



Prevalence Of Anxiety And Depression Among Asthma Patients In Latur City

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Abstract

Background: Asthma is a chronic inflammatory disorder of the airways characterized by reversible airflow obstruction, bronchial hyperresponsiveness, and recurrent episodes of wheezing, breathlessness, chest tightness, and coughing. Along with physical symptoms, asthma is frequently associated with psychological comorbidities such as anxiety and depression, which may negatively affect asthma control, treatment adherence, and quality of life.

Objective: To determine the prevalence of anxiety and depression among asthma patients in Latur city using the Beck Anxiety Inventory (BAI) and Beck Depression Inventory (BDI).

Methodology: A cross-sectional observational study was conducted among 140 diagnosed asthma patients aged 18–40 years in Latur city. Participants were selected using purposive sampling. Anxiety and depression levels were assessed using the Beck Anxiety Inventory (BAI) and Beck Depression Inventory (BDI). Data were analyzed using SPSS version 24.0.

Results: The mean age of participants was 27.41 years. Severe anxiety was observed in 47.1% of participants, moderate anxiety in 20%, and low anxiety in 32.9%. Severe depression was observed in 51.4% of participants, moderate depression in 25%, and mild depression in 23.6%.

Conclusion: Anxiety and depression are highly prevalent among asthma patients in Latur city. Routine psychological screening and integrated mental health management should be included in asthma care protocols.

Keywords: Asthma, Anxiety, Depression, Beck Anxiety Inventory, Beck Depression Inventory, Psychological Comorbidity.

I. INTRODUCTION

Asthma is a chronic inflammatory respiratory disorder characterized by reversible airflow obstruction and airway hyperresponsiveness. It affects millions of individuals worldwide and contributes significantly to healthcare burden and reduced quality of life. Chronic illnesses such as asthma often create emotional stress due to recurrent symptoms, fear of sudden attacks, dependency on medications, and lifestyle restrictions.

Psychological disorders such as anxiety and depression are commonly associated with asthma. Anxiety may worsen respiratory symptoms through hyperventilation and increased symptom perception, while depression may negatively affect treatment adherence and asthma control. Several studies have shown a strong association between asthma and mental health disorders.

Despite growing evidence globally, limited regional data are available from smaller cities such as Latur. Therefore, this study was conducted to determine the prevalence of anxiety and depression among asthma patients in Latur city.

II. NEED FOR THE STUDY

Asthma not only affects physical health but also has a major psychological impact on patients. Anxiety and depression can worsen asthma symptoms, reduce treatment compliance, and decrease quality of life. Limited studies are available regarding the psychological burden among asthma patients in Latur city. Early identification of mental health problems can help healthcare professionals provide comprehensive management strategies.

III. AIM AND OBJECTIVES

Aim

To determine the prevalence of anxiety and depression among asthma patients in Latur city.

Objectives

1. To assess anxiety levels among asthma patients using the Beck Anxiety Inventory (BAI).
2. To assess depression levels among asthma patients using the Beck Depression Inventory (BDI).
3. To analyze the association of anxiety and depression with demographic variables such as age and gender.
4. To provide baseline data for integrated psychological and respiratory care.

IV. REVIEW OF LITERATURE

Several studies have demonstrated a strong association between asthma and psychological disorders.

Goldney et al. reported that asthma patients are nearly twice as likely to experience depressive symptoms.

Goodwin et al. found a higher prevalence of panic disorder and generalized anxiety disorder among asthma patients.

Di Marco et al. demonstrated that uncontrolled asthma is strongly associated with anxiety and depression.

Opolski and Wilson concluded that psychological distress negatively influences asthma management and quality of life.

These studies support the importance of psychological assessment in asthma management.

V. MATERIALS AND METHODS

Study Design-Cross-sectional observational study.

Study Setting-Tertiary healthcare centers in Latur city.

Study Duration-6 months.

Sample Size-140 asthma patients.

Sampling Method-Purposive sampling method.

Inclusion Criteria-Diagnosed asthma patients.Age between 18–40 years.Male and female participants.

Residents of Latur city.Willing participants.

Exclusion Criteria-Age below 18 years.Severe cognitive impairment or dementia.Psychotic disorders.History of substance abuse.Patients receiving treatment for anxiety or depression.

Outcome Measures-

1. Beck Anxiety Inventory (BAI)

2. Beck Depression Inventory (BDI)

Statistical Analysis-

Data were entered into Microsoft Excel and analyzed using SPSS version 24.0. Quantitative data were expressed as mean and standard deviation, while qualitative data were expressed as frequency and percentage.

VI. PROCEDURE

Ethical clearance and institutional permission were obtained before commencement of the study. Eligible participants were selected according to inclusion and exclusion criteria. Written informed consent was obtained from all participants.

Demographic information was collected using a structured data collection sheet. Anxiety was assessed using the Beck Anxiety Inventory (BAI), and depression was assessed using the Beck Depression Inventory (BDI). Responses were scored according to standardized scoring criteria.

The collected data were analyzed statistically to determine the prevalence of anxiety and depression among asthma patients.

VII. RESULTS

A total of 140 asthma patients participated in the study.

Severe anxiety was observed in 47.1% participants.

Moderate anxiety was observed in 20% participants.

Low anxiety was observed in 32.9% participants.

Similarly, Severe depression was observed in 51.4% participants.

Moderate depression was observed in 25% participants.

Mild depression was observed in 23.6% participants.

Younger participants aged 18–25 years showed higher levels of anxiety and depression. Female participants demonstrated slightly higher psychological distress compared to males.

VIII. DISCUSSION

The present study demonstrated a high prevalence of anxiety and depression among asthma patients in Latur city. Nearly half of the participants experienced severe anxiety and depression.

The findings are consistent with previous studies conducted by Goldney et al., Opolski and Wilson, and Di Marco et al., which reported a strong association between asthma and psychological disorders.

Chronic respiratory symptoms, fear of breathlessness, medication dependency, and social limitations may contribute to psychological distress among asthma patients. Anxiety and depression may further worsen asthma control and negatively influence quality of life.

These findings highlight the need for routine psychological screening and multidisciplinary management approaches in asthma care.

IX. CONCLUSION

The study concludes that anxiety and depression are highly prevalent among asthma patients in Latur city. Severe anxiety and severe depression were observed in a large proportion of participants. Early psychological screening and integrated management strategies should be incorporated into routine asthma care to improve patient outcomes and quality of life.

X. LIMITATIONS

1. The study was conducted only in Latur city.
2. Sample size was limited to 140 participants.
3. Only participants aged 18–40 years were included.
4. Cross-sectional design limits causal interpretation.
5. Self-report questionnaires may introduce response bias.

XI. FUTURE SCOPE

1. Future studies can include larger sample sizes.
2. Multicentric studies can improve generalizability.
3. Longitudinal studies may assess long-term psychological outcomes.
4. Intervention studies can evaluate the effect of counseling and rehabilitation programs.

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