



Mental Health &
Addiction Research

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28.02.2023

Brief Report: Epidemiological Survey on Addiction 2021

Volume: Tobacco Use and Indications of problematic Tobacco Use by Gender and Age in 2021

Citation option:

Möckl, J., Rauschert, C., Wilms, N., Schäfer, E., Olderbak, S., & Kraus, L. (2023). *Brief report: Epidemiological Survey on Addiction 2021. Volume: Tobacco Use and Indications of problematic Tobacco Use by Gender and Age in 2021*. IFT Institute for Therapy Research. <https://www.esa-survey.de/ergebnisse/kurzberichte.html>

Introduction

The data presented below are based on the Epidemiological Survey on Addiction (ESA) 2021. A detailed description of the methodology of the study can be found in Rauschert et al. (2022). Results on the prevalence of tobacco use and evidence of problematic tobacco use in 2021 are presented and discussed for the total sample in Rauschert et al. (2022) and in Kraus et al. (2022).

Definitions and calculation bases

Smoking status: classification of individuals by frequency of tobacco use:

- Non-smoker: Smoked no more than 100 cigarettes (or cigars, pipes, or cigarillos) total in a lifetime.
- Ex-smoker: smoked more than 100 cigarettes (or cigars, pipes, or cigarillos) in a lifetime, but abstinent for the past 30 days.
- Smoker: smoked conventional tobacco products in the past 30 days.

Extent of cigarette consumption: classification of cigarette smokers in the past 30 days according to daily vs. nondaily smokers, and daily smokers according to the number of cigarettes smoked on average per day. The average number of cigarettes smoked per day is calculated from the number of smoking days in the past 30 days and the average number of cigarettes smoked on a smoking day.

Average age of initiation: Average age at which a tobacco product was smoked for the first time.

Problematic tobacco use: evidence of problematic tobacco use in the past 12 months according to the criteria of the Fagerström Test for Nicotine Dependence (FTND; Heatherton et al., 1991). A threshold score of four or more is considered to indicate problematic tobacco use (Breslau & Johnson, 2000).

Literature

Breslau, N. & Johnson, E. O. (2000). Predicting smoking cessation and major depression in nicotine-dependent smokers. *American Journal of Public Health, 90*(7), 1122–1127.

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Funding notice

The Epidemiological Survey on Addiction 2021 was funded by the Federal Ministry of Health (Bundesministerium für Gesundheit; BMG) (AZ: ZMVI1-2520DSM203). There are no strings attached to the funding.

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Table 1: Smoking status: distribution of smokers, ex-smokers, non-smokers (percent) (total population)

	Total	Age groups						
		18-20 years	21-24 years	25-29 years	30-39 years	40-49 years	50-59 years	60-64 years
Total (n)	8994	1023	1097	1145	1648	1574	1581	926
Non-smoker ¹⁾	52,9	79,9	68,3	64,9	50,6	48,5	48,0	44,2
Ex-smoker ²⁾	24,5	3,8	7,0	14,3	23,4	29,0	29,4	36,3
Smoker ³⁾	22,7	16,4	24,7	20,8	26,1	22,6	22,7	19,5
Men (n)	3901	439	508	509	700	644	674	427
Non-smoker ¹⁾	48,2	78,2	63,2	58,1	46,7	42,1	44,7	40,1
Ex-smoker ²⁾	26,1	4,8	7,1	15,4	22,2	32,5	31,7	40,8
Smoker ³⁾	25,7	17,0	29,7	26,5	31,1	25,5	23,6	19,1
Women (n)	5080	582	587	630	946	929	907	499
Non-smoker ¹⁾	57,7	81,5	73,8	71,9	54,7	55,0	51,2	48,3
Ex-smoker ²⁾	22,8	2,7	7,0	13,1	24,4	25,6	27,1	32,0
Smoker ³⁾	19,6	15,8	19,3	15,0	20,8	19,5	21,7	19,8

n for the complete sample.

¹⁾ Smoked a total of 100 cigarettes (or cigars, pipes, or cigarillos) at most.

²⁾ Smoked more than 100 cigarettes (or cigars, pipes, or cigarillos), not in the past 30 days.

³⁾ Smoked in the last 30 days.

Table 2: Extent of cigarette consumption by cigarette smokers (last 30 days) (percent)

	Total	Age groups						
		18-20 years	21-24 years	25-29 years	30-39 years	40-49 years	50-59 years	60-64 years
Total (n)	1582	135	228	196	321	274	279	149
Not daily	34,9	57,9	54,5	49,6	40,0	29,7	21,9	18,7
Daily up to 10	26,1	22,0	26,8	20,2	25,1	25,2	29,7	31,9
Daily 11-19	18,1	12,2	8,4	18,6	17,1	21,1	18,7	20,6
Daily 20 or more	21,0	7,9	10,3	11,6	17,8	24,0	29,7	28,8
Men (n)	771	64	129	116	147	131	123	61
Not daily	38,5	72,1	54,2	52,3	43,3	34,9	20,6	12,9
Daily up to 10	21,7	18,6	24,9	17,5	19,3	20,1	26,3	31,5
Daily 11-19	15,0	4,5	10,1	15,9	13,5	18,7	16,6	11,7
Daily 20 or more	24,8	4,8	10,8	14,3	24,0	26,3	36,4	43,9
Women (n)	810	71	99	79	174	143	156	88
Not daily	30,2	42,3	55,1	43,2	35,6	23,1	23,1	22,7
Daily up to 10	31,6	25,8	30,1	26,1	33,1	31,7	33,3	32,2
Daily 11-19	22,0	20,7	5,3	24,4	22,0	24,1	20,9	26,7
Daily 20 or more	16,2	11,3	9,5	6,3	9,3	21,2	22,7	18,4

n = number of cigarette smokers.

Table 3: Average age of first smoking (years) ((ex-)smokers)

	Total	Age groups						
		18-20 Years	21-24 Years	25-29 Years	30-39 Years	40-49 Years	50-59 Years	60-64 Years
Total	16,2	15,1	15,5	15,4	15,3	16,7	16,6	16,5
Men	16,2	15,4	15,6	15,6	15,4	16,8	16,6	16,4
Women	16,1	14,6	15,5	15,1	15,2	16,6	16,5	16,7

Table 4: Problematic tobacco use in the past 12 months by FTND¹⁾ (percent) (total population)

	Total	Age groups						
		18-20 Years	21-24 Years	25-29 Years	30-39 Years	40-49 Years	50-59 Years	60-64 Years
Total (n)	8557	979	1044	1064	1559	1508	1509	894
Problematic consumption ¹⁾	7,8	3,6	5,3	5,6	7,8	9,5	8,9	6,8
Men (n)	3657	412	481	463	655	606	631	409
Problematic consumption ¹⁾	8,8	2,7	7,1	6,0	10,7	10,0	10,6	5,5
Women (n)	4889	565	561	595	903	902	878	485
Problematic consumption ¹⁾	6,8	4,5	3,3	5,4	4,9	9,0	7,4	8,0

n for the complete sample.

¹⁾ FTND: Fagerström Test for Nicotine Dependence; threshold ≥ 4 .

Table 5: Problematic tobacco use in the past 12 months by FTND¹⁾ (percent) (tobacco consumers)

	Total	Age groups						
		18-20 Years	21-24 Years	25-29 Years	30-39 Years	40-49 Years	50-59 Years	60-64 Years
Total (n)	1471	123	212	177	303	259	255	142
Problematic consumption ¹⁾	36,1	25,2	22,5	28,0	30,3	42,6	44,8	39,8
Men (n)	712	54	119	103	141	122	113	60
Problematic consumption ¹⁾	36,2	19,2	24,7	23,3	34,6	41,1	51,1	33,6
Women (n)	758	69	93	73	162	137	142	82
Problematic consumption ¹⁾	36,0	30,7	18,7	37,3	24,1	44,4	38,4	44,2

n for the number of tobacco consumers.

¹⁾ FTND: Fagerström Test for Nicotine Dependence; threshold ≥ 4 .

Table 6: Lifetime prevalence of tobacco alternatives and alternative tobacco products (percent) (total population).

	Total	Age groups						
		18-20 Years	21-24 Years	25-29 Years	30-39 Years	40-49 Years	50-59 Years	60-64 Years
Total								
E-cigarettes	20,1	38,9	40,0	30,4	22,3	17,1	11,2	6,5
Heat-Not-Burn	3,3	3,5	6,5	4,5	4,5	3,1	1,5	0,6
Hookah	34,0	47,9	62,3	65,1	50,2	24,9	11,5	7,8
Men								
E-cigarettes	24,3	38,9	47,1	34,8	28,7	22,2	12,9	5,6
Heat-Not-Burn	3,9	3,6	7,8	4,2	5,3	4,4	1,3	0,6
Hookah	37,8	47,2	65,6	68,0	54,9	30,6	13,2	9,1
Women								
E-cigarettes	15,8	39,0	32,4	25,9	15,3	12,0	9,5	7,5
Heat-Not-Burn	2,7	3,4	5,1	4,7	3,7	1,9	1,8	0,7
Hookah	30,0	48,9	58,9	62,4	45,4	19,2	9,7	6,5

Table 7: 12-month prevalence of tobacco alternatives and alternative tobacco products (percent) (total population)

	Total	Age groups						
		18-20 Years	21-24 Years	25-29 Years	30-39 Years	40-49 Years	50-59 Years	60-64 Years
Total								
E-Products ¹⁾	7,9	19,6	18,0	9,4	7,8	7,0	4,5	1,9
Heat-Not-Burn	2,0	2,3	3,3	2,9	2,6	2,2	0,8	0,2
Hookah	7,9	31,3	30,0	19,0	5,7	3,1	1,0	0,2
Men								
E-Products ¹⁾	9,4	20,2	22,7	9,7	10,4	8,6	5,5	1,4
Heat-Not-Burn	2,1	2,9	3,9	2,5	2,2	2,9	0,5	0,4
Hookah	9,5	33,2	33,2	23,9	7,0	4,3	1,4	0,0
Women								
E-Products ¹⁾	6,2	19,0	12,9	9,1	4,9	5,4	3,5	2,5
Heat-Not-Burn	1,9	1,7	2,6	3,4	3,1	1,5	1,2	0,0
Hookah	6,2	29,4	26,6	13,2	4,3	2,0	0,7	0,3

¹⁾ Includes the following products: E-cigarettes, E-shisha, E-pipe, E-cigar

Table 8: 30-day prevalence of tobacco alternatives and alternative tobacco products (percent) (total population)

	Total	Age groups						
		18-20 years	21-24 years	25-29 years	30-39 years	40-49 years	50-59 years	60-64 years
Total								
E-Products ¹⁾	4,3	8,6	9,0	4,1	4,6	4,5	2,6	1,0
Heat-Not-Burn	1,3	1,0	1,5	1,7	1,5	1,8	0,6	0,1
Hookah	4,1	17,1	18,5	9,4	2,5	1,5	0,4	0,0
Men								
E-Products ¹⁾	4,9	8,0	11,0	4,8	5,7	5,0	2,8	0,8
Heat-Not-Burn	1,3	0,9	1,7	1,6	1,1	2,2	0,4	0,2
Hookah	5,3	17,5	20,9	13,7	3,6	2,2	0,6	0,0
Women								
E-Products ¹⁾	3,6	9,1	6,8	3,5	3,1	4,0	2,4	1,2
Heat-Not-Burn	1,2	1,1	1,3	1,8	1,9	1,3	0,8	0,0
Hookah	3,0	16,7	16,0	5,0	1,3	0,9	0,1	0,0

¹⁾ Includes the following products: E-cigarettes, E-shisha, E-pipe, E-cigar

Table 9: Average age of first consumption (years) of tobacco alternatives and alternative tobacco products ((former) consumers)

	Total	Age groups						
		18-20 Years	21-24 Years	25-29 Years	30-39 Years	40-49 Years	50-59 Years	60-64 Years
E-cigarettes								
Total	28,9	16,0	17,4	21,1	27,2	36,2	48,8	49,4
Men	28,9	16,0	17,5	21,3	27,5	36,2	48,6	46,9
Women	29,0	15,9	17,4	21,0	26,5	36,2	49,1	51,5
Heat-Not-Burn								
Total	31,9	17,5	19,8	23,9	30,7	39,5	52,7	40,7
Men	32,2	17,4	19,7	24,4	29,9	41,2	51,6	38,4
Women	31,5	17,6	20,0	23,5	32,0	36,4	53,9	43,2

Table 10: Problematic Use of Tobacco Alternatives and Alternative Tobacco Products (percent)

	Total	Age groups						
		18-20 Years	21-24 Years	25-29 Years	30-39 Years	40-49 Years	50-59 Years	60-64 Years
Total								
E-cigarettes ¹⁾	1,8	0,7	1,5	1,0	2,7	2,5	1,1	0,8
Heat-Not-Burn ²⁾	0,2	0,2	0,0	0,1	0,5	0,3	0,1	0,0
Men								
E-cigarettes	2,5	0,8	1,7	1,2	4,3	3,4	1,3	0,7
Heat-Not-Burn	0,2	0,3	0,0	0,1	0,6	0,2	0,1	0,0
Women								
E-cigarettes	1,1	0,7	1,2	0,8	0,9	1,6	0,8	1,0
Heat-Not-Burn	0,2	0,1	0,0	0,1	0,4	0,4	0,1	0,0

¹⁾Problematic use according to Penn State Electronic Cigarette Dependence Index (PSECDI).

²⁾Problematic use according to Fagerström Test for Nicotine Dependence (FTND); threshold ≥ 4 .