

HVER ER HÆTTAN AF RAFRETTU NOTKUN UNGLINGA?

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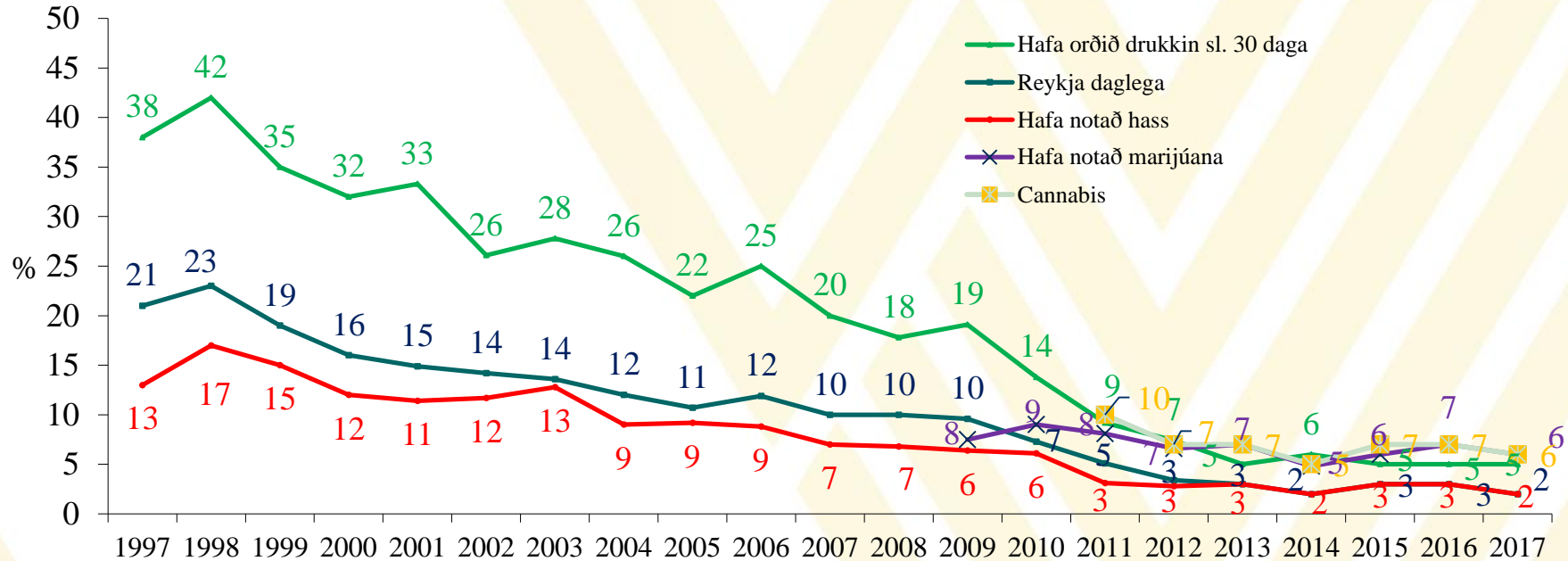
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Forvarnir virka! (þróun, 15-16 ára)



Rannsóknir & greining (1998-2017)



Tóbaksvarnir – hingað til..

- Tvívíður heimur
 - Tóbaksnotkun óæskileg og slæm fyrir heilsuna
 - Fólk á ekki að nota tóbak
- Tilkoma rafretta flækir þessa sýn
 - Upphaflega hannaðar sem hjálp við reykingarfólk til að hætta að reykja, og/eða draga úr skaða reykinga

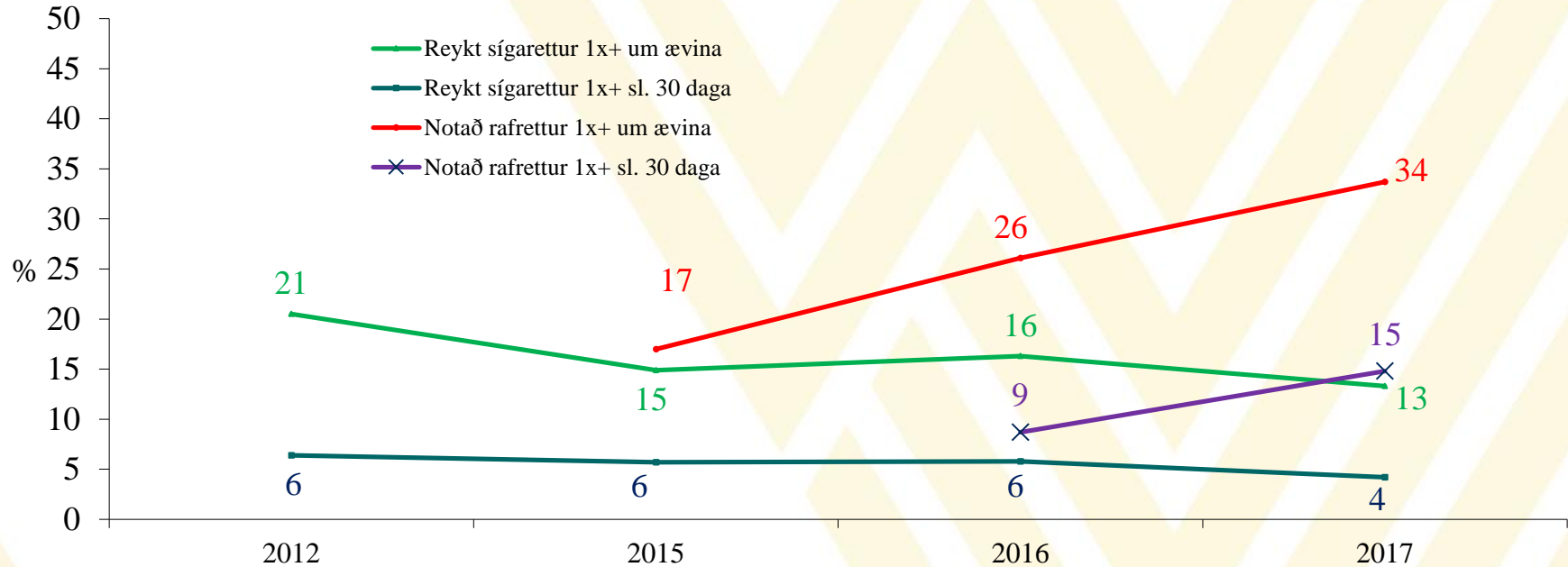


Forvarnir

- Grunn skilgreining
 - Fyrsta stigs forvarnir (upphaf notkunar)
 - Annars stigs forvarnir (stöðvun reykinga, skaðaminnkun)
 - Þriðja stigs forvarnir (forða úr lífshættu)
- Börn/unglingar eða fullorðnir
 - Tilrauna notkun eða langtíma notkun



Staðan á Íslandi í dag. Sígarættur og rafættur, 15-16 ára



Rannsóknir & greining, 2015-2017



Niðurstöður rannsókna: Líkamleg áhrif og skaði rafretta

- Ný greining á eiturefnum í gufu úr rafrettum (til viðbótar við nikótín):
 - Skiptu 103 hefðbundnum notendum (16 ára) í 3 hópa (ekkert/rafrettur eingöngu/tóbak+rafrettur) og mældu dreifingu 8 eiturefna (ekki nikótín) úr munnvatns- og þvagsýnum. Sex af átta efnum voru marktækt hærri í notendum rafretta í samanburði við þá sem hvorki nota rafrettur né tóbaks sígarettur (Rubinstein et al. 2018, *Pediatrics*)
- Yfirlitsgrein (systematic review):
 - ENDS “pose substantially less harm to smokers than cigarettes” (Glasser et al. 2017, *Am J Prev Med*)
- Ný álitsgrein:
 - Our projections show that a strategy of replacing cigarette smoking with vaping would yield substantial life year gains, even under pessimistic assumptions regarding cessation, initiation and relative harm (Levy et al. 2018, *Tobacco Control*)



Niðurstöður rannsókna: Rafrettur og framtíðar tóbaksnotkun unglinga

- Þátttakendum á aldrinum 14-15 ára fylgt yfir tíma frá 2013 til 2014. Þrjár mælingar: grunnlína/6 mán/12 mán
 - Meðaltals líkindi (average odds ratio), rafrettur > hvers konar tóbaksnotkun = 4.27 (95% CI: 3.19 – 5.71) (Leventhal et al. 2015, *JAMA*)
- Ný meta-analýsa, samantekt 9 rannsókna
 - Samantekin líkindi (pooled odds ratio), rafrettur > sígarettu reykingar = 3.62 (95% CI: 2.42 – 5.41) (Soneji et al. 2017, *JAMA Pediatrics*)



Niðurstöður rannsókna: Rafrettur og viðhorf unglunga til reykinga

- Fylgdu unglingum á aldrinum 12-16 ára yfir tíma frá 2013 til 2015
 - Notkun rafretta í upphafi jók líkur á jákvæðum breytingum á viðhorfum til annars konar reykinga
 - Notkun rafretta í upphafi jók bæði forvitni um annars konar reykingar, sem og líkur á að prófa annars konar reykingar

Chaffee and Cheng (forthcoming), *Prev Med*



Niðurstöður rannsókna: Rafrettur og önnur vímuefnaneysla meðal unglinga

Table 2
Lifetime prevalence of licit and illicit substance use by 10th-grade adolescent EC users compared with nonsmokers, CC smokers, and dual users

Substances	Boys (%) ^a				Girls (%) ^b				Total (%) ^c			
	None	EC	CC	Dual	None	EC	CC	Dual	None	EC	CC	Dual
Any alcohol use	20.2	47.0	80.4	86.6	20.3	58.1	79.1	95.7	20.2	52.6	79.8	91.3
Drunkenness	3.7	12.7	42.3	68.9	3.4	22.1	44.4	75.3	3.6	17.4	43.3	72.2
Oral tobacco	1.2	17.2	32.7	65.1	1.2	10.4	22.8	48.2	1.2	13.8	28.1	56.2
Snuff	5.7	21.1	38.5	68.5	1.4	9.7	17.8	36.4	3.5	15.4	28.9	51.6
Sleeping pills or tranquilizers	4.0	7.5	12.4	24.0	6.7	18.5	10.9	30.1	5.4	13.0	11.7	27.2
Sniffed glue	.8	1.5	6.7	12.1	.6	2.2	2.2	11.0	.7	1.9	4.6	11.5
Marijuana	.8	4.5	22.1	48.0	.4	3.7	10.9	51.2	.6	4.1	16.8	49.7
Amphetamine	.1	.7	3.8	20.0	.1	1.5	2.2	15.7	.1	1.1	3.0	17.7

CC = conventional cigarette; EC = electronic cigarette.

^a Significant differences between all groups in sequential order ($p < .05$) except for any alcohol for CC versus Dual; sleeping pills or tranquilizers for None versus EC and EC versus CC; sniffed glue for None versus EC, EC versus CC, and CC versus Dual; and amphetamine for None versus EC, and EC versus CC.

^b Significant differences between all groups in sequential order ($p < .05$) except for snuff for EC versus CC, sleeping pills or tranquilizers for EC versus CC, sniffed glue for EC versus CC, and amphetamine for EC versus CC.

^c Significant differences between all groups in sequential order ($p < .05$) except for sleeping pills or tranquilizers in EC versus CC.

Kristjansson et al., 2015. *J Adol Health*



Niðurstöður rannsókna: Rafrettu notkun unglinga og félagsleg einkenni

Table 2 Odds ratios (OR) from multinomial logistic regression models in three groups; associated with parents and family, school, and peer group and leisure time, by never smokers, CC-only, and dual users, compared to EC users as reference category (Independent variables employed as Z scores. All models account for school clustering and include demographic and background factors as control variables)

Independent variables	Never smokers			CC only			Dual		
	OR	Sig.	95% CI	OR	Sig.	95% CI	OR	Sig.	95% CI
Domain 1: parents and family									
Family support	1.33	.001	1.14–1.55	.85	.085	.71–1.02	.87	.145	.72–1.05
Parental monitoring	1.37	.001	1.29–1.46	.95	.456	.83–1.09	.79	.001	.69–.90
Time spent with parents	1.21	.003	1.07–1.37	.84	.010	.74–.96	.90	.171	.78–1.05
Intergenerational closure	1.30	.001	1.19–1.41	.88	.142	.75–1.04	.74	.001	.65–.85
Domain 2: studies and school									
Time on homework	1.21	.022	1.03–1.42	.86	.220	.67–1.10	.80	.024	.66–.97
A in Mathematics	1.17	.102	.97–1.41	.92	.371	.76–1.11	.74	.015	.58–.94
Skip classes	.68	.001	.62–.75	.97	.485	.88–1.07	1.08	.101	.99–1.19
Alienation from school/studies	.65	.001	.60–.72	1.13	.154	.96–1.34	1.43	.001	1.23–1.66
Domain 3: peer group									
Perceived peer respect for delinquency	.64	.001	.57–.73	1.06	.491	.90–1.26	1.31	.002	1.11–1.55
Peer delinquency	.52	.001	.49–.56	1.10	.288	.92–1.31	1.44	.001	1.16–1.79
Domain 4: leisure time									
Late outside hours	.71	.001	.64–.78	1.09	.288	.93–1.29	1.44	.001	1.24–1.67
Hangout at a friend's home without adult supervision	.60	.001	.53–.67	.89	.041	.79–1.00	1.16	.009	1.04–1.30
Hangout with friends in a field or wooded area	.73	.001	.66–.80	.99	.869	.86–1.13	1.33	.001	1.16–1.52

Kristjansson et al., 2018. *Prev Sci*



Samantekt: Hver er hættan af rafrettu notkun unglunga?

- Líkamlegar
 - Minniháttar; en þó fyrir hendi
- Hegðunarlegar
 - Meiri; líklegri til að hefja tóbasknotkun, forvitni um, og þróun jákvæðara viðhorfa til tóbaksreykinga (eftirherma), neysla annarra vímuefna
- Félagslegar
 - Meiri; tilfærsla á viðmiðum, félagslegt samþykki (re-normalization), jafningjastimplun og neyslutengdur lífstíll (sub-culture)



Ályktanir

- Koma í veg fyrir nýgengi í notkun rafretta meðal unglunga sem ekki nota tóbak að staðaldri
- Rafrettur á að markaðsetja sem tæki til skaðaminnkunar en koma í veg fyrir nýliðun, sérstaklega í hópi barna og unglunga (t.d. með aldurstakmörkunum og skaðamerkingum)
- Gera á rafrettur aðgengilegar fyrir reykingafólk sem vill hætta að reykja eða draga úr áhrifum reykinga (t.d. með verðstýringu)



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