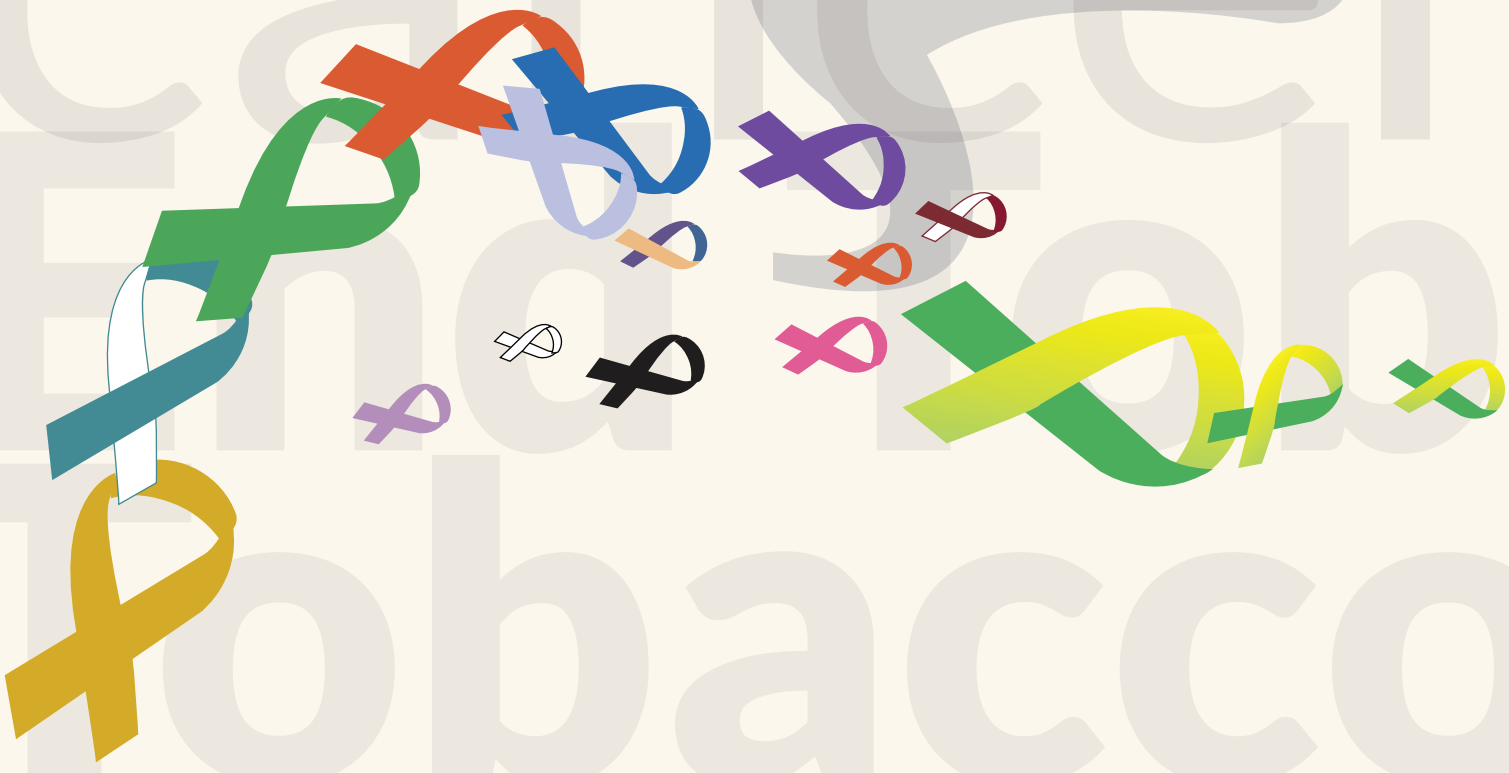
ENSP

European Network
for Smoking and Tobacco Prevention

Tobacco use and Cancer

The role of smoking cessation

Europe's Beating Cancer Plan
a unique opportunity to end tobacco



ENSP Fact Sheet Series #2/2021

Tobacco epidemic & Cancer

The use of tobacco products is proven to be the largest avoidable risk in the European Union. According to the latest Eurobarometer report, 23% of the respondents continue to smoke cigarettes, cigars, cigarillos or a pipe while in total tobacco use results in 700,000 deaths each year.[1]

It is also proven that around half of the smokers die prematurely, resulting in the loss of an average of 14 years of life per smoker.[2] ***In addition, tobacco use is the leading cause of preventable cancer, with around 27% of all cancer and***

80% of lung cancer deaths attributed to tobacco use.[3]

Smoking increases the risk of more than 10 types of cancers. Here are some examples:

Childhood Cancer: Evidence suggest that exposure to smoking by family members during pregnancy or exposure to waterpipe and cigarette smoking during their neonatal period is a risk factor for developing cancer.[4]

Cervical cancer: Women who smoke are about twice as likely to get cervical cancer while smoking also makes the immune system less effective in fighting HPV infections.[5]

Gallbladder & Bile Duct Cancer: Smoking appears to increase the risk of developing all biliary tract cancers except gallbladder cancer.[6]

Kidney Cancer: Cigarette smoking is a well-established risk factor for renal cell carcinoma (RCC).[7]

Colon Cancer: Smokers had a significantly higher risk for colon cancer.[8]

Esophagial cancer: Smoking is an important risk factor for the development of Esophageal cancer and especially squamous cell carcinoma.[9,10]

Testicular cancer: Testicular cancer is strongly associated with tobacco smoking.[11]

Bladder cancer: Smoking cigarettes, cigars or pipes may increase the risk of bladder cancer by causing harmful chemicals to accumulate in the urine.[12]

Pancreatic cancer: Cigarette smoking is a consistent risk factor for pancreatic cancer, contributing to development of approximately 20% of pancreatic cancer cases.[13]

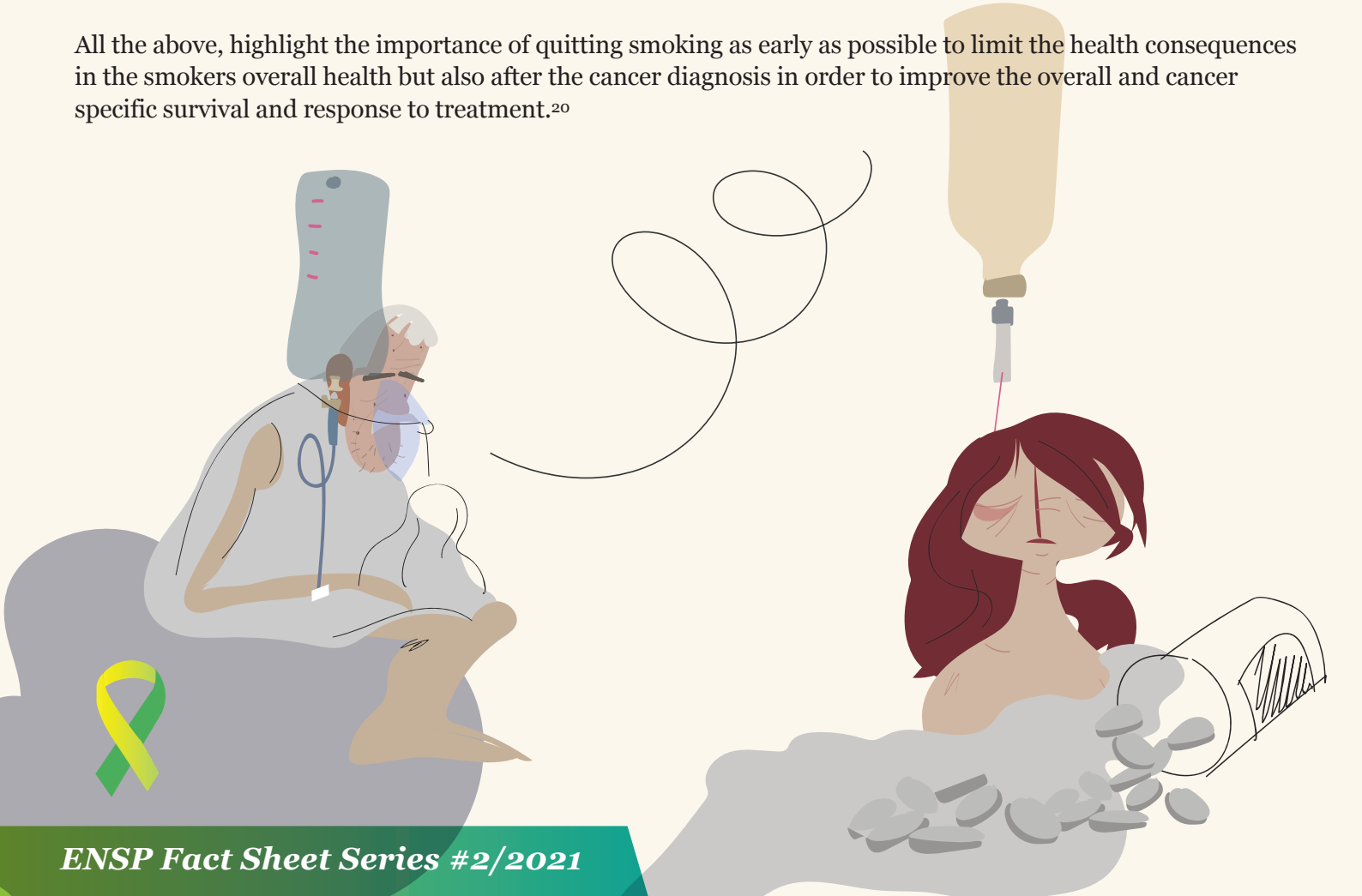
Acute myeloid leukaemia: Cigarette smoking is associated with increased risk of developing myeloid leukaemia in adults.[14]

Head and neck cancer: Head and neck cancers which include cancers of the oral cavity, pharynx, and larynx and are among the most common cancers worldwide[15] while the association between cigarette smoking and the incidence and mortality of head and neck cancers is well established.[16]

Breast Cancer: smoking is associated with breast cancer and that there is a consistent causality between second-hand smoke exposure and premenopausal breast cancer.[17]

Tobacco use is not only associated with the increased risk of developing various cancers, but also worsens cancer outcomes.[18] Lower survival rates among patients who smoked or continue to smoke after diagnosis are also documented not only among patients with cancers strongly linked to smoking (lung, esophageal, or head and neck), but also in patients with breast, prostate, and other cancer types. Current or past smokers with cancer also have decreased therapeutic responses, increased cancer recurrences, and increased cancer treatment complications, including problems with wound healing, infections, cardiovascular complications, and the development of a secondary malignancy.[19]

All the above, highlight the importance of quitting smoking as early as possible to limit the health consequences in the smokers overall health but also after the cancer diagnosis in order to improve the overall and cancer specific survival and response to treatment.[20]



Data on the importance of quitting smoking

It is well documented that the majority of smokers who are aware of the dangers of tobacco, want to quit while behavioral counselling and first line medication can more than double increase their chance of successfully quitting. Currently however, only 23 countries provide comprehensive cessation services with full or partial cost-coverage to smokers to quit which equals to 32% of the world's population.[21]

Health professionals have the greatest potential to promote smoking cessation. Studies have shown that brief advice from health professionals can increase quitting success rates by up to 30%, while intensive advice increases the chance of quitting by 84%.[20]

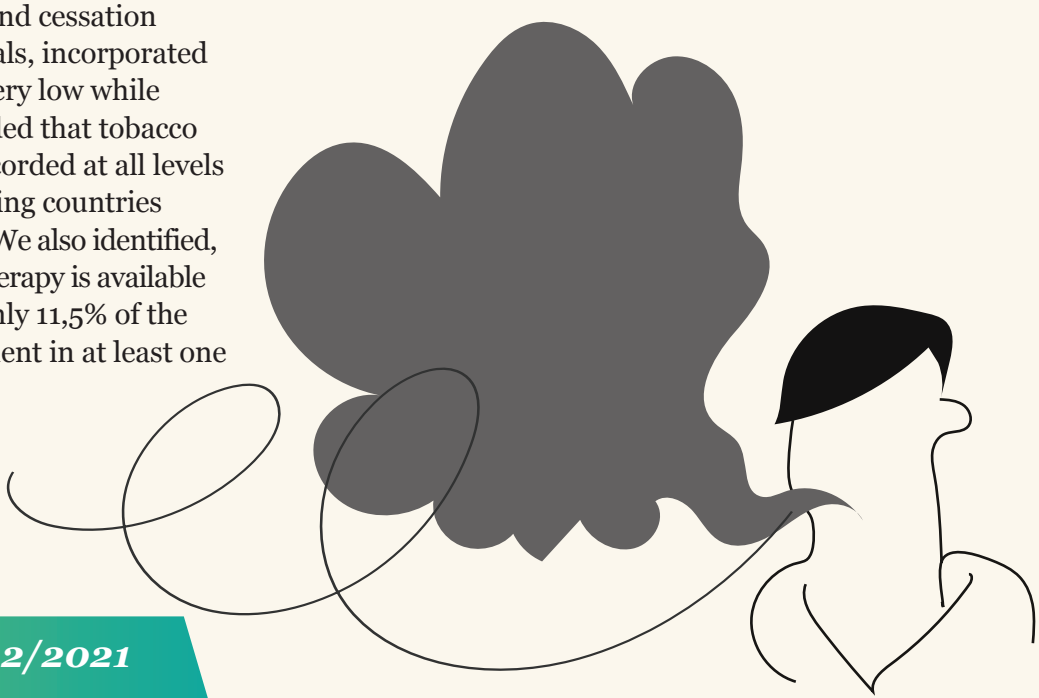
In 2020, ENSP conducted a survey in order to map the level of the implemented actions of WHO FCTC Article 14, among its members and provide evidence to support the need for stronger policies.

A summary of the results from 27 European countries (Albania, Armenia, Austria, Belgium, Bosnia & Herzegovina, Bulgaria, Denmark, France, Georgia, Germany, Greece, Hungary, Ireland, Italy, Kazakhstan, Kosovo, Lithuania, Poland, Romania, Russia, Serbia, Slovenia, Spain, Sweden, the Netherlands, Turkey, Ukraine) showed that system components such as national plans, programs, guidelines and campaigns development are poorly implemented in Europe.

The level of tobacco dependence and cessation training for healthcare professionals, incorporated as part of their education is also very low while although it is strongly recommended that tobacco use is routinely monitored and recorded at all levels of care, only 60% of the participating countries confirmed its full implementation. We also identified, that although first-line pharmacotherapy is available in the majority of the countries, only 11,5% of the countries provide full reimbursement in at least one form.

The analysis of the two previous waves of the Eurobarometer data also confirmed the wide heterogeneity among the member states as people living in countries with comprehensive smoking cessation policies are more likely to have used any cessation assistance. It also showed that the majority of attempts to quit smoking in the EU continue were without any cessation assistance while smokers attempting to quit using assistance has further decreased over the past 5 years.[22]

All the above indicate that, the level of the WHO FCTC Article 14 implementation in Europe which requires effective measures to promote cessation of tobacco use and adequate treatment for tobacco dependence is low and that further legislative actions in European and National level focused on the described elements are necessary. Tobacco dependence treatment should be considered as a clinical priority for all healthcare professionals and we recommend that all health care providers should be trained in evidence-based tobacco treatment delivery and be prepared to intervene with tobacco users in their practice.[23]



Tobacco control policies in Europe

During the past years the European Union and its Member States have been working to take measures that will reduce the use of tobacco and related products, including regulating tobacco and related products, restricting the advertising and sponsorship of tobacco and related products, implementing smoke-free environments, increasing taxes, and running anti-smoking campaigns. The last initiative of the EU was the revised Tobacco Products Directive, which became applicable in the Member States on 20 May 2016. The Directive mandated a range of measures including prominent pictorial health warnings on packages of cigarettes and roll-your-own tobacco, a ban on cigarettes and roll your-own tobacco with characterizing flavours as well as safety and quality requirements and packaging and labelling rules for e-cigarettes.

Despite the progress on other tobacco control policies and European regulations over the past years the provision of measures to support Article 14 of the WHO Framework Convention on Tobacco Control (WHO FCTC) which states that *"each Party shall develop and disseminate appropriate, comprehensive and integrated guidelines based on scientific evidence and best practices, taking into account national circumstances and priorities, and shall take effective measures to promote cessation of tobacco use and adequate treatment for tobacco dependence"*, is not yet addressed.

On the 3rd of February 2021, the Europe's Beating Cancer Plan was presented. The Plan aims to set cancer as a top health priority for the next five years in the EU, with both the European Commission President, Ursula von der Leyen, and Commissioner for Health and Food Safety, Stella Kyriakides, having made clear that cancer will play a central role in the policy agenda. The plan aims to leave no stone unturned to take action against cancer.

To support its policy objectives, the actions are described by ten flagship initiatives and multiple supporting actions. Although, Europe's Beating Cancer Plan aims put forward actions to support the Prevention pillar, in order to help create a "Tobacco-Free Generation' where less than 5% of the population uses tobacco by 2040, compared to around 25% today",[24] actions to support smoking cessation were again not considered as priority.

However, on the 9th December 2021, the final report of the Special Committee on Beating Cancer on strengthening Europe in the fight against cancer – towards a comprehensive and coordinated strategy, finally called the European Commission to fund programmes that promote smoking cessation.[25]

At ENSP, we welcome this call of the Special Committee on Beating Cancer, as we strongly believe that smoking cessation should play a central role on the policy environment and on the next years' plans to reduce the tobacco epidemic in Europe.

To further support this, ENSP urged the Special Committee on Beating Cancer members of the European Parliament to adopt a Resolution on the Article 14 of the World Health Organization Framework Convention on Tobacco Control (WHO FCTC) which requires effective measures to promote cessation of tobacco use and adequate treatment for tobacco dependence.

Smoking cessation should be considered as one of the main pillars of the European policy that synergistically with the policies already implemented or planned can contribute to the reduction of the smoking prevalence in Europe and eventually reach the target of creating smoke free generations in Europe the years to come.

[1] https://www.drugsandalcohol.ie/33761/1/Eurobarometer_2020_cigarettes_ebs_506.pdf

[2] https://ec.europa.eu/health/tobacco/overview_en

[3] World Health Organization, Regional Office for Europe, 18.02.2020 at https://www.euro.who.int/en/health-topics/diseaseprevention/tobacco/news/news/2020/2/tobacco-use-causes-almost-one-third-of-cancer-deaths-in-the-who-european-region.

[4] Alyahya, Mohammad S., Nihaya A. Al-Sheyab, and Batool Amro. "Parental Smoking Behavior and Childhood Cancer: A Case-control Study." American Journal of Health Behavior 44.5 (2020): 572-590.

[5] American Cancer Society: https://www.cancer.org/cancer/cervical-cancer/causes-risks-prevention/risk-factors.html

[6] McGee, Emma E., et al. "Smoking, alcohol, and biliary tract cancer risk: a pooling project of 26 prospective studies." JNCI: Journal of the National Cancer Institute 111.12 (2019): 1263-1278.

[7] Capitanio, Umberto, et al. "Epidemiology of renal cell carcinoma." European urology 75.1 (2019): 74-84

[8] Cheng, Jiemin, et al. "Meta-analysis of prospective cohort studies of cigarette smoking and the incidence of colon and rectal cancers." European Journal of Cancer Prevention 24.1 (2015): 6-15.

[9] Jain S, Dhingra S. Pathology of esophageal cancer and Barrett's esophagus. Ann Cardiothorac Surg. 2017;6(2):99-109. doi:10.21037/acs.2017.03.06.

[10] Okamura A, Watanabe M. [Perioperative Management Team in Esophageal Cancer Surgery]. Kyobu Geka. 2017;70(8):712-715

[11] Song, Ashley, et al. "Incident testicular cancer in relation to using marijuana and smoking tobacco: A systematic review and meta-analysis of epidemiologic studies." Urologic Oncology: Seminars and Original Investigations. Elsevier, 2020.

[12] https://www.mayoclinic.org/diseases-conditions/bladder-cancer/symptoms-causes/syc-20356104

[13] Iodice S, Gandini S, Maisonneuve P, et al: Tobacco and the risk of pancreatic cancer: A review and meta-analysis Langenbecks Arch Surg 393:535-545, 2008

[14] Qin, Ling, et al. "Relationship between cigarette smoking and risk of chronic myeloid leukaemia: a meta-analysis of epidemiological studies." Hematology 22.4 (2017): 193-200.

[15] Wyss, Annah, et al. "Cigarette, cigar, and pipe smoking and the risk of head and neck cancers: pooled analysis in the International Head and Neck Cancer Epidemiology Consortium." American journal of epidemiology 178.5 (2013): 679-690.

[16] International Agency for Research on Cancer, IARC Monographs on the Evaluation of Carcinogenic Risks to Humans: Volume 83: Tobacco Smoke and Involuntary Smoking, 2004Lyon, FranceInternational Agency for Research on Cancer

[17] Johnson KC, Miller AB, Collishaw NE, et al. Active smoking and secondhand smoke increase breast cancer risk: the report of the Canadian expert panel on tobacco smoke and breast cancer risk (2009). Tob Control. 2011;20(1):e2

[18] NCI. Smoking cessation and continued risk in cancer patients (PDQ®). 2012. http://www.cancer.gov/cancertopics/pdq/supportivecare/smokingcessation/HealthProfessional/page3

[19] Warren, G. W., Kasza, K. A., Reid, M. E., Cummings, K. M., & Marshall, J. R. (2013). Smoking at diagnosis and survival in cancer patients. International journal of cancer, 132(2), 401-410.

[20] Warren, Graham W., et al. "The 2014 Surgeon General's report:"The Health Consequences of Smoking–50 Years of Progress": a paradigm shift in cancer care." Cancer 120.13 (2014): 1914-1916.

[21] https://www.who.int/activities/quitting-tobacco

[22] Filippidis FT, Laverty AA, Mons U, et alChanges in smoking cessation assistance in the European Union between 2012 and 2017: pharmacotherapy versus counselling versus e-cigarettesTobacco Control 2019;28:95-100.

[23] http://ensp.network/ensp-art-14-brochure/

[24] https://ec.europa.eu/commission/presscorner/detail/en/ip_21_342

[25] https://www.europarl.europa.eu/meetdocs/2014_2019/plmrep/COMMITTEES/BECA/DV/2021/12-09/2021_12_01_BECA_Final_compromise_amendments_EN.pdf

Tobacco related cancer awareness

Make every day a no tobacco day!
Make every day a cancer awareness day!

ENSP
European Network
for Smoking and Tobacco Prevention

Co-funded by the
Health Programme
of the European Union