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Evaluation of Bronchial Asthma among Females Age Group (18-25) Years

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Abstract:- Asthma remains the most common chronic respiratory disease in India. Although asthma is often believed to be a disorder localized to the lungs. Asthma frequently co-exists with other atopic disorders, particularly allergic rhinitis. World wide 80% of asthma deaths occur in low and middle-income countries. The prevalence of asthma in India is about 3%, 2.4% in adults, and 20% in children. This study was conducted to assess bronchial asthma among females age group (18 - 25) years at Sree Ramakrishna Medical College of Naturopathy and Yogic Sciences and Hospital, Kulasekharam, Tamil Nadu, India. Verbal consent was taken from the females by explaining the purpose of the study. The total number of study respondents was 30. The questionnaire contains 30 questions. The parameters of the questionnaire included respiratory disturbances, gastrointestinal discomfort, skin infection, stress, pain, and medication.This study shows and concluded that, females are aware about the bronchial asthma, but need more awareness about prevention of allergy symptoms and mental hygiene and also should improve the indoor and outdoor hygiene.

Keywords:- *Bronchial asthma, dust allergy, common cold.*

I. INTRODUCTION

Asthma remains the most common chronic respiratory disease in India. Although asthma is often believed to be a disorder localized to the lungs. Current evidence indicates that it represents the component of systemic airway disease involving the entire respiratory tract, and asthma frequently co-exists with other atopic disorders, particularly with allergic rhinitis. Asthma is said to be a chronic inflammatory disease of the airways and it is characterized by increased responsiveness of the trachea to a variety of stimuli resulting in widespread spasmodic narrowing of the air passages, which may be relieved spontaneously or by therapy. World wide 80% of asthma deaths occur in low and middle-income countries. The prevalence of asthma in India is about 3%, 2.4% in adults, and 20% in children. The factors that stimulate asthma attacks are air pollution, dust mites, exercise, pets, smoking, strong chemical smell, hereditary factors and also due to other occupational exposure.

II. PATHOPHYSIOLOGY

The Pathogenesis of bronchial asthma is an extrinsic, intrinsic, and mixed pattern. In the extrinsic pattern, it is an allergic, atopic. This is characterized by personal or family history. Rhinitis, urticaria, or infantile eczema, are the symptoms. In this condition, there is an increased level of IgE in the serum. The intrinsic pattern is idiosyncratic and non atopic. It occurs later in adult age, with negative personal or family history of allergy and negative skin test normal serum level of IgE. In mixed patterns, many persons do not fit into both categories but have mixed features of both. The triggers that cause asthma attacks are air pollution, dust mites, exercise, pets, smoking, strong chemical smell, and also due to other occupational exposure, and hereditary factors. The symptoms of bronchial asthma are, cough, wheezing, allergic rhinitis, breathing difficulty, chest pain, headache, fever, tiredness, and restlessness.

III. MATERIALS AND METHOD

The study is designed as a questionnaire and is distributed to the female age group (18 - 25) years at Sree Ramakrishna Medical College of Naturopathy and Yogic Sciences and Hospital, Kulasekharam, Tamil Nadu, India. Verbal consent was taken from the females by explaining the purpose of the study. The total number of study respondents was 30. The questionnaire contains 30 questions. The parameters of the questionnaire included respiratory disturbances, gastrointestinal discomfort, skin infection, stress, pain, and medication. Those females who did not cooperate and non-willing participants were excluded from the study.

IV. RESULT

The respondents were between the age group of (18 - 25) years. The total number of females is n=30. Table 1 shows, Affected with asthma attack 10(33.33%), and 20(66.66%) do not have asthma attack. Throat Infection frequently 8(26.66%), while 22(73.33%) do not have throat Infection frequently. Affected with dry cough 8(26.66%), and 22(73.33%) do not have affected with dry cough. Common cold frequently 14(46.66%), and 16(53.33%) do not affected with common cold frequently. Breathing difficulty with cough 6(20%), while 24(80%) do not have breathing difficulty with cough. Parents affected with bronchial asthma 4(13.33%), and 26(86.66%) parents are not affected with bronchial asthma. Females undergone Lung Function Test 4(13.33%), and 26(86.66%)) do not undergone Lung Function Test.

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S.NO	CONTENTS	YES(%)	NO(%)
1	Are you affected with Asthma Attack	10(33.33%)	20(66.66%)
2	Throat Infection Frequently	8(26.66%)	22(73.33%)
3	Affected with Dry Cough	8(26.66%)	22(73.33%)
4	Common Cold Frequently	14(46.66%)	16(53.33%)
5	Breathing Difficulty with Cough	6(20%)	24(80%)
6	Parents affected in bronchial asthma	4(13.33%)	26(86.66%)
7	Lung Function Test	4(13.33%)	26(86.66%)
8	While Climbing the Staircase, do you feel Breathing Difficulty	11(36.66%)	19(63.33%)
9	After a long Walk did you feel gasping Breathing	10(33.33%)	20(66.66%)
10	Do you feel Chest Tightness while wear Tight Clothes	18(60%)	12(40%)
11	While exercise do you feel Breathing difficulty	9(30%)	21(70%)
12	While Speaking are you feel Breathing Difficulty	6(20%)	24(80%)
13	In Physical activity, do you feel Breathing difficulty	14(46.66%)	16(53.33%)
14	Do You Feel Wheezing Sound	11(36.66%)	19(63.33%)
15	Climatic Changes can Cause Breathing Difficulty	9(30%)	21(70%)
16	Are you Experienced with Breathing Difficulty	13(43.33%)	17(56.66%)
17	Climatic Changes can cause Common Cold	21(70%)	9(30%)

Table: 1: Respiratory disturbances during asthmatic condition

Breathing difficulty while climbing the staircase 11(36.66%) and 19(63.33%) do not feel breathing difficulty while climbing the staircase. After a long walk feels gasping breathing 10(33.33%), and 20(66.66%) do not feel gasping breathing. Chest tightness while wearing tight clothes 18(60%), and 12(40%) do not have this symptom. Getting breathing difficulty while doing exercise 9(30%) and 21(70%) do not have breathing difficulty while doing exercise. Have breathing difficulty while speaking 6(20%), and 24(80%) do not have breathing difficulty while speaking. Have breathing difficulty during physical activity 14(46.66%) and 16(53.33%) do not have breathing difficulty during physical activity. Having wheezing sounds 11(36.66%) and 19(63.33%) do not have wheezing sounds. Climatic changes can cause breathing difficulty 9(30%), and 21(70%)) do not have breathing difficulty while climatic changes. Have experience breathing difficulty 13(43.33%) and 17(56.66%) do not experienced breathing difficulty. Climatic changes can cause the common cold 21(70%) and 9(30%) do not have a common cold while climatic changes.

S.NO	CONTENTS	YES(%)	NO(%)
1	Are You suffer with Constipation	7(23.33%)	23(76.66%)
2	Do You have Food Allergy	2(6.66%)	28(93.33%)

Table 2: Gastro intestinal discomforts during asthmatic Condition

Table: 2 shows, suffered with constipation 7(23.33%), while 23(76.66%) do not have suffered with constipation. Have food allergy 2(6.66%), and 28(93.33%) do not have food allergy.

S.NO	CONTENTS	YES(%)	NO(%)
1	Dust allergy	19(63.33%)	11(33.33%)
2	Early Morning Allergy Symptoms	13(43.33%)	17(56.66%)

Table 3: Allergy symptoms during asthmatic condition

Table: 3 shows, dust allergy 19(63.33%), and 11(33.33%) do not have dust allergy . Early morning allergy symptoms 13(43.33%) and 17(56.66%) do not have early morning allergy symptoms.

S.NO	CONTENTS	YES(%)	NO(%)
1	During stress are you feel heaviness on Chest	7(23.33%)	23(76.66%)
2	During Stress are you feel Breathing Difficulty	3(10%)	27(90%)

Table 4: Stress during asthmatic condition

Table: 4 shows, during stress, getting heaviness in chest 7(23.33%) and 23(76.66%) do not have this symptom. Have breathing difficulty during stress 3(10%) and 27(90%) do not have this symptom.

S.NO	CONTENTS	YES(%)	NO(%)
1	Are you using Inhaler	6(20%)	24(80%)
2	Steroid injection or Oral Medication	9(30%)	21(70%)

Table 5: Medication during asthmatic condition

Table: 5 shows, using Inhaler 6(20%), and do not use inhaler 24(80%). Steroid injection or oral medication 9(30%), and 21(70%) do not use steroid injection or oral medication.

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S.NO	CONTENTS	YES(%)	NO(%)
1	Affected with Sinusitis	7(23.33%)	23(76.66%)
2	Any Limitation in Physical activities	5(16.66%)	25(83.33%)
3	Travel in Public Transport frequently	14(46.66%)	16(53.33%)
4	Are you feel Headache	10(33.33%)	20(66.66%)
5	Do you have Skin Infection	3(10%)	27(90%)

Table 6: other symptoms during asthmatic condition

Table: 6 shows the other symptoms, being affected by sinusitis 7(23.33%) and 23(76.66%) do not affect by sinusitis. Any limitation in physical activities 5(16.66%) and 25(83.33%) do not have any limitations in physical activities. Travel in public transport frequently 14(46.66%) and 16(53.33%) do not travel in public transport frequently. Have headache 10(33.33%), and 20(66.66%) do not feel headache. Have skin Infection 3(10%), and 27(90%) do not have skin Infection.

V. DISCUSSION

Affected in asthma attack 10(33.33%), fewer females affected in an asthma attack. Common cold frequently 14(46.66%), more females having the symptoms of common cold frequently. While climbing the staircase, fewer females feel breathing difficulty 11(36.66%). Climatic changes can cause breathing difficulty 9(30%). Chest tightness while wearing tight clothes 18(60%), majority of females have this symptom. Have breathing difficulty during physical activity 14(46.66%), most of the females have this symptom. Fewer female feels wheezing sound 11(36.66%). Experienced with breathing difficulty 13(43.33%), suffer with constipation 7(23.33%). fewer females suffer from constipation. Dust allergy 19(63.33%), majority of the females having dust allergy. Early morning allergy Symptoms 13(43.33%), more females have morning allergy Symptoms. During stress, getting heaviness in chest 7(23.33%), fewer females have this symptom. Steroid injection or oral medication 9(30%), most of the females have steroid injection or oral medication. Most of the females have sinusitis 7(23.33%) and 10(33.33%) headache.

VI. CONCLUSION

This study shows and concluded that females are aware of bronchial asthma, but need more awareness about the prevention of allergy symptoms and mental hygiene and should improve indoor and outdoor hygiene. Need more awareness about asthma triggers.

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