



The future of surveys in alcohol research: New approaches for measuring alcohol use

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Disclosure

CF, EY, and MN are **staff members of the WHO**. The authors alone are responsible for the views expressed in this article and they do not necessarily represent the views, decisions or policies of the institutions with which they are affiliated. **The authors declare no further conflict of interest.**

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Alcohol use and coverage in South Africa

Survey, year	APC total	Current drinker (%)	Grams of pure alcohol per day among current drinkers				Coverage in %		
			Total ^a	Adjusted ^a	Recorded ^a	Survey ^b	Total (95% UI)	Adjusted (95% UI)	Recorded (95% UI)
SADHS, 2003	10.1	24.9	87.2	69.7	60.5	16.9	19.4 (14.9–24.2)	24.2 (19.0–32.9)	27.9 (22.4–36.8)
SADHS, 2003 B ^c	10.1	24.9	87.2	69.7	60.5	13.1	15.0 (11.4–21.3)	18.8 (14.6–25.7)	21.7 (17.3–28.6)
SABSSM, 2005	11.1	25.7	93.5	74.8	67.6	11.1	11.8 (9.3–16.2)	14.8 (11.8–19.5)	16.3 (13.3–21.0)
SABSSM, 2008	10.9	30.5	77.6	62.1	57.3	10.9	14.0 (11.0–19.2)	17.5 (14.1–23.2)	19.0 (15.4–24.4)
SABSSM, 2012	10.4	35.2	63.8	51.0	45.3	10.7	17.4 (13.1–23.5)	21.7 (16.8–28.3)	25.1 (19.3–30.7)
NIDS, 2012	10.4	27.9	80.4	64.4	57.1	11.7	14.6 (11.3–20.3)	18.2 (14.2–25.5)	20.5 (16.6–26.6)

Probst C, Shuper PA, Rehm J. Coverage of alcohol consumption by national surveys in South Africa. *Addiction*. 2017;112(4):705-10.

Screening for alcohol use disorders

- Around 70% of the health burden caused by alcohol use is due to heavy drinking
- Screening is still widely underutilized
 - a study on 120 PHC units from five European countries found that only 5.9% of patients underwent screening
- < 1 of 4 people with an AUD receive treatment

Rehm J, Shield KD, Gmel G, Rehm MX, Frick U. Modeling the impact of alcohol dependence on mortality burden and the effect of available treatment interventions in the European Union. *Eur Neuropsychopharmacol*. 2013;23(2):89-97.

Anderson P, Bendtsen P, Spak F, Reynolds J, Drummond C, Segura L, et al. Improving the delivery of brief interventions for heavy drinking in primary health care: outcome results of the Optimizing Delivery of Health Care Intervention (ODHIN) five-country cluster randomized factorial trial. *Addiction*. 2016;111(11):1935-45.

Key challenges of alcohol assessment and screening

Underestimation due to abstract standard drinks

Inaccuracy due to missing cultural adaptation

Low screening rates due to limited resources and stigma

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The AAA-Tool

Interactive, individualized animations

Seamless adaptability to cultural contexts

Minimal training, time efficiency, self-assessment in playful style



AAA-Tool collaborators

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AAA-Tool

Project overview

Phase 1: Current state of knowledge

Systematic search for
existing apps

Systematic
literature review

Expert survey

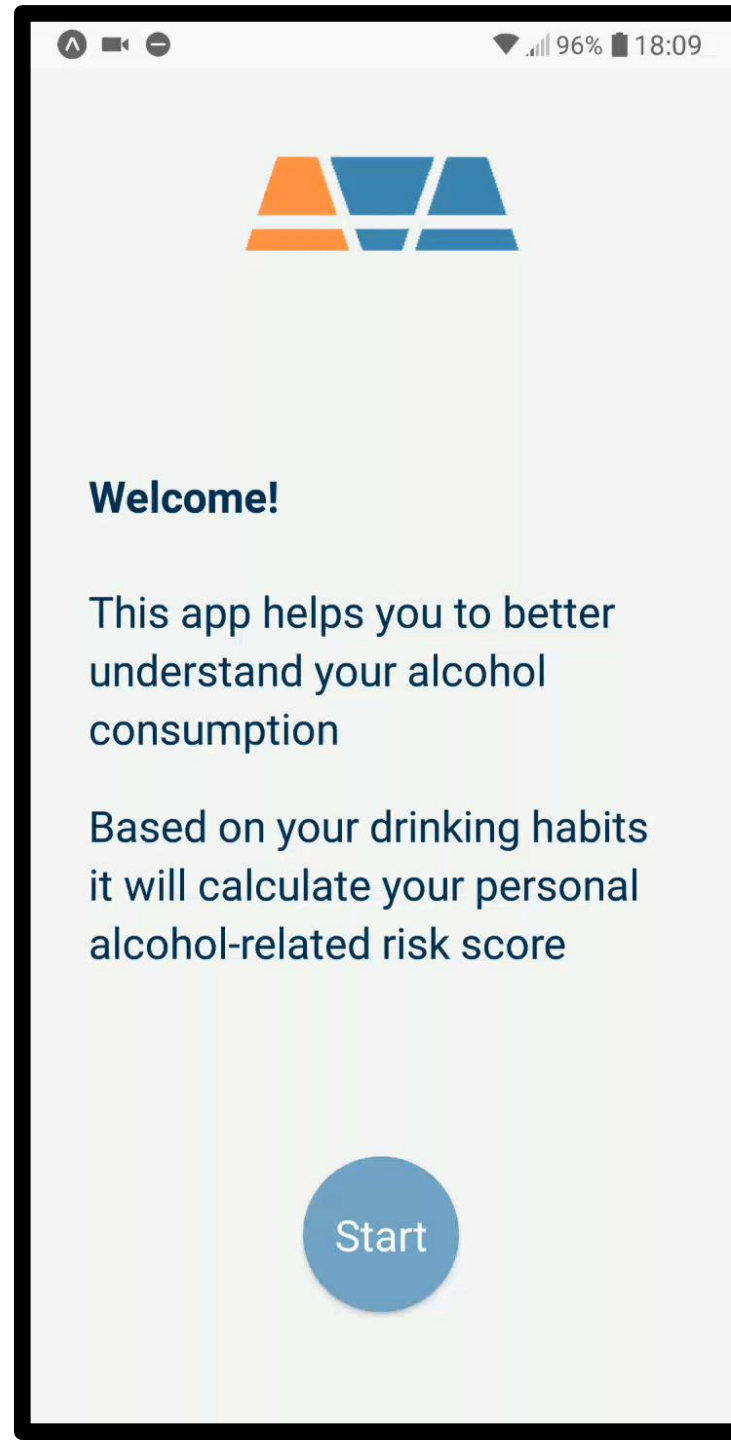
Phase 2: App development

Design, technical req.,
country specific contents

Development of a
prototype

Pilot study

AAA-Tool prototype





AAA-Tool

Findings from the pilot study

- 55 patients and 15 healthcare practitioners from two Russian primary healthcare facilities
- **Usability** (average completion time): 6:38 min (SD=2.49)
- **Acceptability**: good subjective quality, more than 50% of the patients and 90% of practitioners would recommend the tool
- **Internal validity**: very few implausible responses
- **Adequacy**: vessels and alcoholic beverages were rated as appropriate and sufficient for the cultural context



Will apps help us to better assess the “true” consumption?

- **Caveat:** The AAA-Tool will not fix challenges related to sampling frames and selective non-response
- But: We may improve assessment accuracy through a more realistic representation of true alcohol consumption
- The AAA-Tool will be developed further to benefit both research and healthcare settings



Thank you



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AAA-Tool

Next steps



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Systematic search for
existing apps

Systematic
literature review

Expert survey

Phase 2: App development

Design, technical req.,
country specific contents

Development of a
prototype

Pilot study

Phase 3: Validation & improvement

Adaptations for different
countries

Validation as a screening
tool





Validation in
epidemiological settings



AAA-Tool Insights

←

What do you usually drink?

- Beer 
- Cider 
- Wine 
- Sparkling wine 
- Fortified wine 
- Spirits 
- Liqueurs 
- Mixed drinks 



◀ ○ ◻

←

Let's talk about **beer**

How often do you drink beer?
Think about the past 12 months

Every day

4-6 times a week

2-3 times a week

2-4 times a month

Once a month

Less than once a month

◀ ○ ◻

←

Add the beer(s) you usually have
Think about a typical day in the past 12 months


500 ml 500 ml 500 ml 500 ml

Select a glass/bottle





◀ ○ ◻

←


Pour your beer 

Think about the beer you usually drink



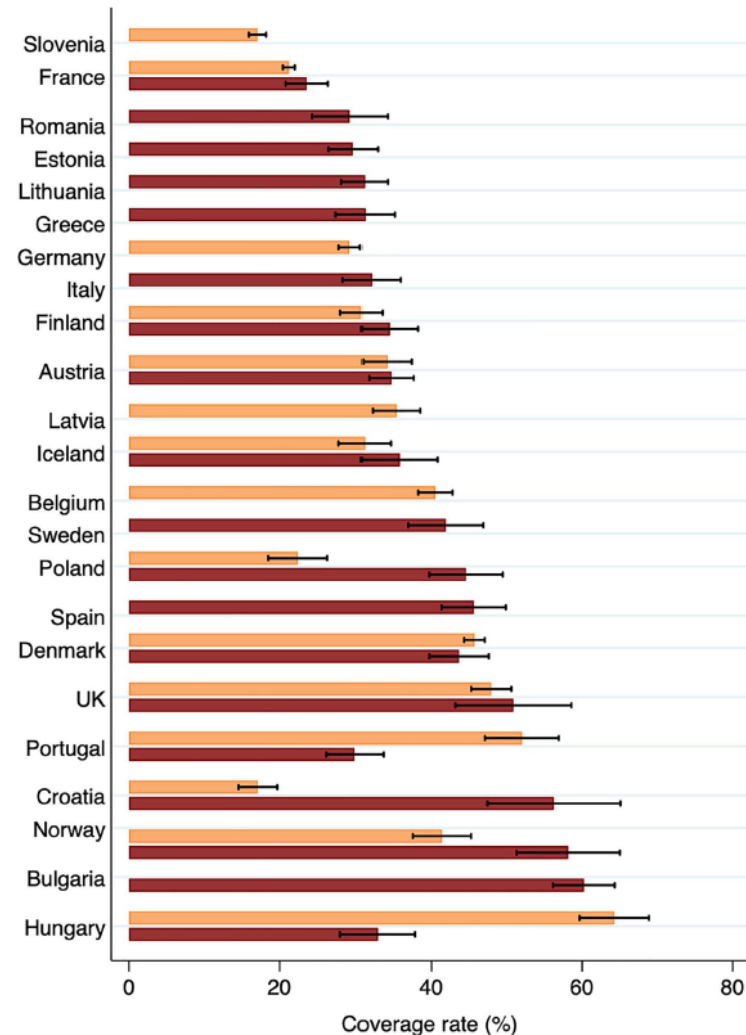


You drank 280 ml

◀ ○ ◻

Alcohol consumption coverage in Europe



- Surveys often capture only less than 50% of the “true” alcohol consumption
 - Sampling design
 - Limitations related to the assessment itself