AUDIT-C, AUDIT-3 and AUDIT-QF in Screening Risky Drinking Among Occupational Health Care Patients

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- **statutory preventive work**
  covers 90 % off all employees
  includes health checkups approximately once in every four year

- **voluntary medical work**
  covers 80 % off all employees
  half of all the visits to general physician among Finns between 16-65 years is done by doctors of occupational health

- One half of the expenses is paid by employers the other half by The Social Insurance Institution of Finland

The primary tasks of Occupational Health Care:

-Prevention of work-related health problems

-Health promotion

Still:

alcohol-related issues are seldom discussed in occupational health care

Background

- Primary care physicians need a brief screening instrument to detect risky drinkers among their patients.
- In previous studies the three first questions of the Alcohol Use Disorders Identification Test (AUDIT-C) and the third question on heavy episodic drinking alone (AUDIT-3) have been shown to be almost as effective as the whole AUDIT.
- Also, AUDIT-QF (the first two questions of AUDIT - quantity-frequency) maybe a potential screening instrument.
- However, the effectiveness of these short questionnaires has not been studied among the occupational health care patients.

Methods

- Patients visiting their doctor in six occupational health clinics were asked to complete a questionnaire
- Alcohol Use Disorders Identification Test (AUDIT) and other questions concerning health.
- 757 patients participated
- **Risky drinking**

  men: score of 10 or more

  women: 8 or more in the AUDIT questionnaire.
- Effectiveness of AUDIT-C, AUDIT-3 and AUDIT-QF scores were compared with the whole AUDIT in screening risky drinking.

Participants

- All Caucasian
- 388 men, average age 45.7 years
- 369 women, average age 46.3 years
- wide range of occupations

  330 of them (44%) were white-collar

  169 (22%) blue-collar

  257(34%) both

Cumulative Audit Score of the Occupational Health Care Patients

	Men%	Women %	Total %
Score	N=388	N=396	N=784
≥21	3.1	< 0.3	1.7
≥20	3.4	< 0.5	2.0
≥19	4.6	<0.8	2.8
≥18	6.7	1.1	4.0
≥17	7.7	1.4	4.6
≥16	9.3	1.4	5.4
≥15	10.8	1.4	6.2
≥14	13.6	3.3	8.7
≥13	16.8	3.3	10.1
≥12	20.1	4.1	12.3
≥11	24.2	5.4	15.2
≥10	29.4	7.3	18.6
≥9	34.3	10.8	22.8
≥8	42.0	13.1	27.8
≥7	49.7	15.8	33.1
≥6	60.1	24.1	42.4

Effectiveness of the short versions (AUDIT-C, AUDIT-3 and AUDIT-QF) of Alcohol Use Disorders Identification Test (AUDIT) compared to whole AUDIT detecting heavy drinking in men.

	Area under the curve	Sensitivity	Spesificity	positive predictive value	Negative predictive value
AUDIT-C	0,905(0,876-0,935)				
≥4		1,00	0,38	0,40	1,00
≥5		0,96	0,44	0,60	0,98
≥6		0,86	0,79	0,63	0,94
≥7		0,62	0,93	0,78	0,86
AUDIT-3	0,857(0,816-0,898)				
≥1		0,99	0,18	0,33	0,98
≥2		0,88	0,75	0,59	0,94
≥3		0,39	0,97	0,85	0,80
AUDIT-QF	0,828(0,786-0,870)				
≥2		1,0	0,20	0,38	1,0
≥3		0,98	0,37	0,43	0,97
≥4		0,82	0,66	0,53	0,88
≥5		0,45	0,91	0,73	0,81

Effectiveness of the short versions (AUDIT-C, AUDIT-3 and AUDIT-QF) of Alcohol Use Disorders Identification Test (AUDIT) compared to whole AUDIT detecting heavy drinking in women.

	Area under the curve(95%)	Sensitivity	Spesificity	Positive predictive value	Negative predictive value
AUDIT-C	0,939(0,910-0,968)				
≥4		0,96	0,71	0,33	0,99
≥5		0,81	0,89	0,52	0,97
≥6		0,56	0,98	0,80	0,94
≥7		0,25	1,00	1,00	0,90
AUDIT-3	0,887(0,840-0,934)				
≥1		1,00	0,48	0,23	1,00
≥2		0,63	0,96	0,72	0,95
≥3		0,17	1,00	1,00	0,89
AUDIT-QF	0,854				
≥2	(0,805-0,903)	1,0	0,36	0,22	1,0
≥3		0,88	0,64	0,30	0,97
≥4		0,64	0,88	0,49	0,93
≥5		0,19	0,99	0,92	0,87