

Smoking cessation in young people

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15-18 April 2015, Geneva, Switzerland Educational session: Smoking epidemiology and smoking cessation techniques

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Disclosure slide

- Research funded mainly by governmental organizations (Federal Ministry of Health, Federal Health Agency, UNODC)
- Funding of one research project by Pfizer, Inc. (2012-2013)
- Consultant contract with abbvie (2015)



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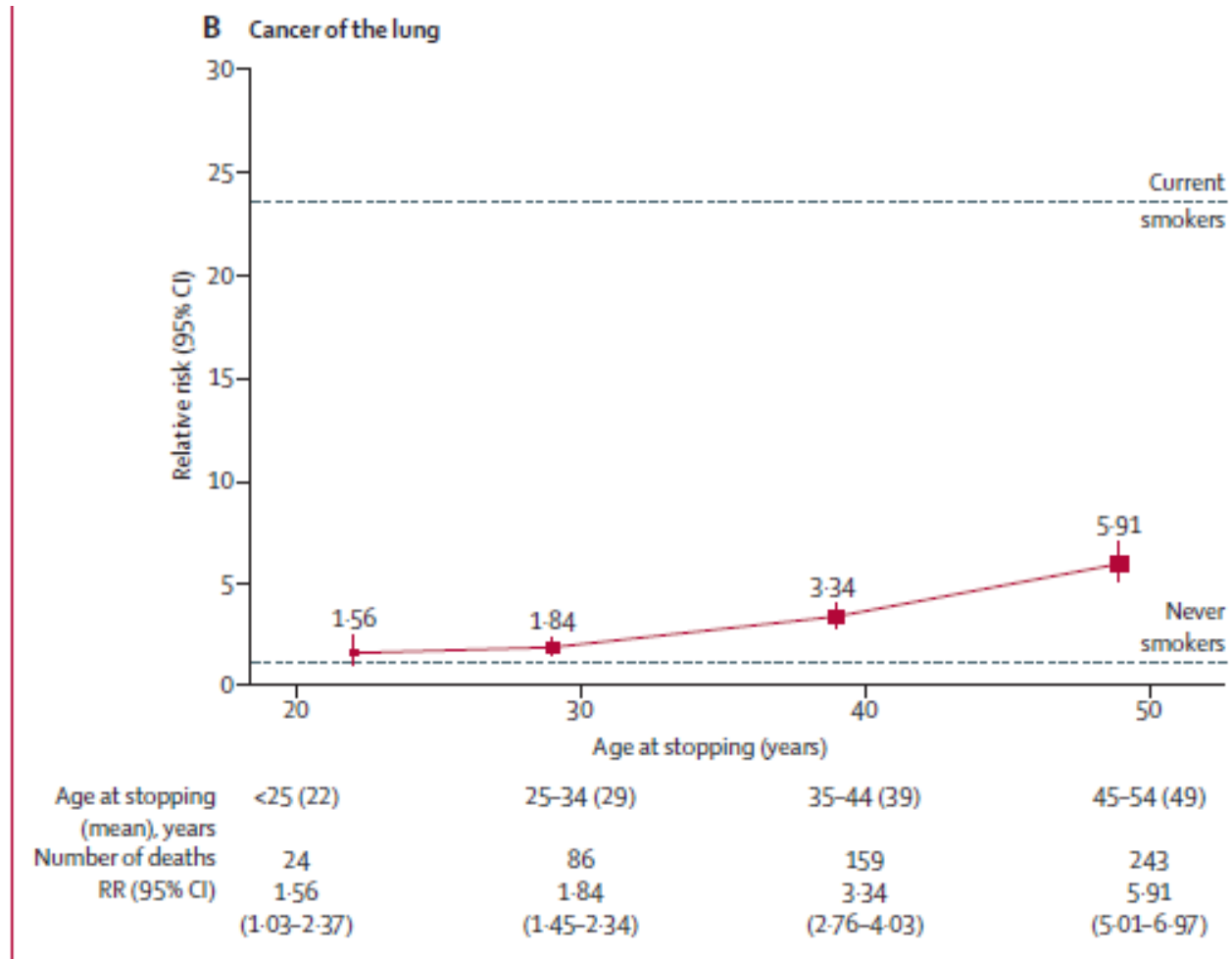
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Smoking cessation is prevention of lung cancer



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Pirie (2012)

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Less teen smokers in Europe

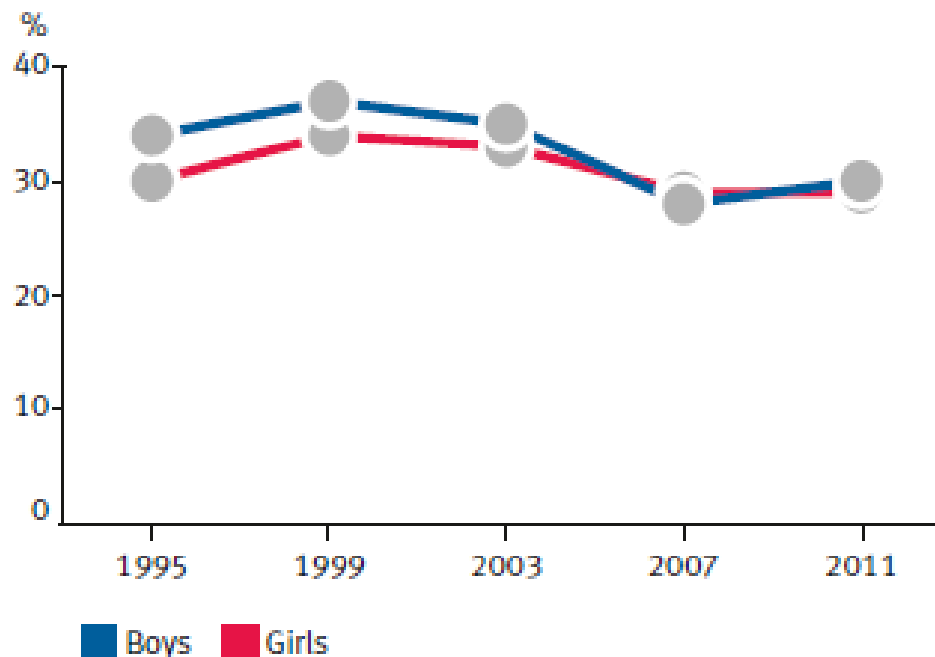


Figure 20c Cigarette use during the past 30 days by gender. 1995–2011. Averages for 19 countries. Percentages. (Table 43)



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ESPAD (2012)

Prevalence decreasing: Congratulations to Tobacco Control!

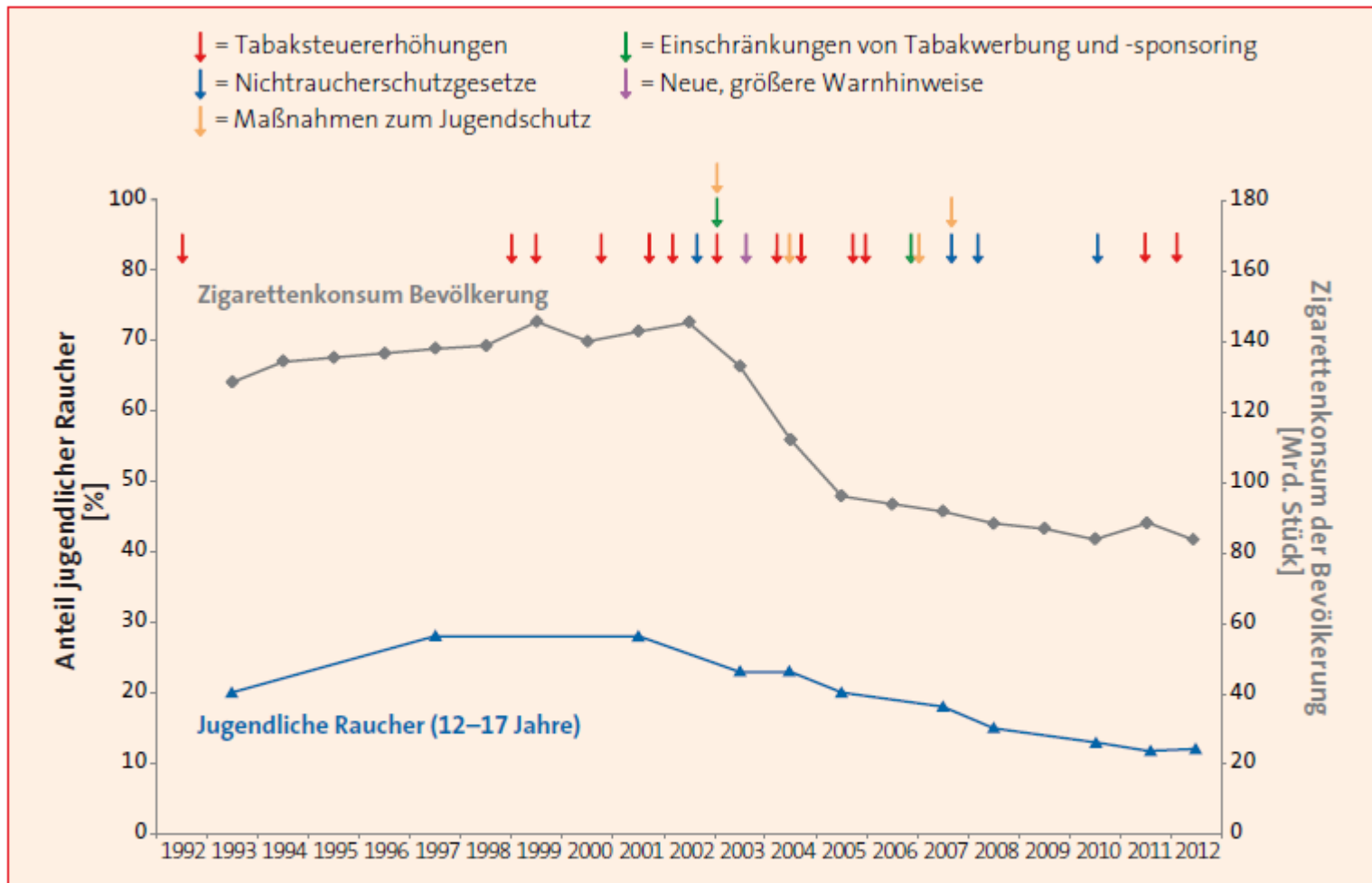
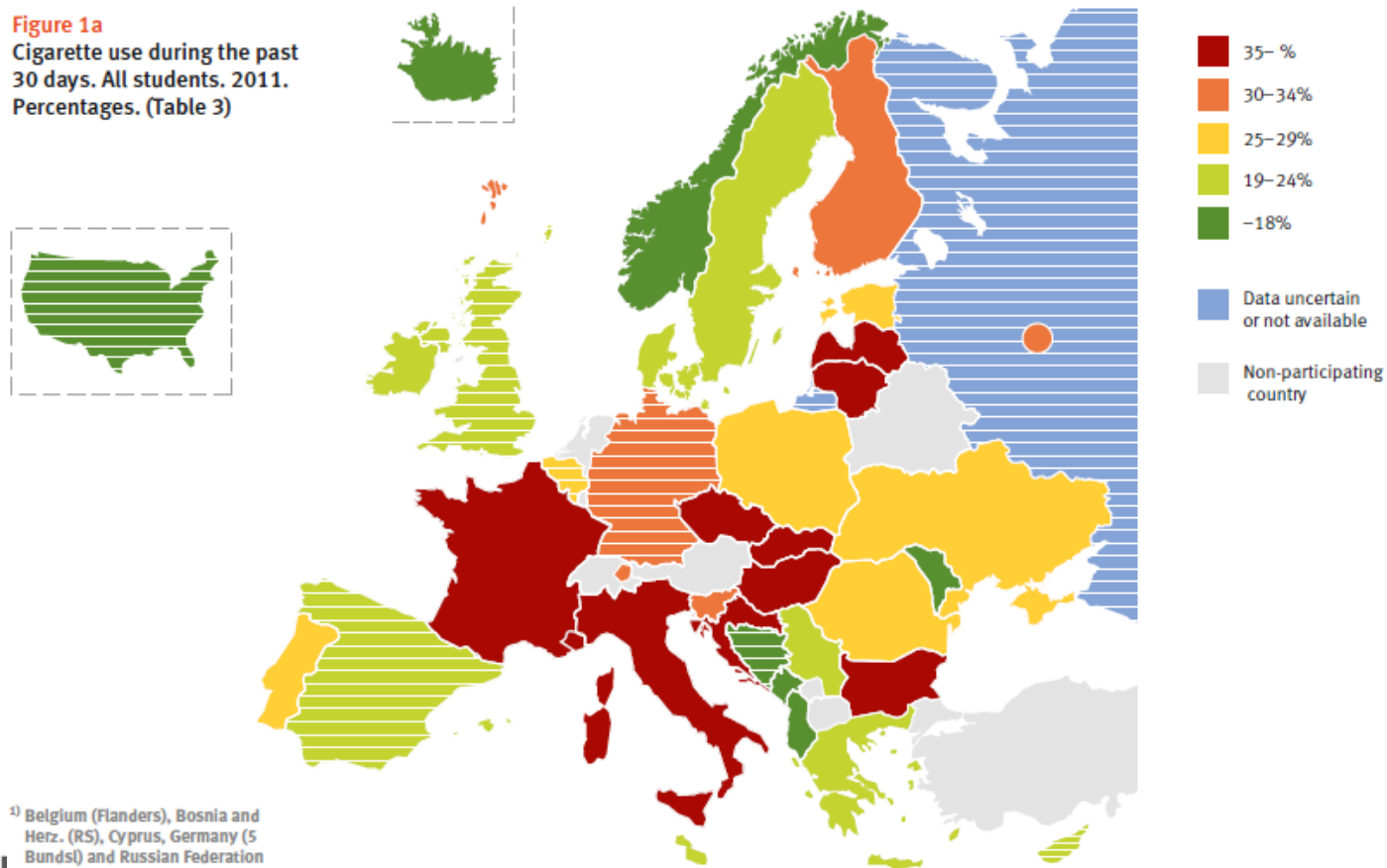


Abbildung 4: Tabakkontrollmaßnahmen, Zigarettenkonsum und Raucheranteile bei Jugendlichen in Deutschland. Quellen: Statistisches Bundesamt 1993–2013³², Bundeszentrale für gesundheitliche Aufklärung 2013⁵

DKFZ, 2014

Still too many young smokers

Figure 1a
Cigarette use during the past
30 days. All students. 2011.
Percentages. (Table 3)



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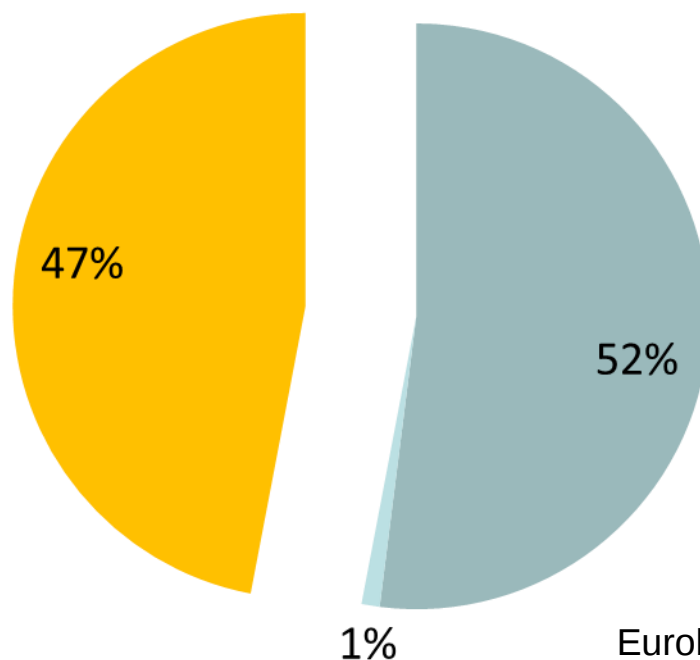


ESPAD (2012)

Who want and try to quit

Have you ever tried to quit smoking?

■ no ■ don't know ■ yes



Eurobarameter 385, 2012

15 to 24 year old smokers



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On their own - without professional help!

Cessation approach	Non-daily smokers ^a % (n)			Daily smokers ^b % (n)		
	Definitely use	Maybe use	Never use	Definitely use	Maybe use	Never use
<i>Wants to quit within next 30 days</i>						
Self-help booklet	4.6 (8)	20.7 (36)	74.7 (130)	4.6 (12)	23.6 (62)	71.8 (188)
Group meetings at school	1.7 (3)	16.7 (29)	81.6 (142)	4.2 (11)	12.3 (32)	83.5 (218)
Doctor	3.5 (6)	25.3 (44)	71.2 (124)	11.6 (30)	34.2 (89)	54.2 (141)
Chat room on Internet	0.6 (1)	15.4 (27)	84.0 (147)	1.9 (5)	11.5 (30)	86.6 (225)
Information site on Internet	5.8 (10)	21.1 (36)	73.1 (125)	4.6 (12)	28.5 (74)	66.9 (174)
Teacher, guidance counsellor, school nurse	5.2 (9)	20.2 (35)	74.6 (129)	6.5 (17)	16.1 (42)	77.4 (202)
Free telephone quit line	2.3 (4)	15.1 (26)	82.6 (142)	3.1 (8)	13.5 (35)	83.4 (217)
Friends advice	28.7 (50)	40.2 (70)	31.1 (54)	32.2 (84)	44.1 (115)	23.7 (62)
Quit on my own	80.3 (143)	14.6 (26)	5.1 (9)	85.3 (226)	12.1 (32)	2.6 (7)

Leatherdale and MacDonald, 2005



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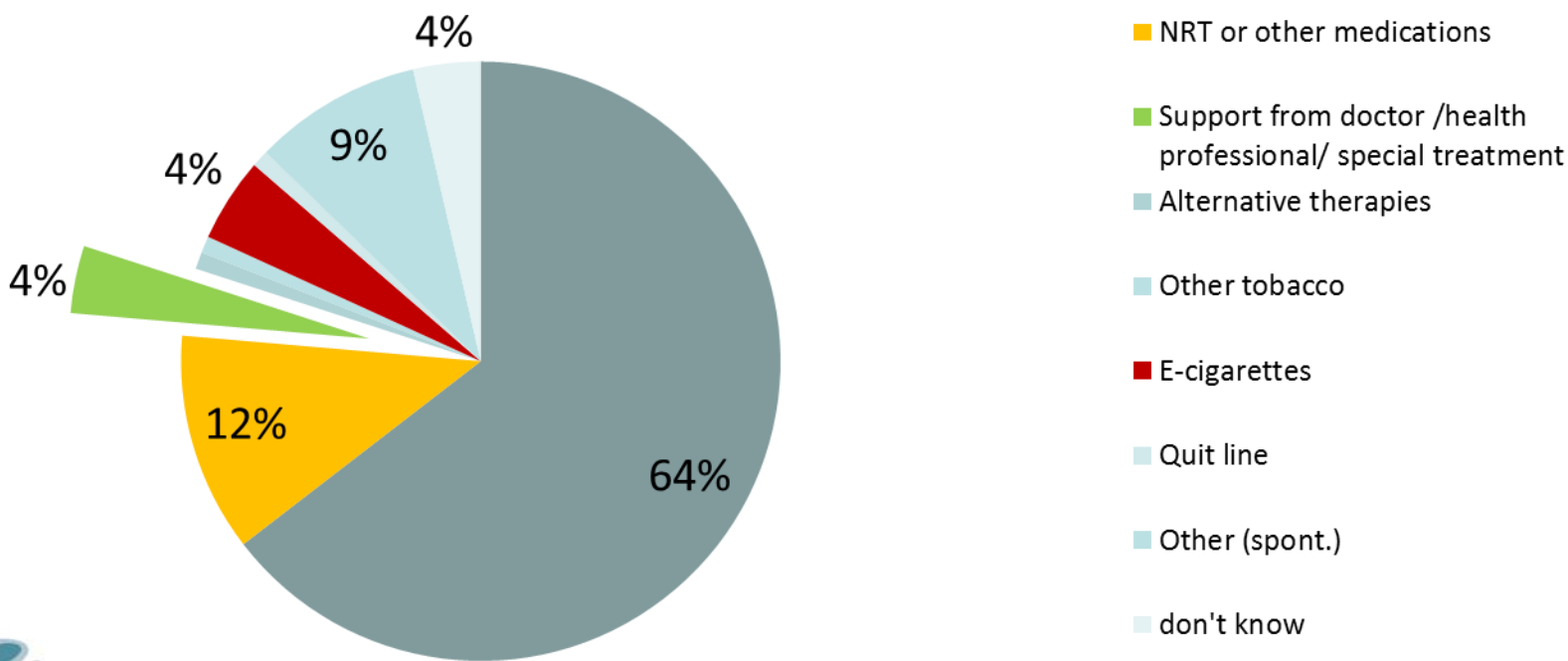
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Does this work?

The case of successful ex-smokers

Which did you use in order to quit or to try to quit
smoking?



Eurobarometer 385, 2012

15 to 24 year old ex-smokers



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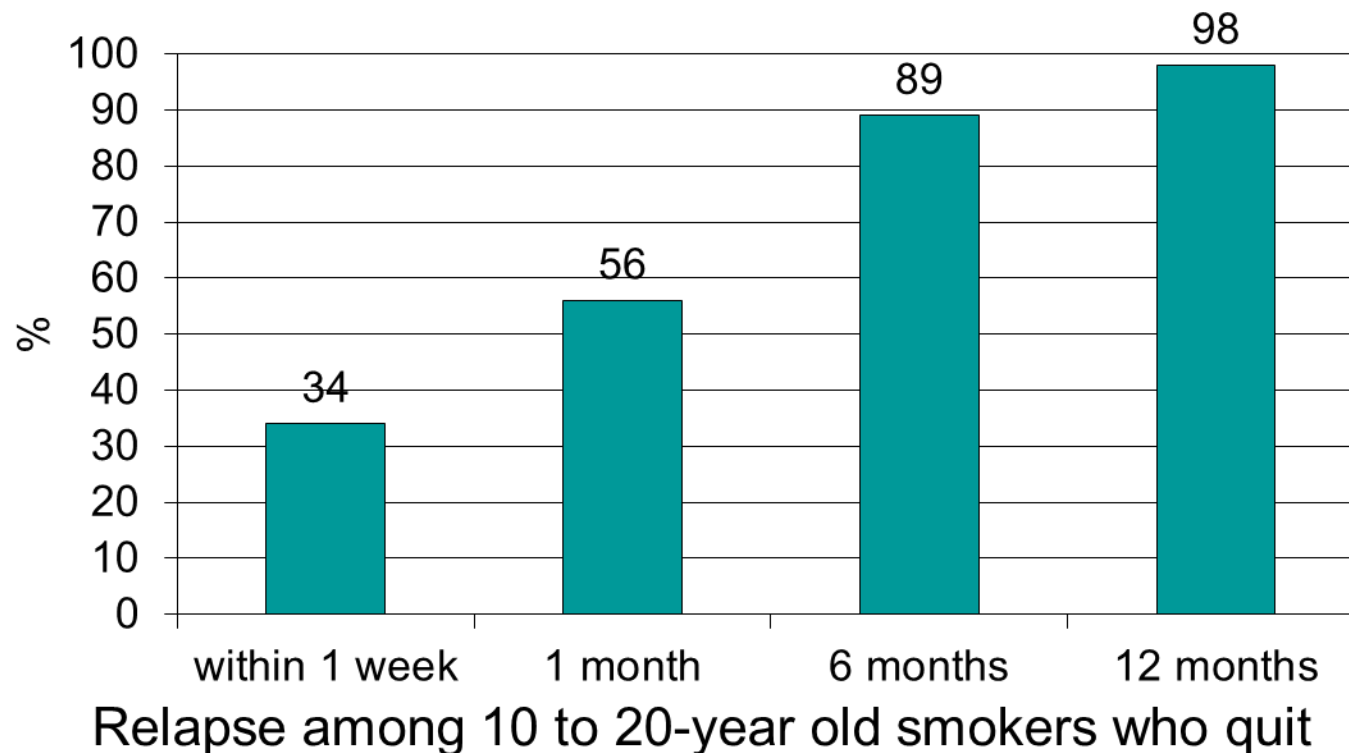


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Does this work?

The case of all young smokers



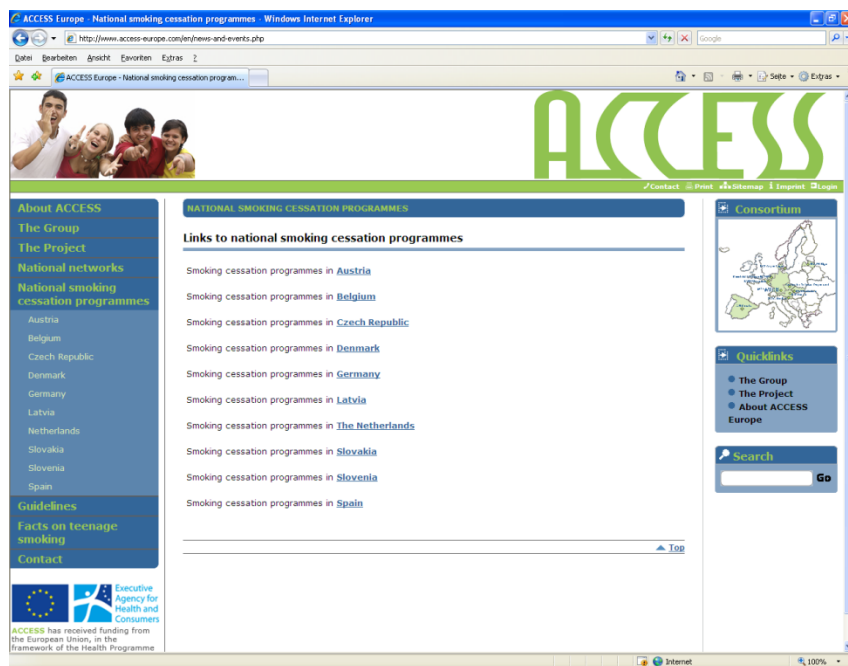
Smoking cessation attempts among adolescent smokers: a systematic review of prevalence studies

Christina Bancej, Jennifer O'Loughlin, Robert W Platt, Gilles Paradis, André Gervais

(Bancej et al, 2007)

Professional cessation aids ...

- ... are available!



European interventions on ACCESS-
website

- ... and effective!

The program mean estimate was 11.79 (error = 1.10, t value = 10.72, $p < .001$, two-tailed), and the control mean estimate was 7.53 (error = 1.11, t value = 6.85, $p < .001$, two-tailed). The overall absolute risk reduction effect was a program advantage of absolute effect = 4.26% (relative increase for treatment: $(11.79 - 7.53) / 7.53 = 57\%$ reduction). Thus, after a 27% increase in number of studies in the pool, the overall outcomes are slightly higher than the previous meta-analysis (2.90% advantage with $n = 48$), though the effect size is still not large.

Sussman & Sun, 2009, 64
intervention studies

Stanton & Grimshaw, 2013, 26
RCT studies

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What works best in youth smoking cessation?

Cochrane Database Syst Rev. 2013 Aug 23;8:CD003289. doi: 10.1002/14651858.CD003289.pub5.

Tobacco cessation interventions for young people.

Stanton A¹, Grimshaw G.

- Pharmacological approaches (Nicotine replacement and Bupropion) not effective, not to be recommended in adolescence
- A combination of psychosocial approaches
 - Taking into account the stage of readiness of the smoker (TTM)
 - Enhancing motivation (MET)
 - Supporting behavioral change (CBT)



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Readiness to change (TTM)

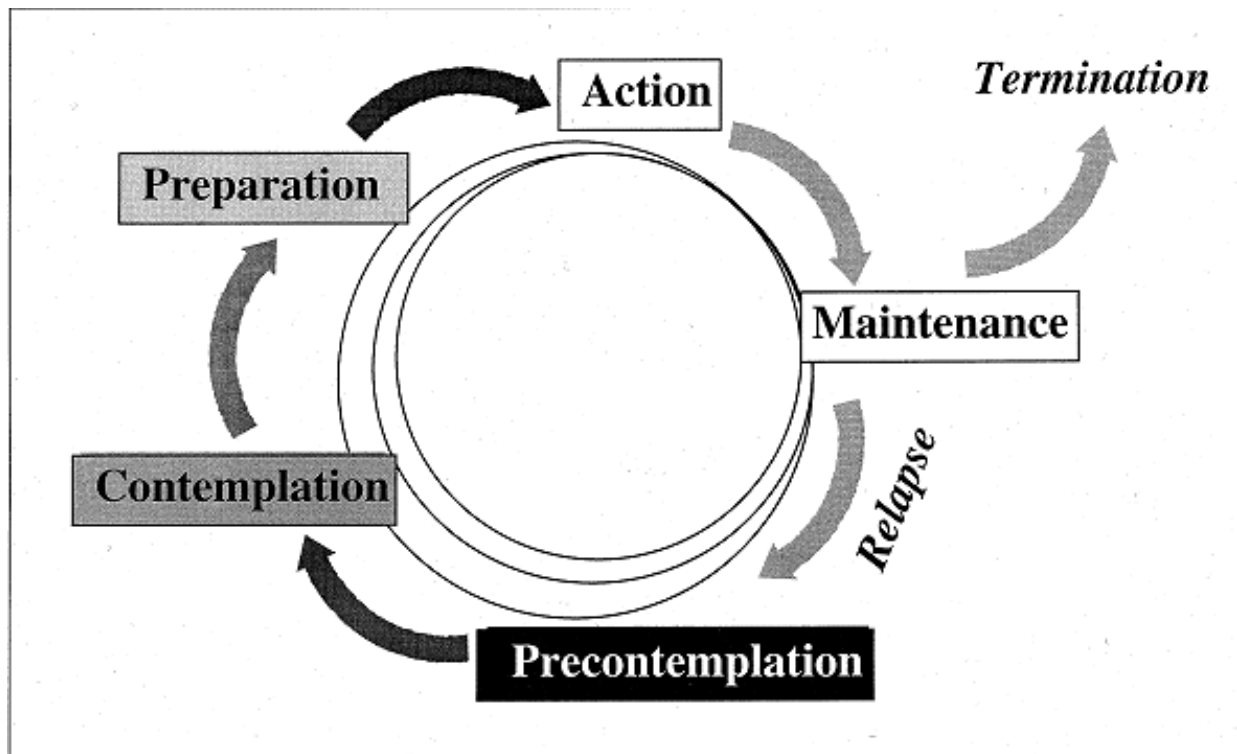


Figure 2: Spiral Model of Smoking Cessation



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From www.wikipedia.com

Transtheoretical Model of Change (TTM) compared to standard care or dietary advice for smoking cessation in young people**Patient or population:** young people**Intervention:** TTM**Comparison:** standard care or dietary advice

Outcomes	Illustrative comparative risks* (95% CI)		Relative effect (95% CI)	No of Participants (studies)	Quality of the evidence (GRADE)
	Assumed risk	Corresponding risk			
	Standard care or dietary advice	TTM			
Cessation Self-report Follow-up: 12 months	103 per 1000 ¹	160 per 1000 (124 to 207)	RR 1.56 (1.21 to 2.01)	1662 (3 studies)	⊕⊕○○ low ^{2,3}



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Cochrane Database Syst Rev. 2013 Aug 23;8:CD003289. doi: 10.1002/14651858.CD003289.pub5.

Tobacco cessation interventions for young people.Stanton A¹, Grimshaw G.

Cognitive-behavioral elements

- Analysis of personal situations and emotions connected to smoking
- Alternative behaviors
- Preparation quit day (script)
- Relapse prevention,
- Directive cognitive elements, frequent reinforcement, repetition of content, interactivity, fun



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Drehbuch meines Quit-Day

Wie sieht mein **Vormittag** aus?

Wie sieht mein **Nachmittag** aus?

Wie sieht mein **Abend** aus?



Analysekarte

Zigarette	Situation	Ärger	Stress	Angst	Lange- weile	Trauer	Freude
1							
2							
3							
4							
5							

Activity List

Es gibt wie Situationen, in denen du es gewohnt bist, zu rauchen.
Hier sind ein paar Vorschläge, was du tun kannst, anstatt zu rauchen.

Such' dir deine Alternative zum Rauchen!

- 01

Freunde anrufen
- 02

Joggen
- 03

Basketball spielen
- 09

Auf Zahnstocher kauen
- 10

Radio hören/ Musik hören
- 11

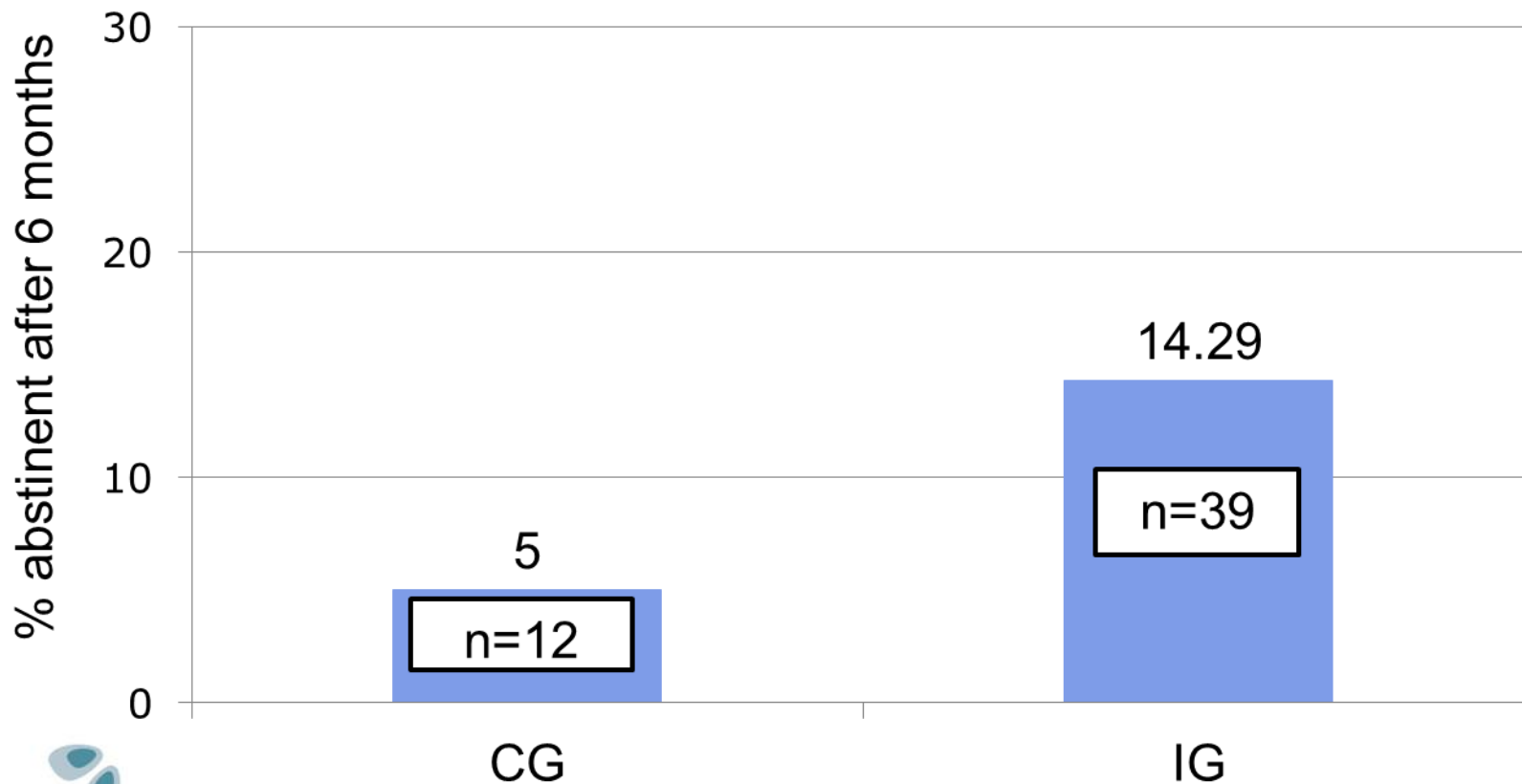
Früchte- oder Kräuter-
tee statt Kaffee oder
schwarzen Tee trinken



Quit rates (CT)

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Motivational Enhancement

- pick the client's general and drug-specific goals as a central theme
- for promoting ambivalence and readiness to change
- while supporting their autonomy



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Challenge in smoking cessation with young people: Motivation

- To quit
 - Major obstacle: the belief that people should stop smoking forever
 - Quitting as a stressful event and big effort : fluctuating motivational status
 - Physical disadvantages not a significant motivator
- To use professional help
 - Ambiguous towards adult world
 - Overestimation of own competence
 - Boring interventions
 - Unflexible logistics



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„mobile“ Cessation

- Web-based interventions

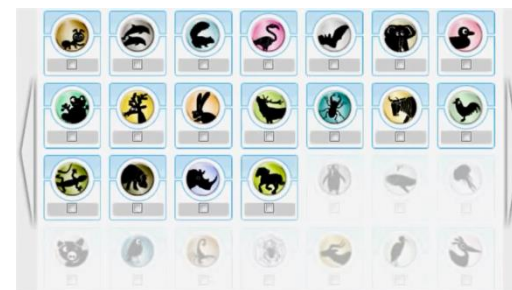
(e.g. www.ex-smokers.eu)

- Gaming-style interventions

(e.g. www.squin.de)

- Texting interventions

- Regular personalized text messages one week before quit day (5 per day) and following four weeks
- Smoking cessation advice, support and distraction
- E.g. Rodgers et al., 2005



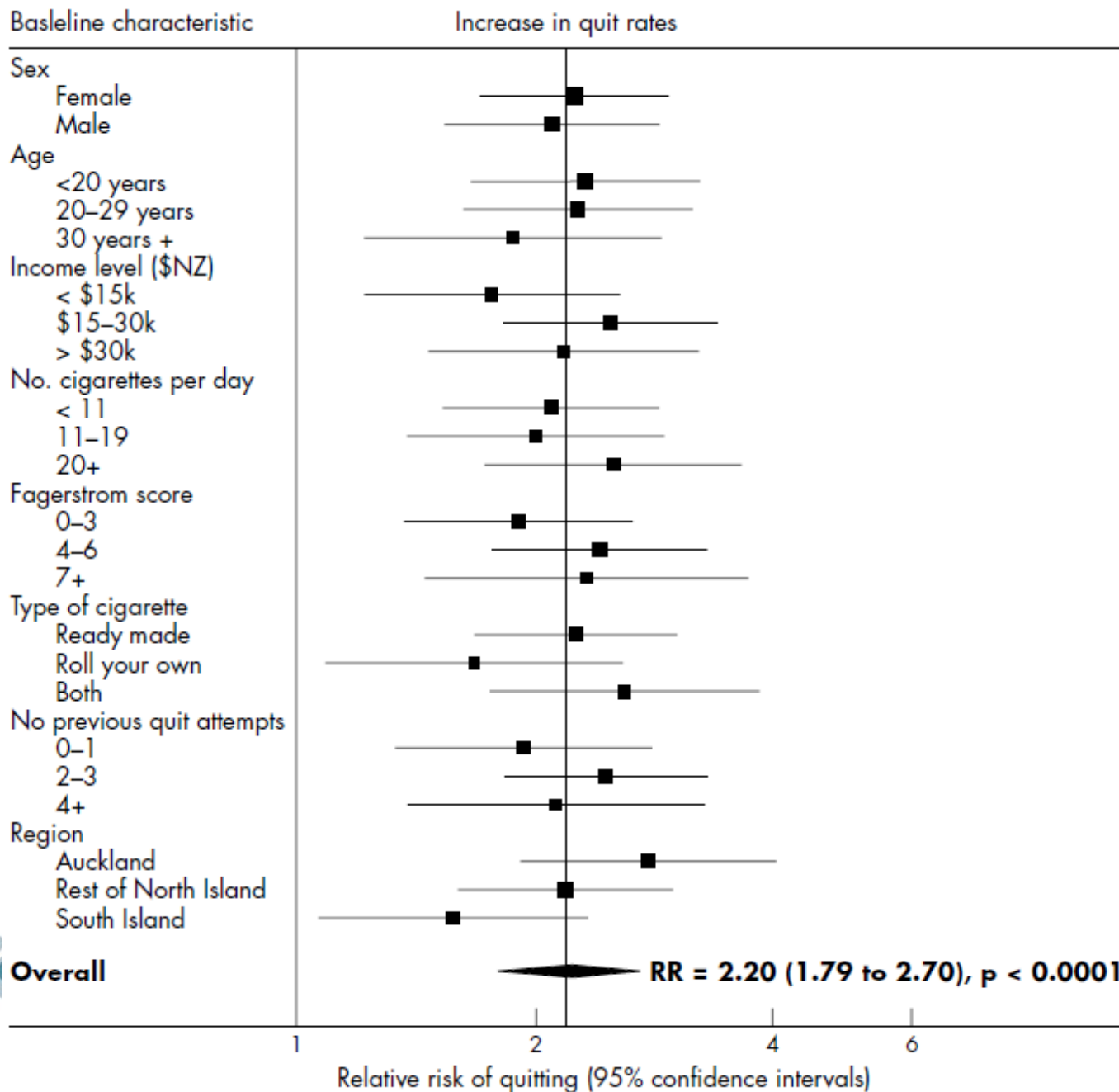
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Conclusion

- Smoking cessation is prevention of lung cancer
- Need for smoking cessation among young people
- Effective interventions are available
- Motivation is key
- Minimum for health and youth professionals:
Brief intervention Most brief intervention



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Thank you for your attention!

buehler@ift.de



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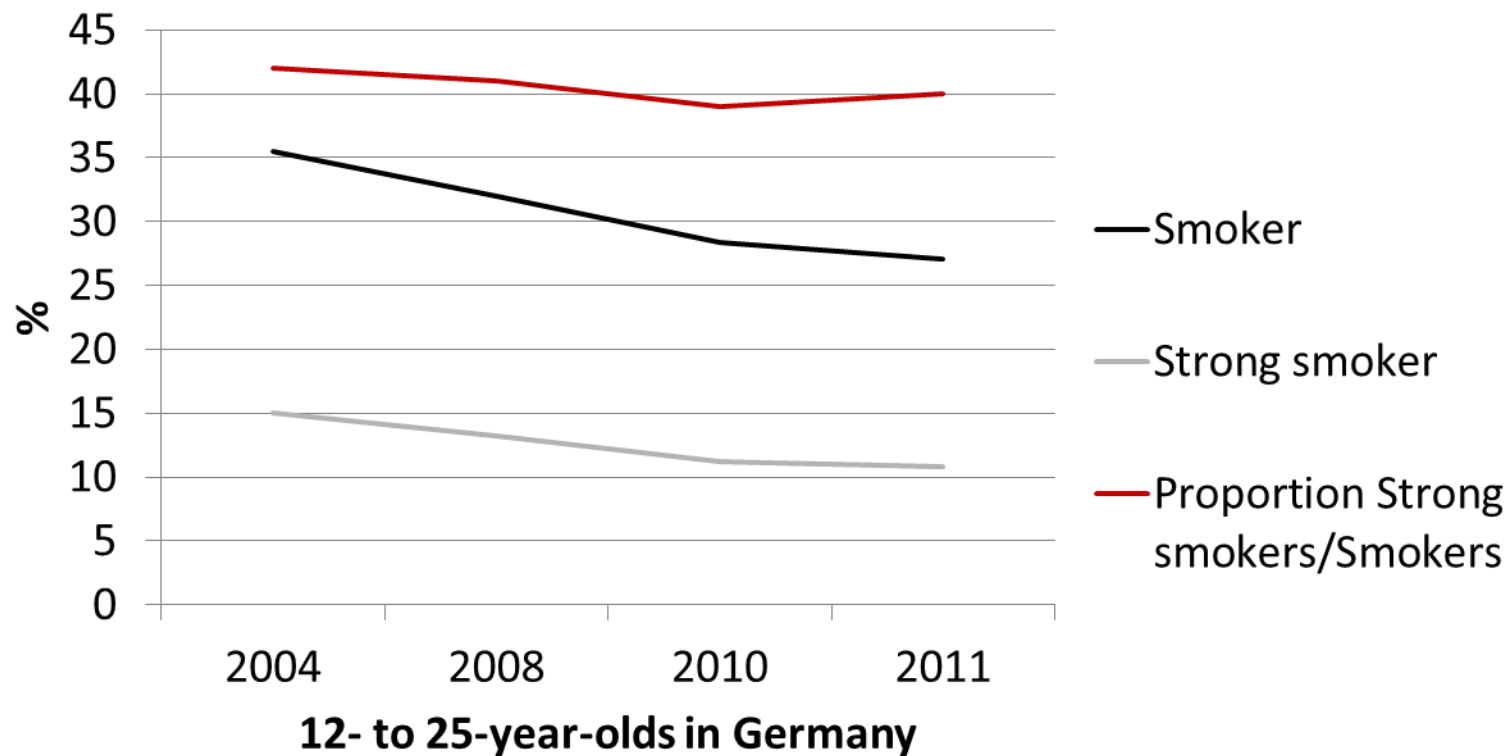
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Heavy smoking is substantial



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Readiness to change (TTM)

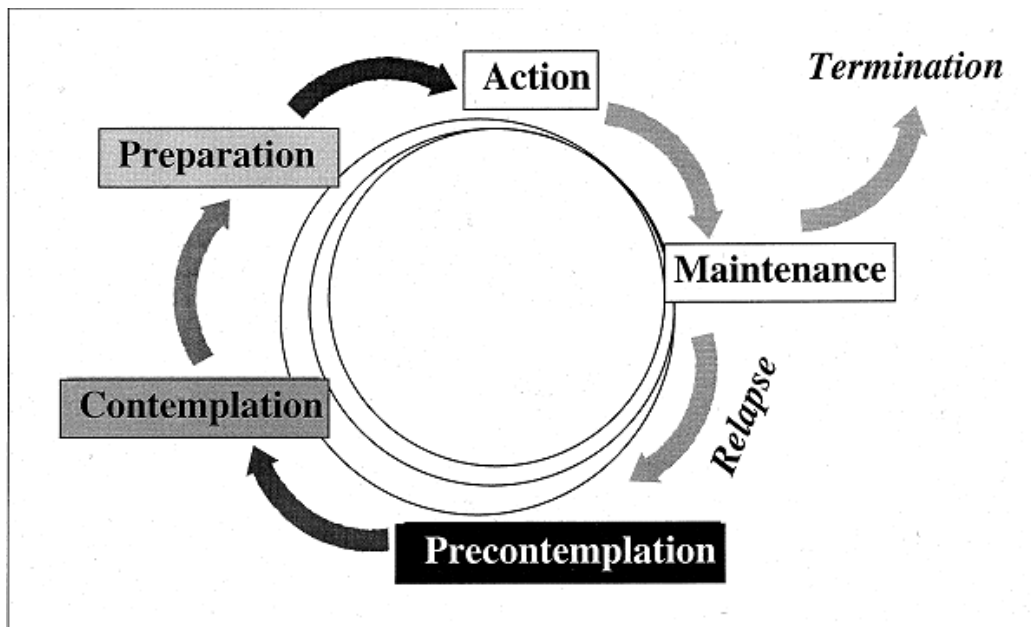


Figure 2: Spiral Model of Smoking Cessation

Stages by Processes of Change



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From www.wikipedia.com

- <http://www.quit.org.au/learninghub/resources/smoking-cessation-intervention-videos/young-people/scene-1-young-people.html>



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