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SEVERITY OF RECENT STRESSFUL LIFE EVENTS **IN** DEPRESSIVE PATIENTS

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## ABSTRACT

**OBJECTIVE**

To determine the frequency of recent stressful life events in depressive patients.

## STUDY DESIGN

Cross sectional study.

## PLACE AND DURATION OF STUDY

The study was conducted in psychiatric unit of civil hospital Karachifrom2016to 2017.

## SUBJECTS AND METHODS

The present prospective cross sectional study was conducted over a period of six months in the Department of Psychiatry of Pakistan Navy Ship(PNS) Shifa Hospital Karachi. After approval of synopsis from CPSP and the ethical committee of PNS Shifa hospital. All the patients through Psychiatry inpatients and out­ patient's departments who fulfilled the eligibility criteria were enrolled in the study. Informed consent was taken after explaining the procedure, risks and benefits of the study. The stressful life events were diagnosed on social readjustment rating scale (SRRS) score. All the collected information will be entered the pre-designed Performa and SPSS version 20.0 was usedfor dataanalysis.

## RESULTS

Mean± SDof age was36.81± 11.02 years.Outof237patients,90

(38%) weremale and 147(62%) werefemale.Mean±SDofSRRS was 220.61±80.06.In frequency of life event severity 156 (66%) had low, 49 (21%) and 32 (13%) had severe and mildseverity of lifeevent respectively.

## CONCLUSION

Current study concludes thatmostof the depressive patientshad low stressful life event severity. It is to be concluded that to handle the stressful events during short and long-term period, preventionand treatment strategies for depression arerequired.

## KEYWORDS

Depression, Mood Disorders, Life change events, Life event severity.

## INTRODUCTION

Public health concern in developing countries includes an increasing percentage of depressive disorder'. Major contribution of depressive disorder tot he global burden of diseases in 2020ispredicted to be the second most common cause of disability'. Occurrence of depressive disorders in Pakistan is particularly high a major fraction being contributed by women'. In Pakistan, the adjusted prevalence of depressive disorders is 44.4%'. An overall prevalence of ,mxiety and depressive disorders recommended by systematically collected peer reviewedstudiesis 34%'.

Stressful Life event stress is directly associated with depression and is mostly operationalized by self-report checklists of specific distressing life experiencessuchasdivorce,lossof close relatives, serious diseases, or sexual abuse in childhood.Thedevelopment of depression is most likely to occur withtheperson who hasexperienced more stressful life events and can also be caused by job related factors'. Depression affects the whole lifein general and can impact performance on job'. Research has also shown that stressful life events (SLEs) influence the patternof individual depressive symptoms'.

Recent studies identifyvarious factors that aredirectly associated to or that may predispose to the progression of first depressive episode or contributes to the recurrence. Different clinical, demographic variables and psychosocial factors have been identified'·'•. Major stressful life events play significant important role in the etiology of depression.In *a* recent study,lifeevents severity pertaining to number of episodes showcased statistically differences in SRRS total score, moderate and mild life events (F= 15.14, p<0.001) but not for severe lifeevents11. People witharecurrent major stressful life event are2.3- 12 times more vulnerable to develop depression"·". A local study concluded that stressful life events preceding depressive illness as compared with dissociative (conversion) disorder were of similar timing,type, nature and intensity. While majority of such events were marked withinfirst02months priorto the development of the current episode". In a study, the prevalence of low, mild and severe stressful lifeeventsin patients with first andrecurrent depressive episodes was 65%,29.8% and5.9%".

The purpose of this study is to find out the frequency of severity of stressful life events in our target population, which might suffer from depression due to stressful life events. This study would help in



preclusion and management strategies for the recurrences of depression and to educate them as to how to manage stressful events of life during mild and long term periods and not just in the initial recurrences of the disease.



## SUBJECTS AND METHODS

### Participants

237 patients withdepression (using ICD-10 diagnostic criteria) were recruited using non-probability consecutive sampling technique. The biasness was controlled by strictly following the inclusion and exclusioncriteria.

Inclusion criteria was patients of age between 18-60 years, of either genderand already diagnosed asdepressive usingICD-1odiagnostic

criteria. Exclusion criteria followed as patients, who had a lifetime history of bipolar disorder, schizophrenia, schizoaffective disorder, confirmed on the basis of history or medical records, patients with history of substance use/abuse within last 6 months and patients with Intellectual development disorder/general learning disability on the basisof clinical history.

### Instruments

Afteridentifying patient, the demographic profile ofthe patients was noted and stressful life events were diagnosed on the basis of psychometric rating instrument namedassocialreadjustment rating scale(SRRS).Stressfullifeeventswerecategorized intothree levelsof severity (mild, moderate and severe). The relevant effect modifiers/confounders like age, gender, living status, educational status, employment status, marital status, economic status and depression statuswereanalyzed.

### Procedure

The present prospective crosssectional study wasconducted over a period of six months in the Department of Psychiatry of Pakistan Navy Ship (PNS) Shifa Hospital Karachi. After institutional ethical committee approval, patients were briefed about the study and informed consent was sought. the data were collected and confidentiality of patient wasmaintained.

The data was analysed by using SPSS version 21.Mean and standard deviation were computed for quantitative variable, i.e.age, number of family members, SRSS Score. Frequency and percentage were calculated for qualitative variables [i.e. Gender, living status, lives, educational status, employment status, marital status, economic status, depression status and recent stressful life events (Low/Mild/Severe). Stratification were done with regards to age, living status, lives, educational status, employment status, marital status, economic status and depression status to see the effect of theseon confounders, by using chi square test and P-value..;:0.05 wastakenassignificant.

## RESULTS

A total of 237 patients was recruited to assessthe recent stressfullife events in depressive patients. Mean age of the sample was 36.81±11.02, mean score of SRRS was 220.61±80.06 and Mean

number of family members was 6.60±3.72 (see table 1 for details). In Gender distribution 90 (38%) were male and 147 (62%) were female. Most of the patients belonged to urban area, i.e. 200 (84%) and37(16%)belonged to ruralarea.Levelof Education of most of the patients were primary, 57 (24.1%) and 56 (23.6%) were illiterate. In

distribution of employment status 119 (51%) did housework, 98 (41%) were employed and 20 (8%) were unemployed. In marital status 194 (82%) were married, 20 (12%) were single, 14 (6%) were widowed.On socioeconomic status66(28%) belonged to lowerclass while151(64%) werefrommiddle class(seetable 2).

As per severity of depression 149 (63%) had moderate depression and 54 (23%) had severe depression. As per severity of recent life event severity 156 (66%) had low while 49 (21%) had mild severity (seetable3).

Stratification of recent life event severity was done with respect to age, gender, number of family members, economic status, marital status,employmentstatus,Educational status, livesstatus,living area

, SRSS scoreanddepression statusweredonethrough Chi square.Chi square statistics showed statistically significant differences on age, socioeconomic status, marital statusand level of education whileChi square could not produce enough evidence to establish statistical differences on gender, no of family members, employment status and area of living. Chi square statistics have also shown statistical differences in severity of depression asper severity of recent stressful lifeevents(seetable4).

Table I

**Dest.:nptivc :Uatistics of uge SRRS and no uf family members (n= 237)**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **At•** | **SRRS** | **No.urfamlly**  **member** |
| **Mean** | 36.81 | 220.01 | 6.60 |
| SD | 1102 | 80.06 | 3.72 |
| ***95%* Confidence interval** | 35.40 -38.22 | 210.37 -230,86 | 6.13 -7,08 |
| Median | 36 | 225 | 6 |
| Rang | 39 | 377 | 17 |
| IJ1tcrruptible Range | **18** | 103 | 4 |

**Tobie 2**

**Dc crip1ivc s1.atis1ic!> ofU1c sample tn=237)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Demographic** |  | *I* | **y.** |
| **Living Area** | **Rurnl** | 37 | 16 |
| Urban | 200 |  |
| Gender | Male | 90 | 38 |
| Female | 147 | 62 |
| **Education Status** | Literate | *56* | 23.6 |
| **Printary** | *57* | 24.1 |
| Secondary | 48 | 20.3 |
| **Metric** | 29 | 12.2 |
| **Gradllated** | 47 | 19.8 |
| **Employee Sunus.** | **House work** | 119 | 51 |
| Employed | 98 | 41 |
| Unemployed | 20 | 8 |
| **Marital s1atus** | **Married** | 194 | 82 |
|  | **Single** | 29 | 12 |
|  | Widow | 14 | 6 |
| **Socio-economic status** | Lower | 66 | 28 |
| Middle | 151 | 64 |
| Upper | 20 | 8 |



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This may indicate that ICD-10 severe depressive episode is a more

Descriplivc statistics of the variables of the study (n ~237)

|  |  |  |  |
| --- | --- | --- | --- |
| **Variable** |  | *I* | * ***t.*** |
| Stressful life evenls | Low | l56 | 66 |
| Mild | 32 | 13 |
| Severe | 49 | 21 |
| Severity of depression | Mold | 34 | 14 |
| Moderme | 149 | 63 |
| Severe | 54 | 23 |

Table4

Chi square statistics on demographic variables (n ~237)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Varioblei** | | **Rttent life evtnlil** | | | ***p*** |
|  |  | Low | Mild | Severe |  |
| Age.group | 20-36 | 89 | 20 | 10 | .0001 |
| Grater then 36 | 67 | 12 | 39 |
| Gender | Male | 56 | 14 | 20 | .635 |
| Fcrnak | 100 | 18 | 29 |
| No. of family member | 1-6 | 101 | 18 | 24 | .127 |
| More then 6 | 55 | 14 | 25 |
| Severityof  depre.ssion | Mild | 31 | 3 | 0 | ,0001 |
| Modern1e | I 10 | 25 | 14 |
| Severe | *IS* | 4 | 35 |
| Socio econointc  Slatllt-. | Low | 34 | 8 | 24 | ,002 |
| Middle | 106 | 20 | 25 |
| Upper | 16 | 4 | 0 |
| Marital stanis | M nied | 136 | 28 | 30 | ,001 |
| Single | 20 | 4 | s |
| Widow | 0 | 0 | 14 |
| Employee  s.1atu£ | Housewife | 84 | 15 | 20 | .541 |
| Employee | 59 | 15 | 24 |
| Unemployed | 13 | 2 | 5 |
| Education  status | llliternt . | 30 | 6 | 20 | .0001 |
| Primary | 45 | 6 | *5* |
| Middle | 35 | 9 | 4 |
| Mclric | II | 3 | 15 |

# DISCUSSION

Thestudy aimedto assess the frequency of recentstressful life events in depressive patients\_ In recent years recurrent depression studies havemovedfromasimple demonstration of the effect of stressfullife events to examining more complex interrelationships. Empirical research on hysterical conversion has lagged behind theoretical speculation". Prevalence studies are rare, etiological considerations areevenrarer.

ICD-10 research criteria do not consider the impact of depressive symptoms on daily living activities In arriving at a diagnosis of a depressive episode". Consequently, we performed parallel tests using both a broader depressive phenotype (i.e., ICD-10 depressive episode of any severity) and a narrower phenotype (I.e., only ICD-10 severe depressive episode). The results for the gene-environment interaction are more apparent when using the latter to construct.

specific depressive phenotype. It may also suggest that there could bea linear tendency for the reported gene-environment interaction to influence increasingly more intense depressive states. The definition of the depressive phenotype is crucial In tests of the gene-environment interactions and has been one of the major limitationsof previous researchon thistopic''·"·".

In the present study, the mean age of the patient was36.87±11.02 years with a confidence level (35.40-38.22) years. This result correlates with theotherstudies".

Marital tension was more prominently present in manic and depressed patients. In earlier studies also marital tension has been reported as a stressful life event of depressed patients". In a recent study of stratification of marital status, severity of depression, economic and educational status highly significant difference was foundi.e.(0.0001).

Our results show a somewhat better model fit after adjustment for potentialconfounders, such asgender and family history. Age had a significantimpact. The relationship between genderand depression was established by some studies'•"'·'' but we found no statistically significantdifferencesin gender.

The strengthof our study was the useof non-probabilityconsecutive sampling technique best suited for our sample selection and study design,asour eligibility criteria wasstringent Theuseof operational definitions of the dependent and independent variable also minimizes the source of biasin our study.Themain limitations ofour study were the use of a weak study design (cross-sectional); the analysis and strength of evidence of which is limited and therefore the study design does not require any prior samplesize calculation. Also limited outcomes selected in our study affects the worth of our study. There were many variables and factors that have associated with our independent and outcome variables that could have been Included in our study.Theuseof non-probability sampling alsolimits generalizability; however, we had a small number of patientsand no follow up.

# CONCLUSION

Current study concludes that most of the depressive patients had "LOW" stressful life event severity preceding the index episode. Hence, prevention and management strategies for depression,need to focusevenmoreon"LOW"stressful lifeevents.

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