## COPD: Integration of cough monitors in lung cancer diagnosis Oncology nurse practioner at Beacon Health services in Kenya

## **Nancy Midiwo**

Oncology nurse practioner at Beacon Health services in Kenya

Lung cancer is the leading cause of death among both men and women each year globally. The most effective way of reducing lung cancer deaths is early diagnosis. This can be achieved through early identification and proper referral of suspected clients. A cough monitor is a lay individual trained in community sensitization, cough assessment and sputum collection for symptomatic clients to rule out pulmonary TB. Lung cancer program has shown that diagnosis of lung cancer cases has increased due to integration of cough monitors. The objective was to improve on early identification, raise high index of suspicion and proper referral for suspected lung cancer patients. Cough monitors from peripheral health facilities within our catchment areas were involved and trained in order to ensure that patients who present with cough hemoptysis, chest pain, shortness of breath, backache, unexplained weight loss and gene x-pert negative are referred. A standard referral tool and a phone call referral log were developed and a contact person from both ends identified. Total of (24) cough monitors from (12) peripheral health facilities underwent a two day training and sensitization. Between October 2018 and February 2019, total of (95) clients have been referred for further investigations. Of the (95), (68) clients had no lung mass while (27) had lung mass. (9) were diagnosed with non-small cell lung cancer, of the (9) diagnosed, (7) were male and (2) female. The integration of cough monitors has raised awareness of lung cancer, led to early identification of suspected lung cancer cases and proper referral systems. Cough may well be a standard symptom of the many respiratory illnesses. Many medical publications stress that a system for the automated, objective and reliable detection of cough events is extremely important and really promising for detecting the severity of pathology in chronic cough disease. so as to trace the event status of an audio-based cough monitoring system, we briefly describe the target cough detection history, in order that we illustrate the cough

sound generation principle. Probable endpoints of clinical studies of cough, including cough frequency, cough intensity, and acoustic properties of cough sound, were analyzed during this work. Finally, we present some successful cough monitoring equipment and its recognition algorithm all right. First, it's obtained that the acoustic variability of the cough sounds within and between individuals makes it difficult to assess the intensity of the cough. Additionally, great progress is now being made in audio-based cough detection. Additionally, accurate portable objective monitoring systems are available and can be widely employed in home care and clinical trials within the near future. Cough may well be a standard but complicated symptom of respiratory illnesses. This symptom is additionally the explanation why people seek medical advice within the us and China, although the importance of cough diagnosis has been well accepted by academic organizations in recent years, there's no gold standard to judge cough because of the shortage of objective and precise measures of cough. Frequency and severity. When the cough becomes chronic, it's so extremely unpleasant and distressing that the standard of lifetime of patients with chronic cough has significant reductions, the price of medical aid, medical consultations, and drugs use become a big burden on them. . Assessment of cough severity is currently subjective: it contains visual analog scales (VAS), health-related quality of life (HRQL), Leicester's cough questionnaire (cough-specific quality of life questionnaire (CQLQ). ), and so should be validated in cases of chronic or acute cough in clinical trials. However, these tools are completed by the patient himself or by a parent. The underlying disease determines the physical nature of the cough. Therefore, they develop Cough Sound Compatible Methods for Counting and Classifying Cough Events This text focuses on audio-based methods and systems for analysis and cough measurement.

nancymids1@gmail.com