## OP-241-20 Tobacco use and social determinants in 30 Sub-Saharan African countries: analyses of national level population-based surveys

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**Background:** Though Framework Control for Tobacco Control prioritises monitoring of tobacco use by population-based surveys, information about prevalence and patterns of tobacco use in Sub-Saharan Africa is limited. We aim to provide country-level prevalence estimates for smoking and smokeless tobacco use and assess their social determinants.

Design/Methods: We analysed population-based data from 30 Demographic Health Surveys (DHS) done between 2006 and 2013 involving men aged 15-49(64) years and women aged 15-49 years in 30 Sub-Saharan African countries. Weighted country-level prevalence rates were estimated for 'current smoking' (cigarettes, pipe, cigars etc.) and 'current use of smokeless tobacco (SLT) products' (chewing, snuff etc.) among men and women. From the pooled datasets for men and women, social determinants of smoking and SLT use were assessed using multivariate analyses by including dummy country variable as controls and including within-country sample weight of each country.

**Results:** Among men prevalence of smoking was high in Sierra Leone (37.7%), Lesotho (34.1%) and Madagascar (28.5%); low (<10%) in Ethiopia, Ghana, Nigeria and Sao Tome and Principe. Prevalence of SLT use among men was <10% in all countries except Madagascar (24.7% and Mozambique (10.9%). Men mainly smoked cigarettes a while snuff was also used by men in few countries. Among women prevalence rates were <5% in most countries except Burundi (9.9%), Sierra Leone (6.1%) and Namibia (5.9%) for smoking; Madagascar (19.6%) and Lesotho (9.1%) for SLT use. Cigarette smoking was low among women in most countries and they mainly used snuff and chewing tobacco. Older age (>40 years), was strongly associated [adjusted Odd Ratios (aOR), 4.65-9.33] with both smoking and SLT use among men and women. Smoking among both men and women was weakly associated (aOR, 1.79 & 1.77 respectively) with education but SLT use strongly associated (aOR, 2.39, 15.5 respectively) with education. Similarly, smoking among men and women was weakly associated (aOR, 1.55, 1.24 respectively) with wealth but SLT use was strongly associated (aOR, 3.36, 3.65 respectively) with wealth. Smoking and SLT use were also associated with marital status (being single) among both men and women while smoking and SLT use were associated with occupation (agriculturists and unskilled workers).

Conclusion: Prevalence among women was much lower than men but showed similar social patterns as men. To-bacco control strategies should target the poor, not (least) educated, agricultural and unskilled workers who are the most vulnerable social groups in Sub-Saharan Africa. DHS can provide reliable estimates for surveillance of to-bacco use.

## OP-243-20 Second-hand smoke exposure and health-related quality of life in never smokers: The Hong Kong Jockey Club Family project

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**Background:** Despite the mounted evidence on the adverse health effects of secondhand smoke (SHS), the evidence is limited on the relation between SHS exposure and Health Related Quality of Life (HRQoL).

Methods: SHS exposure was self-reported by a probability sample of adult never smokers aged 18 or above from the 2010, 2012 and 2013 waves of The Hong Kong Family and Health Information Trends Survey (FHinTs) of FAM-ILY Project (www.family.org.hk). HRQoL was measured using the validated Cantonese version of Short Form 12 Health Survey Questionnaire (SF-12v2). Two summary scores of Physical Component Summary (PCS12) and Mental Component Summary (MCS12) were calculated with higher scores indicating better perceived HRQoL. Using linear regression models adjusting for demographic variables and potential confounding factors, associations of SHS exposure with PCS12 and MCS12 were examined with subgroups analysis in males and females. The sample was weighted by sex and age from the census data in the year of each wave of the survey.

**Results:** In 3807 never smokers, 74.8% (95%CI: 73.3% to 76.2%) reported any SHS exposure. After adjustment for covariates, SHS exposure was associated with lower PCS12 (=-0.8, 95%CI: -1.3 to -0.1, p=0.011) and MCS12 (=-1.3, 95%CI: -2.1 to -0.6, p<0.001). In females, exposure to SHS was associated with lower PCS12 ((=-1.0, 95%CI: -1.7 to -0.2, p=0.009) and MCS12 (=-1.5, 95%CI: -2.3 to -0.7, p<0.001). Negative but non-significant associations were observed in males (=-0.4, 95%CI: -1.4 to 0.6, p=0.408 for PCS12; =-1.1, 95%CI: -2.4 to 0.2, p=0.109 for MCS12). The p value for interaction (sex × SHS exposure) was 0.85 for PCS12 and 0.64 for MCS12.

**Conclusion:** SHS exposure was associated with poorer HRQoL in never smokers. The apparently stronger association in females than males was not significant. Prospective studies are needed to confirm the findings, which should have implication on intervention to reduce SHS.