

## Editorial

# Pulmonary Hypertension: An Underestimated Disease In Developing World

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The burden of chronic respiratory diseases is increasing worldwide. In addition to common respiratory disorders such as asthma and COPD, less known diseases such as pulmonary hypertension also contribute to the global burden of chronic respiratory diseases.

Pulmonary hypertension is defined by a mean pulmonary artery pressure  $> 25$  mm Hg with a normal ( $< 15$  mm Hg) pulmonary artery wedge pressure.<sup>(1)</sup> Pulmonary hypertension is still poorly recognized in many developing countries. The true burden of pulmonary hypertension is currently unknown and largely underestimated. In about half of the cases of pulmonary hypertension no identifiable risk factors are found corresponding to idiopathic (sporadic) or familial PAH.<sup>(2)</sup> Hypoxia is a major worldwide risk factor for pulmonary hypertension. The predominant causes of hypoxia are inadequate oxygenation of arterial blood as a result of either lung disease such as COPD or interstitial lung diseases, impaired control of breathing, residence at high altitude and up to 4% of all patients with acute pulmonary embolism may acquire chronic thromboembolic disease and pulmonary hypertension.<sup>(3)</sup>

There are no early or specific symptoms of pulmonary hypertension, usually patients presented with progressive dyspnea on exertion. Initial screening tools like ECG, PFTs and chest radiography are neither sensitive nor specific. Improved awareness and initial suspicion of physician should help to recognize, confirm, and treat this condition. Doppler echocardiography, which allows a noninvasive measurement of systolic pulmonary artery pressure, is more accurate method for screening. A definite diagnosis of pulmonary hypertension requires invasive measurements like right-heart catheterization.

There is no cure for pulmonary hypertension and survival of untreated pulmonary hypertension is indeed extremely poor.<sup>(4)</sup> However, during last two decades treatment has evolved from a state of “no hope” to one in which prolonged survival and improvements in quality of life can be achieved. In addition to simple treatments such as diuretics, anticoagulants, and oxygen, current treatments target the prostacyclin, NO, endothelin receptor antagonists, and type 5 phosphodiesterase inhibitors for symptomatic pulmonary arterial hypertension. Updated ACCP evidence-based guidelines for clinical practice were published in 2007.<sup>(5)</sup> One of the major conclusions of these guidelines is that referral of patients with PAH to specialized centers continues to be strongly recommended due to the complexity of the diagnostic evaluation required and the treatment options available.

Improving awareness, diagnosis, prevention, and treatment of pulmonary hypertension in developing countries is currently supported by a World Health Organization program of the Global Alliance Against Chronic Respiratory Diseases (GARD). Such an awareness and approach should decrease the burden of the condition that is currently either ignored or recognized too late in developing countries. <sup>(6)</sup>

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