

Preventing the onset of depressive disorders

Pim Cuijpers

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Canberra



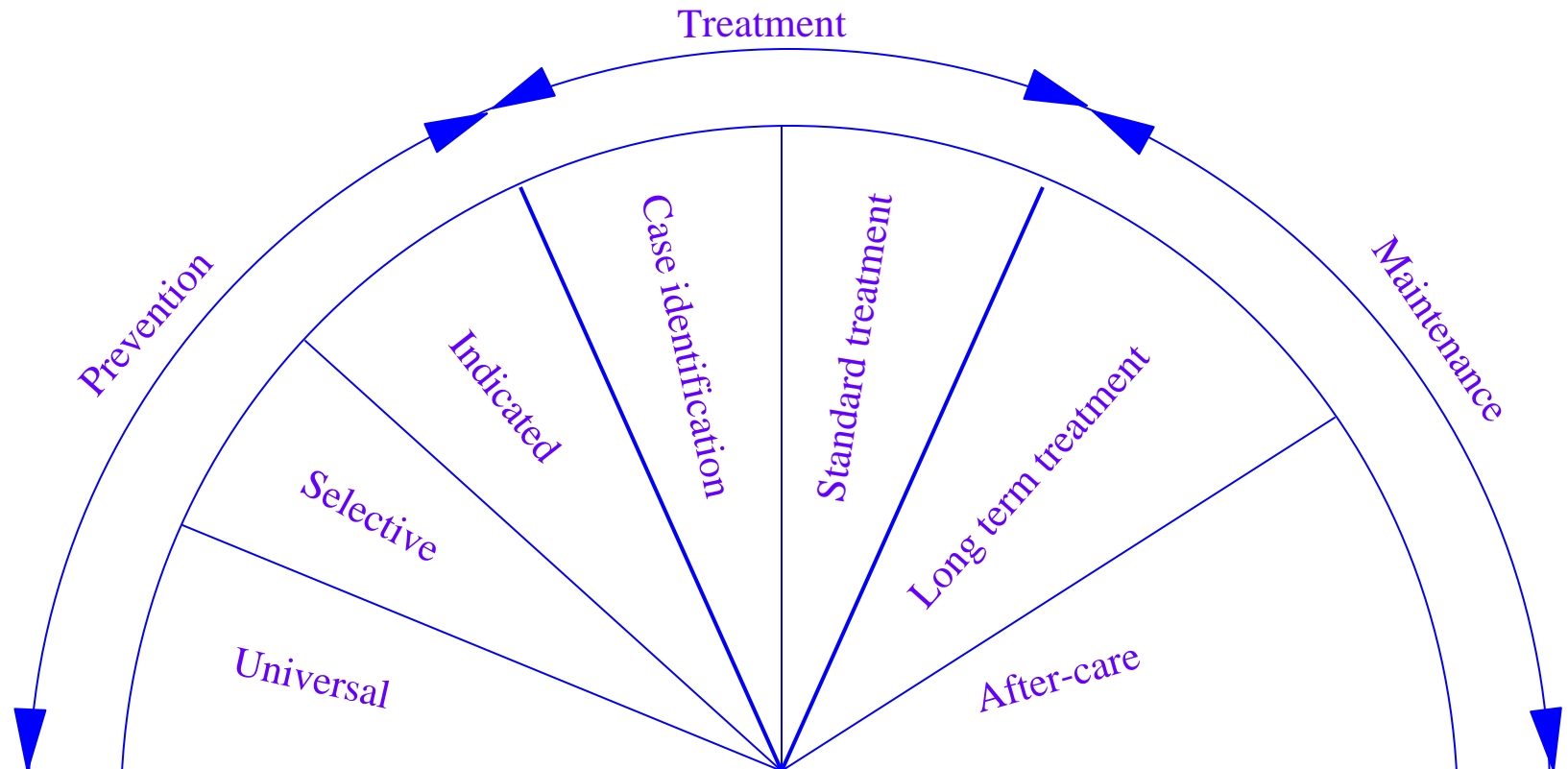
Overview

- What is prevention?
- Why is prevention important?
- Is it possible to prevent new incident cases?
- How can depression be prevented?
- Conclusions

What is prevention?

Intervention spectrum for mental disorders

(Mrazek & Haggerty, 1994)



Why is prevention of depression important?

Why is prevention of depression important?

- Huge burden of disease (fourth)
- Highest burden of disease in 2030 in developed countries
- High prevalence
- High incidence (almost 50% of prevalence)
- Huge economic costs
- Treatments can reduce burden of disease with not more than 35% (currently 15%)

Illnesses with highest disease burden (Netherlands)

| Illness | % of disease burden |
|--------------------------------------|---------------------|
| Coronary heart disease | 7.6 |
| <i>Anxiety disorders</i> | 5.1 |
| Stroke | 4.9 |
| <i>Depression / dysthymia</i> | 3.9 |
| COPD | 3.2 |
| Diabetes mellitus | 3.2 |
| Lung cancer | 3 |
| <i>Alcohol dependence</i> | 2.5 |
| Artrosis | 2.5 |
| <i>Dementia</i> | 2.3 |

Top 5 of diseases in The Netherlands with the highest disease burden, in different age groups

| | 0-14 | 15-24 | 25-44 | 45-64 | 65-74 | 75+ |
|---|----------------------|-------------------|-------------------|-------------------|------------------|------------------|
| 1 | Innate anomalies | Alcohol | Anxiety | Coron. Heart dis | Coron. Heart dis | Coron. Heart dis |
| 2 | Mental handicaps | Anxiety | Depression | Anxiety | Stroke | Stroke |
| 3 | Privat accidents. | Depression | Alcohol | Lung cancer | COPD | Dementia |
| 4 | Bronchial infections | Traffic accidents | Suicide | Depression | Lung cancer | COPD |
| 5 | Asthma | Mental handicaps | Traffic accidents | Diabetes | Diabetes | Diabetes |

Currently averted Years Lived with Disability (Andrews et al., 2004)

| <u>Disorder</u> | <u>Current</u> |
|-------------------------|----------------|
| • Any mood disorder | 15% |
| • Major depression | 16% |
| • Any anxiety disorder | 13% |
| • Any Alcohol rel. dis. | 2% |
| • Schizophrenia | 13% |
| • Any disorder | 13% |

Andrews et al., Br J Psychiatry 2004

Averted YLD (current coverage and with EBMH)

| <u>Disorder</u> | <u>Current</u> | <u>with EBMH</u> |
|-------------------------|----------------|------------------|
| • Any mood disorder | 15% | 23% |
| • Major depression | 16% | 23% |
| • Any anxiety disorder | 13% | 20% |
| • Any alcohol rel. dis. | 2% | 5% |
| • Schizophrenia | 13% | 22% |
| • Any disorder | 13% | 20% |

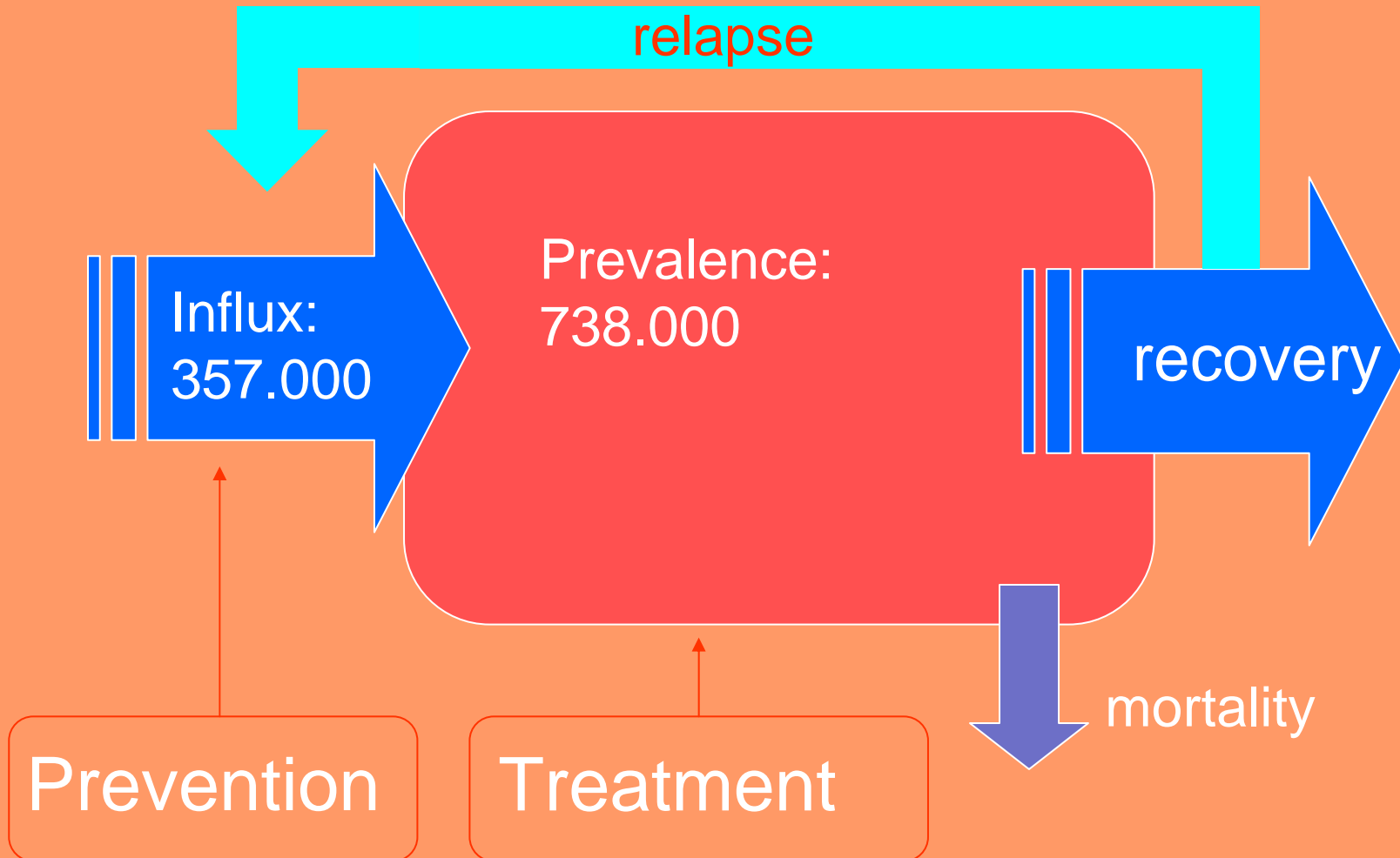
Averted YLD (current coverage and with EBMH)

| Disorder | Current | EBMH | Max |
|-------------------------|---------|------|-----|
| • Any mood disorder | 15% | 23% | 35% |
| • Major depression | 16% | 23% | 34% |
| • Any anxiety disorder | 13% | 20% | 49% |
| • Any alcohol rel. dis. | 2% | 5% | 34% |
| • Schizophrenia | 13% | 22% | 22% |
| • Any disorder | 13% | 20% | 40% |

Consequences

- Currently avoided in major depression (MDD): 16%, maximum 34%
- Consequences:
 - Better treatments
 - Dissemination (low-income countries!)
 - Prevention!

Epidemiology of depression in The Netherlands



Costs of depression

- €132 million per milion adults (210 AU\$)
 - Of which 47% is related to the incidence
 - About the same costs in minor depression
 - About twice as much in dysthymia
 - Total costs about € 600 million (AU\$ 975), per million adults
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- Smit et al. (2006) Journal of Mental Health Policy and Economics
 - Cuijpers et al. (2007). Acta Psychiatrica Scandinavica

So why is prevention necessary?

- Because of high
 - Prevalence
 - Incidence
 - Costs
 - Burden of disease
- Limited possibilities of treatment
- But: Prevention for whom?

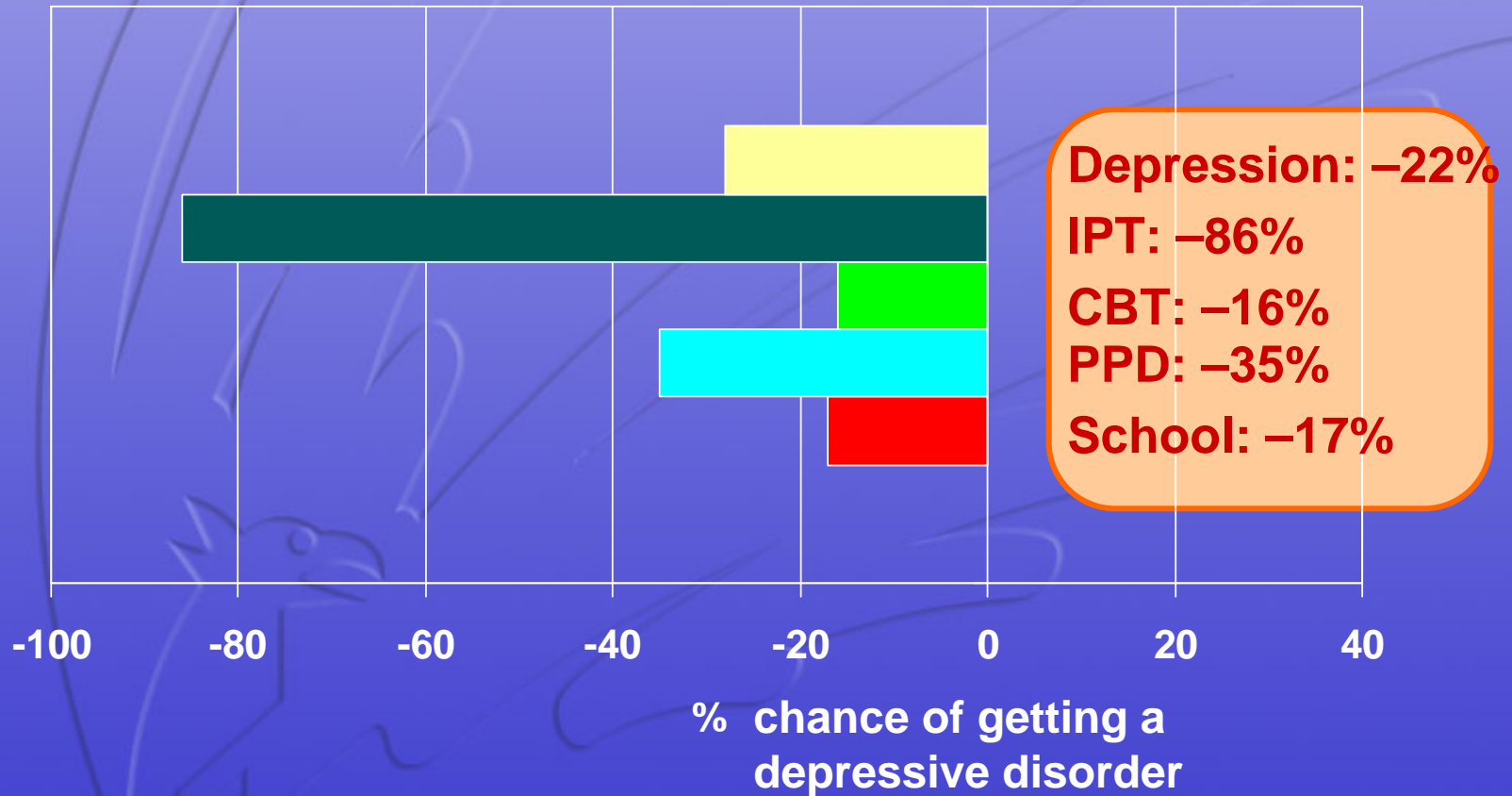
Is it possible to prevent the onset of depressive disorders?

Prevention of incidence of new cases of mental disorders

- Meta-analytic review: statistical integration of all available studies
- 19 controlled studies
- Results:
 - IRR = 0.78 (95% CI: 0.65~0.93)
 - Universal prevention is not effective
 - No significant subgroups (type, target population)
 - IPT may be somewhat more effective than CBT

Cuijpers et al., Am J
Psychiatry 2008

Effects of prevention of depression



Cost-effectiveness plane

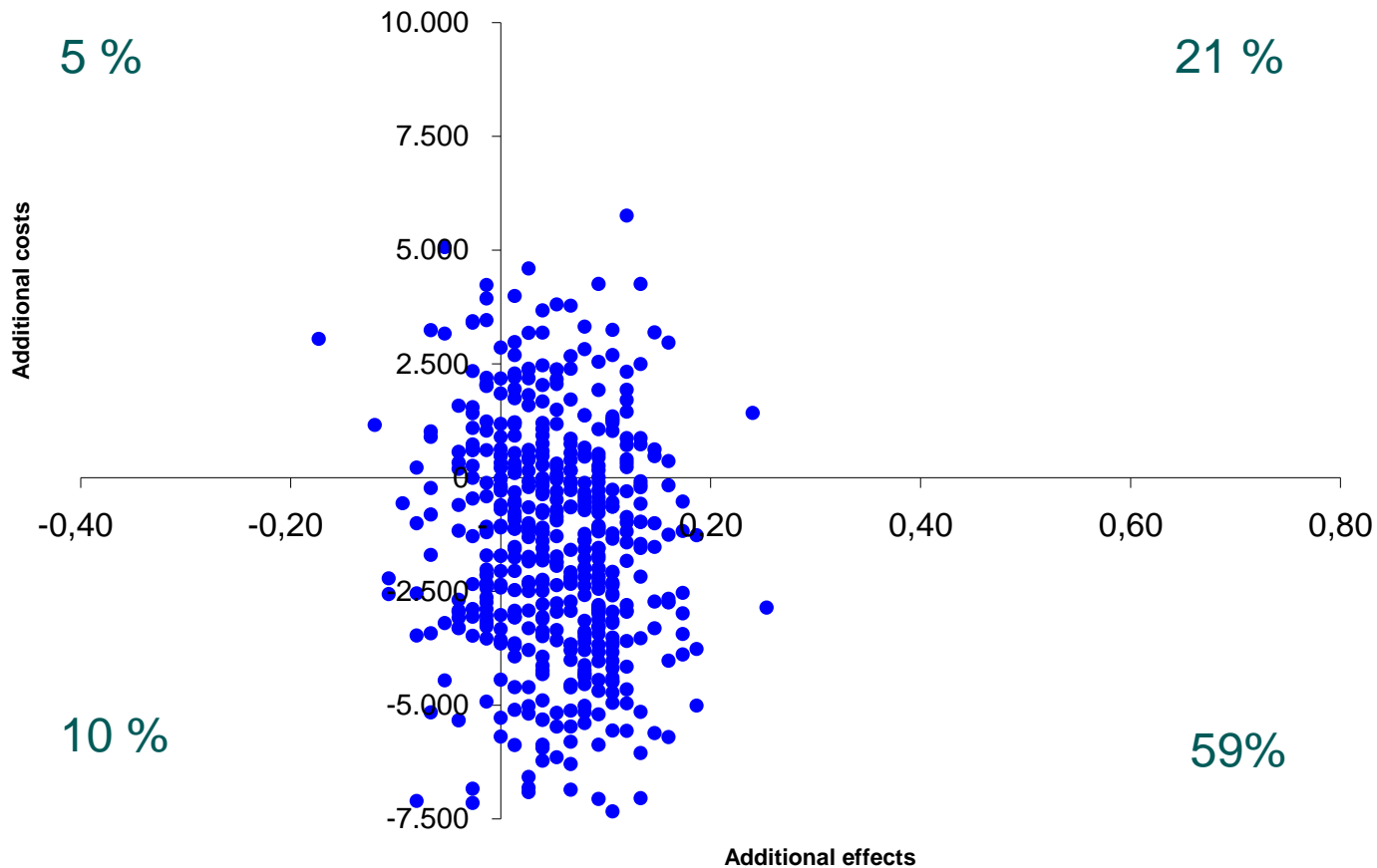
More costs,
Less health

More costs
More health

Less Costs
Less Health

Less costs,
More health

Guided self-help as prevention of major depression



Smit F, Willemsse G, Koopmanschap M, Onrust S, Cuijpers P, Beekman A. (2006) Cost-effectiveness of preventing depression in primary care patients: randomised trial. *British Journal of Psychiatry* 188: 330-336

How can depression be prevented?

Different methods

- By offering “Coping with depression” course to those with subthreshold depression
- Through the Internet
- In primary care
- To patients with somatic disorders
- To pregnant women
- At schools

Interventions

- Cognitive behavior therapy
- Problem-solving therapy
- Interpersonal psychotherapy
- Based on evidence-based treatments

The “Coping with depression” course

- Available for 80% of Dutch population
- Psychoeducation in groups of 8-12 participants
- Mood management skills
 - Learn to think differently
 - More pleasant activities
 - Social skills
- Reduction of incidence with 38% (Cuijpers et al., Clin Psychol Rev 2009)
- Specific versions for adolescents, older adults, minority groups, guided self-help, internet

Internet-interventions

- Indicated prevention
- No studies examining the effects on the incidence of depressive disorders yet
- Easy access, low threshold, less stigma
- Effective in reducing depressive symptoms
- In Australia: Moodgym, e-couch are very promising

In primary care

- Stepped-care for older adults with subthreshold depression
- 4 steps: watchful waiting, guided self-help, brief psychotherapy, medication
- 1 study: 50% reduction of incidence
- Van 't Veer et al., Arch Gen Psychiatry 2009

To patients with somatic disorders

- Increased risk for depressive disorders
- Several studies show that prevention of depressive disorders is possible:
 - Age-Related Macular Degeneration (Rovner et al., 2007)
 - Stroke patients (Robinson et al., 2008)
 - Rheumatology/diabetes (de Jonghe et al., 2009)
 - Head and Neck Cancer patients (Lydiatt et al., 2009)

Pregnant women

- Prevention of Postpartum depression
- Several studies, few examined prevention of depressive disorders
- In our meta-analysis: trend that it may be effective

At schools

- Universal interventions have small effects on depressive symptoms
- No evidence that prevention of MDD is effective
- Individual prevention through the Internet is very promising
- Indicated prevention

Conclusion

- Prevention of depressive disorders is important
- It is possible
- More research is needed to examine methods and target groups in which it is effective
- Implementation!

