



GÖTEBORGS  
UNIVERSITET

SAHLGRENSKA AKADEMIN

# WOMEN AND ALCOHOL

**GUNNEL HENSING**  
**UNIVERSITY OF GOTHENBURG**

GUNNEL HENSING, PROFESSOR



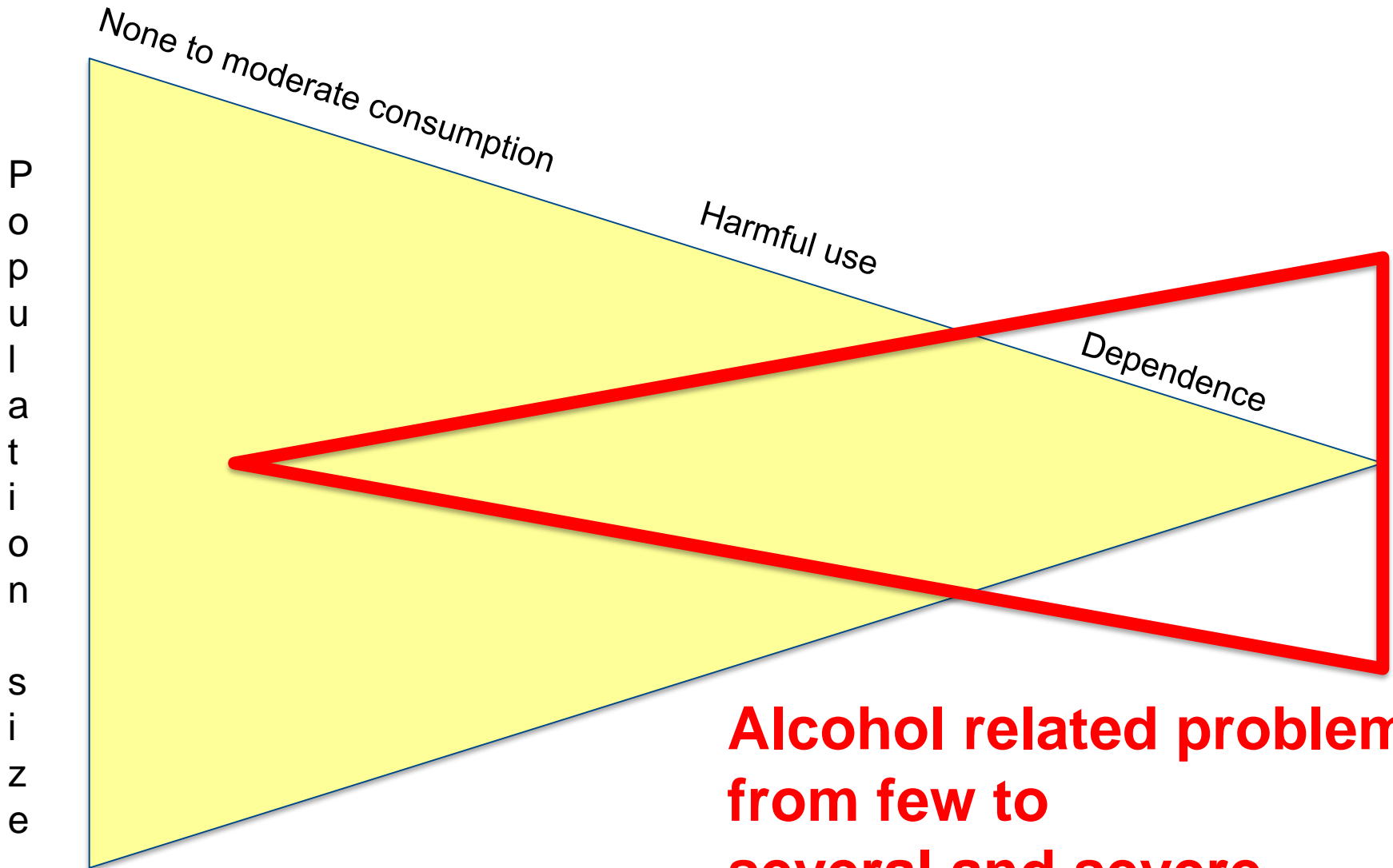
GÖTEBORGS  
UNIVERSITET

SAHLGRENSKA AKADEMIN

## Women and alcohol in Gothenburg - WAG

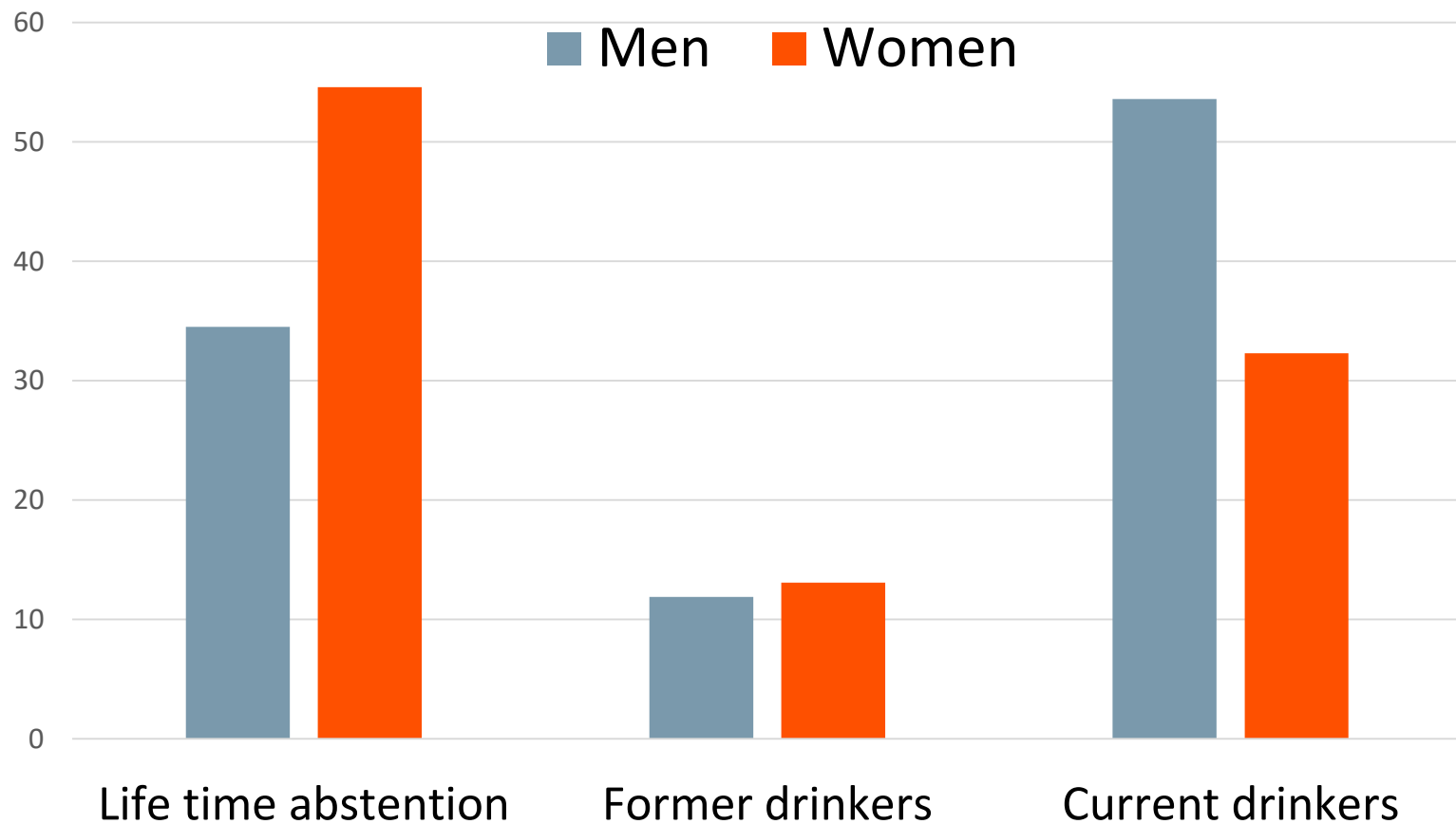


# Alcohol consumption as a continuum.



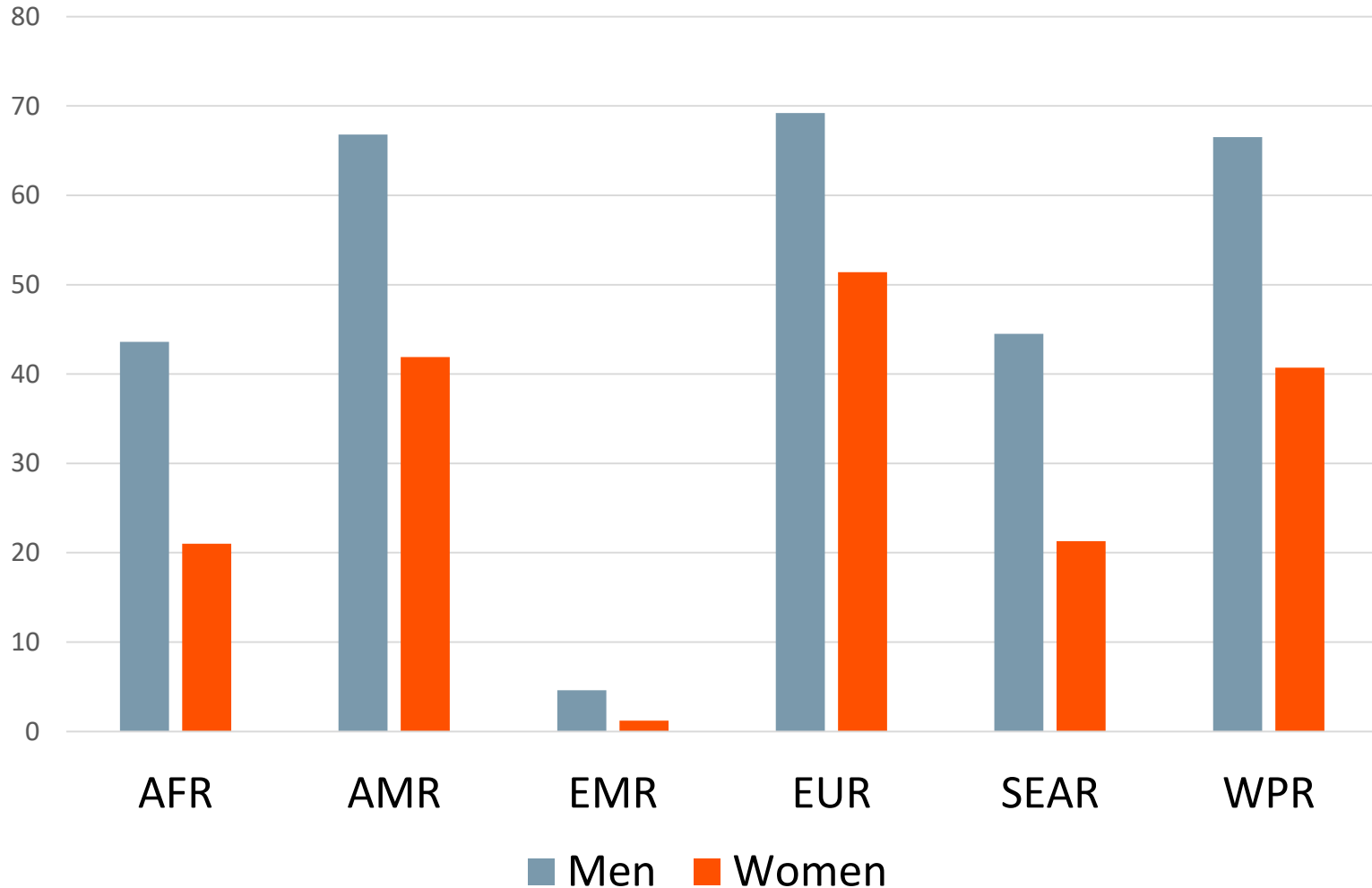
**Alcohol related problems  
from few to  
several and severe**

# Distribution of abstinence and current drinking (%) 15+, World



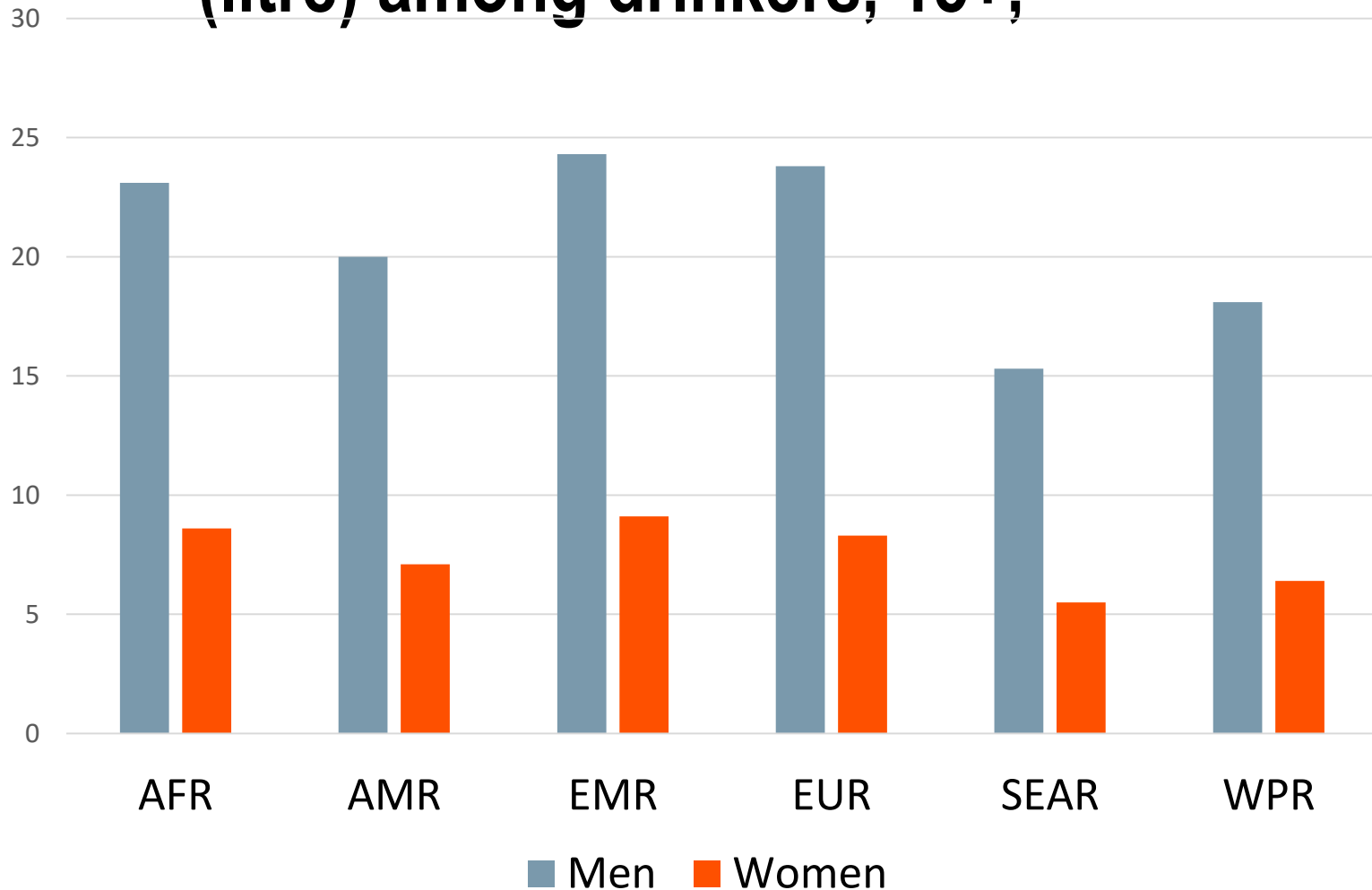


# Current drinkers among all (%), 15+



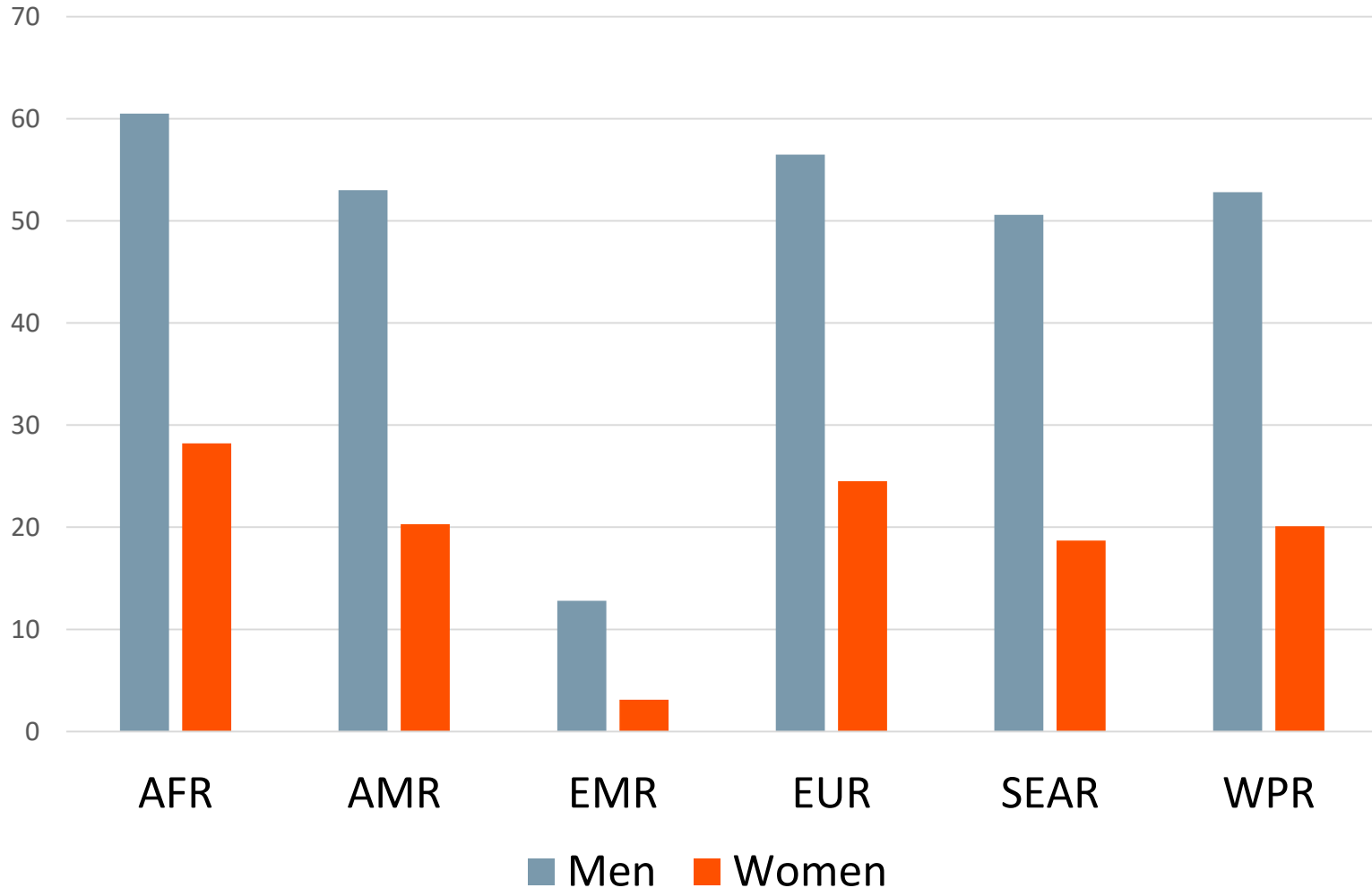


# Per capita consumption of pure alcohol (litre) among drinkers, 15+,





# Prevalence of HED among drinkers (%), 15+





GÖTEBORGS  
UNIVERSITET

SAHLGRENKA AKADEMIN  
ENHETEN FÖR SOCIALMEDICIN OCH  
EPIDEMIOLOGI (EPSO)

# HEALTH CONSEQUENCES?



# Alcohol use disorders

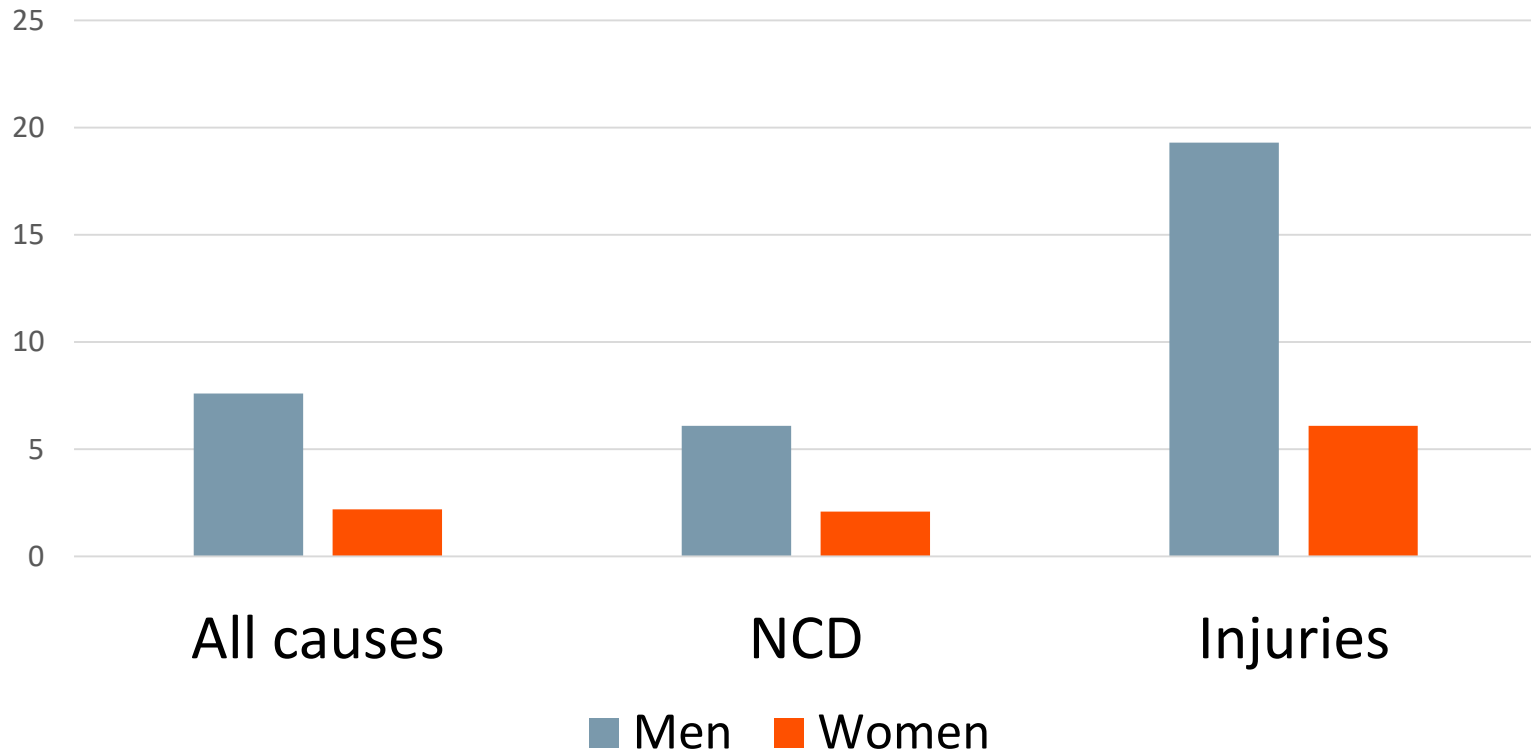
- World
  - 8.6% of adult men
  - 1.7% of adult women
- European Region
  - 14.6% of adult men
  - 3.5% of adult women



# Disability adjusted life years - DALY

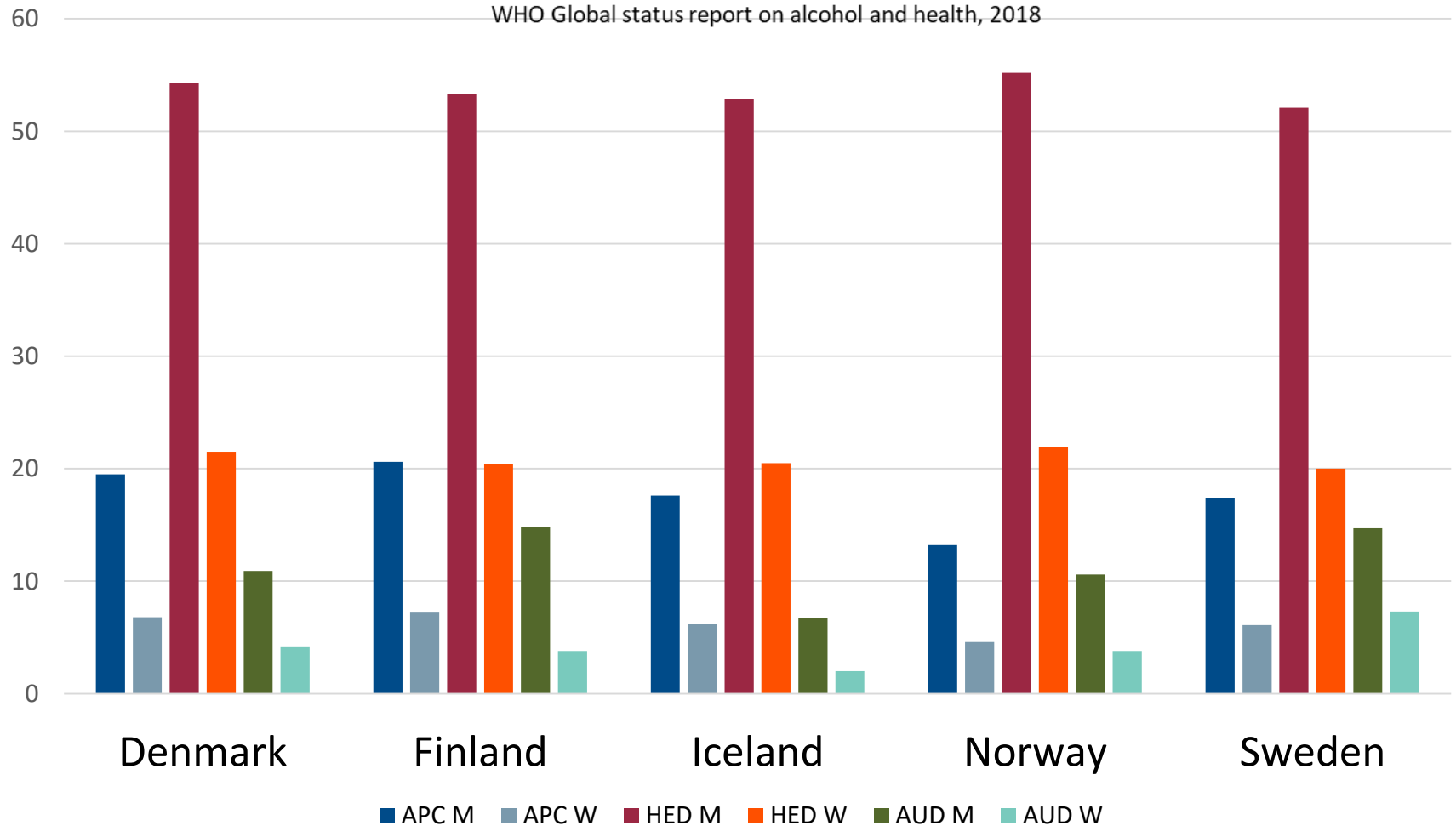
- Disability-adjusted life years (DALYs) represent a time-based measure of overall burden of disease for a given population.
- DALYs are the sum of years of life lost due to premature mortality as well as years of life lost due to time lived in less than full health.
- WHO Global status report on alcohol and health 2018, p62

# Percentage (%) of DALY's attributable to alcohol



# APC, HED and AUD (%)

WHO Global status report on alcohol and health, 2018





GÖTEBORGS  
UNIVERSITET

SAHLGRENSKA AKADEMIN

## Women and alcohol in Gothenburg - WAG



# Research in the early 1980:es

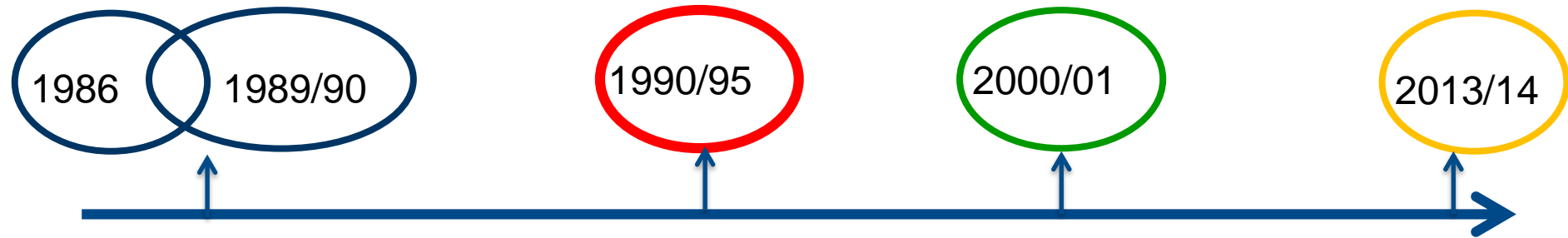
## Research

- on men
- by men
- from the perspective of men



## WAG was designed from the women's perspective

- Increase the knowledge on women's alcohol consumption and alcohol problems
  - Complementary research
- Include questions from areas that are specific for or more common in women:
  - Sexual abuse, intimate partner violence
  - Sexuality, close relationships
  - Combining work and family responsibility
  - Gender segregation of the work life



## Four data collection waves



# Study design

1986

2016



1

SWAG  
Screening  
questionnaire  
by mail  
13 items  
CAGE,  
ML-MAST

## Sample

- Certain districts of Göteborg
- Total birth cohorts



1986

2016



1



SWAG

2

Stratified sample for personal interviews

Birth cohort	Screening 1 1986 N= 3130 *	Interview ** 1989-1992 n= 399	Screening 2 1995-1996 N= 2910 *	Interview ** 1994-1998 n= 935	Screening 3 2000 N= 1103 *	Interview ** 2000-2002 n= 1087	Screening 4 2013 N= 1500 *	Interview ** 2013-2015
1925	583	38	→	25	→	13	Not invited for interview	Not invited for interview
1935	503	60	→	48	→	32		
1945	799	107	→	85	→	69		
1955	572	86	→	71	→	59		
1965	673	108	→	91	→	66	→	44
1970			1944	304	→	254	→	156
1975			966	308	→	237	→	164
1980					1103	358	→	216
1993							568	242

399

+

612  
320

+  
+

358  
730

+  
+

242  
580

= 1611

= 1630

= 3241

\* Number of screening questionnaires that were distributed

\*\* Number of women interviewed per wave



# Interviews n= 3241

- Baseline interviews: 1611
- Follow up interviews: 1630
- Approximately 900 women have been interviewed twice
- Interviewed three times: 232 women
- Interviewed four times: 44 women born 1965



# Birth cohorts, age groups, life course

Birth cohort	1925	1935	1945	1955	1965	1970	1975	1980	1993
Data collection year									
1990	65	55	45	35	25				
1995	70	60	50	40	30	25	20		
2000	75	65	55	45	35	30	25	20	
2013					47	42	37	32	20



# Interview contents?

CHILDHOOD	ADULTHOOD
Family, quality in parental relationship, sexual abuse	Family situation, close relationships, worklife, leisure time, education, sexuality
School, behavior, social problems	Alcohol – frequency, amount, place, type of beverage, effects, consequences Tobacco Legal and illegal drugs
Health	Psychiatric diagnoses DSM Suicidal ideation Somatich health Care seeking

# New perspectives included in the latest wave

CHILDHOOD	ADULTHOOD	New areas
Family, quality in parental relationship, sexual abuse	Familysituation, close relationships, worklife, leisure time, education, sexuality	Internet mobbing, offended while drunk, energy beverages, otc pain killers, gambling
School, behavior, social problems	Alcohol – frequency, amount, place, type of beverage, effects, consequences Tobacco Legal and illegal drugs	Stress, burnout, physical activity, satisfied with the body and the looks, performance-based self-esteem
Health	Psychiatric diagnoses DSM Suicidal ideation Somatich health Care seeking	Demand-control-socia support, job insecurity, work-leisure balance

# Data collection - tests

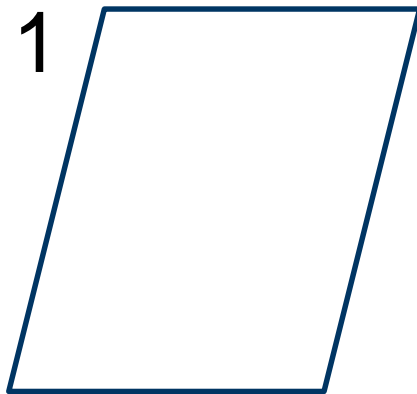
- Personality
  - Karolinska Scale of Personality (KSP)
- Gender identity
  - Masculinity /femininity scale (MF-scale)
    - Based on the Bem's Sex Role Inventory
- Cognitive tests





# Data collection - registers

- Sickness absence, disability pension
- Hospital care
- Mortality



7 133 respondents  
65-80%

2

3

$1611 + 1630 = 3241$  interviews

# SWAG – questionnaire data

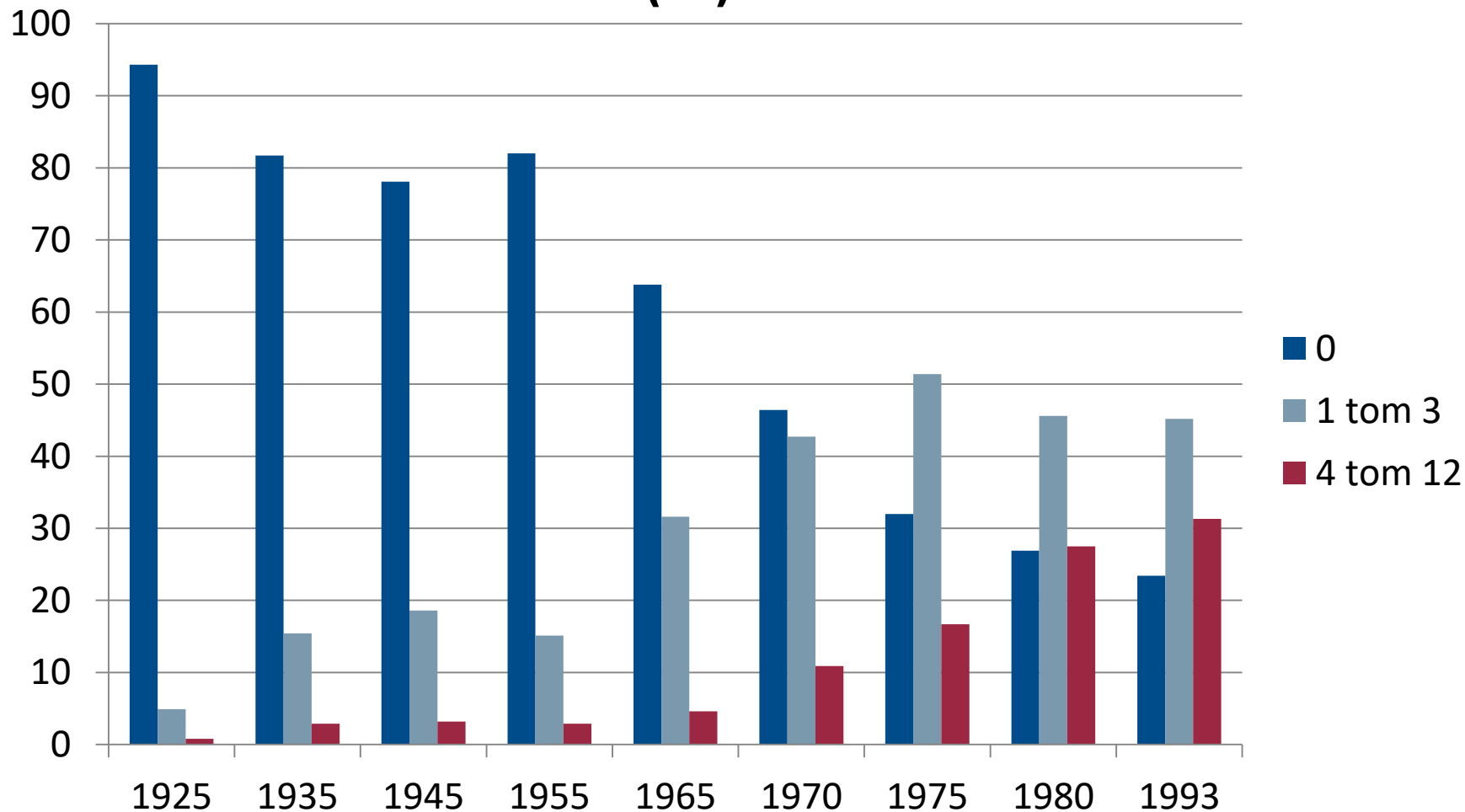
- Screening questionnaire
  - CAGE (cut-down, annoyance, guilt, eye-opener), 4 items
  - ML-MAST, 9 items
- Participation rate between 80 to 65 %



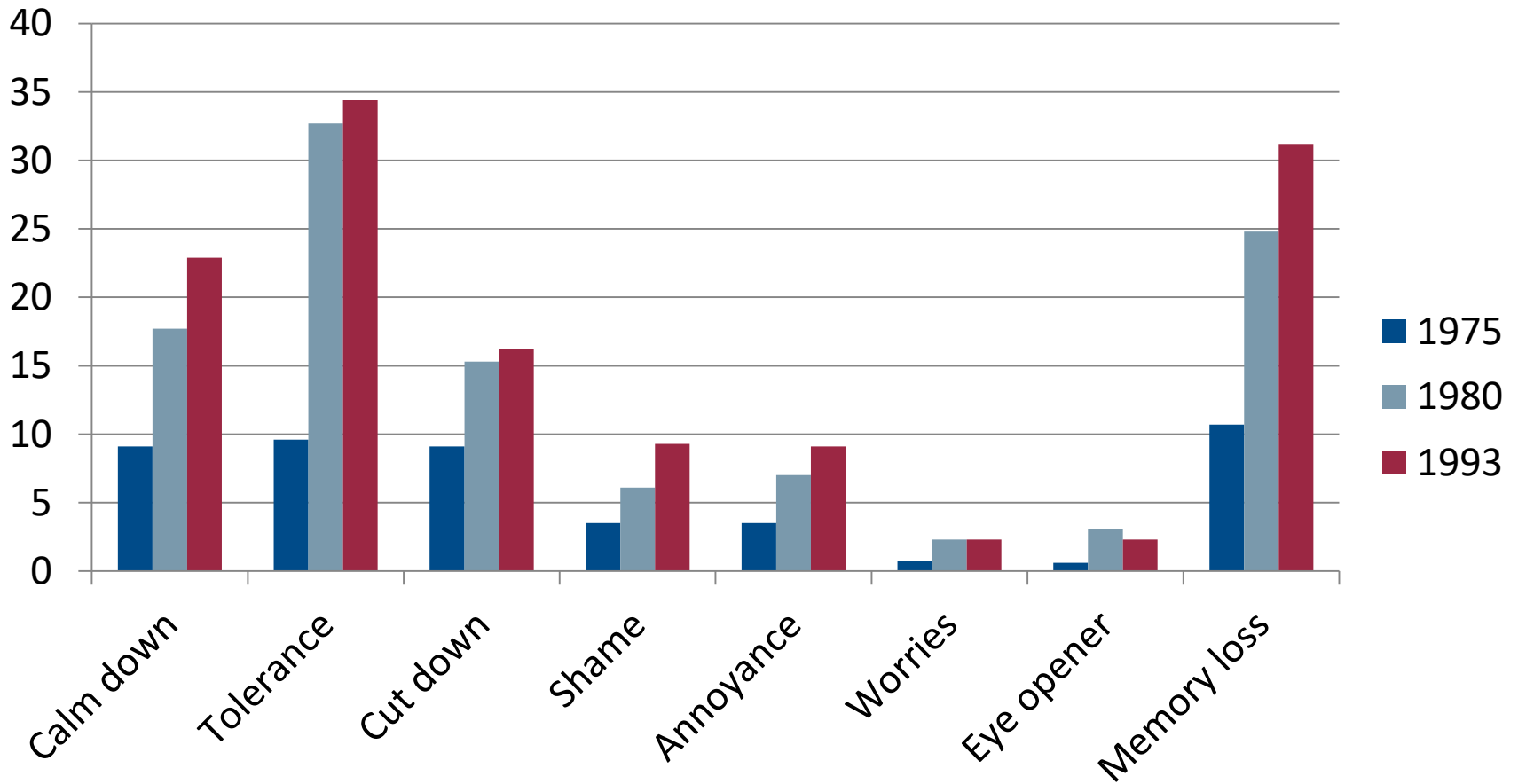
# What kind of alcohol related problems do women report in SWAG 1986-2013

**N=7710 women**

# Distribution of SWAG points in different birth cohorts (%)

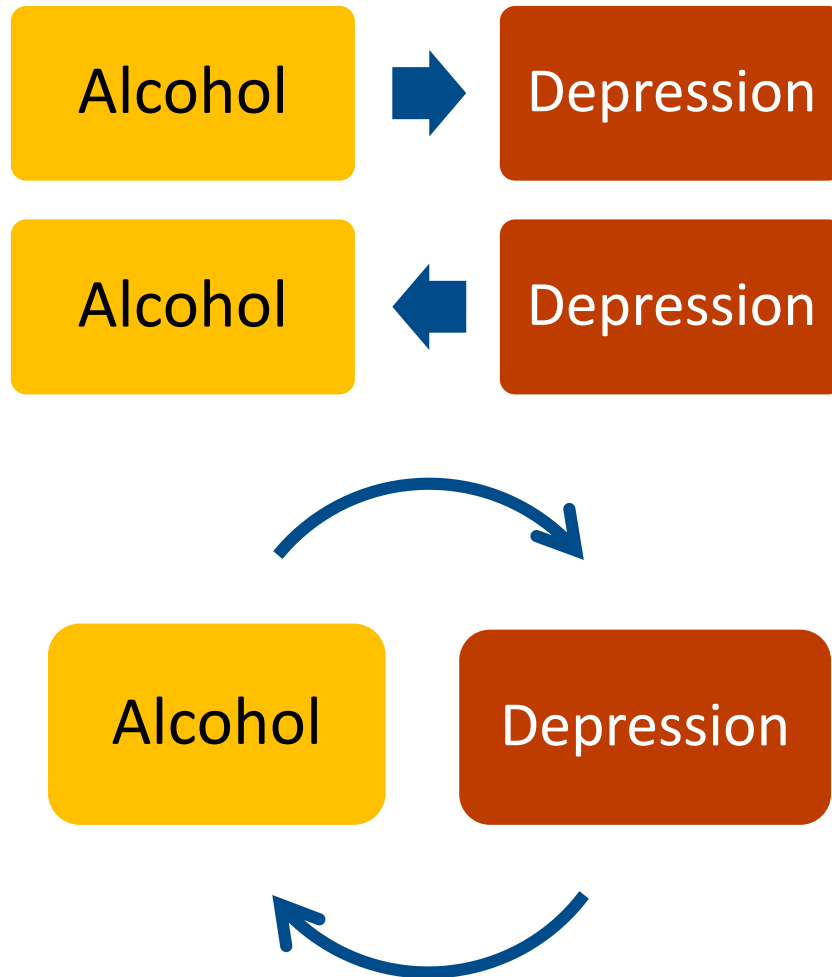


# Age 20 at 1995, 2000 and 2013, SWAG



# I have been drinking to calm my nerves

Birth cohort	Age at SWAG	Year of data collection	Agree/almost agree (%)
1925	60	1985	2
1935	50	1985	2.9
1945	40	1985	4.9
1955	30	1985	3.1
1965	20	1985	2.4
1970	25	1995	9.1
1975	20	1995	7.4
1980	20	2000	17.7
1993	20	2013	22.9

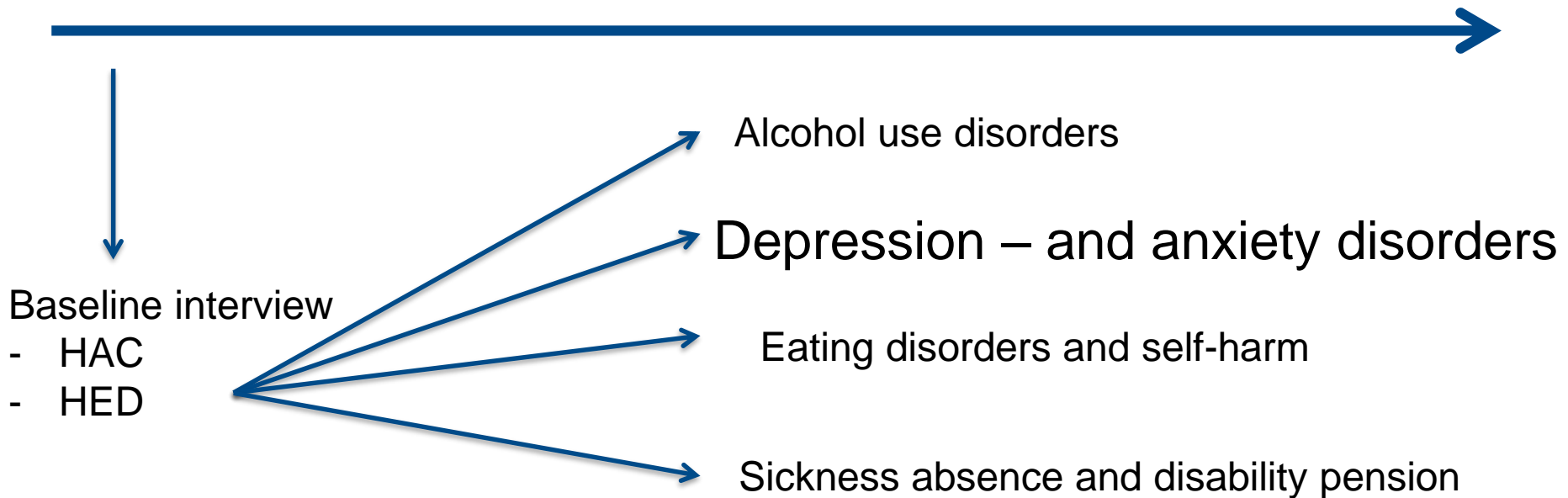




## Literature review of AUD and MD

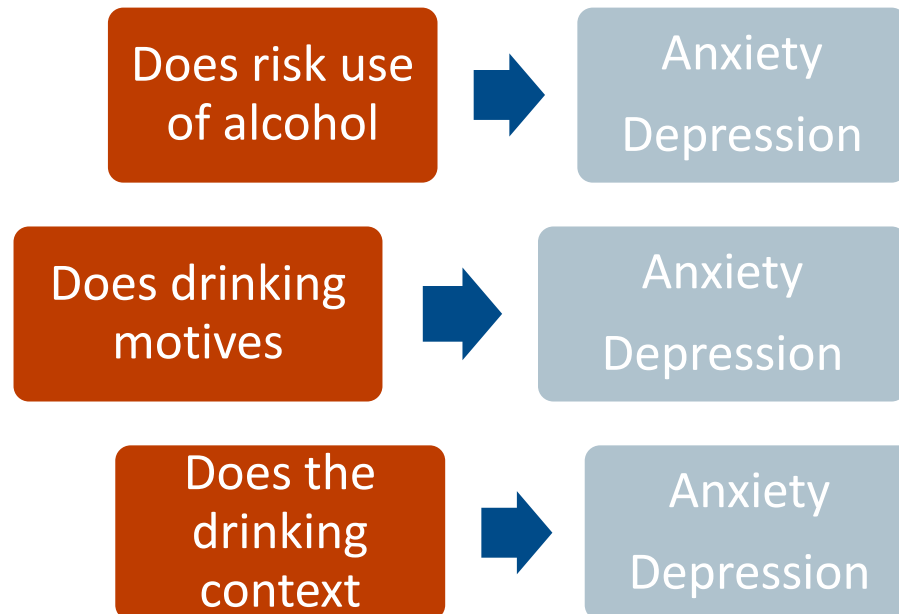
- “The analysis revealed that the presence of either disorder doubled the risks of the second disorder, with pooled AORs ranging from 2.00 to 2.09”
- “The need for further research examining mechanisms of linkage, gender differences in associations between AUD and MD and classification issues was identified.”

# Risk consumption study, WAG





# Research questions

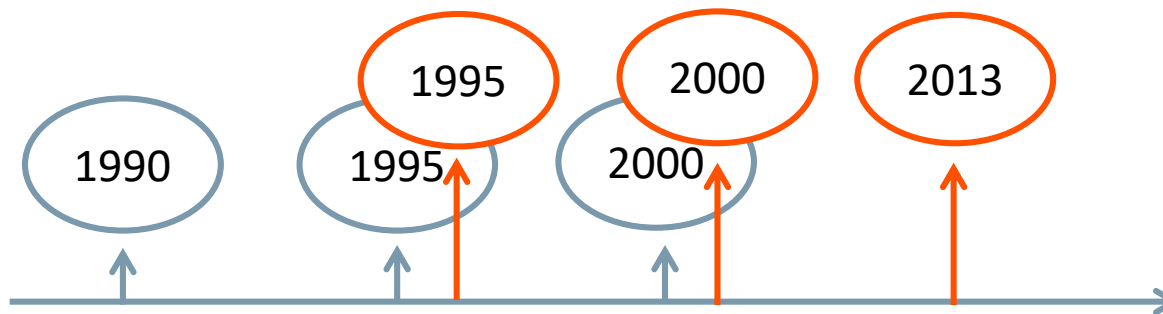




# STUDY DESIGN

938

- Women aged 20-28 years at the first interview
- Born 1965, 1970, 1975 or 1980

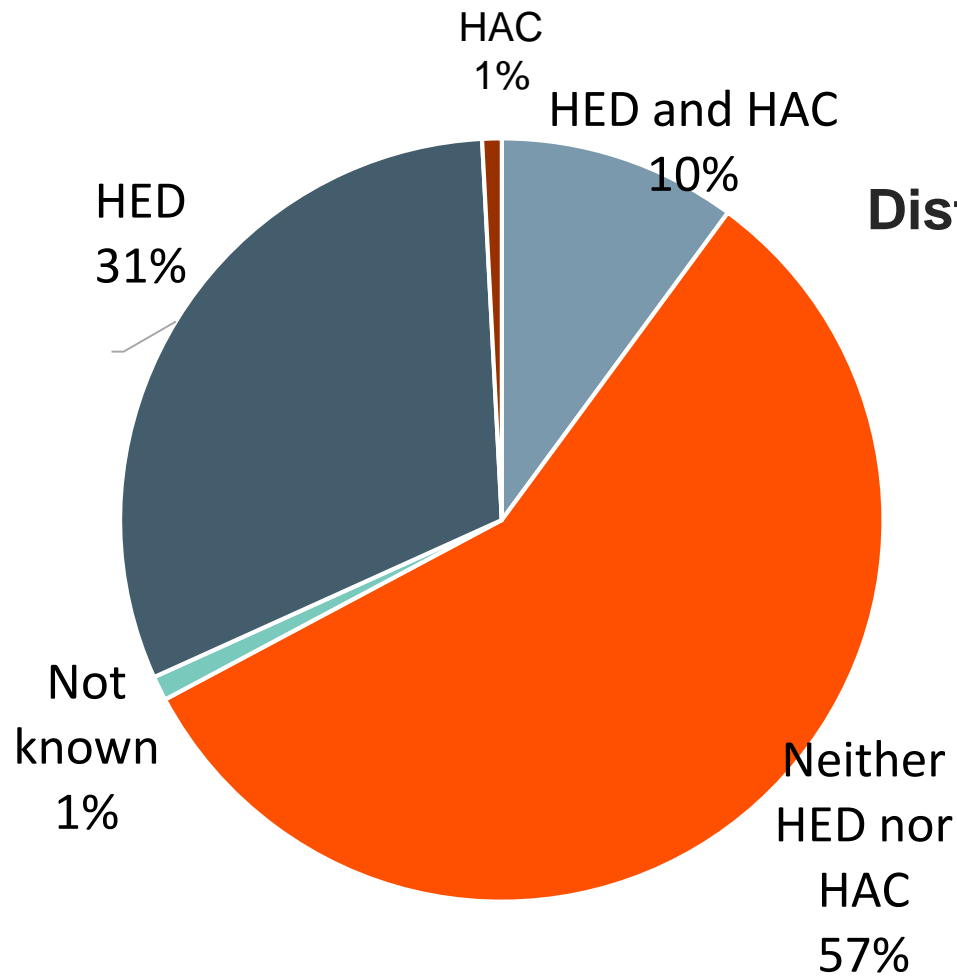




# Risk consumption of alcohol

**High alcohol consumption** = mean consumption of 1,5 standard drinks of alcohol per day during the last month

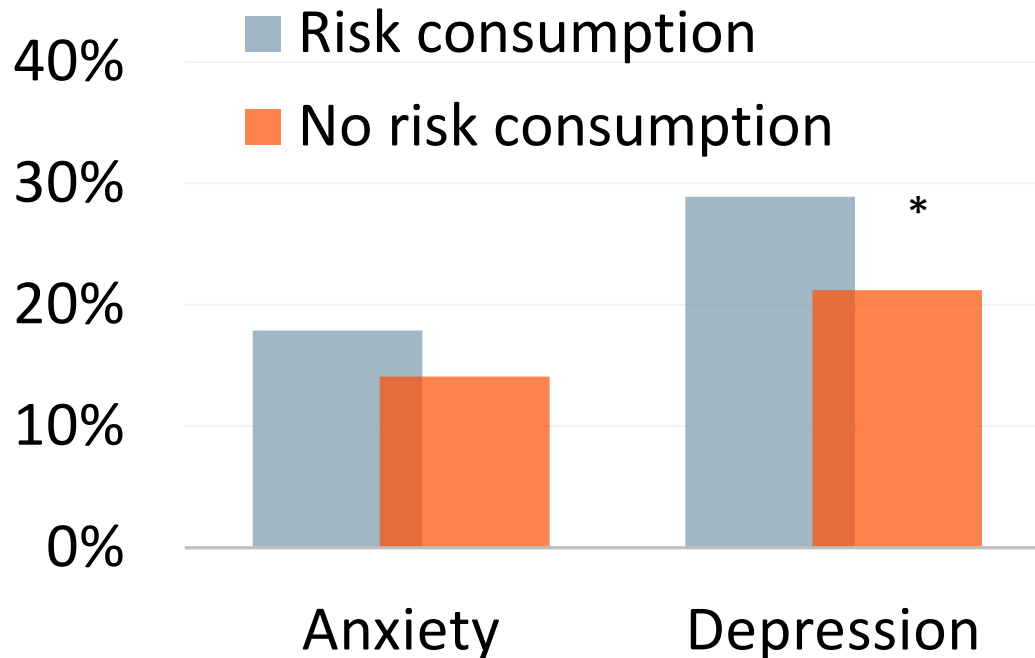
**High episodic drinking** = more than 5 standard drinks of alcohol at one occasion at least once a month the last 12 months



## Distribution of HED and/or HAC

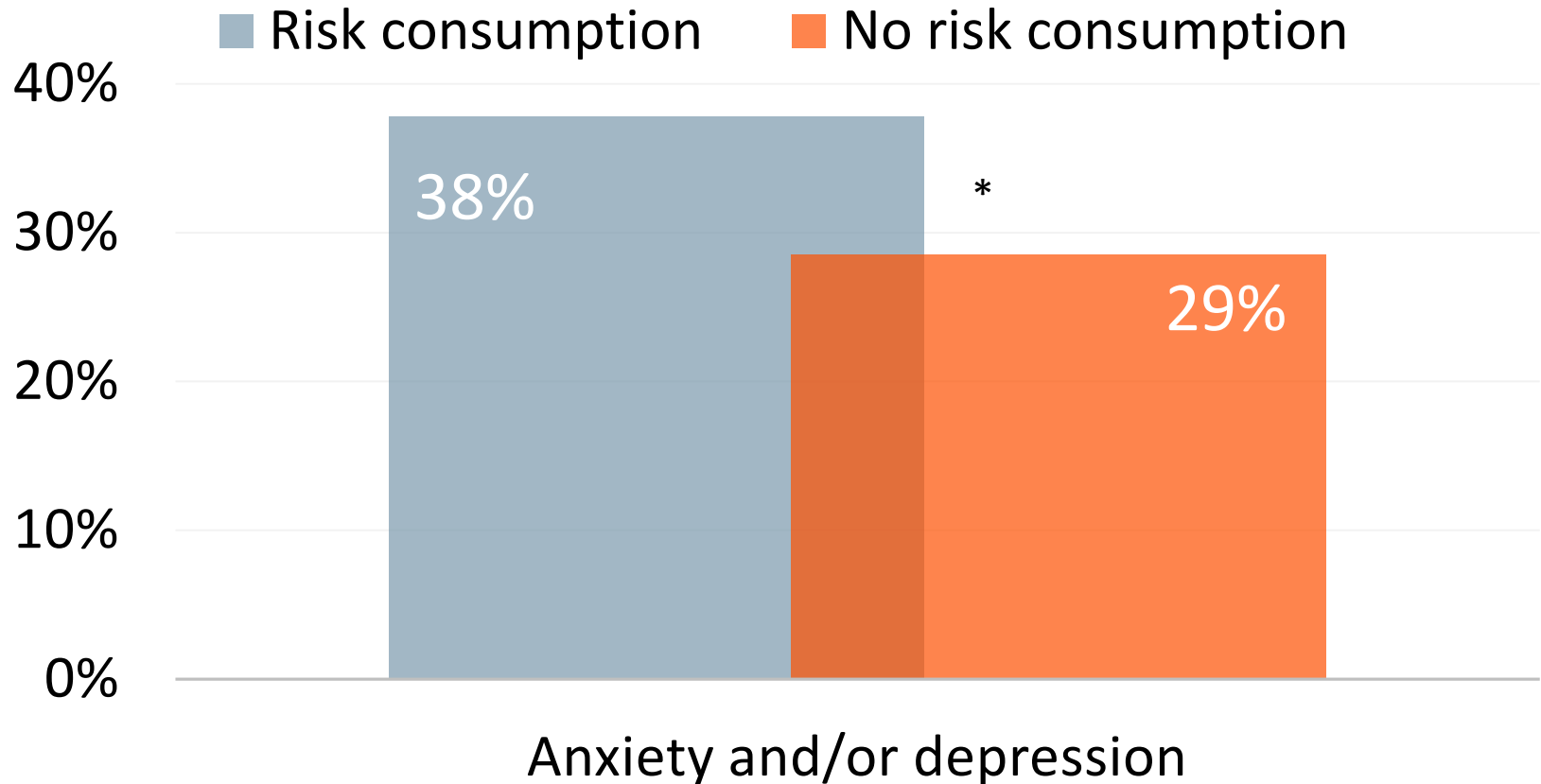
938

# Cross sectional association between risk consumption and anxiety and depression



\*statistically significant difference

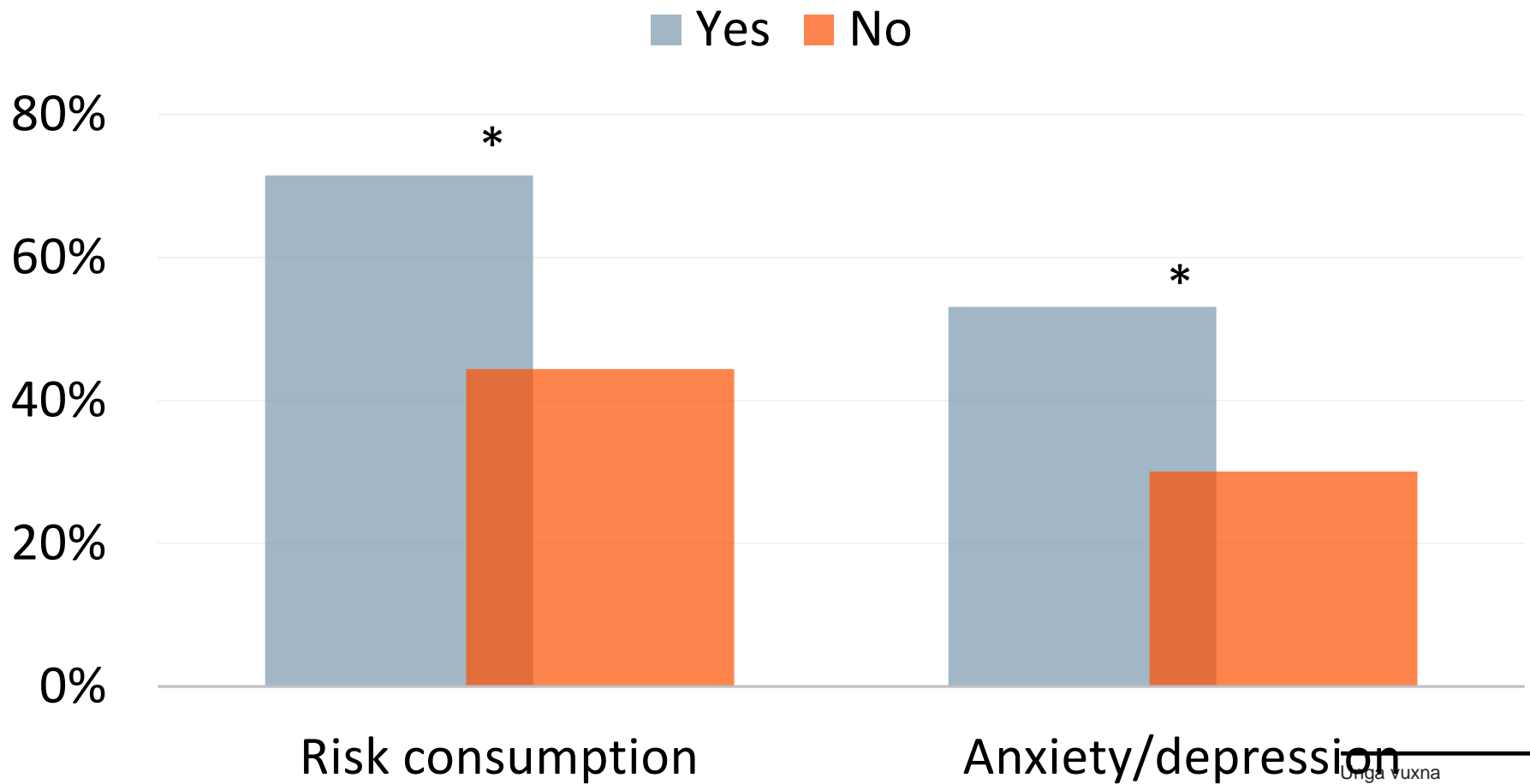
# Cross sectional association between risk consumption and anxiety and depression



\*statistically significant difference



## SWAG response: Calm my nerves





GÖTEBORGS  
UNIVERSITET

SAHLGRENSKA AKADEMIN

PROSPECTIVE ASSOCIATION?

# To sum up

1. A higher proportion men are drinkers and risk consumers globally and in the Nordic countries.
2. Negative health and social consequences are more common in men.
3. An exception might be the association between alcohol and anxiety/depression. However, there is a need for more studies in particular longitudinal.
4. SWAG
  - a. Changes in several items but still a very low proportion seek health care
  - b. From 3 to 22.9% of women drink to calm their nerves
5. WAG
  - a. No prospective association between HED/HAC and drinking context and future anxiety/depression diagnoses but with "calm the nerves"



GÖTEBORGS  
UNIVERSITET

SAHLGRENSKA AKADEMIN

THANKS FOR LISTENING!