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Psychiatry

DEPRESSION AND ANXIETY IN THE PATIENTS OF BRONCHIAL ASTHMA AT TERTIARY CARE HOSPITAL

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ABSTRACT **Background:** There is limited number of studies and information available on the Depression and Anxiety in patients of Bronchial asthma patients. **Objective:** To assess the Depression and Anxiety in patients of bronchial asthma **Materials and Methods:** This cross sectional study was carried out in the department of Respiratory Medicine of Mahatma Gandhi Medical College and hospital Jaipur. 100 diagnosed case of Bronchial Asthma was taken, depression and anxiety was assessed using Hospital Anxiety and Depression Scale (HADS). **Results:** In our study 24% patient reported of anxiety symptoms, 30% of depressive symptoms and 2% reported of mixed symptoms .**Conclusion**: It is important to screen for depression and anxiety in the patients of bronchial asthma for proper management and treatment .

KEYWORDS :

Introduction

Bronchial Asthma is chronic inflammatory disorder of the airway. It is a serious global health problem[1]. In India, over the last two decade there has been a marked increase in the bronchial asthma.[2] Patients with chronic diseases are in general more at risk for having Psychiatric Co-morbidities .[3]

Anxiety and Depression have been found to be associated with Bronchial Asthma[3]. Reason for for the co-occurrence that these three disorders share the common pathophysiological pathways that is they share common susceptibility gene and environment risk factors[4].

These two disorders if present with bronchial asthma have been found to affect health care use, medical treatment and quality of life[5]. Psychiatric disorders associated with Bronchial Asthma is associated with poor asthma control [6] . They also tend to lower the pulmonary function of an individual[7].

Hence , this study was carried out to assess depression and anxiety in patients of Bronchial Asthma so that attention can be given to the above mentioned psychiatric disorders requiring the appropriate management in addition with the Bronchial Asthma.

Material and Methods

This cross sectional study was done in the department of Respiratory Medicine, Mahatma Gandhi Medical College and Hospital, Sitapura, Jaipur Rajasthan, in patients of Bronchial Asthma diagnosed as per the Criteria of Global Initiative for Asthma(GINA) reporting at OPD from September 2015 to October 2016. Those presenting with emphysema, acute ischemic heart disease, left ventricular failure, myocardial infarction, bleeding disorders and Patients with any past history of any Psychiatric disorders or patients currently on any psychotropics drugs were excluded.

Base line information including Name, age, sex, residence, presenting complaints, history of presenting complaints, education, profession, socioeconomic status, history of seasonal recurrence of symptoms, family history of similar disease were taken. Investigation done were TLC,DLC, chest X ray, Spirometry and PEFR. Diagnosis of bronchial asthma is based on detail history, clinical examination and spirometry with demonstration of reversibility i.e. increase in FEV_1 from base line value by 12% and 200ml after inhalation of Levosalbutamol (1.25mg/2.5ml) by nebulizer. Depression and anxiety were assessed using Hospital Depression and Anxiety Scale (HADS). It is a 14 item scale ,seven question relate to anxiety and seven to depression , with the total scores of both subscales in the range of 0-21.for both scales , scores of less than 7 indicate non- casesness.8-10 mild, 11-14 moderate and severe 15-21.

Information so gained and data so collected were subjected to suitable statistical analysis using Microsoft version 13 and conclusions were drawn.

Results

In our study Out of total 100 cases of bronchial asthma, 55% are males and 45% females with majority of cases lies in the age group 26-35years. Most of cases 65%are from urban residence and of lower middle socioeconomic status 28%. About half of cases 47% belong to semiskilled group, followed by 28 % in unskilled and 25% in skilled group. Most of the patient 27% were in the Moderate Persistent of bronchial asthma severity.

In our study 30% of patients were found to have depressive symptoms, 24% were having anxiety symptoms and 2% were found have to have both symptoms of anxiety and depression .and 44% patients were found have no psychiatry symptoms.

Table 1 : Sociodemographic profile of bronchial asthma cases(n=100)

Gender	No.	%
Male	55	55
Female	45	45
Age group (years)	**Number of Persons**	**%**
15-25	22	22
26-35	38	38
36-45	30	30
46-55	10	10
Residence	**Number of persons**	**%**
Urban	65	65
Rural	35	35
Addiction	**Number of persons**	**%**
None	72	72
smoking	21	21
Others (Alcohol)	1	1
Smoking and Others	6	6

Table 2 : Socioeconomic profile of bronchial asthma cases(n=100)

Kuppuswamy scale	Number of Persons	%
Upper	16	16
Upper middle	18	18
Lower middle	28	28
Upper lower	27	27
Lower	11	11
Occupation	**Number of persons**	**%**
Skilled	25	25
Semiskilled	47	47
Unskilled	28	28

Table 3: Grading of severity among bronchial asthma cases (n=100)

Grading	Number of males (n=55) (%)	Number of females (n=45) (%)	Total (%)
Intermittent	4	10	14
Mild persistent	9	12	21
Moderate persistent	27	18	45
Severe persistent	15	5	20

Table 4 - Distribution of Anxiety and Depression according to HADS scale

Items	n
Anxiety	24
Depression	30
Depression & Anxiety	2
None	44

Discussion

In the present study higher number of Bronchial asthma cases (55%) is males in comparison to females (45%). Predominance in males is also reported by Kumar et al8 (59.69%), and in ICMR INSEARCH field9 study (53.5%).

Highest numbers of asthma cases are below 45 years of age. Similar results were also reported by Olufemi et al10 (93.5%), Singh et al11 (85%).

Maximum (65%) cases of asthma belonged to urban area. Singh et al11 (64.9%) also reported similar results. The probable reason of high number of urban cases could be the location of our tertiary care hospital in urban area and urban population is expected to report to higher center of care. Most of cases of asthma middle socioeconomic status. Singh et al11 also reported similar results. Majority of patients are of mild to moderate persistent asthma in our study. Rinair study12 reported similar findings.

24% were found to be having anxiety symptoms similar results was found by a study.13 Rimington et al reported findings similar to our results.14 FD et al15 reported 30% of anxiety patients in bronchial asthma it was also similar to our results. 30% of patients were found to be having depressive symptoms in our study, Labor et al16 and Khot Vilas`13 also reported similar findings.

Conclusions

Every Bronchial patients should be for depression and anxiety as they are common psychiatric co-morbid conditions found with bronchial Asthma. They effect quality of life of patients and leads to poor outcome. Detection of these psychiatric co morbidities and there treatment is necessary for the good prognosis of Bronchial Asthma, by increasing the treatment adherence in the patients and help in the outcome of Asthma

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