

Evaluation of two IVR systems for problematic alcohol use – Three randomized controlled trials

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Background - Problem

- Over 21% of Swedish men and women have a problematic¹ consumption of alcohol (Sinadinovic et al, 2010)
- Numbers are even higher among younger adults (ibid.)
- Having a concurrent psychiatric diagnosis more than doubles the risk of developing alcohol abuse or dependence (Rieger et al., 1990)
- Approximately one in four Swedish psychiatric outpatients have problematic drinking (Öjehagen & Nordström, 2006)

¹We define problematic drinking as having a score measured with AUDIT that is 8 and over for men and 6 and over for women.

Available care in Sweden

- Primary care
- Social services
- Specialized addiction care
- Internet based services – Alkoholhjälpen, eScreen
- Telephone based - the Swedish national alcohol helpline, Alkohollinjen

Problems with the available care

- Care personnel in Sweden often miss addressing the question of alcohol use (Pettersson, 2009)
- Addiction Care – patients often drop out of treatment prematurely (Wickizer, 1994)
- There is often a physical distance to treatment options
- Several of the options have limited hours of operation
- Internet requires access to a computer (smartphones)

Addressing the problems - Interactive Voice Response (IVR)

- Automated systems – conversations controlled by a computer via telephone (cell phone)
- For evaluation and treatment – e.g. patients with hypertension (Friedman, 1996) , diabetes (Piette et al., 2000) and also for reducing impulsivity among violent forensic outpatients and probationers (Berman et al., 2010)
- IVR used in primary care to report alcohol use led to decrease in consumption (Helzer et al, 2002)
- Brief interventions delivered through IVR have been positively received by patients in primary care (Rose et al, 2010)

Our project - two IVR systems

- Short IVR – In cooperation with Lund University. Screening (responding to a drinking diary) and feedback on use compared with last week
- Therapeutic IVR – Emulate a therapeutic conversation. The user communicates through pressing telephone keys. Call-in possible

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1810 – 2010 *Years*



Sample conversation with therapeutic IVR – for user with a goal of quitting drinking

This is the main menu.

For tips on how to say no to alcohol, **press 1.**

For tips on how to feel better without alcohol, press 2.

To register how much you drink as a help in the process of quitting drinking, press 3.

You can say no to alcohol by using various techniques. Becoming aware of situations where it's hard to refrain from drinking can help you say no.

For some techniques for saying no to alcohol, press 1.

To identify situations where it's harder or easier for you not to drink, press 2.

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Advantages – IVR systems

- Intervention delivered through the cell phone – always close
- Complement to other care that requires little effort from professionals
- Alternative to face to face communication
- For the system allowing call-in open 24/7, capability for customized call-up time

Our study: 3 RCTs in 3 settings

Outpatient psychiatry

- Do psychiatry outpatients with a risky alcohol consumption reduce alcohol use more following short or therapeutic IVR than do psychiatry outpatient controls?
- Poster and information cards in the waiting room at the clinic

Our study: 3 RCTs in 3 settings

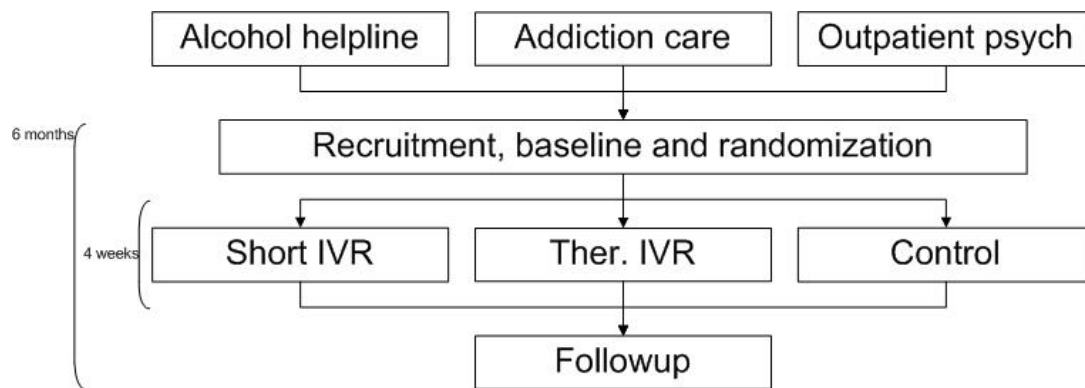
Addiction treatment

- Do addiction care patients adhere to addiction treatment to a larger extent– and reduce alcohol use more - getting short or therapeutic IVR, than do screened addiction care controls?
- Information poster and cards in waiting room + case manager/nurse information+registration at first visit

Our study: 3 RCTs in 3 settings

Alcohol helpline

- Do hazardous/dependent users calling a helpline outside of operating hours reduce alcohol use more following short IVR or therapeutic IVR than do screened helpline controls?
- Recruiting through answering machine outside opening hours (hours of operation mo-th 12.00-19.00 fr 12.00-17.00)



Exclusion – under cut-off or under 18 yrs of age

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Summary

- Evaluation of two IVR systems in three different settings
- RCTs starting in the fall 2010
- Results 2012!

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Thank you for your attention!

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