## البحث الثالث

## (3) بحث مشترك مستخلص من رسالة:

## عنوان البحث بالغة الإنجليزية:

Early detection of chronic obstructive pulmonary disease among high risk smokers using spirometeric screening in Fayoum Governorate.

## الملخص الإنجليزى:

<u>Background</u>: COPD is currently the fourth leading cause of death in the world and further increase in the prevalence can be predicted in the coming decades. More than 90% of cases of COPD are caused by tobacco smoke. COPD usually is diagnosed late in its natural course and 63% of patients with severe and very severe COPD had no prior or current diagnosis of obstructive lung disease. Because of the increase in prevalence and mortality of COPD, and its high medical costs, it is important to identify patients and to treat them before they reach the symptomatic, irreversible and costly stages of the disease.

<u>Aim of the work:</u> to evaluate the role of spirometric screening for the early detection of COPD in high risk smokers in Fayoum governorate.

<u>Patients and methods:</u> This study was performed on 200 smoker volunteers who are not known to be COPD with  $\geq$  40 years of age and smoking history of  $\geq$  20 pack-years. They have no symptoms or complain from chest troubles'. These volunteers were not diagnosed before as COPD patients and they also did not seek for prior repeated medical advice. They were submitted to spirometric evaluation before and after bronchodilators.

<u>Results:</u>39 smokers out of 200 smokers with percentage of 19.5% were found to have irreversible airways obstruction (COPD) according to GOLD 2007 and 161 smokers (80.5%) had no airways obstruction. Mild airway obstruction was found in 3%, moderate airway obstruction was found in 9% and severe airway obstruction was found in 7.5% according to GOLD classification.

<u>Conclusion and recommendations:</u> The present study may represent a potentially useful model to use the mass spirometry in high-risk groups as an effective and easy method for the early detection of COPD.