

of vaper identities in a context were also snus have a substantial marked share. They portray their vaping in various ways, but hold a shared understanding of use of e-cigarettes as harm reduction. The results are relevant to policy makers in order to understand how to address users and potential new users of e-cigarettes.

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PS-653-4 Smoking and snus use among Finnish young males

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Background: The aim of this study was to evaluate the prevalence of cigarette, snus (Swedish type of smokeless tobacco) and dual use as well as transition from one tobacco product to another among a representative population of young Finnish males. In addition, we evaluated the correlation between educational level and the use of tobacco.

Methods: A questionnaire-based survey was carried out among military conscripts during their first week of service (n=1916, mean age 19.4; response rate 95%). The questionnaire consisted of 25 questions including age, gender, basic education, use of tobacco products and questions assessing nicotine dependency. The usage of electric cigarettes was asked but excluded from the analysis due to very low usage (1.4%).

Results: In our survey, 34% (n=635) reported snus usage of which 42% used snus daily (n=237, 14% of the whole study population). A quarter, 26% (n=486), of the study population smoked daily. A total of 40% (n=741) reported sporadic or regular cigarette usage. Every fifth, 21% (n=402), of all conscripts reported simultaneous usage of cigarette and snus. The probability of dual usage was higher among smokers. 35% of former smokers reported daily snus use and 43% of reported quitters in the snus-group were smoking daily. Smoking was common among study subjects with basic educational background of whom 57% smoked daily. A similar association between snus users and the level of education could not be demonstrated. Signs of electric cigarettes as a replacement for tobacco or snus could not be demonstrated.

Conclusions: Exclusive snus use as well as dual use of cigarette and snus were significantly higher than expected. Educational level did not correlate with exclusive snus use. The notably high prevalence of snus usage seems to reflect the aspiring change of trend among tobacco consumers.

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PS-654-4 Factors associated with ever-use of e-cigarette among college students in the Republic of Korea

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Background: Since e-cigarette was introduced into the global market, its use has become popular especially among young

adults. But little is known about the prevalence and associated factors of e-cigarette use among young adults in Korea. The purpose of this study is to identify the factors associated with ever-use of e-cigarette among Korean college students.

Methods: A survey to collect the data for this study was distributed to 550 students in 5 universities in S city and K city from October to December 2016. Data from the survey which consists of self-reporting questionnaires were analyzed using binary logistic regression analysis. Ever-use of e-cigarette was assessed by asking "Have you ever used an e-cigarette?" (yes/no). The final sample for this study (n=399) included those who had ever heard of e-cigarette.

Results: Among 399 students who had ever heard of e-cigarette, 68(17%) were e-cigarette ever-users. E-cigarette ever-use was higher among male students(OR=6.82, 95% CI=2.02, 23.02, p<0.05), students living in dormitory(OR=10.19, 95% CI=1.16, 89.49, p<0.05), whose father is a smoker(OR=58.41, 95% CI=8.70, 392.39, p<.001), who have the experience of past 2-week binge drinking(OR=43.78, 95% CI=5.61, 341.93, p<.001) and past 30-day cigarette smoking(OR=1.02, 95% CI=1.01, 1.03, p<.001).

Conclusions: This study showed significant association between e-cigarette ever-use and gender, residence type, father's smoking status, past 2-week binge drinking and past 30-day cigarette smoking. Associated factors of e-cigarette use should be considered for smoking prevention program for college students. To better understand the patterns and determinants of e-cigarette use among young adults in Korea, further studies are needed.

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PS-655-4 Electronic cigarette effectiveness to quit smoking in the representative Italian population PASSI survey, 2014 - 2016

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Background: This study explored electronic cigarette (e-cigarette) use as an aid to quit smoking and compared abstinence rates for different quitting methods in a representative sample of the Italian population, 2014-2016.

Methods: In the 2014-2015 PASSI survey, the ongoing Italian behavioural risk factor surveillance system, 6,112 adults who smoked and made at least one quit attempt in the previous 12 months, were categorised into three groups according to the method used in their most recent quit attempt: e-cigarette only, no aid, other quitting methods (medications; programmes delivered in smoking cessation services; other unspecified methods). The primary outcome was self-reported abstinence for a period ≥6 months, adjusted for potential confounders.

We will perform the same analysis for 2016 Passi survey.

Results: Eleven percent used e-cigarettes only, 86% no aid, 3% other quitting methods. Smoking abstinence was reported among 9% of those using no aid; 8% of e-cigarette users; 15% of those using other methods. Compared with those reporting no aid to

quit smoking, no statistically significant differences in abstinence were observed for e-cigarette users compared with those reporting no aid (adjusted Prevalence Ratio [aPR]=0.81;95% Confidence Interval (CI)=0.58-1.14), neither for those using other quitting methods (aPR=1.42;95%CI=0.95-2.13). Changing the reference group to e-cigarette users, users of other quitting methods were significantly more likely to report abstinence than e-cigarette users (aPR=1.76; 95%CI=1.07-2.88).

We will add results for the 2016 Passi survey.

Conclusions: One out of ten smokers who attempted to quit in 2014-2015 in Italy used e-cigarettes, a proportion three times higher than that recorded for other quitting methods. E-cigarettes users were no more as likely to report abstinence than as those using no aid, but were less likely to report abstinence than users of established quitting methods. Further studies are needed to understand the relationship between e-cigarette types used to quit and abstinence rates.

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PS-656-4 Perceptions, work environment, and job stress related with tobacco use among fishermen in remote Island, Rebus Japan

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Background: In Japan, lung cancer is the highest leading cause of death. From the data of Japan Tobacco Incorporated (JT) in 2016, the smoking rate was 19.3% and 29.7% in male, and 9.7% in female. Hokkaido showed the highest smoking rate both in male(35.3%) and female(18.1%). Rebus Island located at north of Hokkaido prefecture in Japan and main income is fishing industry. Although studies about smoking among fishermen are rare, many studies showed the high prevalence of smoking among fishermen. This study was conducted to identify the situation of current smoker among fishermen and the factors related to smoking behavior.

Methods: A cross sectional study was conducted, and all of the questionnaire contents were developed based on the literature and theory reviews. In the questionnaire, general characteristics, perceptions based on Health Belief Model (perceived susceptibility, perceived severity, perceived benefits, perceived barriers, and cues to smoking), working environment, and job stress were included to collect data at fishermen's home. One hundred and six fishermen were selected by accidental sampling technique, and interview was performed one by one. Data were analyzed by descriptive statistics and analytical statistics for association analysis by Chi-square and Independent t-test at 95% confidence.

Results: The result showed 45.3% were current smokers (43.4% daily smoker, and 1.9% occasional smoker), and 54.7% (33.0% ex-smoker and 21.7% never smoker) were non-smokers. Age($r=0.070$), marital status($r=0.002$), present of smoker in family($r=0.030$), having chronic diseases($r=0.001$), job experience($r=0.002$), perceptions (perceived susceptibility($r=0.033$), perceived benefits($r=0.049$), and perceived barriers($r<0.001$)) showed strong association with smoking behavior among fishermen in Rebus Island.

Conclusions: Health promotion program for fishermen is necessary in order to educate them for raising perception toward smoking and for understanding the importance of smoking cessation among fishermen in Rebus Island.

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PS-657-4 E-cigarettes or vaping: examining perceptions of use and associated harm among current users in Australia and Bangladesh

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Background: E-cigarettes or vaping are currently increasing in popularity among smokers globally. This study aims to examine the perceptions of e-cigarette users regarding use and associated harm.

Methods: A cross sectional survey was conducted during July 2017 among members of different popular online forums in Australia and Bangladesh, who were current or ex-users of e-cigarettes. A structured questionnaire was used to collect data anonymously using Qualtrics.

Results: There were 452 study participants, mean age was 39(± 13.2) years and 80%($n=356$) were men. Half of them ($n=223$) resided in Australia and 32%($n=143$) in Bangladesh. Three in four participants (77%) lived in metropolitan areas, 47% were married, 33% had undergraduate level of education, a fifth of them were either professionals or employed. More than three quarters (76%) of respondents were not current smokers and 40% of them quit smoking 1-5 years ago. Three quarters of the current smokers (76%) tried to quit smoking cigarettes in the last 12 months. Almost all of the participants (96%) were using e-cigarettes daily and 94% of them had nicotine in the e-liquid used. The average amount of e-liquid used, nicotine strengths and duration of use were 8.2(± 6.9) ml/day, 6.7(± 5.8) mg/ml, and 25.2(± 23.3) months respectively. Reasons for using e-cigarettes were to reduce/quit cigarette smoking (91%), good taste/ flavor (50%), low cost (41%), safe to use (39%) and can be used indoor/ smoke free areas (33%). The majority of respondents (81%) perceived e-cigarettes as less harmful than cigarettes and 65% perceived them as less addictive. The majority of respondents (88%) did not try to stop using e-cigarettes, however, 75% of them had an intention to discontinue in the next five years.

Conclusions: E-cigarettes were primarily used for reducing/ quitting cigarettes, which supports prior evidence regarding the effectiveness of e-cigarettes for smoking cessation.

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PS-658-4 E-cigarettes or vaping: is there any difference in perceptions of use and associated harm among the current users between a developed and a developing country?

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