative dengue serology or normal platelet counts, whereas patients of either sex, 12-70 years of age with recent history of dengue fever and patients with positive dengue serology were included in this study. Patients detailed medical history, physical examination and demographics were stored electronically. The depressive symptoms were identified and assessed for all patients by using a standardized tool "DSM-IV" and later categorized as depressed and non-depressed.

Statistical analysis: All the collected data was stored electronically & analyzed later by using SPSS version 20. Descriptive statistics were applied to calculate mean and standard deviation. Frequency distribution and percentages were calculated for qualitative variables like gender, depression. Over all a P values less than 0.05 was considered statistically significant.

RESULTS

The study includes 50 patients, the mean age was observed as 32±8.2 years. The patient age was stratified later, out of which 10(20%) patients were 12-19 years of age, 21(42%) patients were between 20-29 years, 10(20%) patients were 30-39 years of

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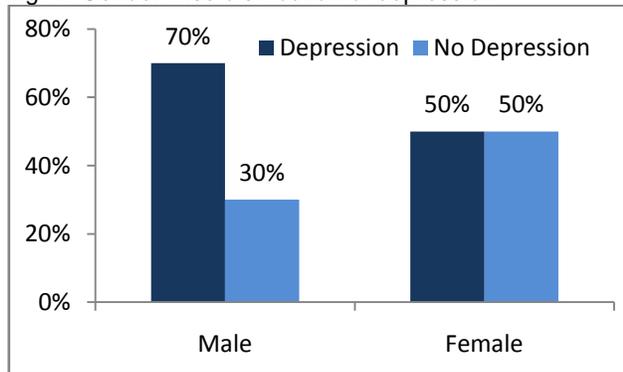
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age, 7(14%) were 40-49 years of age and 2(4%) were of above 50 years of age. 40(80%) patients were male and 10(20%) patients were female. The gender wise distribution of depression is given in figure 1.

Fig. 1: Gender wise distribution of depression



By means of DSM-IV criteria we assessed depression among 34% patients whereas 66% were without depression. Among depressed group 12(24%) were males and 5(10%) were female, on other hand the males were 56% and 10% females in group with no depression.

DISCUSSION

There exists a fundamental linkage among physical and mental health. Past studies indicate higher risk of physical health issues in people living with mental illness⁵. The depression and anxiety is almost double to the general population with people bearing a chronic physical health illness⁶. In literature, an alteration to the hormonal balance, immune system function and in sleep cycle reported as a result of psychiatric or mental illness, more over the medication may produce weight gain and disturbed heart rhythms as side effects^{7,8}. Similarly, disturbance of blood pressure, blood circulation and blood sugar reported due to the poor physical conditions of the patients. These facts have direct impact on the function of human brain⁷.

We observed in our study, a reasonable amount of people with depression which is a mental illness even after cure of a physical illness like dengue fever. This means the patients who recovered from dengue fever (physical illness) can still be the victims of depression. Our study findings are in line with other published studies^{9,10,11}. We also observed in our study that the depression is three times more frequent in post dengue persons than that of the normal population. This is consistent with the literature^{12,13}.

Age has a significant role for the maturity of mind and body responses. Our study reports the most frequent age of post dengue depression is 20-29 years, which means the depression is high in young ages. In Indonesia, data from 1975 to 1984 showed an increase in incidence rates of depression due to dengue fever among young adults in Jakarta as well as in the provincial areas¹⁴.

The major strength of our study is not only identification of psychological symptoms in post dengue population but also to report the frequency over age and gender. The history related to the depression comorbidity with other physical health issue is almost rare in Pakistan. This kind of study not only open a different way to thinking but also will contribute to better understanding and handling to the diseased as well as post disease populations.

CONCLUSION

The depression is high in young ages and more frequent in men. The patients recovered from dengue fever can still be victim of depression and should be screened for it.

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