

**Brief intervention in a general hospital for
problematic prescription drug use:
Outcome at 3- and 12-month follow-up**

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Overview

- **Epidemiology and Treatment**
- **Efficacy of Interventions**
- **The BIGHOP Study**



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Randomized controlled trial of a brief intervention for problematic prescription drug use in non-treatment-seeking patients

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ABSTRACT

Aims Dependence on or problematic use of prescription drugs (PD) is estimated to be between 1 and 2% in the general population. In contrast, the proportion of substance-specific treatment in PD use disorders at 0.5% is comparatively low. With an estimated prevalence of 4.7%, PD-specific disorders are widespread in general hospitals compared to the general population. Brief intervention delivered in general hospitals might be useful to promote discontinuation or



Contents lists available at ScienceDirect

Drug and Alcohol Dependence

journal homepage: www.elsevier.com/locate/drugalcddep



Brief intervention in general hospital for problematic prescription drug use: 12-Month outcome

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ARTICLE INFO

Article history:

Received 20 January 2009

Received in revised form 10 July 2009

Accepted 11 July 2009

Available online 1 September 2009

Keywords:

Brief intervention

Prescription drugs

Motivational Interviewing

General hospital

Randomized controlled trial

ABSTRACT

Background: The problematic use of prescription drugs (PDs) and related disorders are considerably prevalent but evidence concerning brief intervention for problematic PD users is sparse. A previous analysis of the present study on the effectiveness of brief intervention for problematic PD use in a general hospital revealed a significant reduction in PD use after 3 months. The analyses presented herein provides data from the 12-month follow-up.

Method: In a randomized controlled trial, 126 proactively recruited general hospital patients were analyzed. The intervention group received two brief Motivational Interviewing (MI) sessions. Two follow-ups (after 3 and 12 months) were conducted. Intervention effects at 12-month follow-up on PD cessation and reduction were analyzed using regression methods and controlling for significant group differences. Subgroups of sedative/hypnotic- and opioid-users were examined.

Results: No significant intervention effects were found in the overall sample. Respecting significant differences between the intervention and control groups, we detected no effects of the intervention for the

Main groups of prescriptive Drugs with addictive potential

- ▶ Sedatives, Hypnotics und Anxiolytics

 - Benzodiazepine

 - Z-drugs

- ▶ Analgesics

 - Opioids, analgesics combined with caffeine

Addictive Potential

- ▶ 4-5% of all regularly prescribed drugs have an addictive potential
- ▶ 1/3 to 1/2 are not taken due to acute problems but to avoid withdrawal.

Sources of supply in individuals with prescription drug dependence

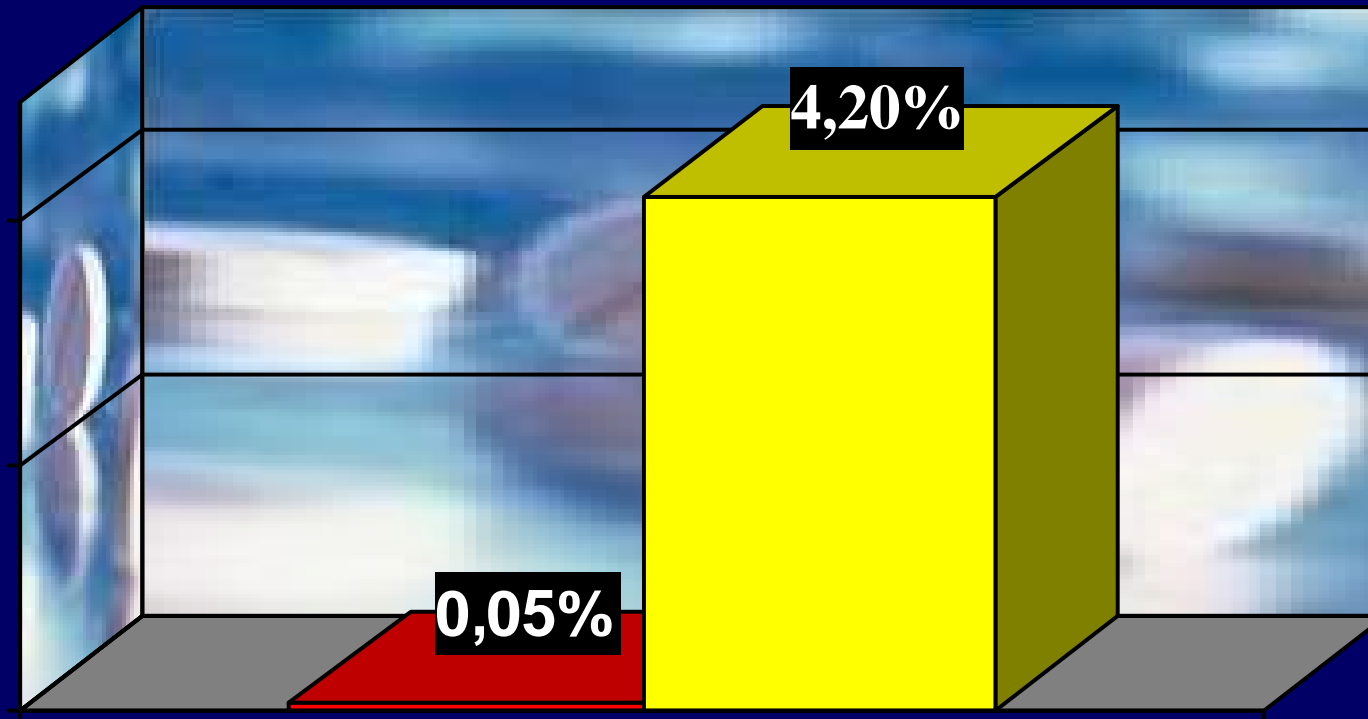
Prescription	91,7%
General Practitioner	56,3%
Internist	28,1%
Psychiatrist	6,3%
Other MDs	9,4%

Fach, Bischof, Schmidt & Rumpf, 2007

Risk of dependence benzodiazepines

- ▶ Rate of dependence after 1 month of continued use of benzodiazepines: 47% (De las Cuevas et al, 2003)
- ▶ Risk factors: Duration and amount of consumption, concurrent use of anti-depressants, early onset of use, chronic somatic diseases, higher age, female gender, Alcohol- and Drugdependence, psychiatric comorbidity (Michelini et al., 1996)

Prevalence in General Hospitals

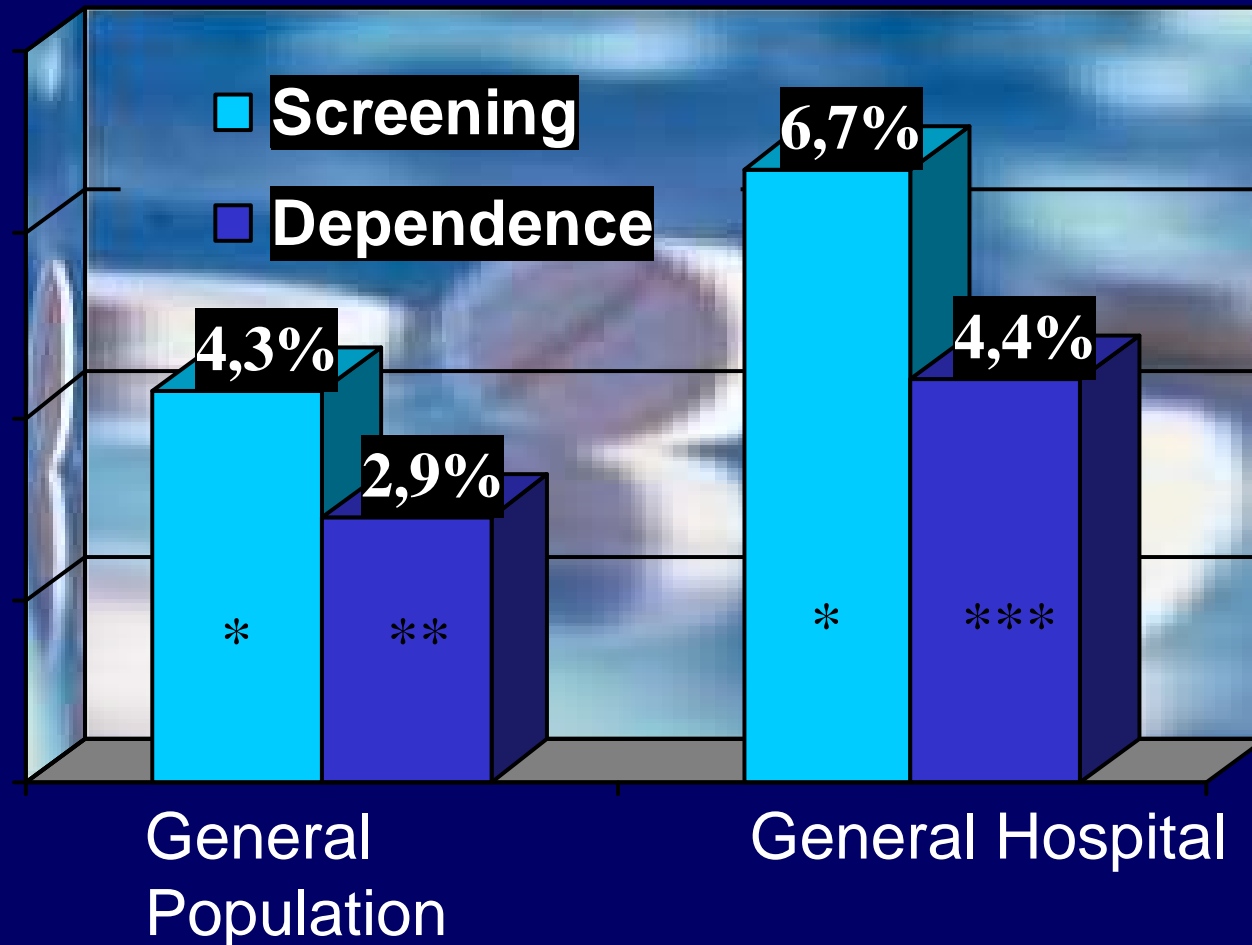


■ **GH Statistics**

■ **MedaK Study***

*Fach, Bischof, Schmidt & Rumpf (2007) Gen Hosp Psychiatry 29, 257-263

Prevalence general population vs. GH-patients



*Kraus & Augustin, 2004; **Kraus & Augustin, 2001; *** Fach et al., 2007



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Interventions

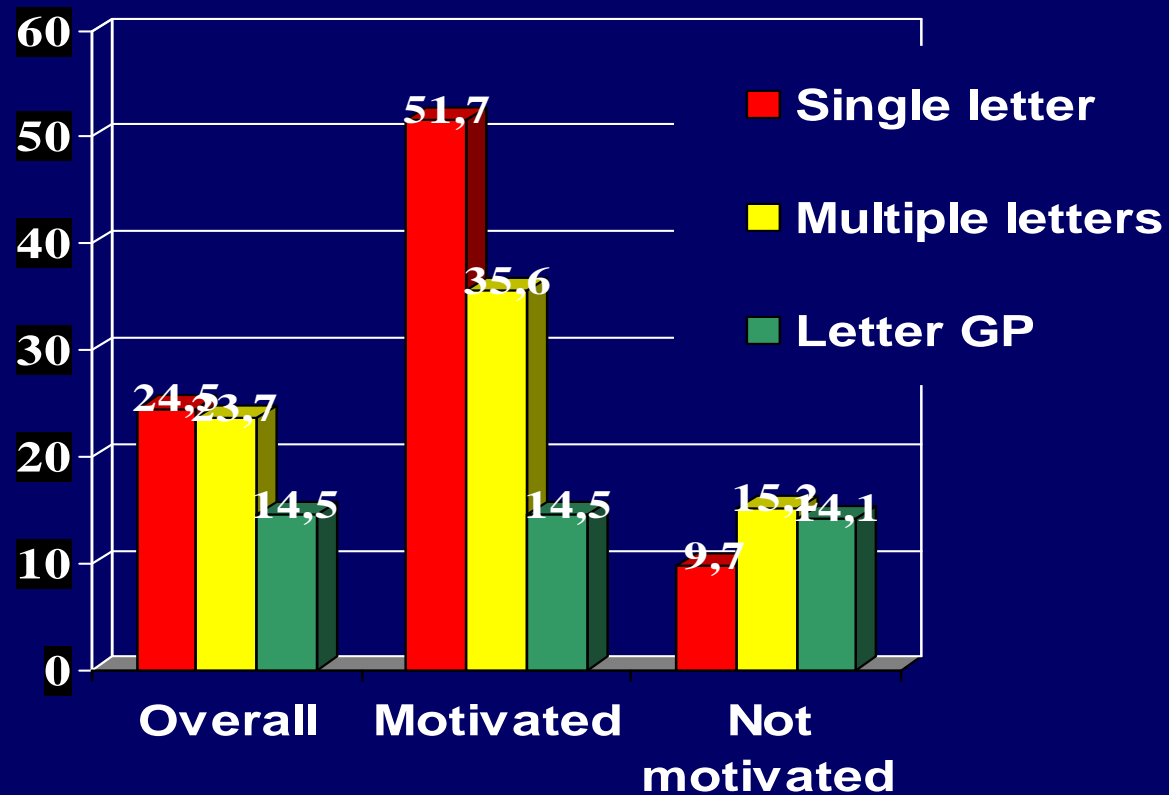
- Meta-analysis (Benzodiazepines)
- Minimal interventions (n=3): OR 2,8
- Systematic Discontinuation (n=26): Heterogeneity
 - SD only (n=1): OR 6,1
 - Plus CBT (n=5/2): OR 5,5
 - Plus pharmacological support (n=21)
 - Imipramin (p=0,03)
 - Carbamazepin (p=0,06)

Interventions

- Computergenerated Interventions
 - 4000 General Practitioner Patients
 - 861 Responders, 508 Participants
 - Letter from GP
 - Single Tailored letter
 - Multiple tailored letter (3 Interventions)

Ten Wolde (2008). *Addiction* 103, 662-670

12-Months-follow-up



Ten Wolde (2008). Addiction 103, 662-670

Interventions

- Intervention Studies faced methodological difficulties:
 - Selective recruitment through media advertisement, GPs
 - Low response rate
 - Selection bias concerning readiness to change
 - No proactive Recruitment
 - No Intervention trial in General hospitals

Brief Intervention in General Hospital of Prescription Drug users (BIGHOP)

- **Funded by the Ministry of Health**
- **Evaluation of a Brief Intervention in the General Hospital Setting**
- **Inclusion of all incoming patients**
- **Screening and Diagnostic**

Study-design BIGHOP

- **Internal, surgical and gynaecological wards**



SANA-Hospital Luebeck



University Hospital Luebeck

Study-design BIGHOP

- **Screening: Questionnaire for prescription drug misuse (QPM), Severity of Dependence Scale (SDS) oder usage >59 days/last 3 Months**
- **Medication with addictive potential according to the Anatomical Therapeutic Classification (ATC): Opioids (N02AA-AC, N02AE, and N02AX), Anxiolytics (N05BA-BC, N05BE), Hypnotics and Sedatives (N05CC-CF, N05CM) and Caffeine (N06BC01)**

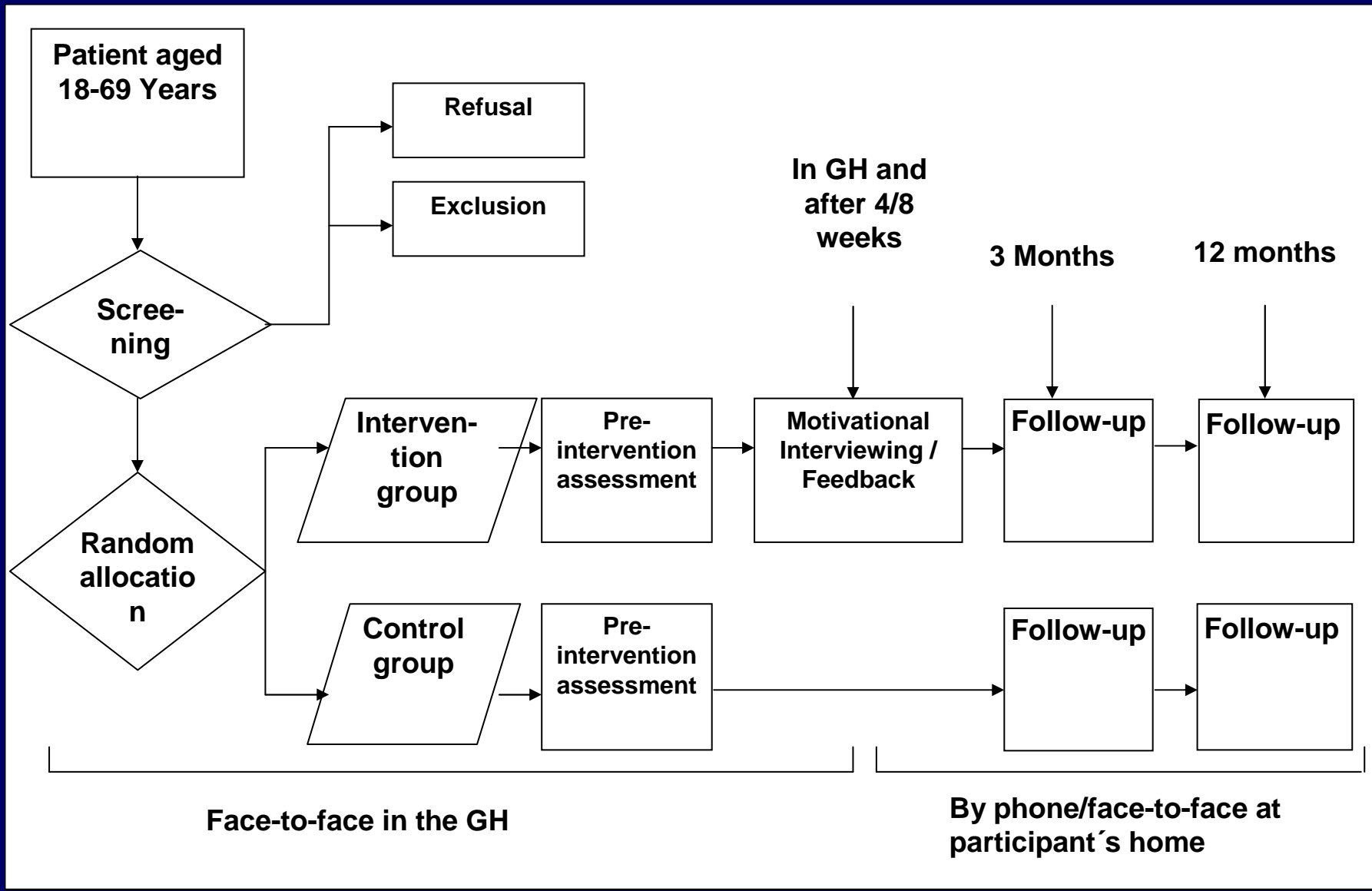
Study-design BIGHOP

- **Inclusion criteria:**

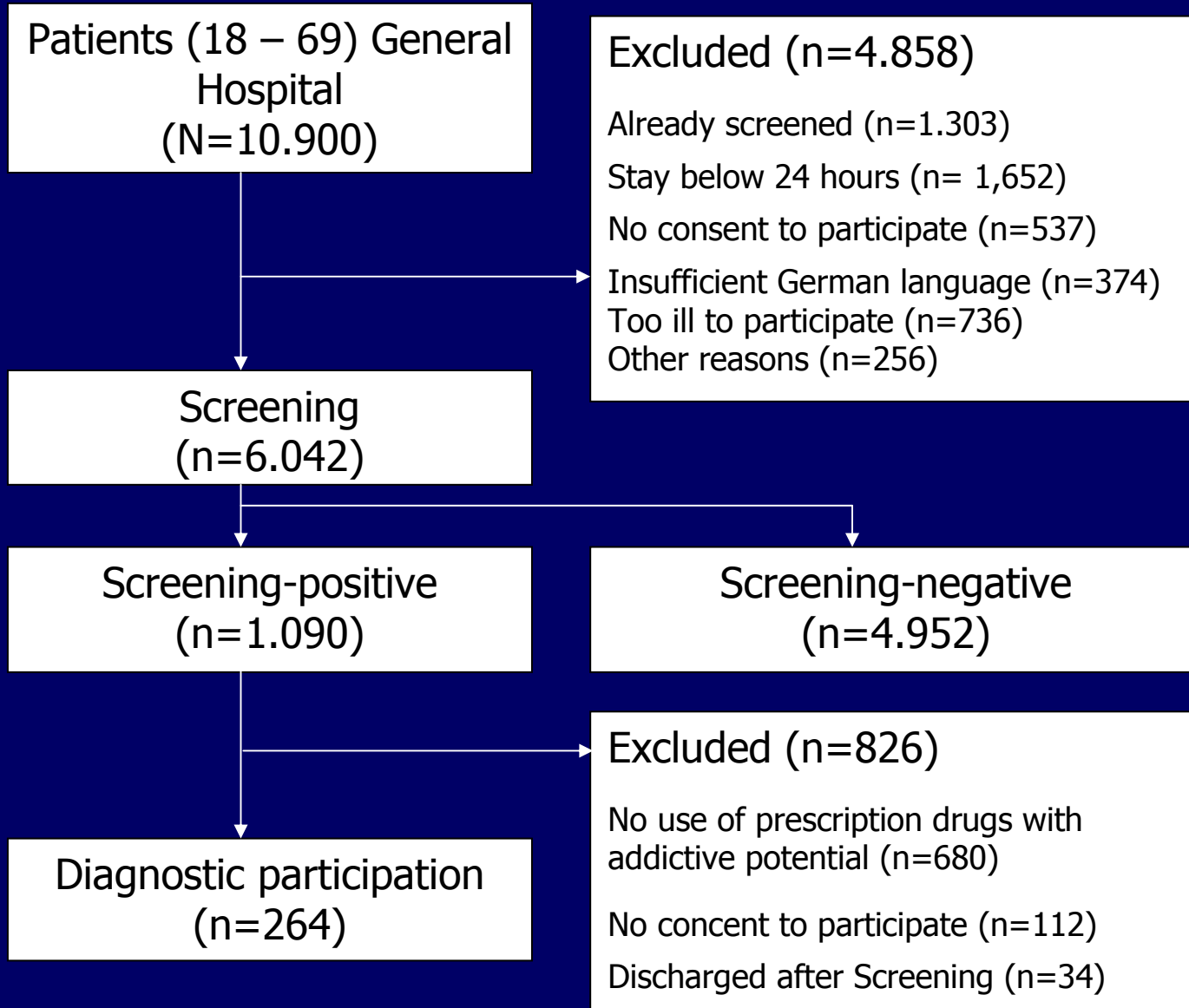
**Dependence or abuse according to DSM-IV,
Usage >59 days/last 3 Months**

- **Exclusion criteria:**

(1) Usage of opioids due to cancer disease, (2) terminale disease, (3) dependence or misuse of illegal drugs, (4) current treatment of associated substance use problems (5) not having a telephone



Recruitment



Allocation

Diagnostic participation
(n=264)

Random allocation (n=126)

Control group (n=70)

Intervention group
(n=56)

3-Months-follow-up

Participants (n=62)
died (n=1)
Too ill (n= 3)
Unattainable (n= 4)

Participants (n= 55)
Unattainable (n=1)

Follow-up

12-Months-follow-up

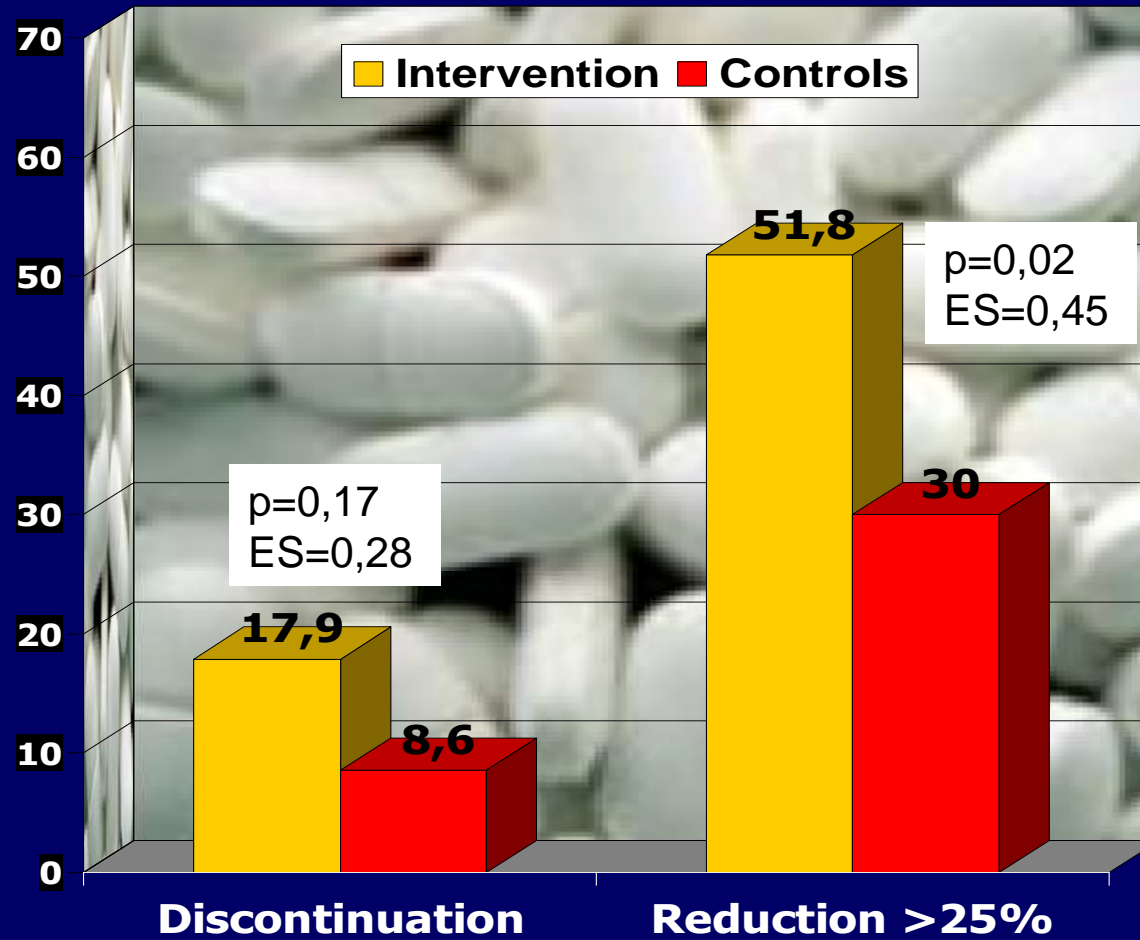
Participants (n=62)
died (n=2)
No consent to participate (n= 2)
Unattainable (n= 4)

Participants (n=50)
died (n=4)
Unattainable (n= 2)

Group differences at baseline Baseline

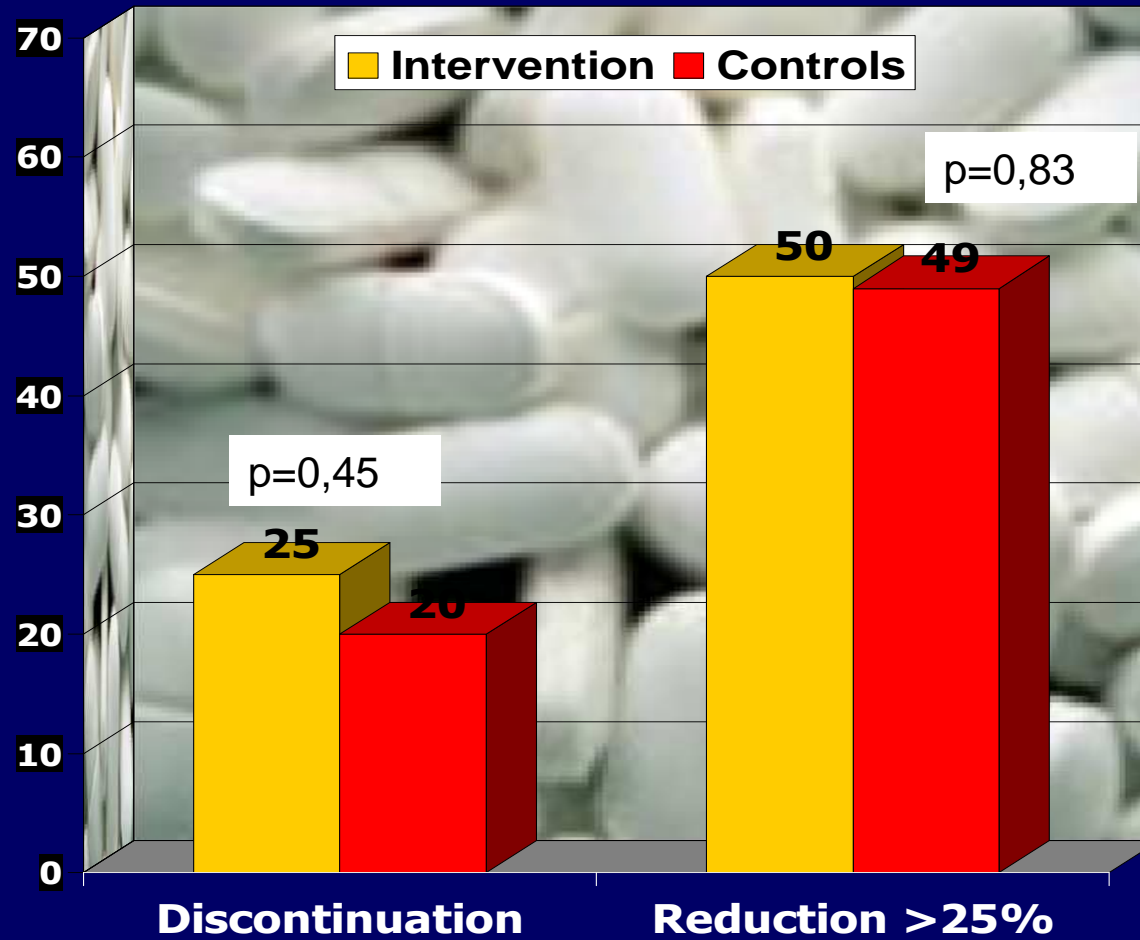
	Controls	Intervention	p
Female	60,0%	64,9%	0,71
Dependence (SCID)	35,7%	53,6%	0,049
Abuse (SCID)	22,9%	10,7%	0,099
Defined Daily Dose	1,37	2,09	0,818
Axis I Disorder	50,0%	42,9%	0,475

3-Monath-follow-up



Zahradnik et al. (2009) Addiction (104): p.109-17.

12-Months-follow-up

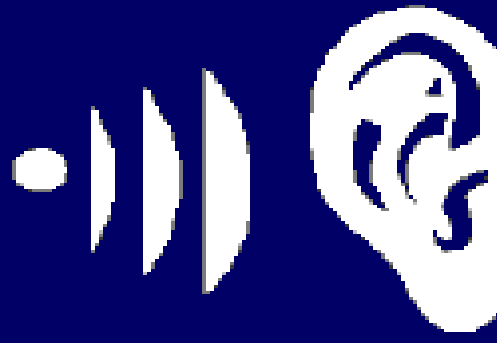


Otto et al. (2009) Drug and Alcohol Dependence

Conclusion

- 1. BI effective after 3 months**
- 2. No effects after 12 months**
- 3. Follow-ups for sustained effects?**
- 4. BI for fostering further treatment?**
- 5. Promising approach**

Thank you for your attention!



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