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A COMPARATIVE STUDY OF SOCIODEMOGRAPHIC AND CLINICAL PROFILE OF PATIENTS HAVING FIRST EPISODE OF DEPRESSION AND HEALTHY CONTROLS

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ABSTRACT **Background :** Gender differences, age, education, marital status, socio-economic status, locality, culture are few factors which are implicated to have an impact on onset and progression of depressive disorders. There is a scarcity in literature for sociodemographic studies in context of basal thyroid functions occurring in patients of major depressive disorder. Our study focuses on various sociodemographic and clinical parameters of the patients suffering from depression.
Methodology: The diagnosis of first episode of major depression was made using structured clinical interview based on ICD 10 (DCR) criteria. the patients were classified into mild, moderate, severe, very severe category on the basis of HAM-D scale.
Results: The mean age of case group was 34.9 ± 10.6 years while that of control group was 35.5 ± 10 years. The case group had more married, rural background, other religion based, illiterate, low socioeconomic status, nuclear family subjects. Mean duration of illness of 4.24 ± 2.45 months or almost 21-22 weeks. The mean age of onset was 32.6 ± 11.90 years, HAM-D scores were 20.36 ± 7.04, 63% of severe to very severe depression, 36% moderate depression and 1% mild depression patients. Females had majority of severe depression cases (52%). Married cases had most patients in the moderate to severe depression category (84.7%) while unmarried cases also had most samples in the severe depression category (39.3%).
Conclusion: Knowing the clinical and socio-demographic variables helps in better understanding of depression and its management.

KEYWORDS : first episode depression, sociodemographic variables

INTRODUCTION

The major depressive disorder, or simply termed as Depression is the most prevalent mental disorder, and it is thought to be the most common cause of human disability. Depression is one the top ten causes of DALY lost currently and according the estimations made by WHO it is set to become one of top three causes of DALY lost by the year 2030 [1]. According to WHO statistics, a total number of 322 million were found to be living with depression which makes the prevalance of depression in the world to be about 4.4%. Depressive disorders caused about 50 million Years lived with disability (YLD) in 2015 [2].

There is a scarcity in literature for sociodemographic studies in context of basal thyroid functions occurring in patients of major depressive disorder. Our study focuses on various sociodemographic and clinical parameters of the patients suffering from depression. However, gender differences, age, education, marital status, socio-economic status, locality, culture are few factors which are implicated to have an impact on onset and progression of depressive disorders.

Hence present comparative study was undertaken to study various clinical and socio-demographic variables in patients of depression and healthy controls.

METHODOLOGY-

The present study is cross sectional in design where we included 100 (52 females,48 males) drug naïve first episode of depression patients in the age range of 18 to 65 years as cases and 100 healthy controls. The study was conducted in department of Psychiatry, M.G.M. Medical College, Indore between January 2018 to December 2018. The study was approved by institutional scientific and ethics committee.

INCLUSION CRITERIA-

Patients meeting diagnosis of Depression (F32 Depressive Disorder, first episode) according to International Classification of Diseases Diagnostic criteria for Reasearch (ICD-10 DCR)[3]. Patients aged between 18-65 years, either sex. Patients giving written, informed consent. Patients cooperative for interview.

Exclusion criteria-

Included any co-morbid psychiatric illness, any substance dependence except nicotine , patients with history neoplasm of endocrine gland, radiation exposure, any medical co-morbidity, hypertension, any endocrinological disorder ,Pregnancy and lactation, Current use of anti-hypertensive drugs, steroid hormones, retinoids, antipsychotics, mood stabilizer (Lithium), amiodarone, immune-suppressants and immunomodulatory agents, antithyroid drugs, hypothyro idism drugs.

Tools-

The Hamilton Depression Rating Scale (HAM-D 17)[4], General Health Questionnaire(GHQ-12)[5], ICD-10 DCR were used for assessment of the subjects.

Procedure-

 After complete description of the study to the subjects, written informed consent was obtained from all participants. The diagnosis of major depression was made using structured clinical interview based on ICD 10(DCR) criteria. Socio-demographic data was collected using a semi-structured proforma. After that clinical assessment of patient group was done using HAM-D to ascertain severity. Statistical analysis was performed using the Statistical Package for Social Sciences (SPSS for Windows, Version 23, SPSS Inc.).

RESULTS
Table 1
Table 1 shows the comparison of socio-demographic variables between the depressive and the control groups. The

mean age of case group was 34.9 ± 10.6 years while that of control group was 35.5 ± 10 years. The gender was evenly distributed in the case and control group alike due to matching of cases with control group as per inclusion criteria. female

Variable	Variable (N=100)	Controls (N=100)
Age	34.9 ± 10.6	35.5 ± 10
Sex		
Male	48	48
Female	52	52
Others	0	0
Marital status		
Married	72	67
Unmarried	28	33
Domicile		
Rural	15	12
Urban	85	88
Religion		
Hindu	75	88
Non-hindu	25	12
Education		
Illiterate	20	18
Till class 5	32	30
6th to 12	44	44
Graduation	6	8
Socio economic status		
Low	61	58
Middle	34	38
High	5	4
Family type		
Nuclear	61	57
Joint	39	43

gender had a slight preponderance in both groups. The case group had more married, rural background, other religion based, illiterate, low socioeconomic status, nuclear family subjects in comparison to control group.

Table 2

Variables		Depression patients (N=100)	Healthy Controls
Precipitating factor	Yes	35 (35%)	-
	No	65 (65%)	-
Family history	Negative	78 (78%)	93 (93%)
	Positive	22 (22%)	7 (7%)

Table 2 shows the depression patients had precipitating factors in 35% sample, while family history was positive in 22% samples of cases and only 7% of controls.

Table 3

Variables	Depression patients (Mean ± SD)
Age of onset of illness (years)	32.6 ± 11.90
Duration of illness (months)	4.24 2.45
HAM-D score	20.36 ± 7.04

Table 3 showing the depression patients had a mean duration of illness of 4.24 ± 2.45 months or almost 21-22 weeks. The mean age of onset was 32.6 ± 11.90 years, while mean HAM-D scores were 20.36 ± 7.04.

Table 4 : Severity of depression in various groups as per HAM-D 17.

Severity of Depression	Frequency	Percent
Mild	1	1.0
Moderate	36	36.0
Severe	46	46.0
very severe	17	17.0
Total	100	100

Table 4 : Depression's severity in first episode of major depression as per HAM-D scores showing that in our sample first episode had 63% of severe to very severe depression, 36% moderate depression and 1% mild depression patients.

Table -5:

	Sex		
	Female	Male	Total
Mild	0(0%)	1(2.1%)	1
Moderate	18(34.6%)	18(37.5%)	36
Severe	27(51.9%)	19(39.6%)	46
very severe	7(13.5%)	10(20.8%)	17
Total	52	48	100

Table 5 shows Distribution of depression's severity in context of gender in depression patients. Females had majority of severe depression cases (52%), as compared to males. Males had more moderate and very depression cases.

DISCUSSION

The mean age of case group was 34.9 ± 10.6 years while that of control group was 35.5 ± 10 years **(table 1)** Similar mean age were found by **Chopra et al,2001[6], Islam et al.[7] Dar et al.[8]**. The gender distribution in the case and control group was alike due to matching of cases with control group as per inclusion criteria . However, female gender had a slight preponderance in both groups which is agreement with **Chopra et al.,2001[6] , Kassaee et al.,2016[9]**. Most of the participants in both the case (72%) and control (67%) groups were married. Data obtained by **Chopra et al, Okeafor et al.[10] and Milanović et al.[11]** corroborate our findings. The better part of participants in both case (75%) and control (88%) groups were Hindu by religion, while rest subjects belonged to other religions. In our study we have found Hindu people were in excess in both study and control group similar to **Agarwal et al.[12]** and this finding is in concordance of the usual ethnic distribution as per geographical distribution. Case group had 20% illiterate and 80% literate samples while the control group had 18% illiterate and 82% literate samples but there was no significant differences found between two groups with respect to education status. Resembling findings were obtained by **chopra et al[6]., kassaee et al[9]**. However, from our findings it was not evident that educational status have a significant effect on depression. Low socio-economic income groups were found to be the majority in both case (61%) and control groups (58%), followed by middle income and lastly high income. In terms of socioeconomic variables studies have shown that depression is more common in poor economic background individuals, this finding is consistent with **Poongothai S et al., 2009;[13], Bagadia VN et al., 1973[14], Coentre et al.[15]**. The distribution of case (85%) and control (88%) sample were urban in majority, while 15% cases and 12% controls groups belonged to rural background . **Islam et al[7]** found similar results with their sample population having 64% urban residents which is in concordance with **Srivastava et al.[16]**. The urban majority can be explained by the fact that our study centre is a tertiary healthcare institute which is based in an urban setting and most patients who visited the hospital were urban dwellers. The makeup of family type displayed case group had greater distribution of nuclear family at 61% while joint family being at 39% of samples. The control group had nuclear (57%) family preponderance than joint family sample. Hence, from the above findings it can be summarized that nuclear family suffered depression more than joint family samples. Our findings are similar to the findings of **Chopra et al.,[6] Kamble et al. [17]**. This finding is consistent with the fact that joint family have a firm and consistent family support which might be a factor preventing depressive disorder.

We would like to emphasize that the higher prevalence of depression in nuclear family, Hindu religion, married subtype

can be attributed to the abundance of such samples in our study which is a bias secondary to the purposive sampling technique and hence these findings shouldn't be generalized to all settings.

Both case (78%) and control (93%) groups **(table 2)** had negative family history in abundance with only 22% of cases and 7% of control samples having positive family history which was also evidenced by **Srivastava et al.[16].** This finding is indicative of depression having a stronger genetic predisposition and risk of transmission in pedigree. The depression patients had a mean duration of illness of 4.24 ± 2.45 months or almost 21-22 weeks **(table 3)** . This is keeping with the mean duration of depression which was replicated by **Solomon et al.1997 [18].**On assessment of continuous variables **(table 3)** age of onset, duration of illness and HAM-D scores in depression patients we found the mean age of onset was 32.6 ± 11.90 years, mean duration of illness in depression patients was 4.24 ± 2.45 months while mean HAM-D scores were 20.36 ± 7.04 **Park et al.[19], Yang et al.[20], Srivastava et al.[16]** also found similar results in their studies.

The depression patients had presence of precipitating factor in 35% of samples while family history was positive in 22% cases. This is a result which is indicative of the fact that although depression is associated with precipitating factors in about one fourth samples and general population who have experienced a significant stressor should be closely monitored, but even in the absence of any such factors depressive disorder may develop which is inconspicuous in origin.

Depression's severity in first episode of major depression **(table 4)** as per HAM-D scores demonstrated that in our sample first episode had 17% very severe, 46% severe depression, 36% moderate depression and 1% mild depression patients . **Talukdar et al.,2018 [21]** also displayed similar findings in their work.

Both genders had majority of severe depression cases (52%), while mild depression was least of all in both case and control groups **(table 5).** Married cases had most patients in the severe depression category (48.6%) while unmarried cases also had most samples in the severe depression category (39.3%), **Chopra and Ram, Das, Kamble** found resembling results in their studies. Mild depression were the least prominent samples in married and unmarried groups of depression patients.

As we have limited our study to first episode of depression, future studies should widen the horizon including depression with psychotic symptoms, recurrent depression and bipolar depression for a more comprehensive result.

CONCLUSION
The mean age of depression was 34.9 years. Most of the participants were married, Hindu by religion,. maximum subjects were literate. In terms of socioeconomic variables, nuclear, urban and low socio-economic income groups were found to be the majority . nuclear family suffered depression more than joint family samples. The depression patients had presence of precipitating factor in 35% of samples while family history was positive in about a quarter of cases. General population who have experienced a significant stressor should be closely monitored, but even in the absence of any such factors depressive disorder may develop. Depression patients had a mean duration of illness of 4.24 ± 2.45 months or almost 21-22 weeks. The mean age of onset was 32.6 ± 11.90 years, while mean HAM-D scores were 20.36 ± 7.04. Depression's severity in first episode of major depression demonstrated 63% of severe to very severe depression cases. Both genders had majority of severe

depression cases, married cases had most patients in the severe depression category while unmarried cases also had most samples in the severe depression category. Hence, we conclude that knowing the clinical and socio-demographic variables helps in better understanding of depression and its management.

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