



# Prevention of depressive and anxiety disorders

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# Disclosure

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Conflict of interests	None
Relevant relationship with companies	Not applicable
<ul style="list-style-type: none"><li>• Sponsoring or research money</li><li>• Fee or other reimbursement</li><li>• Shareholder</li><li>• Other relationship, namely ...</li></ul>	Not applicable



# Overview

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- Predicting depression and anxiety
- Prevention strategies
  - Universal
  - Selective
  - Indicated
- Concluding remarks



# Predicting depression and anxiety

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## History of disorder

- Depression
- Anxiety

## Subthreshold symptoms

- Depression
- Anxiety



# Predicting depression and anxiety

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## History of disorder

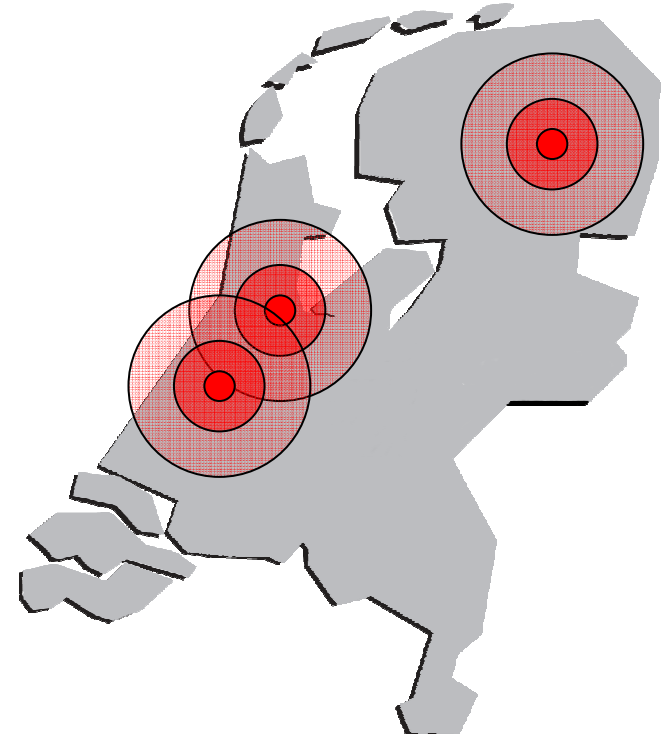
- Depression
- Anxiety

## Subthreshold symptoms

- Depression
- Anxiety

# NESDA: Netherlands Study of Depression and Anxiety

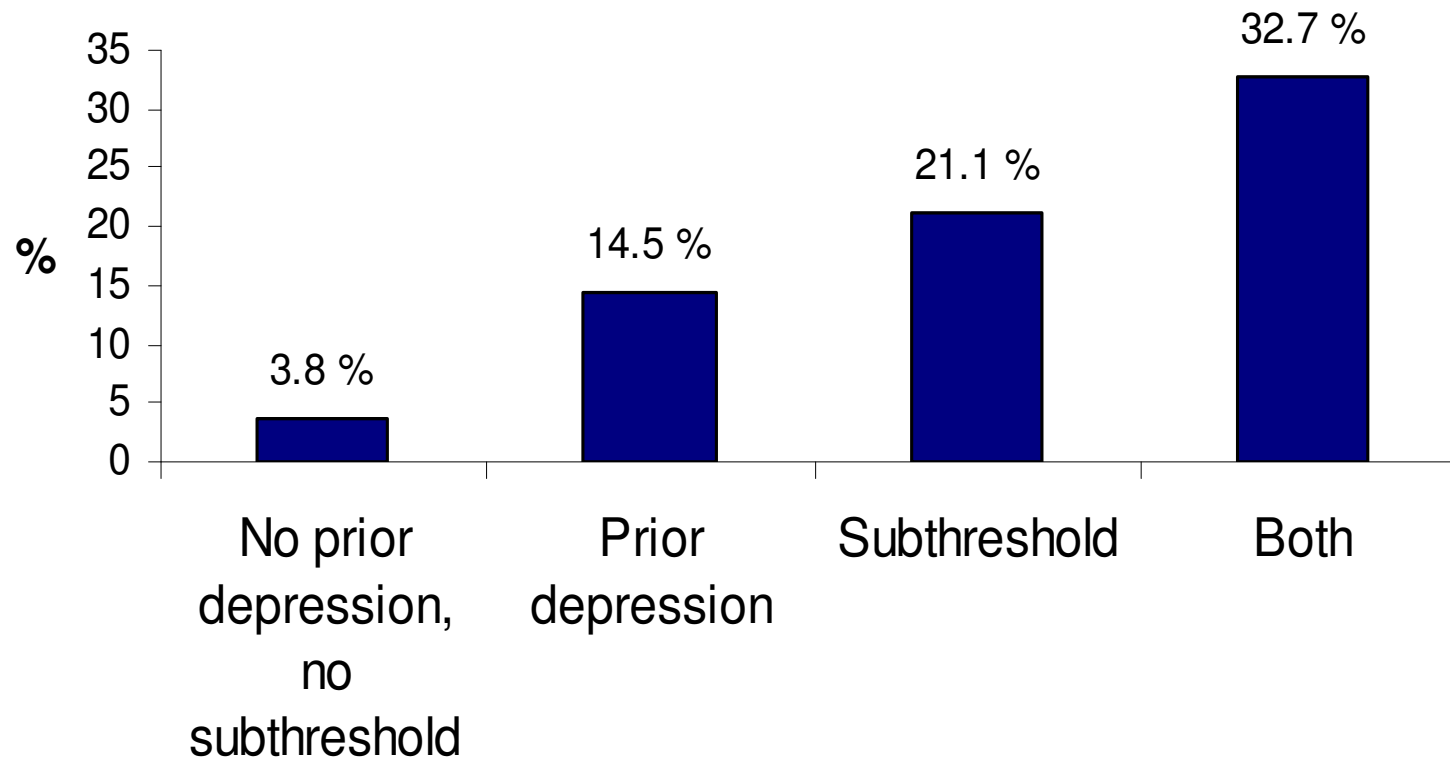
- 3 area's
- 2981 participants
- 18-65 years of age
- General population
  - Primary care
  - Secondary care
- 10 year follow-up (and counting)





# Occurrence depression (N=1167)

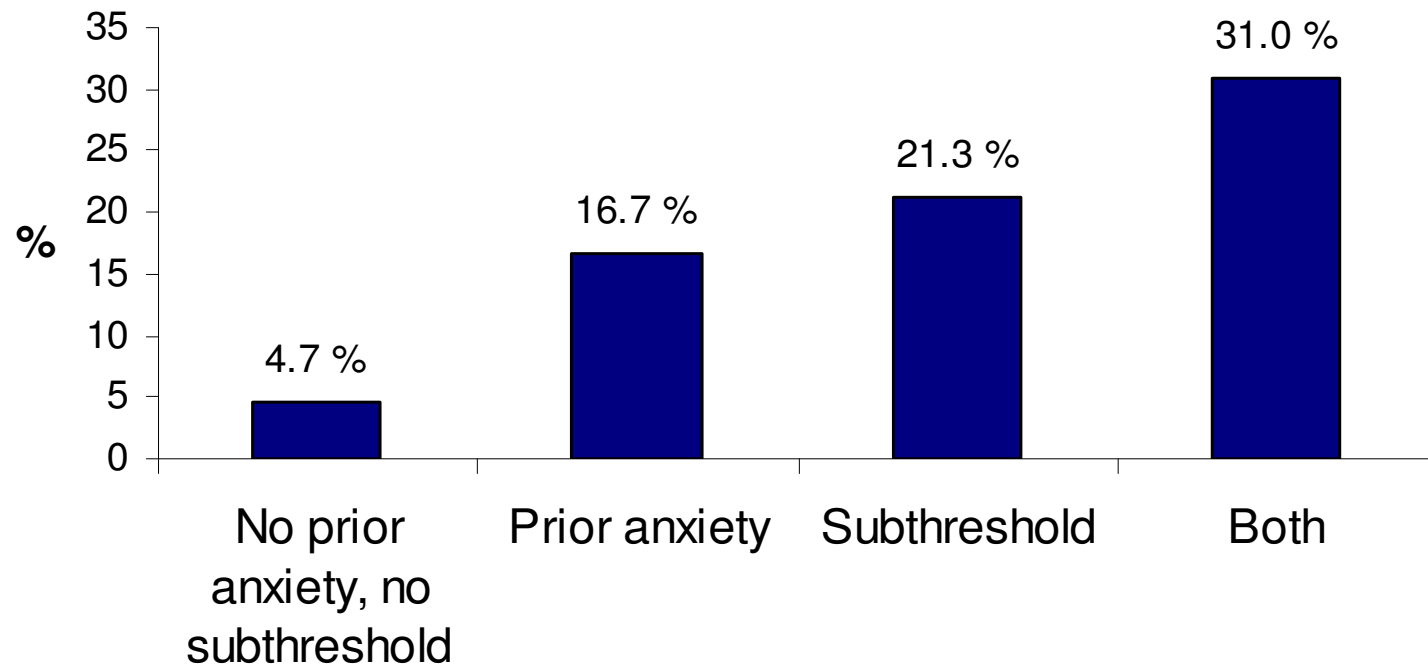
## Occurrence MDD or Dys Within 2 years





# Occurrence anxiety disorder (N=1167)

**Occurrence Soc, PD, Ago, GAD  
Within 2 years**





# Logistic regression: depression

	Univariate OR (95% CI)	Multiple regression OR (95% CI)
Gender	1.13 (0.79 - 1.61)	0.85 (0.58 - 1.25)
Age	0.99 (0.98 - 1.00)	0.98 (0.97 - 0.99)*
Years of education	0.94 (0.90 - 0.99)*	0.98 (0.93 - 1.04)
Number of somatic illnesses	1.17 (1.04 - 1.31)**	1.06 (0.93 - 1.21)
Depressive disorder		
History of depressive disorder	4.25 (2.42 - 7.45)***	4.15 (2.32 - 7.44)***
Subthreshold depression	6.71 (3.74 - 12.04)***	6.23 (3.31 - 11.74)***
Both	12.23 (7.27 - 20.57)***	10.00 (5.49 - 18.20)***
Anxiety disorder		
History of anxiety disorder	2.47 (1.60 - 3.82)***	1.38 (.86 - 2.22)
Subthreshold anxiety	2.88 (1.60 - 3.82)***	1.07 (0.60 - 1.92)
Both	6.02 (3.69 - 9.83)***	2.04 (1.15 - 3.61)*

\*p<.05, \*\*p<.01, \*\*\*p<.001



# Logistic regression: anxiety

	Univariate OR (95% CI)	Multiple regression OR (95% CI)
Gender	1.74 (1.14 - 2.65)*	1.36 (0.87 - 2.15)
Age	1.00 (0.99 - 1.01)	0.99 (0.98 - 1.01)
Years of education	0.95 (0.89 - 1.00)	0.99 (0.93 - 1.06)
Number of somatic illnesses	1.11 (0.98 - 1.27)	1.01 (0.87 - 1.17)
Depressive disorder		
History of depressive disorder	2.81 (1.54 - 5.12)**	2.02 (1.07 - 3.79)*
Subthreshold depression	5.68 (3.12 - 10.33)***	3.47 (1.78 - 6.78)***
Both	8.54 (5.01 - 14.54)***	4.07 (2.18 - 7.59)***
Anxiety disorder		
History of anxiety disorder	4.05 (2.47 - 6.64)***	2.82 (1.66 - 4.79)***
Subthreshold anxiety	5.44 (3.15 - 9.40)***	2.65 (1.41 - 4.99)**
Both	9.05 (5.24 - 15.63)***	4.17 (2.22 - 7.85)***

\*p<.05, \*\*p<.01, \*\*\*p<.001



# Logistic regression: anxiety

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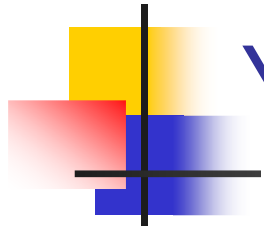
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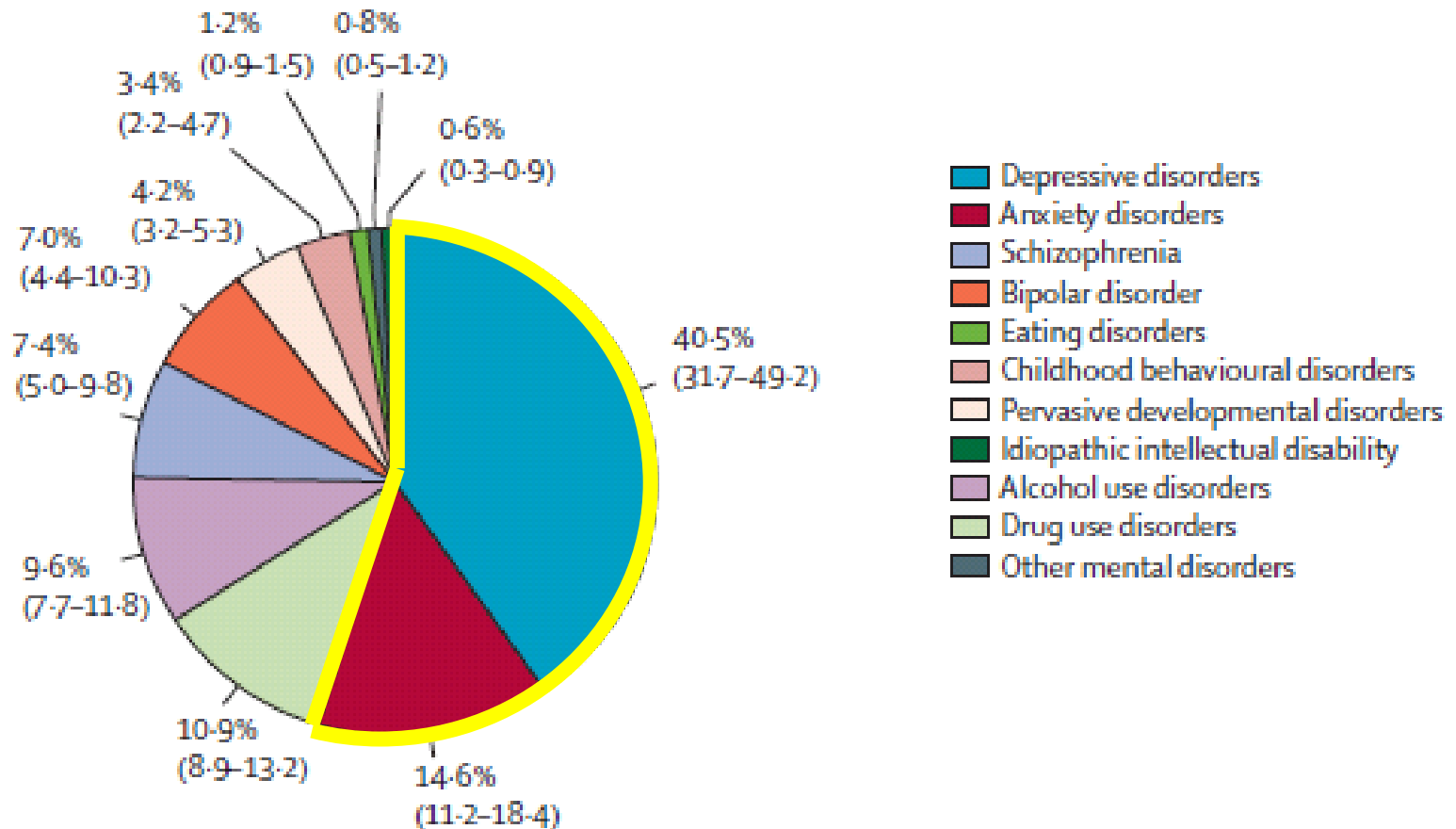
## Main point

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- Depressive and anxiety disorders can be predicted by prior episodes, but even more so by subthreshold symptoms and the combination of the two.



# Years lost or lived with disability



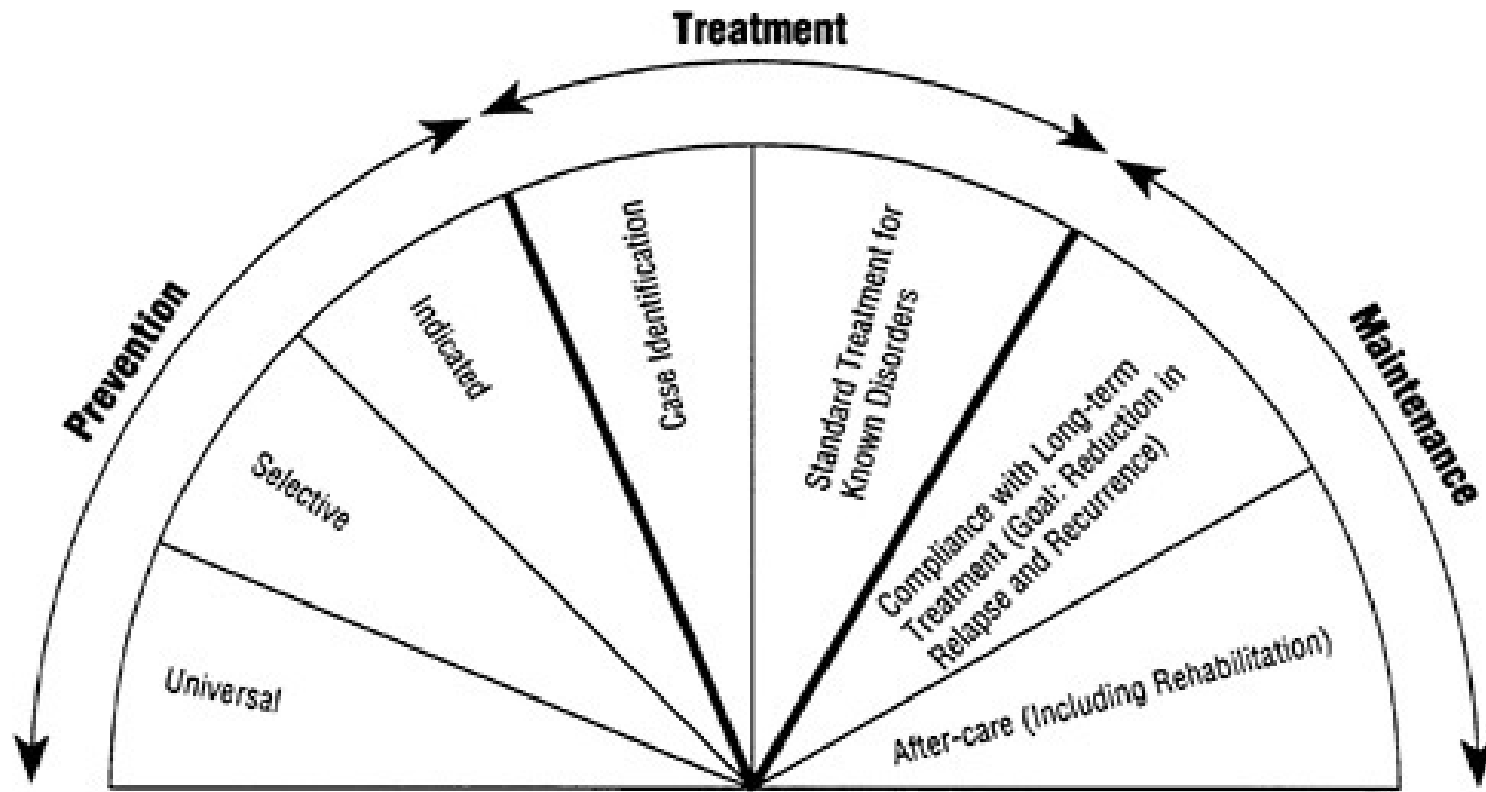
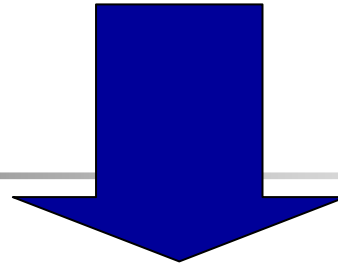
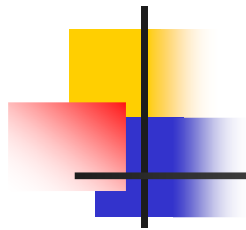


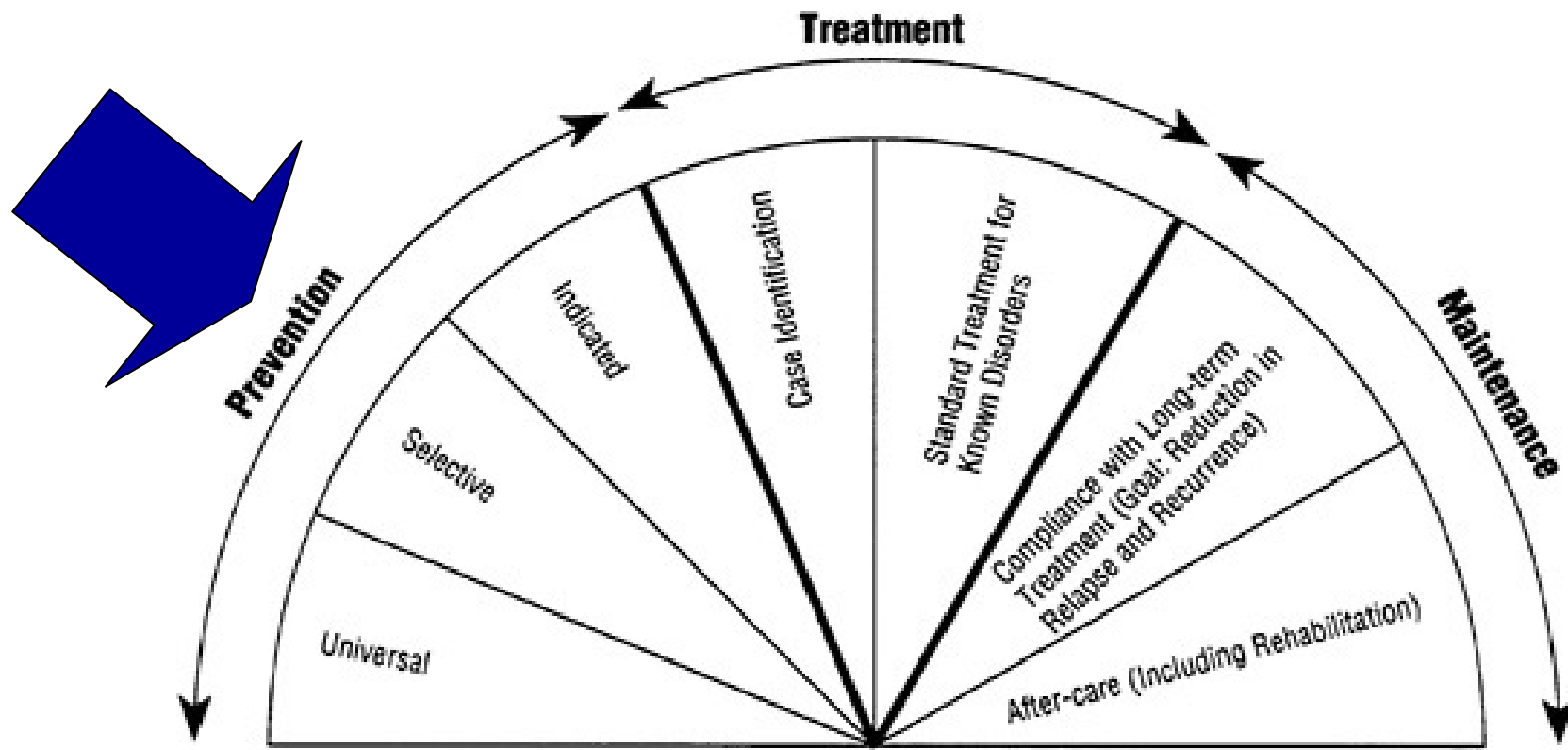
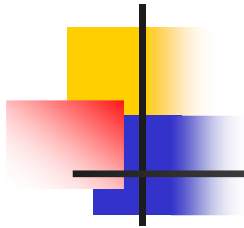
# Prevention

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It is better and more useful to meet a problem in time than to seek a remedy after the damage is done

Henry of Bracton (1240 AD)









## Universal: entire population

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### Pros

- In line with other health education
- No stigma
- No one is 'overlooked'
- No screening-time
- Relatively cheap per person



# Universal

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## Cons

- Relatively expensive per population
- Unnecessary for many
- Very hard to test effectiveness



# Universal

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## Possible applications

- Infomercials on television
- Internet (e.g. [zwaarweer.nl](http://zwaarweer.nl))
- (Single lesson) programs at school



## Universal: does it work?

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Lack of convincing evidence, though not necessarily ineffective<sup>1,2</sup>

FRIENDS program seems promising for preventing anxiety in children and adolescents<sup>3</sup>

<sup>1</sup>Sheffield et al., 2006; <sup>2</sup>Spence et al., 2003; <sup>3</sup>Barret et al., 1999



## Selective: based on risk factors

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### Pros

- Tailored to the specific risk factors
- Target group easily located
- Easier to test effectiveness



# Selective

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## Cons

- Stigmatizing, possibly groundless
- Still not necessary for everyone
- Bad adherence



# Selective

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## Possible applications

- Debriefing after traumatic event
- Course for new mothers
- Online support forum for adolescents of parents with depressive or anxiety disorder (“KOPP-kinderen”)



## Selective: does it work?

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- Better results than for universal prevention<sup>1</sup>
- Debriefing ineffective or even counterproductive for PTSD and PPD<sup>2,3</sup>
- CBT-based or interpersonal therapy better than supportive counseling<sup>1,4</sup>

<sup>1</sup>Munoz et al., 2010; <sup>2</sup>Rose et al., 2009; <sup>3</sup>Priest et al., 2003; <sup>4</sup>Forneris et al., 2013





## Indicated: subthreshold symptoms

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### Pros

- Highly focussed intervention
- Likely initiated by the patient
- Easiest to test effectiveness



# Indicated

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## Cons

- Still not necessary for some
- Possible threat to self-reliance



# Indicated

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## Possible applications

- Primary care
- Internet CBT programs (e.g. MoodGYM)
- Health care centers



## Indicated: does it work?

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- Positive findings, especially for depression<sup>1,2</sup>
- CBT or interpersonal therapy based prevention seems most effective<sup>2</sup>

<sup>1</sup>Calear et al., 2010; <sup>2</sup>Cuijpers et al., 2008; <sup>3</sup>Lewinsohn et al., 1984



## In a nutshell:

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- Prevention is worthwhile<sup>1</sup>
- Indicated prevention seems more effective than universal or selective prevention
- CBT or interpersonal therapy based prevention more effective than debriefing or support
- More research on the prevention of anxiety is needed

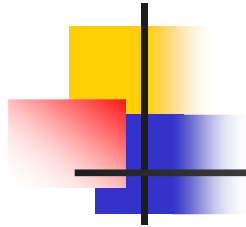
<sup>1</sup>Cuijpers et al., 2008



## Issues of note

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- Costs versus effectiveness
- Stepped care



Thank you for your attention!

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