European Respiratory Society
Annual Congress 2012

Abstract Number: 2198

Publication Number: P3395

Abstract Group: 6.1. Epidemiology

Keyword 1: Epidemiology **Keyword 2:** Smoking **Keyword 3:** Wheezing

Title: Life-span perspective of susceptibility to tobacco smoking in men and women

Mrs. Toril Mørkve 12014 Knudsen gerd.knudsen@med.uib.no , Dr. Roy Miodini 12016 Nilsen roy.nilsen@uib.no , Dr. Trude Duelien 18696 Skorge trude.duelien.skorge@helse-bergen.no MD , Prof. Cecilie 18697 Svanes cecilie.svanes@med.uib.no MD and 18707 ECRHS Early Life Working Group cecilie.svanes@med.uib.no . [1] Institute of Medicine, University of Bergen, Norway ; [2] Centre for Clinical Research, Haukeland University Hospital, Bergen, Norway and [3] Department of Occupational Medicine, Haukeland University Hospital, Bergen, Norway .

Body: Aim: Maternal smoking in utero, age of smoking debut, and pack years, were examined in relation to wheeze, bronchial reactivity (BHR), and other airways symptoms in 5348 male and 5262 female ECRHS participants. Results: In both men and women, mutually adjusted models showed that wheeze (33%) was statistically significantly associated with maternal smoking in utero (men: OR=1.54[1.19-2.00], women: OR=1.53[1.25-1.88]), age of smoking debut (men: p=0.019, women: p<0.001, see figure 1), and pack years of smoking at 5 yrs interval (men: OR=1.03[1.02-1.04], women: OR=1.04 [1.03-1.05]). Effects of both smoking debut and of pack years were stronger in women, with p-values for interaction of respectively 0.001 and 0.007. Association with other airways symptoms and symptoms with BHR showed similar results. Conclusion: Exposure to tobacco smoking affects adult respiratory health, with women being more susceptible than men to early smoking debut and amount of pack years. Figure 1. OR for wheeze in relation to age of smoking debut in women and men. Estimated from GAM models.