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# 1825P Prevalence of cancer among e-cigarette smokers compared to non-smokers: A retrospective cross-sectional survey study of NHANES-CDC

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### **GENERAL INTEREST**

1824P

Attitudes, knowledge, and need for education about LGBTQ patients with cancer: A survey by the ESMO/SIOPE AYA with cancer Working Group

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Background: Sexual and gender minorities [lesbian, gay, bisexual, transgender, and queer/questioning (LGBTQ)] is a diverse group that is at risk for receiving disparate cancer care. A survey of the European Society for Medical Oncology (ESMO) and the European Society for Paediatric Oncology (SIOP Europe) members was conducted, to identify challenges in attitude and knowledge, as well as interest for further education about LGBTQ patients with cancer.

Methods: A link to an online survey was sent to the members of ESMO and SIOP Europe to measure attitudes and knowledge about LGBTQ health, and clinical practices. Results were analyzed by using descriptive analyses.

Results: Among the 672 respondents, there was high agreement regarding the importance of knowing the gender identity as perceived by the patient (75%) and set at birth (78%), which was contrasted by lower agreement (54%) regarding the importance of knowing sexual orientation. However, the majority doesn't ask about sexual orientation and gender identity during first visit (64% and 58% respectively). Only a minority of the respondents considered themselves well informed regarding gays/lesbians and transgender patients' health (44 and 25% respectively), and psychosocial needs (34%). Questions about cancer risk in relation to sexual orientation and in those who identify themselves as a different gender compared to risk estimated based on their gender at birth yielded mixed responses. There was high interest in receiving education regarding the unique health needs of LGBTQ patients (73%), which was considered as a core skill for all cancer specialists by 72%. For most of the questions no significant differences were noted among those who defined themselves as heterosexual, gays/lesbians or bisexual.

Conclusions: This is the largest, to our knowledge, and the first among European specialists survey, addressing attitude, knowledge and interest for further education needs about LGBTQ patients with cancer. A lack in knowledge about clinical and psychosocial issues was revealed, as well as high interest in receiving LGBTQ-specific education and clinical practice guidelines.

Legal entity responsible for the study: European Society for Medical Oncology (ESMO), European Society for Paediatric Oncology (SIOPE).

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1825P

Prevalence of cancer among e-cigarette smokers compared to non-smokers: A retrospective cross-sectional survey study of NHANES-CDC

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**Background**: Current e-cigarette use has been rising, assuming as a safe alternative to traditional smoking. Therefore, we aim to evaluate the prevalence of cancer and types of cancers amongst e-cigarette and traditional smokers.

Methods: A retrospective cross-sectional survey study was performed using NHANES (National Health And Nutrition Examination Survey) database from 2015 to 2018. History of cancer (MCQ220), type of cancers (MCQ230a), and smoking status (Ecigarette: SMQ900 or SMQ905 and Traditional smoking: SMQ020) were identified. Univariate and multivariable logistic regression analysis was performed to find out prevalence and association between e-cigarette smoking and cancer. We have excluded respondents with dual smoking.

Results: Out of 154,856 participants, 7756 (5.01%) were e-cigarette users, 48625 (31.4%) were traditional smokers, 98475 (63.59%) were non-smokers. Females (49 vs 38%), Mexican Americans (20 vs 13%), high annual household income (>\$100,0001 sv 15%) were having a higher prevalence of e-cigarette smoking in comparison with traditional smoking. (p<0.0001) Prevalence of cancer (any type) was 11.61%. Cancer prevalence was higher amongst traditional smokers in comparison with e-cigarette smokers. (16.77 vs 2.32%; p<0.0001) E-cigarette smokers were younger at the diagnosis of 1st cancer in comparison with traditional smokers. (median: 45 vs 63-years; p<0.0001) Cervical (21.99 vs 2.01%), thyroid (10.64 vs 2.45%), leukemias (8.51 vs 1.08%), and breast (12.06 vs 12.01%) cancers were more prevalent amongst e-cigarette smokers in comparison to traditional smokers. (p<0.0001) In adjusted multivariable regression analysis, e-cigarette smokers [aOR: 1.3 (95%CI: 1.32-1.33); p<0.0001] and traditional smokers [1.6 (1.64-1.65); p<0.0001] were having higher odds of prevalence of cancer in comparison with non-smoker.

Conclusions: E-cigarette smokers had an early age of cancer onset and higher odds of cancer prevalence. Females had higher use of e-cigarette and cervical, thyroid, and breast cancers were prevalent amongst e-cigarette users. More prospective studies should be planned to mitigate the risk and before considering e-cigarette as a safe alternative to traditional smoking.

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