Chronic Obstructive Pulmonary Disease – A Growing Global Threat

Chronic Obstructive Pulmonary Disease (COPD) is a major cause of concern for world health authorities, as it is a leading cause of chronic morbidity & mortality across the world. Even more important is the fact that burden of this disease is increasing at an alarming pace. It was 5th leading cause of death in 2002, which has climbed to 4th position at present. With the estimated trend of 30% increase in mortality per decade, it is likely to become the 3rd leading cause of death in 2030, and 90% of these deaths occurs in middle and lower income countries. Based on various large scale epidemiological studies, global prevalence is estimated to be 11.7% (95% confidence interval 8.4% - 15%). The prevalence is likely to increase in parallel with ever increasing causative factors around the world. Although the use of various tobacco products including cigarettes, cigar and water pipe smoking are the major causes of COPD, biomass and coal burning leading to indoor air pollution, occupational dust, chemicals and vehicle emission are also becoming increasingly important especially in developing countries. Additionally, the number of COPD cases is also likely to increase due to the aging population worldwide.

COPD is a progressive disease and most of patients suffer for years and die from the disease or its complications prematurely. Not only the patients but also their families & health care system of the countries also suffer. The economic burden of COPD is enormous. For example, total direct cost of COPD is estimated to be approximately 6% of total health care budget of European Union and about 56% of respiratory diseases budget is spent of COPD.⁵

In developing countries, the health care system usually do not provide long term supportive care to severely disabled COPD patients; the situation demands at least two persons to leave the workplace to care for severely ill patient. If we add this indirect cost in the form of loss of working days of patients and their carers, economic burden become even higher. This added cost of COPD care in the form of loss of work force may pose serious threat to the economy of developing countries which heavily depend on the human capital for growth of their economies.⁶ Disability Adjusted Life Years (DALY) is another method of expressing the burden of specific disease. According to global burden of disease (GBD) study, COPD was 8th leading contributor of DALYs loss across the world in 2005 which has even worsened in 2013 and ranked 5th leading cause of DALY loss.⁷

It is important to realize that COPD is a preventable and treatable disease. With appropriate steps to eliminate or minimize the predisposing agents, development of this disease can be prevented. In those people, who had developed this disease, these steps can halt the progression of disease. Similarly, diagnosis in early stage of disease give an opportunity to treat the condition and prevent the progression as well as its complications. Unfortunately, early stages of COPD are unrecognized as the symptoms are nonspecific and many a time considered to be normal part of aging process or expected consequence of smoking.

To stop the spread of this disabling illness, the efforts are needed from individual patients as well as health care systems. To create awareness among all concerned, Global Initiative for chronic Obstructive Lung Disease (GOLD) with the support of WHO started observing world COPD day in 2002. Since then, annual COPD day is observed worldwide in November every year. Health Care Professional, non-profit organization and government agencies as well as patients have to get together to take action against this devastating disease. World COPD day 2016 theme is "Breathe in the knowledge". Focus is on the patients, to create awareness that they can take action to improve their respiratory health at all stages of disease. They may be able to slow and even stop the progress of disease by reducing the risk factors and sticking to management plan. Needless to say that the government agencies, non-profit organizations and health care professionals must also play their role to combat this global threat.

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