

Recent trends in the use of tobacco and e-cigarettes in Germany: findings from the new DEBRA survey

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Disclosures

Industry funding to the investigator in the last 5 years

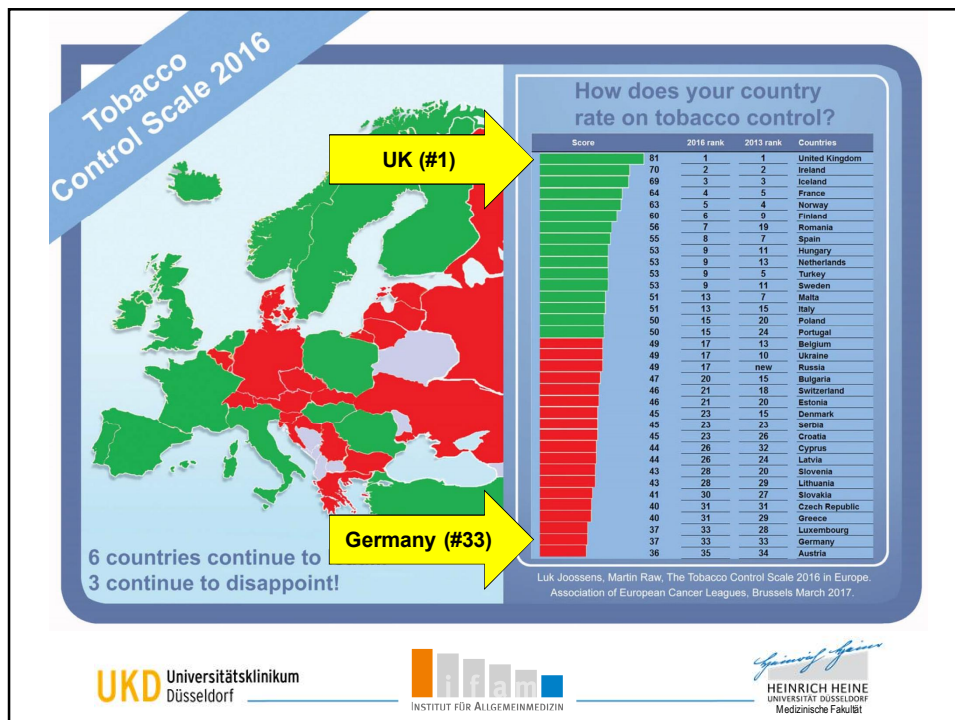
None

Tobacco-related mortality

- Tobacco smoking causes **~6 million deaths** worldwide each year, including more than **600,000 non-smokers** who die from second-hand tobacco smoke [WHO, 2011]
- Smokers lose on average **10 life-years**, and spend much of their life in **lower quality and poorer health** [Doll, BMJ 2004]

Smoking in Germany

- Germany ranks among the **top 10 countries worldwide** in largest number of smokers [Reitsma, Lancet 2017]
- **110,000** people die from smoking each year, including **3,300 non-smokers** [Mons, Gesundheitswesen 2011]
- Annual direct costs of tobacco smoking **~€8.7 billion**, indirect costs **~€25.9 billion** [Adams, DKFZ 2009]



DEBRA Deutsche Befragung zum Rauchverhalten

DEBRA general aims

Provide data helping to guide tobacco control policy, clinical practice and scientific research

- Collect data on **patterns and trends** of smoking and quitting in the German population
- Assess **processes** of smoking and quitting and the role played by **triggers** such as motivation or physician advice, sociodemographic factors, and aids to cessation
- Assess the use of **e-cigarettes** and their impact on tobacco smoking and quitting

UKD Universitätsklinikum Düsseldorf

ifam INSTITUT FÜR ALLGEMEINMEDIZIN

HEINRICH HEINE UNIVERSITÄT DÜSSELDORF Medizinische Fakultät

DEBRA strengths

- In-depth data on key indicators of smoking and quitting
- Baseline and 6-month follow-up data
 - face-to-face household interview (CAPI)
 - telephone follow-up interview (CATI)
 - cross-sectional AND longitudinal data analyses
- Bi-monthly data collection via omnibus survey, 3 years
 - monitoring of trends (including new innovations)
- Large accumulated data set (18 waves)
 - high statistical power
- Methods closely aligned to "Smoking Toolkit Study"
 - international comparison with England

DEBRA methods

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BMC Public Health

STUDY PROTOCOL

Open Access

Study protocol of the German Study on Tobacco Use (DEBRA): a national household survey of smoking behaviour and cessation



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DEBRA sampling

- Multi-topic omnibus survey by market research institute Kantar Health
- Multi-stage, multi-stratified random probability sampling of German population 14+
- Bi-monthly representative sample $N \approx 2,000$
 - 500-600 smokers > ~10,000 smokers in total

DEBRA current state

- Wave 1 = start of DEBRA: June 2016
- Current analysis:
 - 5 waves
June + August + November 2016
January + March 2017
 - **total N = 10,226 (N = 2,811 current smokers)**

DEBRA today's aims

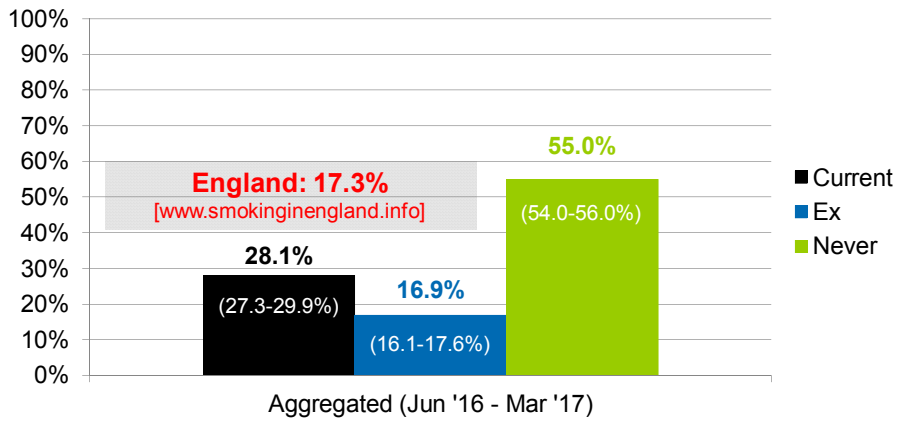
- **Recent trends in use of tobacco and e-cigarettes in Germany**
- Population's support for tobacco policy measures

Tobacco use

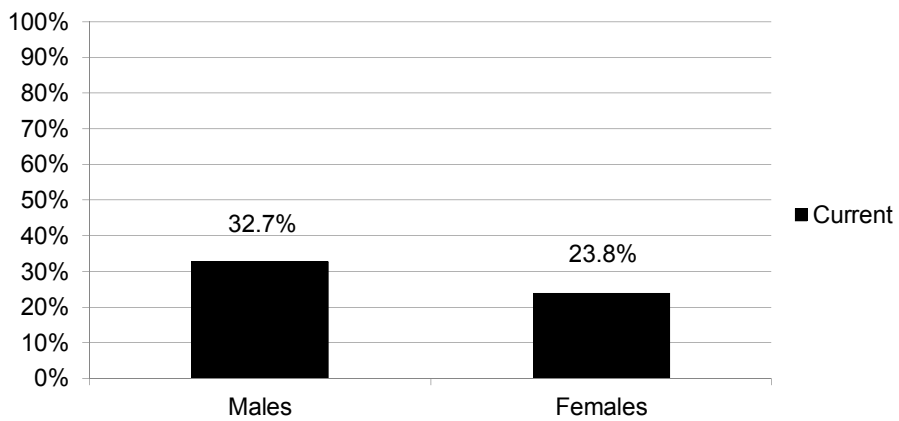
"Which of the following best applies to you?"

- I smoke cigarettes every day > **current smoker**
- I smoke cigarettes, but not every day
- I do not smoke cigarettes at all, but I do smoke tobacco of some kind (e.g., pipe or cigar)
- I have stopped smoking completely > **ex-smoker** in the last year
- I stopped smoking completely more than a year ago
- I have never smoked > **never smoker** (i.e., smoked for a year or more)

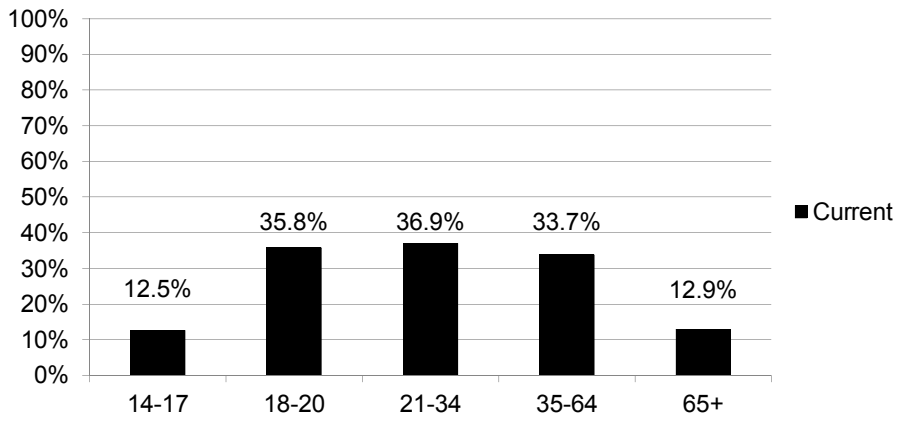
Smoking status



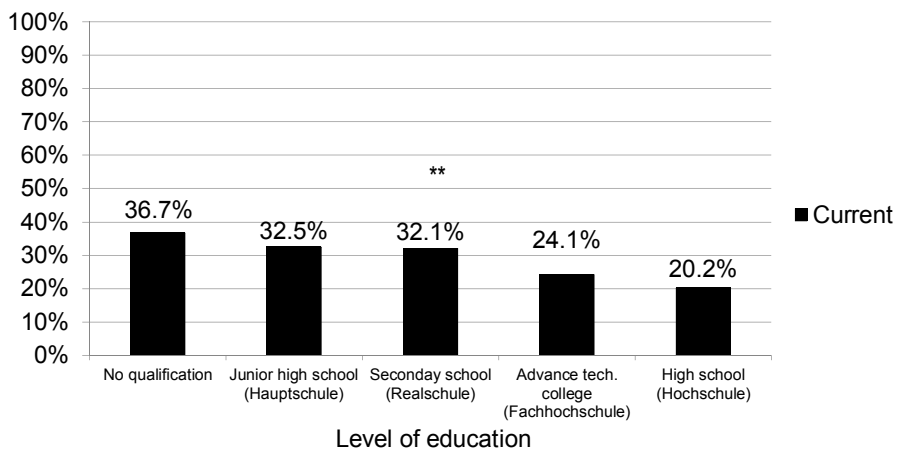
Smoker by sex



Smoker by age categories

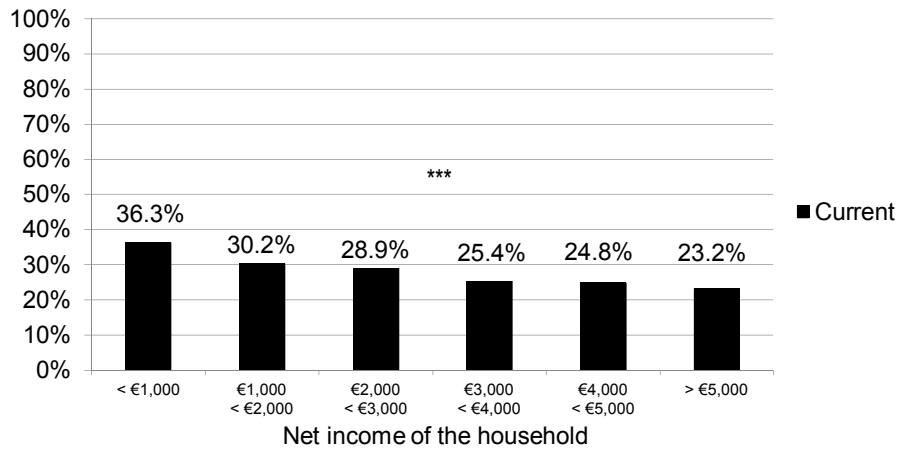


Smoker by education



** p<0.01 for linear-by-linear trend

Smoker by income

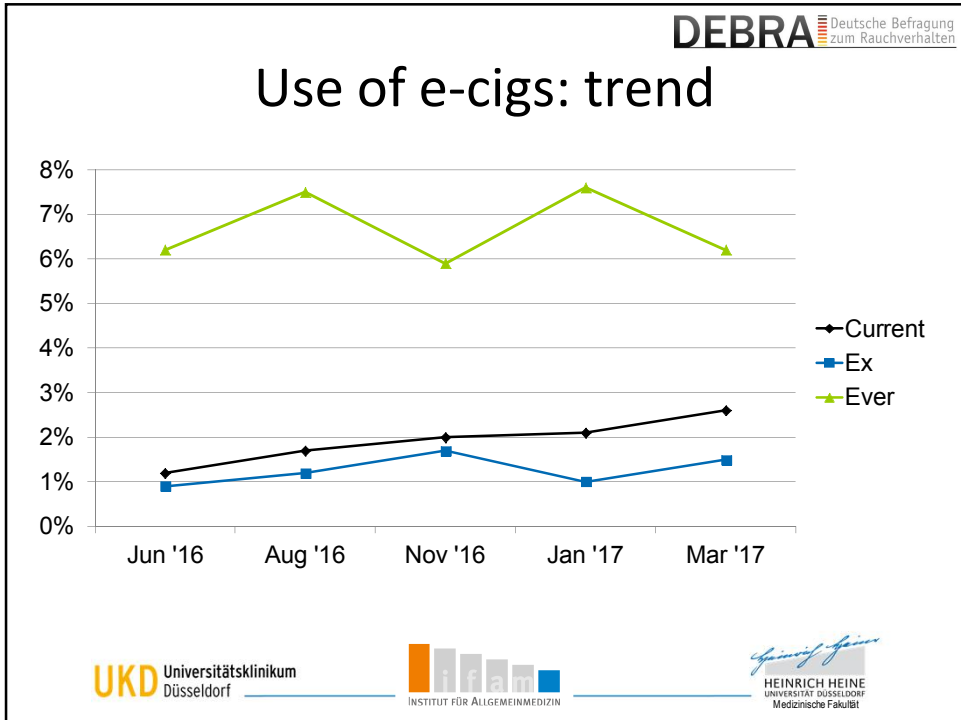
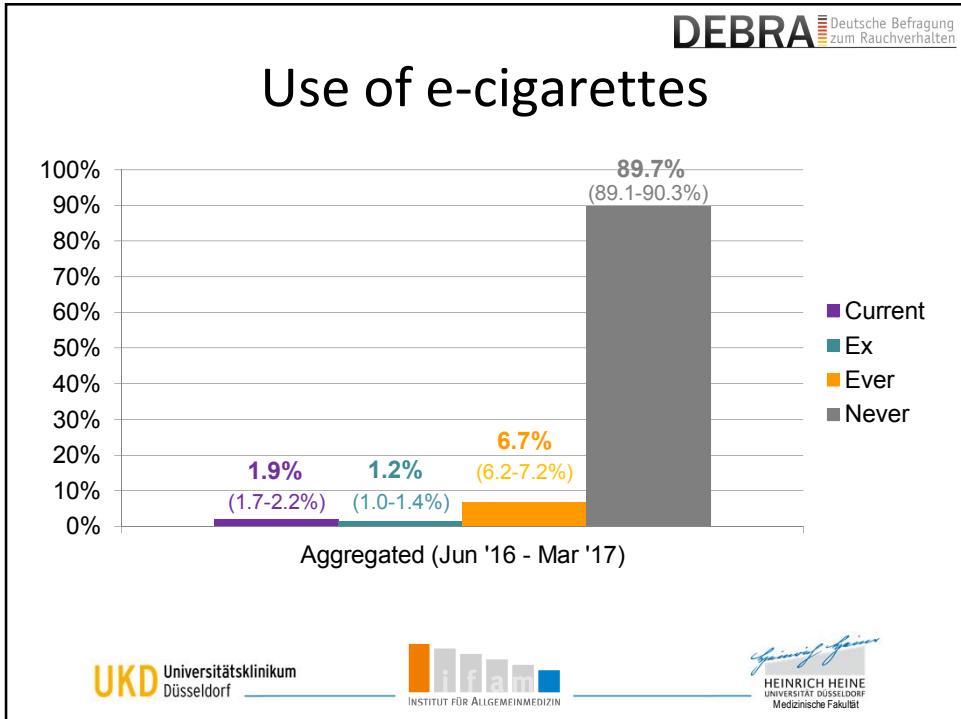


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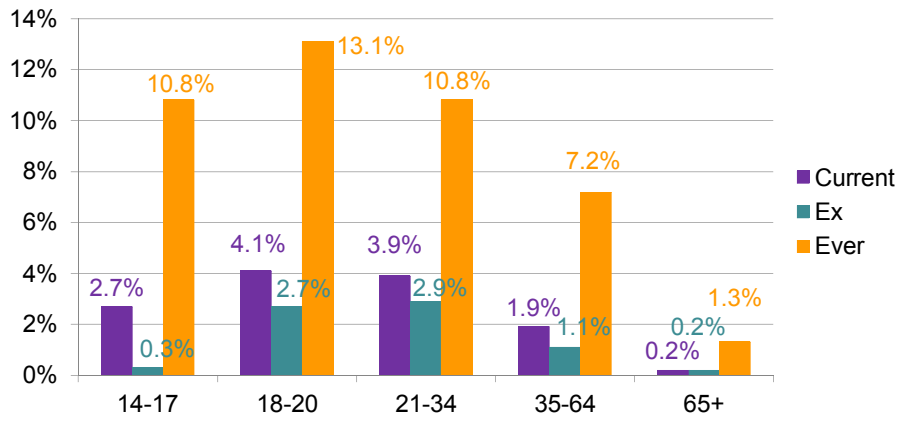
Use of e-cigarettes

"Have you ever used an electronic cigarette (e-cigarette) or similar product (e.g., e-shisha, e-cigar, e-pipe)?"

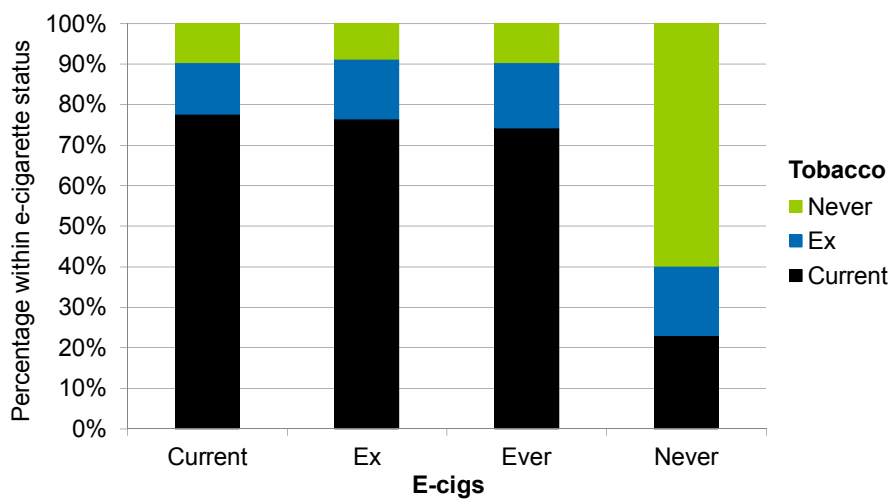
- Yes, I still use them at current > **current user**
- Yes, I used them regularly, but currently not any more > **ex-user**
- Yes, I tried them in the past, but currently not any more > **ever tried**
- No, I never used them > **never user**



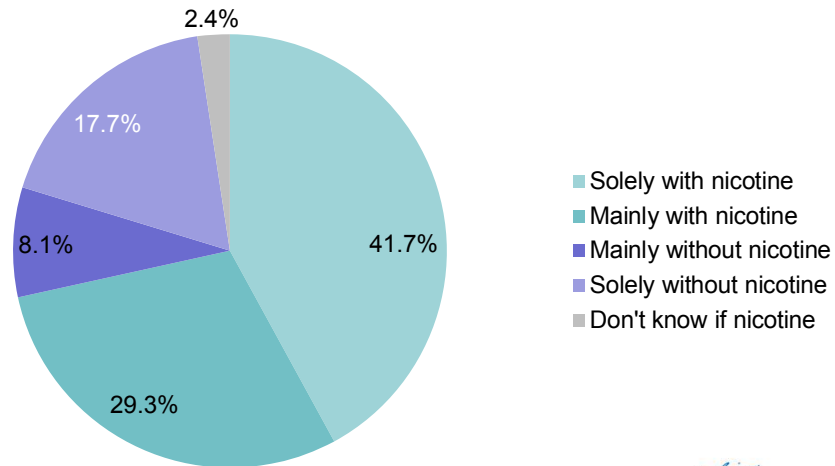
Use of e-cigarettes by age categories



Smoking status within e-cig status



Nicotine content of e-cigs [subset of current users, N=179]

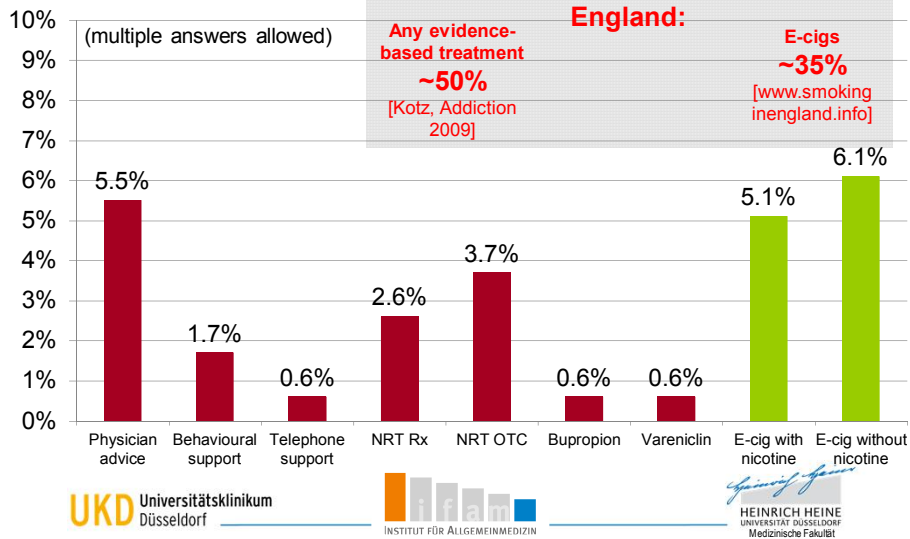


Reasons for e-cig use – top 10 [subset of current users, N=179]

Reason	% (multiple choice)
1. Different flavours	35.5
2. Less expensive than tobacco	33.1
3. To smoke less tobacco without quitting	31.2
4. Less harmful than tobacco	30.7
5. It's fun	29.8
6. Less annoying for others than tobacco smoke	26.8
7. To quit tobacco	25.4
8. For use at places where tobacco is prohibited	24.2
9. Tastes better than smoking tobacco	22.2
10. Reduces urges to smoke tobacco	18.1

Use of e-cigs as quit aid

[subset smokers who attempted to quit, N=719]



DEBRA today's aims

- Recent trends in use of tobacco and e-cigarettes in Germany
- **Population's support for tobacco policy measures**

Support tobacco policy measures

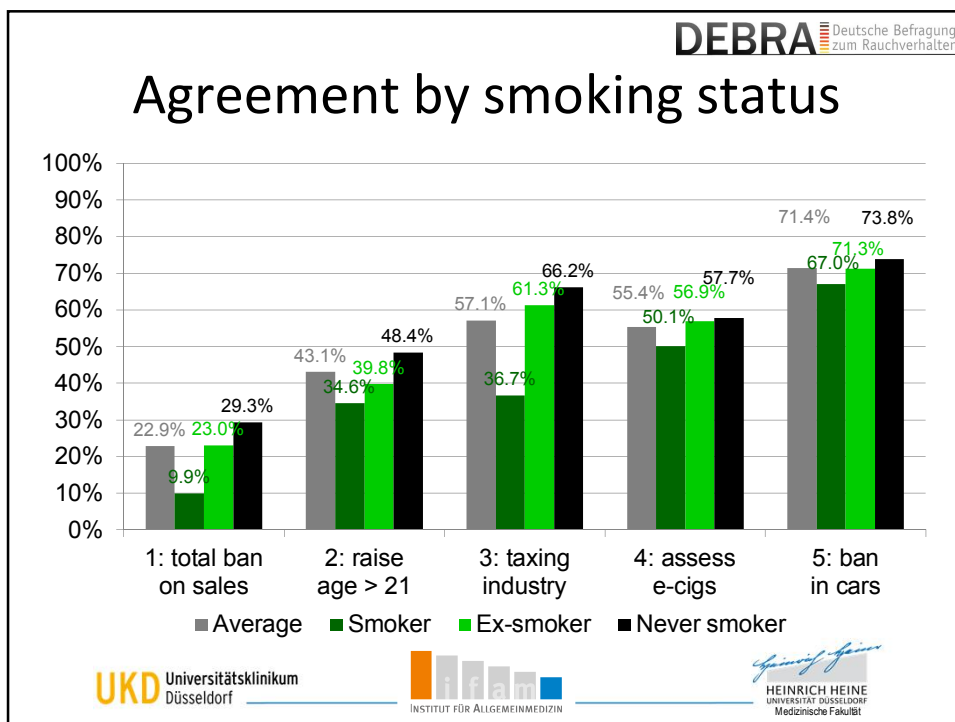
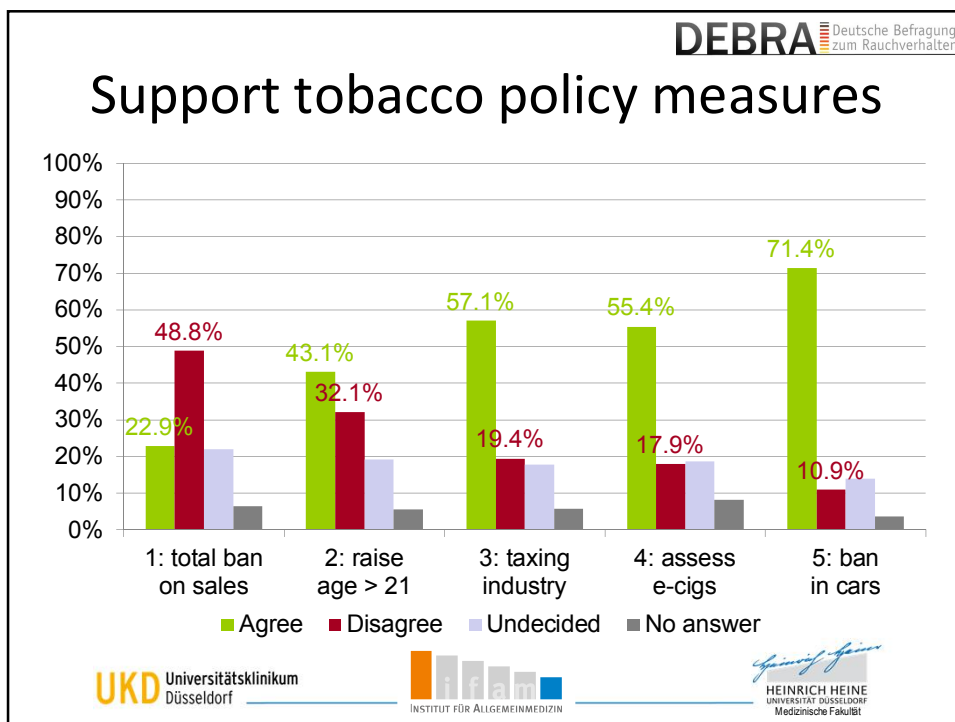
Statements [Wave 2, September 2016, N=2,087]:

1. The sale of cigarettes and tobacco in Germany should be banned completely within the next 10 years
2. The legal age of sale of cigarettes and tobacco in Germany should be raised from 18 to 21
3. Tobacco industry sales should be taxed in order to use the money to address problems caused by tobacco (e.g. health issues, environmental problems, etc.)
4. It should be assessed whether e-cigarettes are safe and effective in assisting smokers to quit
5. When children are in the car, smoking inside the car should be banned and subjected to punishment

Support tobacco policy measures

Response categories:

- | | |
|-----------------------------|--------------|
| 1. Strongly support | 1+2 > agree |
| 2. Tend to support | |
| 3. No opinion either way | |
| 4. Tend to oppose | 4+5 disagree |
| 5. Strongly oppose | |
| 6. Not applicable/No answer | |



Conclusions: tobacco

- **Prevalence** of tobacco smoking in Germany is relatively **high**
 - 28% of the population smokes tobacco, incl.
 - 13% of children aged 14-17 years
- **Social gradient** in smoking tobacco: the lower the education and income the higher the prevalence of smoking
- Only very few smokers attempting to quit use **evidence-based treatments**

Conclusions: e-cigarettes

- 1.9% of the population currently uses e-cigs, incl.
 - 2.7% of children aged 14-17 years
- E-cigs are mainly used by tobacco smokers
- E-cigs are a relatively frequently used aid to reduce and quit tobacco

→ **There is scientific need and public support for research into the effectiveness and safety of e-cigarettes as an aid to quitting**

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