



REDUCTION OF EMERGENCY DEPARTMENT VISIT USING AN URGENT CLINIC FOR ADULT WITH COPD

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INTRODUCTION

Chronic obstructive pulmonary disease (COPD) is a chronic inflammatory lung disease that causes obstruction of airflow out of the lungs. Symptoms include difficulty breathing, coughing, mucus (phlegm) build-up, and wheezing. It is usually caused by prolonged exposure to irritating gases or particles, often from cigarette smoke. People with COPD are at increased risk of heart disease, lung cancer, and a variety of other conditions

Chronic bronchitis is an inflammation of the lining of the bronchial tubes that carry air to and from the air sacs (alveoli) of the lungs. This disease is characterized by daily coughing and mucus (sputum) formation.

Emphysema is a condition in which the alveoli at the end of the smallest air passages (bronchioles) in the lungs are destroyed by harmful exposure to cigarette smoke, gases and other irritating particles.

Chronic obstructive pulmonary disease (COPD) is a major public health problem worldwide and causes disabling, progressive symptoms with episodes of rapid exacerbation termed acute exacerbations (AE-COPD) [1].

COPD is characterized by persistent airflow obstruction, however, reliance on spirometers alone fails to capture the observed variability in symptoms and prognosis [2]. While recent GOLD guidelines [3] have partially addressed this, there is an urgent need to improve the characterization of COPD.

Cough and phlegm are reported by 60-80% of COPD patients [4,5] yet clinicians do not greatly appreciate the importance of these symptoms to the patient's well-being [6]. Chronic cough and mucus hypersecretion in COPD are associated with a rapid deterioration in lung function, more frequent exacerbations, and early mortality [7- 9].

AE-COPD causes significant morbidity and mortality. Cough and shortness of breath are primary features of AE-COPD [10] and worsen in the prodromal . [11] Thus, monitoring cough frequency has potential applications in both phenotyping and identification of AE-COPD. We report a longitudinal, observational study of objective monitoring of cough over a 45-day period during AE-COPD convalescence.

BACKGROUND

In the Urgent Care unit, we deal with all cases that require emergency medical intervention. The unit provides a wide range of urgent medical care services aimed at treating and diagnosing patients' cases, whether simple or critical. Our facilities provide expert urgent care under the supervision of highly trained physicians, nurses and paramedics 24 hours a day, 7 days a week. The urgent care unit sorts, evaluates, diagnoses and treats injuries and cases based on their severity for both adult and pediatric patients, in addition to providing the necessary support to resuscitate the patient and keep him in a stable health condition until the necessary emergency care services are provided.

AIM

To provide comprehensive and coordinated care , treatment options and comprehensive diagnosis by the urgent care team with out the need to go to the emergency hospital (ED).

OBJECTIVE

- Training urgent care staff to provide services to patients
- Assisting the patient in navigating the urgent care system, including assistanc
- Improve communication between the hospital and the urgent care team-
- Evaluation of urgent training in relation to cost-effectiveness
- prevent or management of complication
- improvement in the patient quality of life

PROBLEM STATEMENT

COPD is included in the WHO Global Action Plan for the Prevention and Control of Noncommunicable Diseases and the United Nations 2030 Agenda for Sustainable Development.

WHO is taking action to expand the diagnosis and treatment of chronic obstructive pulmonary disease in many ways.

project aims to support decision-making in the field of respiratory health based on scientific evidence and the daily lives of COPD patients

LITERATURE REVIEW

Chronic obstructive pulmonary disease is the third leading cause of death in the world, causing 3.23 million deaths in 2019.

Several operations may lead to narrowing of the airways. It may be caused by damage to parts of the lung, blockage of the airways with mucus, or inflammation and swelling of the lining of the airway. COPD is sometimes called "emphysema" or "chronic bronchitis." Emphysema usually refers to damage to the small air sacs at the end of the airways in the lungs. Chronic bronchitis refers to a chronic cough with sputum production due to inflammation of the airways.

COPD and asthma share common symptoms (coughing, wheezing, and difficulty breathing) and individuals may suffer from both diseases together

It results in losses in quality of life and productivity and, if not managed, can lead to severe and long-term complications requiring costly hospitalization and readmission.

The urgent care coach effectively and safely involved patients in changing their health behavior ,supported patients in taking actions, developing plans and achieving goals based on the patient's desires ,training as a urgent Care Intervention, is an effective chronic care management intervention in influencing outcome measures that can also act as a proxy in the absence of clinical indications or other cost.

REFERENCE IIST

1. [Coronary heart disease and heart failure in asthma, COPD and asthma-COPD overlap](#)
2. [Truls Sylvan Ingebrigtsen et al., Open Resp Res, 2020](#)
3. *Brightling CE, Monteiro W, Ward R, et al. Sputum eosinophilia and short-term response to prednisolone in chronic obstructive pulmonary disease: a randomised controlled trial. Lancet 2000;356:1480-1485*
 - *Crossref. opens in new tab*
 - *Web of Science. opens in new tab Medline*
4. [Comprehensive Dutch market data analysis shows that e-liquids with nicotine salts have both higher nicotine and flavour concentrations than those with free-base nicotine](#)
5. [Jeroen L A Pennings et al., Tobacco Control, 2022](#)
6. [Pro-inflammatory effects of e-cigarette vapour condensate on human alveolar macrophages](#)
7. [Aaron Scott et al., Thorax, 2018](#)
8. [Ten golden rules for individualized mechanical ventilation in acute respiratory distress](#)

[syndrome](#)

9. [Denise Battaglini et al., Journal of Intensive Medicine, 2021](#)
10. *Investigation and analysis of the biosafety awareness of laboratory staff involved in the detection of pathogens in seven provincial Centers for Disease Control and Prevention in China* [Yan Liu et al.,](#)
11. [Application of an integrated dissolved ozone flotation process in centralised fracturing wastewater treatment plant](#)
12. [Zhuodi Yao et al., Journal of Water Reuse and Desalination, 2021](#)
13. [Impact of smoking status on the efficacy of inhaled corticosteroids in chronic obstructive pulmonary disease: a systematic review](#) [Kimberley Sonnex et al., BMJ Open, 2020](#)
14. [Design and implementation of gigabit ethernet transmission system based on Zynq-7000](#) [Zhenlei YANG et al., Nuclear Techniques, 2021](#)
15. [Is decreased lung function associated with chronic kidney disease? A retrospective cohort study in Korea](#) [Soo Kyoung Kim et al., BMJ Open, 2018](#)
16. [P47 The impact of comorbid ischaemic heart disease on exercise capacity in COPD patients](#)
17. [A R C Patel et al., Thorax, 2011](#)