



Does Having Guidelines Translate to Better COPD Management in Primary Care Setting?

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Chronic Obstructive Pulmonary Disease (COPD) affects over 380 million people worldwide. It is the fourth leading cause of death in the world and accounts for millions of death worldwide. Every year, the Global Strategy for Diagnosis, Management and Prevention of COPD (GOLD) publishes a report which reviews the current evidence of diagnosis, assessment and management of COPD [1]. This event is aimed to serve as a guide for physicians to manage COPD patients. This can serve as a resource for pulmonary physicians and especially for primary care physicians who may not have the specialized training to treat pulmonary diseases. However, the question remains, while considerable time and effort is spent on updating these guidelines, do these guidelines really translates to patient care?

Several studies have looked into physician adherence to GOLD guidelines and its effect on patient outcomes. In a study by Chinai, *et al.* total of 158 COPD patients in an outpatient suburban primary care office were studied for a differences in mortality, exacerbations, or hospitalizations. Only 36% of the patients studied were being treated according to the GOLD guidelines. While they found that physician adherence to GOLD guidelines did not have any statistically significant difference in patient outcomes, patients non adherent to GOLD guideline directed therapy did receive a long acting beta agonist (LABA) and inhaled corticosteroids (ICS) at a higher frequency than GOLD non adherent patients [2]. Surani, *et al.* found that in their retrospective study of 101 patients in two outpatient primary care community clinics, none of the patients had baseline validated measures of dyspnea such as Chronic

obstructive pulmonary disease assessment test (CAT) scores or modified medical research council (m MRC) dyspnea scale. Only 21% patients had formal pulmonary function tests done, 31.5% of the patients were incorrectly diagnosed to have COPD and only 42% patients were on maintenance therapy with a long acting muscarinic antagonist (LAMA) [3]. Evidence of non-adherence to guideline-based therapy is not only evident in the United States but also globally. In a study by Graf, *et al.* medical management of 2281 patients with a diagnosis of COPD in Germany found evidence of under treatment in high risk patient groups with COPD because many of the patients were not treated with combination LABA/LAMA therapy or LAMA therapy as recommended [4]. In a large clinical audit based in Spain called EPOCONSUL, a total of 4508 patient records from 59 Spanish hospitals were examined and found high level of variability in management of COPD. They identified some factors that could explain the high degree of variability including differences in hospital size, location, differences in nursing care, treatment in primary care clinics vs in specialized outpatient clinics and difference in patient characteristics, such as level of dyspnea, degree of airflow obstruction, presence of comorbidities and risk of hospitalizations/exacerbations [5]. However, it remains to be questioned why many clinicians are not following guideline and practice evidence based therapy.

It needs to be mentioned that when societies publish guidelines, it should be clarified that the guidelines are meant to be suggestions, and the ultimate management of the patient depends on the clinical scenario, patient conditions and clinician's judgment.

While several studies have shown that most COPD management in the primary care outpatient setting is clearly not guideline directed, further studies need to be done to investigate how that correlates to patient's overall COPD status, including, number of hospitalizations, exacerbations, compliance with immunizations, use of oxygen, etc. Interestingly, in a retrospective study conducted by Foda., *et al.* including COPD patients in the VA system, it was found that while only 19% patients were appropriately managed using guideline directed therapy, under treatment of COPD was associated with decreased frequency of exacerbation [6]. This event could be due to other confounding factors including, better adherence to immunizations and more focus on preventative care in the VA.

In the end, the question remains if guidelines improve care and management of COPD. Moreover, it also raises the question that does guidelines takes into account the availability of service, cost, ethnic variability, difference in phenotype and diversity. Maybe, it is the time to come up with strength based guideline with must do, should do and may do. The must do portion in guidelines should be prioritized and is disseminated. This based on evidence should help in improving the mortality and healthcare cost and should be practiced both in developed and developing countries. Should do and may do portion of the guidelines should be a suggestion. Further research needs to be undertaken to assess the factors which may improve the compliance with the guidelines in both developing and developed countries.

Bibliography

1. Agusti Alvar. "Global Initiative for Obstructive Lung Disease 2019 Report." *Goldcopd* (2019).
2. Chinai B., *et al.* "Outpatient Management of Chronic Obstructive Pulmonary Disease: Physician Adherence to the 2017 Global Initiative for Chronic Obstructive Lung Disease Guidelines and Its Effect on Patient Outcomes". *Journal of Clinical Medicine Research* 11.8 (2019): 556-562.
3. Surani S., *et al.* "Adoption and Adherence to Chronic Obstructive Pulmonary Disease GOLD Guidelines in a Primary Care Setting". *SAGE Open Medicine* 7 (2019): 2050312119842221.
4. Grafj., *et al.* "Medical Treatment of COPD". *Deutsches Ärzteblatt International* 155.37 (2018): 599-605.
5. Calle Rubio M., *et al.* "Variability in Adherence to Clinical Practice Guidelines and Recommendations in COPD Outpatients: a Multi-Level, Cross-Sectional Analysis of the EPOCONSUL Study". *Respiratory Research* 18.1 (2017): 200.
6. Foda HD., *et al.* "Inverse Relationship between Nonadherence to Original GOLD Treatment Guidelines and Exacerbations of COPD". *International Journal of Chronic Obstructive Pulmonary Disease* 12 (2017): 209-214.

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