EDITORIAL

Global Initiative for Chronic Obstructive Lung Disease (GOLD)

*MM Rahman[1], MMR Siddiqui[2]

[1]*Prof. Md. Mostafizur Rahman, Professor, Department of Medicine, AKMMC, National GOLD Leader*
[2]*Dr. Md. Mahmudur Rahman Siddiqui, Associate Professor, Department of Medicine, AKMMC.*

**Corresponding Author*

Chronic Obstructive Pulmonary Disease (COPD) is a preventable and treatable disease, which is characterized by progressive, persistent airflow limitation with an enhanced chronic inflammatory response in the airway to noxious particles.[1] Chronic Obstructive Pulmonary Disease (COPD) is the fourth common cause of death in the whole world. COPD is a major cause of chronic morbidity and mortality throughout the world with big economic and social burden.[2,3] COPD burden is increasing day by day because of continuous exposure to its risk factors. Often, the prevalence of COPD is directly related to the prevalence of tobacco smoking.[3,4] COPD prevalence data show some variations in different parts of the worlds due to differences in survey methods, analytical approaches and exposure to different types of risk factors. Most national data show that less than 6% of the adult population has been suffering in COPD.[5] A systematic review and meta-analysis of studies carried out in 28 countries between 1990 to 2004 showed that the prevalence is higher in smokers and ex-smokers over 40 years of age. Prevalence was higher in men than in women.[5] The Global Burden of Disease Study projected that COPD was ranked sixed cause of death in 1990, will become the third leading cause of death worldwide by 2020.[6] COPD is a big economic burden. In the United States the estimated direct costs of COPD are $29.5 billion and the indirect costs $20.4 billion.[7] In developing countries, direct medical costs as well as the impact on workplace and home productivity is very important.

The chronic airflow limitation of COPD is a mixture of small airways disease (obstructive bronchiolitis) and parenchymal destruction (emphysema).[1] Inhalation of cigarette smoke and other noxious particles such as smoke from biomass fuels causes modified pulmonary inflammation. These chronic inflammatory responses induce parenchymal tissue destruction (resulting in emphysema) and disrupt normal tissue repair and defense mechanisms (resulting in small airway fibrosis).[1] These pathological changes lead to air trapping and progressive airflow limitation in lung, causes breathlessness and other characteristic symptoms of COPD.[1]

In the year 1998, a Global Initiative for Chronic Obstructive Lung Disease (GOLD) program was initiated.[8] The GOLD is a strategy document for health care professionals to use as a tool to implement effective management programs based on the best scientific information available. The first report, Global Strategy for Diagnosis, Management and Prevention of COPD was issued in 2001. In 2006 and again in 2011 a complete revision was prepared based on published research. Subsequently new update reports released in January 2013, January 2014 and January 2015 are based on scientific research published since the completion of the 2011 document.[8,9] GOLD initiative work with National Leaders and other interested health care professionals to bring COPD to the attention of governments, public health officials, health care workers and the general public to rise awareness of the burden of COPD and to develop programs for early detection, prevention and approaches to management.

References

1. Global strategy for the diagnosis, management, and prevention of chronic obstructive pulmonary disease, update 2015.
2. World Health Report. Geneva: World Health Organization. Available from URL: http:// www.who.int/whr /2000/en/ statics.htm; 2000.
3. Lopez AD, Shibuya K, Rao C, et al. Chronic obstructive pulmonary disease: current burden and future projections. Eur Respi J 2006; 27: 397-412.
4. Salvi SS, Barnes PJ. Chronic obstructive pulmonary disease in non-smokers. Lancet 2009;374:733-43.
5. Halbert RJ, Natoli JL, Gano A, et al. Global burden of COPD: systematic review and meta-analysis. Eur Respir J 2006;28: 523-32.
6. Mathers CD, Loncar D. Projections of global mortality and burden of disease from 2002 to 2030. PLoS Med 2006; 3: e442.
7. National Heart, Lung and Blood Institute. Morbidity and mortality chartbook on cardiovascular, lung and blood diseases. Bethesda, Maryland: US Department of Health and Human Services, Public Health Service, National Institutes of Health. Accessed at: http://www.nhlbi.nih.gov/resources/docs/cht-book.htm; 2009.
8. Agusti A, Hurd S, Jones P, et al. FAQ about the GOLD 2011 assessment proposal of GOLD: a comparative analysis of four different cohorts. Eur Respir J 2013 Nov; 42(5): 1391-401.
9. Maio S, Baldacci S, Martini F, et al. COPD management according to old and new GOLD guidelines: an observational study with Italian general practitioners. Curr Med Res Opin 2014 June; 30(6): 1033-42.