

## PREVALENCE AND CAUSES OF DYSPNOEA IN RURAL PUNJAB

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*Received: 17 May 2013, Revised and Accepted: 19 Sep 2013***ABSTRACT**

**Objective:** Dyspnoea is a sign of serious disease of the airway, lungs, or heart. The onset of dyspnoea should not be ignored but is reason to seek medical attention.

**Material & Methods:** We selected randomly about 100 patients of grade 1, grade 2 and grade 3 dyspnoea NYH classification. Past history and other health problems were also noted. All the cases of dyspnoea from age of 18 to 90 were included with exclusion of acute patient of dyspnoea and previously diagnosed were excluded

**Results:** In this study we found 51% were females & 49 % were males. In this study majority of our patients were between age groups of 50-60 years. We found that 55% were from rural and 45% were from urban. In 85% of cases it is due to either asthma, pneumonia, cardiac ischemia, interstitial lung disease, congestive heart failure, chronic obstructive pulmonary disease, or psychogenic causes.

**Conclusions:** It may be because of rural Punjab is agriculture based state in that case dust and harvesting season may precipitate or cause respiratory dyspnoea. Second cause of dyspnoea is cardiac may consumption of high fat obtaining diet and lack of activity because of modernization in agriculture methods.

**Keywords:** Dyspnoea, Pulmonary, Respiratory, Cardiac

**INTRODUCTION**

Dyspnoea is a sign of serious disease of the airway, lungs, or heart. The onset of dyspnoea should not be ignored but is reason to seek medical attention. It is a normal symptom of heavy exertion but becomes pathological if it occurs in unexpected situations.

In 85% of cases it is due to either asthma, pneumonia, cardiac ischemia, interstitial lung disease, congestive heart failure, chronic obstructive pulmonary disease, or psychogenic causes.

Dyspnoea is distinct from labored breathing, which is a common physical presentation of respiratory distress.

It can be acute or chronic. While shortness of breath is generally caused by disorders of the cardiac or respiratory system, other systems such as neurological, musculoskeletal, endocrine, hematologic, and psychiatric may be the cause. Diagnosis Pro, an online medical expert system, listed 497 distinct causes in October 2010. The most common cardiovascular causes are acute myocardial infarction and congestive heart failure while common pulmonary causes include chronic obstructive pulmonary disease, asthma, pneumo thorax, pulmonary edema and pneumonia.

On a Pathophysiological basis the causes can be divided into: (1) an increased awareness of normal breathing such as during an anxiety attack, (2) an increase in the work of breathing and (3) an abnormality in the ventilator system...

**MATERIALS AND METHODS****Hyperkaelimia-1**

We selected randomly about 100 patients of grade 1, grade 2 and grade 3 dyspnoea NYH classification visiting our OPD block, Adesh Medical Collage and Research Bathinda, Punjab. Past history and other health problems were also noted. All the cases of dyspnoea from age of 18 to 90 were included with exclusion of acute patient of dyspnoea and previously diagnosed were excluded. All the patient were examined clinical and thoroughly investigated to a certain cause of dyspnoea.

**Physical Examination**

Detailed general physical examination with emphasis on pallor, jaundice, clubbing, pedal edema, lymph adenopathy was done with detailed CNS, CVS, abdominal, chest was done

**Investigation**

Patient were categorized on the bases of CBC, x-ray chest, ECG, 2D ECHO Cardiography, liver function test, ultrasound abdomen, HR CT Scan chest, creatinine, blood sugar, PFT

**OBSERVATIONS****Causes**

Respiratory: 45

Cardiac: 30

Renal: 11

Nutritional: 5

Cardiac + respiratory: 3

Psychological (anxiety disorder or panic attacks) -1

Endocrine-DKA-3

Infectious: enteric fever-1

Metabolic Disorder - 1

**RESULTS**

In our study we found that majority of our patients were.

Respiratory: 45, Cardiac:- 30, Renal:-11, Nutritional:-5, Cardiac+ respiratory:- 3, Psychological (anxiety disorder or panic attacks) :-1, Endocrine:-DKA-3, Infectious:- enteric fever-1, metabolic Disorder 1 as shown in Fig. 2. In this study we found 51% were females & 49 % were males as shown in Fig. 1 In this study majority of our patients were between age groups of 50-60 years as shown in table 1 & Fig. 3 & 4. In our study we found that 55% were from rural and 45% were from urban. as shown in Fig.5. In 85% of cases it is due to either asthma, pneumonia, cardiac ischemia, interstitial lung disease, congestive heart failure, chronic obstructive pulmonary disease, or psychogenic causes.

**Table 1**

Age Group	No. of cases
<20 years	3
20-30 yrs	11
30-40	11
40-50	15
50-60	25
60-70	21
70-80	6
>80	2

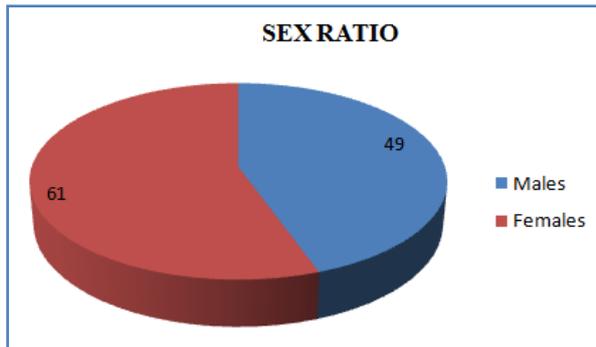


Fig. 1

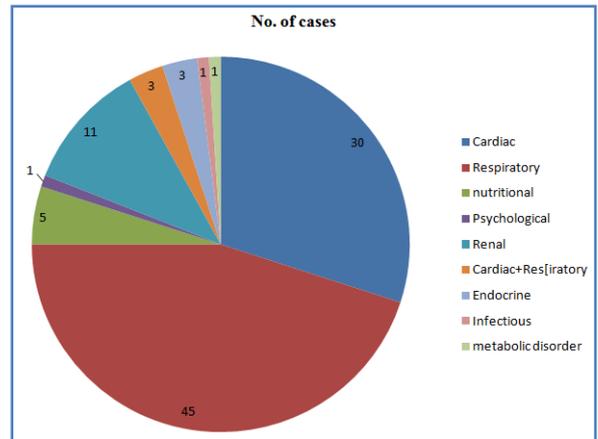


Fig. 2

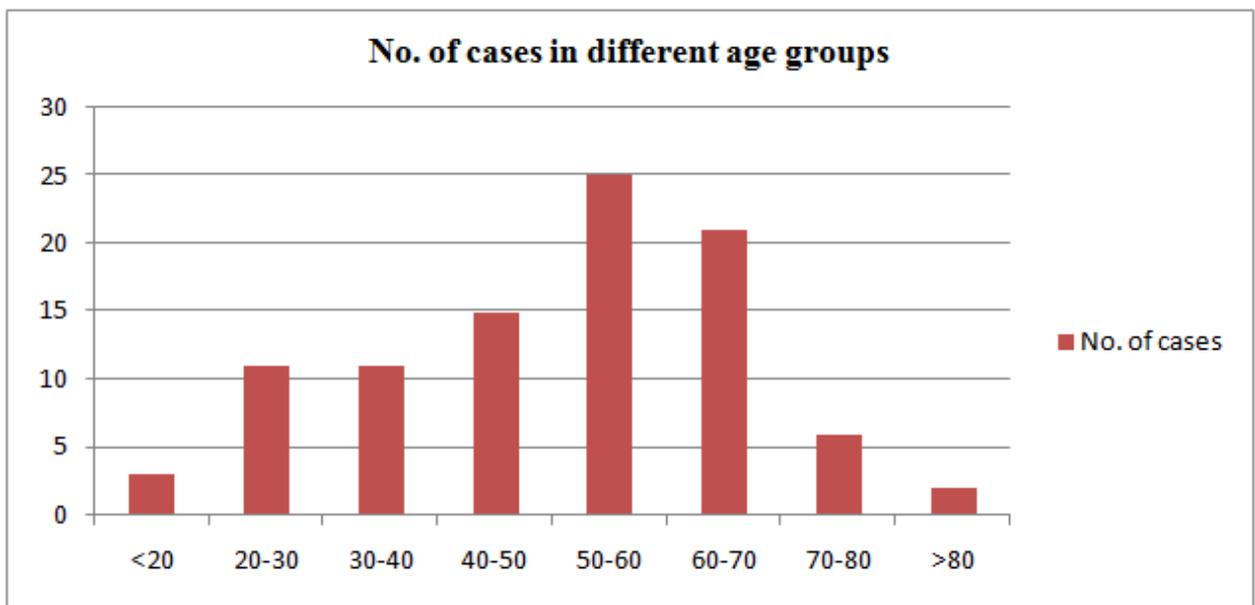


Fig. 3

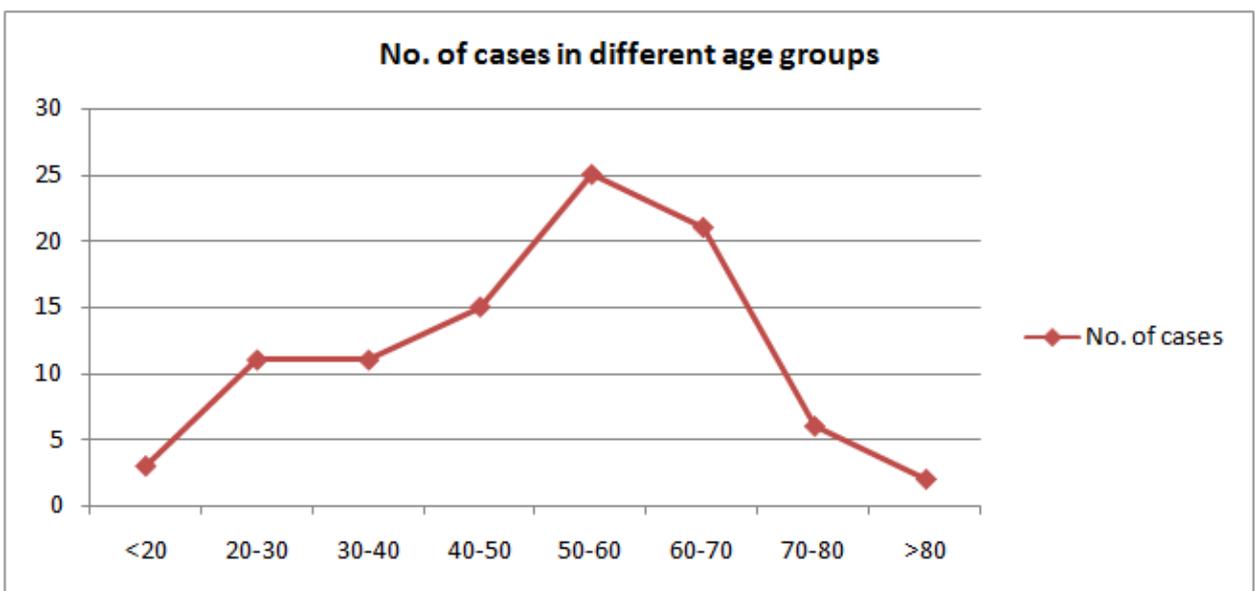


Fig. 4

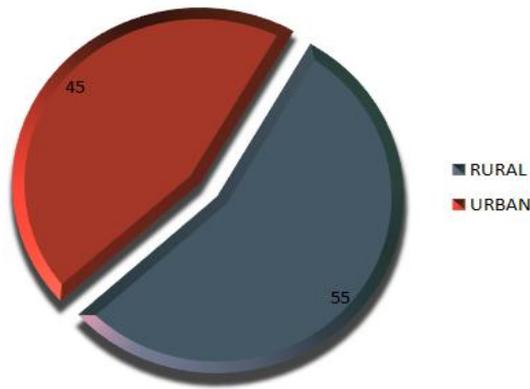


Fig. 5: Urban/Rural Ratio

## DISCUSSIONS

Dyspnoea is distinct from labored breathing, which is a common physical presentation of respiratory distress. It can be acute or chronic. While shortness of breath is generally caused by disorders of the cardiac or respiratory system, other systems such as neurological, musculoskeletal, endocrine, hematologic, and psychiatric may be the cause. The most common cardiovascular causes are acute myocardial infarction and congestive heart failure while common pulmonary causes include chronic obstructive pulmonary disease, asthma, pneumothorax, pulmonary edema and pneumonia. On a pathophysiological basis the causes can be divided into: (1) an increased awareness of normal breathing such as during an anxiety attack, (2) an increase in the work of breathing and (3) an abnormality in the ventilatory system.

### List of causes of shortness of breath

Many different conditions can lead to the feeling of dyspnea (shortness of breath). The most common cardiovascular causes are acute myocardial infarction and congestive heart failure while common pulmonary causes include: chronic obstructive pulmonary disease, asthma, pneumothorax, and pneumonia.

Pulmonary Obstructive lung diseases, Asthma, Bronchitis, Chronic obstructive pulmonary disease, Cystic fibrosis, Emphysema, Hookworm disease. Diseases of lung parenchyma and pleura. Contagious are Anthrax through inhalation of *Bacillus anthracis* Pneumonia. Non-contagious Fibrosing alveolitis, Atelectasis, Hypersensitivity pneumonitis, Interstitial lung disease Lung cancer, Pleural effusion, Pneumoconiosis, Pneumothorax, Non-cardiogenic pulmonary edema or acute respiratory distress syndrome, Sarcoidosis. Pulmonary vascular diseases are Acute or recurrent pulmonary emboli,

Pulmonary hypertension, primary or secondary and Pulmonary veno-occlusive disease. Superior vena cava syndrome. Other causes Obstruction of the airway Cancer of the larynx or pharynx, Pulmonary aspiration, Epiglottitis, Laryngeal edema and Vocal cord dysfunction. Immobilization of the diaphragm, Lesion of the phrenic nerve, Polycystic liver disease, Tumor in the diaphragm. Restriction of the chest volume Ankylosing spondylitis, Broken ribs Kyphosis of the spine Obesity, Pectus excavatum and Scoliosis. Disorders of the cardiovascular system, Aortic dissection, Cardiomyopathy, Congenital heart disease, CREST syndrome, Heart failure, Ischaemic heart disease and Malignant hypertension.

Pericardium disorders, including: Cardiac tamponade, Constrictive pericarditis Pericardial effusion Pulmonary edema, Pulmonary embolism, Pulmonary hypertension Valvular heart disease. Disorders of the blood and metabolism Anemia Hypothyroidism Adrenal insufficiency Metabolic acidosis Sepsis Leukemia Holocarboxylase synthetase deficiency. Disorders affecting breathing nerves and muscles Amyotrophic lateral sclerosis, Guillain-Barré syndrome Multiple sclerosis, Myasthenia gravis, Parsonage Turner syndrome Eaton-Lambert syndrome and Chronic fatigue syndrome. Psychological conditions Anxiety disorders and panic attacks. Medications Fentanyl. Other Carbon monoxide poisoning and Pregnancy.

## CONCLUSIONS

Majority of our patients were having respiratory cause of dyspnoea it may be because of rural Punjab is agriculture based state in that case dust and harvesting season may precipitate or cause respiratory dyspnoea. Second cause of dyspnoea is cardiac may consumption of high fat containing diet and lack of activity because of modernization in agriculture methods.

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