Brief alcohol intervention in Primary Health Care in Sweden shows a reduced alcohol consumption at follow-up but is it due to the intervention? A pragmatic randomized trial in routine care.

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Background

Secondary prevention concerning alcohol involves different methods of early identification of risky drinking and interventions (Salaspuro, 2001) and studies have shown that early identification and brief interventions (EIBI) have positive effects on alcohol consumption habits (Salaspuro, 2001; Kaner et al., 2007). In 2009 the SPIRA-project (Secondary prevention in Primary health care – Implementation of methods to reduce Risk drinking of Alcohol) was launched with the objective to investigate methods that can draw attention to and detect risk behavior concerning alcohol among people that seek care at primary health care centers (PHCCs) in Sweden. The study was designed test effectiveness rather than efficacy. The Swedish background in this field is that extensive efforts have been done to introduce BI, at least in primary health care.

Purpose

The purpose of the current study was to investigate whether BI (Brief intervention) counseling decreased alcohol consumption and to study whether it improved health-related quality of life for individuals seeking care at PHCCs in Sweden. The aim is also to test a very short intervention.

Method

Patients aged 18-75 visiting PHCCs were asked to answer questionnaires containing three questions about alcohol (AUDIT-C) and health related quality of life (EQ-5D-questions). The AUDIT-C was used for categorization of risky drinking with a cut-off set to ≥ 5 for men and $4 \geq$ for women. Intervention was done with 5-A (Whitlock 2002) BI or a modified MI-model. To reduce the number of interview we contacted a random sample of 849 out of the 2918 eligible patients for follow-up in 2012 per telephone (Figure 1). A total of 643 of were reached. The questionnaire used included the same questions asked at the PHCCs. The analysis was conducted separately for men and women. Participants were divided into four age categories; 18-30, 31-50, 51-65 and 66-75.

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Results

Figure 1. Flowchart

Risk drinkers and non-risk drinkers significantly decreased AUDIT-C total score. (Table 1).

For female risk drinkers receiving BI AUDIT-C score e was reduced from 4.89 to 4.36 but also the score for women not receiving BI decreased from 4.93 to 4.29.

In male risk drinkers who received BI the AUDIT-C total score significantly declined with 0.71 and a similar decrease was seen among male risk drinkers who did not receive BI.

The EQ-5D score for male risk drinkers receiving BI decreased from 6.30 to 5.83.

| taking questionnaires certain cases =1370 |
|---|
| |
| |

age n=998

Invalid questionnaires n=1022

participating in telephone interview n=206

| | n | Mean | Follow- up | Mean difference (95 % CI) | Sig. (2-tailed) |
|---------------------|-----|----------|---------------|------------------------------|-----------------|
| | | Baseline | | | |
| | | | | | |
| EMALE RISK | | | | | |
| DRINKERS | | | | | |
| Receiv ing BI | | | | | |
| fotal score EQ-5D | 44 | 6.27 | 6.11 | 0.159 [280, 0.599] | .469 |
| otal score AUDIT-C | 44 | 4.89 | 4.36 | 0.523 [0.066 , 0.979] | .026 |
| ot receiving BI | | | | | |
| otal score EQ-5D | 140 | 6.51 | 6.17 | 0.343 [0.138, 0.548] | .001 |
| fotal score AUDIT-C | 150 | 4.93 | 4.29 | 0.640 [0.448, 0.832] | .000 |
| IALE RISK | | | | | |
| RINKERS | | | | | |
| Receiving BI | | | | | |
| otal score EQ-5D | 30 | 6.30 | 5.83 | 0.467 [0.031,0.902] | .037 |
| otal score AUDIT-C | 31 | 6.23 | 5.52 | 0.710 [0.000, 1.420] | .050 |
| Not receiving BI | | | | | |
| fotal score EQ-5D | 85 | 6.12 | 5.87 | 0.247 [-0.002, 0.496] | .052 |
| fotal score AUDIT-C | 86 | 5.87 | 5.12 | 0.756 [0.364, 1.148] | .000 |

Conclusions

All groups reduced their alcohol consumption. However, no statistical difference between intervention group and control group regarding AUDIT-C and EQ-5D total score was found at follow-up. Therefore there is no clear evidence that BI specifically has an effect on alcohol consumption or health related life quality. So albeit the alcohol consumption was reduced, this and this study does not support BI for reducing alcohol consumption. Although it is still likely that the intervention had some effect on drinking, this effect came already by participating in the study. A larger part of the individuals identified as risk drinkers did not receive any BI, a finding that demands further research. Further, many paienst drinking below the used definition of risk drinking. IN this study we also have a large number of interviews of a qualitative nature, and we hope these will shed light why the providers also gave BI to those.

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Table 4. Test of mean difference of EQ-5D and AUDIT-C of male and female risk drinkers at baseline receiving



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