Abstract Group: 6.1. Epidemiology
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Title: The prevalence and determinants of COPD in an urban community in Lagos, Nigeria

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Body: Background: There is limited data on the prevalence of COPD in sub-Saharan Africa. We aimed to determine the prevalence of COPD in an urban community in Lagos, Nigeria and also explore the risk factors associated with COPD. Methods: Adults 40 years and above were randomly selected from Idi-Araba community in Mushin Local Government Area. Questionnaire of symptoms and risk factors for COPD was completed and pre-bronchodilator spirometry performed on all participants. Those with pre-bronchodilator FEV1/FVC ratio <0.7 initially also had post bronchodilator spirometry performed after inhalation of 200ug salbutamol. A diagnosis of COPD was defined as post-bronchodilator FEV1/FVC ratio <0.7. Multivariate logistic regression analysis was used to explore the significant determinants of COPD and the magnitude of risk expressed as odds ratio (OR). Results: There were 412 participants (58.3%) females. Mean age was 53.7±11.2 years, 9.7% had >12 years of formal education, 13.8% were ever smokers (1.5% current smokers), 23.1% used biomass fuel for cooking, 24.5% had occupational dust exposure, and 1.5% had tuberculosis previously. The prevalence of COPD was 5.3% (95% confidence interval (CI) 3.4 – 8.0), 7.6% (95% CI 4.1 – 12.6) in males, 3.8% (95% CI 1.7 – 7.0) in females, (X2=2.88, p=0.09). The significant determinants of COPD were ever smoking cigarettes (OR 4.9 95% CI 1.8-13.2, p=0.001) and increasing age, (OR for age ≥60 years 3.6, 95%CI 1.4-9.5 and OR for age >70 years 4.6, 95%CI 1.6-13.0, p=0.004). Conclusion: The prevalence of COPD in our population is substantial. Tobacco control should be a priority in reducing the prevalence of COPD in our region.