





Study on Burden to Others due to alcohol-related harms (2017)

A quick insight into...

Context – Methodology – Results

Albert Kern,

Federal Ministry of Health, Division Addiction and Drugs, Germany







Study on Burden to Others due to alcohol-related harms (2017)

Prof. Dr. Ludwig Kraus, IFT Institut für Therapieforschung, Munich, Germany

Prof. Dr. Jürgen Rehm, CAMH Centre for Addiction and Mental Health, Toronto, Canada

Project Duration: December 2015 – November 2016

Costs: approximately 15.000 Euro







Context

- ightarrow We know enough about alcohol-related harms to consumers: $\sqrt{}$
- What do we know about the burden to third parties due to alcoholrelated harm: ?
 - increasing recognition of harms experienced by someone other than the drinker (Laslett et al., 2011) including physical, mental, emotional and environmental type harms
 - More than a third of all surveyed persons in a GPS of 2012 indicate one or more of 11 negative consequences of an alcohol consumption of other persons
 - SEAS/RARHA: results of the dimension of harm to others
 - 2.65 million children with addicted parents







Targets

To estimate the extent of damage to third parties as a result of

- (1) alcohol consumption of pregnant women on the unborn child (fetal alcohol syndrome - FAS),
- (2) alcohol-related traffic accidents and
- (3) alcohol-related violent acts

<u>Challenges</u>: Finding parameters that can be regularly updated from existing data without great effort

<u>Challenges</u>: Use the results to discuss and change the attitude towards alcohol in society







Methods

- meta-analyzes that estimate missing information for Germany based on available data from original studies
- statistics with complete reference to the damage to third parties due to alcohol,
- estimates of the alcohol-attributable proportion in a particular diagnosis (ICD-10)

Other approach: Self-reported negative effects/harm from known people's or from strangers' drinking in GPS (ESA or SEAS)







Results 1 – Prevalence of FAS in Germany

Method 1: Meta-analytic approach by Popova and colleagues (2017) and the prevalence of alcohol-consuming pregnant women **41 cases** per 10,000 births; total: **3,024 cases**

Method 2: Diagnosed with Q86.0 (FAS) in hospital and death causes statistics

0.2 cases per 10,000 births; total: 14 cases

Method 3: ICD diagnoses for low birth weight without alcohol reference (P05-P07) and estimation of the alcohol attributable proportion

14 cases with an alcohol-related impairment of the fetus per 10,000 births; total: **1.033 cases**







Results 1 – Prevalence of FASD in Germany

Method 1:

The estimates for FASD was 1.77% (95% CI: 1.35%-3.26%) relating to **177 children** with FASD per 10.000 livebirths per year.

For the year 2014 with 714,927 livebirths this translates to **12,638 children** born with FASD







Results 2 – Alcohol-related traffic accidents in Germany

<u>Method 1</u>: Traffic statistics of the Federal Statistical Office and the assumption of a causal alcohol reference for a BAC ≥ 0.5 per mille; statistics fully attributable to alcohol

- 5,486 other persons were injured in such an accident (total)
- 4,303 other persons with minor injuries (2.1% of all minor injuries)
- **1,115 other persons** with severe injuries (**4.9**% of all fatal injuries)
 - **68 deaths** of other persons than the drunken driver







Results 2 – Alcohol-related traffic accidents in Germany

Method 2: Estimation on the basis of diagnoses with respect to the damage of third parties in road traffic (V-diagnoses) and the calculation of alcohol-attributable proportion; statistics partially attributable to alcohol

525 number of **other persons** who were killed as a result of the alcohol consumption of a person causing the accident

Method 1: **68 deaths** of other persons than the person who caused the accident







Results 3 – **Deaths** of third parties due to alcohol-related violence

<u>Method 1</u>: <u>Police criminal statistics</u>; <u>crime statistics with reference to, but not attributable to alcohol</u>

766 other persons died because the offender was under the influence of alcohol at the time of the crime

- 154 murders (18% of all murders)
- > **589 homicide** (33% of all homicide)
- 23 negligent homicide (not traffic accidents).







Results 3 – **Deaths** of third parties due to alcohol-related violence

Method 2: Alcohol-attributable causes of death statistics; ICD-10-Codes X85-Y09 (assault, e.g. by drugs, medicaments); statistics partially attributable to alcohol

368 cases (ICD-10-Codes X85 – Y09)

111 alcohol-attributable cases (= 30%)

- 63 male cases (= 36% of all male cases)
- 48 female cases (= 25% of all female dases)







Results 3 – Victims of alcohol-related violent crimes

<u>Method</u>: <u>Police criminal statistics</u>; <u>crime statistics with reference to, but not attributable to alcohol</u>

Of a total of **631,811 persons**, who were victims of an act of violence, in **26%** the suspect was under the influence of alcohol

- 159,608 victims of bodily injury
- 2,289 victims of sexual abuse
- 2,275 victims of violent violations of sexual self-determination







Challenges and recommendations

- explain the differences between the figures, depending on the methods
- discuss which methods are adequate and should be used regularly in a long term perspective
- compare the results with self-reported harm due to others' alcohol drinking







Challenges and recommendations

- do both promote research on numbers and improve the health system:
 - use the results of harm to others to discuss and change the attitude towards alcohol in society
 - find out which problems relatives are facing and how to help them
 - especially: develop targeted and effective offers for children with addicted parents
 - realize the consequences that arise in companies by alcoholrelated problems of colleagues







Thank you for your attention!