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Prevalence of depression and vulnerability factors among visually impaired older adults

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Background

- Depressive disorders are not simply a normal reaction to aging or vision loss

- Depression may hamper rehabilitation:
  - Concentration
  - Cognitive problems, e.g. information processing
  - Motivation, ability to reach goals

- Subthreshold depression seriously affects quality of life[1]
- Subthreshold depression and anxiety (symptoms) are the most important predictors of developing a full-blown depression or anxiety disorder (DSM-IV)
- International literature: one third has depressive symptoms

[1]Beekman A.T. et al (1999)

Goal

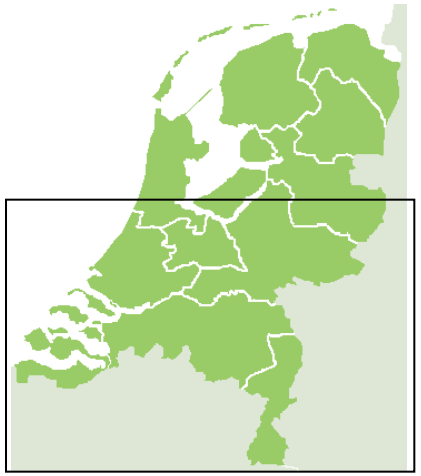
1. Prevalence and severity of depressive symptoms among visually impaired older adults (50+) in the Netherlands (and Belgium)

2. Factors associated with depressive symptoms

3. Find possibilities for improvement in care and referral pathways

Method

- Inclusion period: Oct 2009 – Nov 2010
- Research population invited at the end of intake (N=274)
- Inclusion criteria:
  - ≥ 50 years
  - Cognitively able to answer questions
  - Understand and able to speak Dutch
- Cross-sectional design (1 moment)
- Interviews by medical / psychology students at clients' homes



- Computer adaptive face-to-face interview
  - Duration: mean 1:24 hrs (70% < 1:30 hrs)
- Standardised questionnaires, e.g.:
  - Depressive symptoms (CES-D $\geq$ 16)
  - Depressive disorder (CIDI: diagnostic interview)
  - Adaptation to age-related vision loss (AVL)
  - Cognition (MMSE)
  - Health indicators (e.g. Euroqol, comorbidity)
  - Socio-demographic characteristics

Characteristics

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Gender, % female	61%
Age, mean years (Sd) [range]	78.1 (10) [51 – 99]
Age-related macular degeneration, %	61%
Visual acuity (logMAR), mean (SD)	0.68 (0.5)
Education, mean years (SD)	9.9 (3.1)
Marital status, % alone	50%

Results

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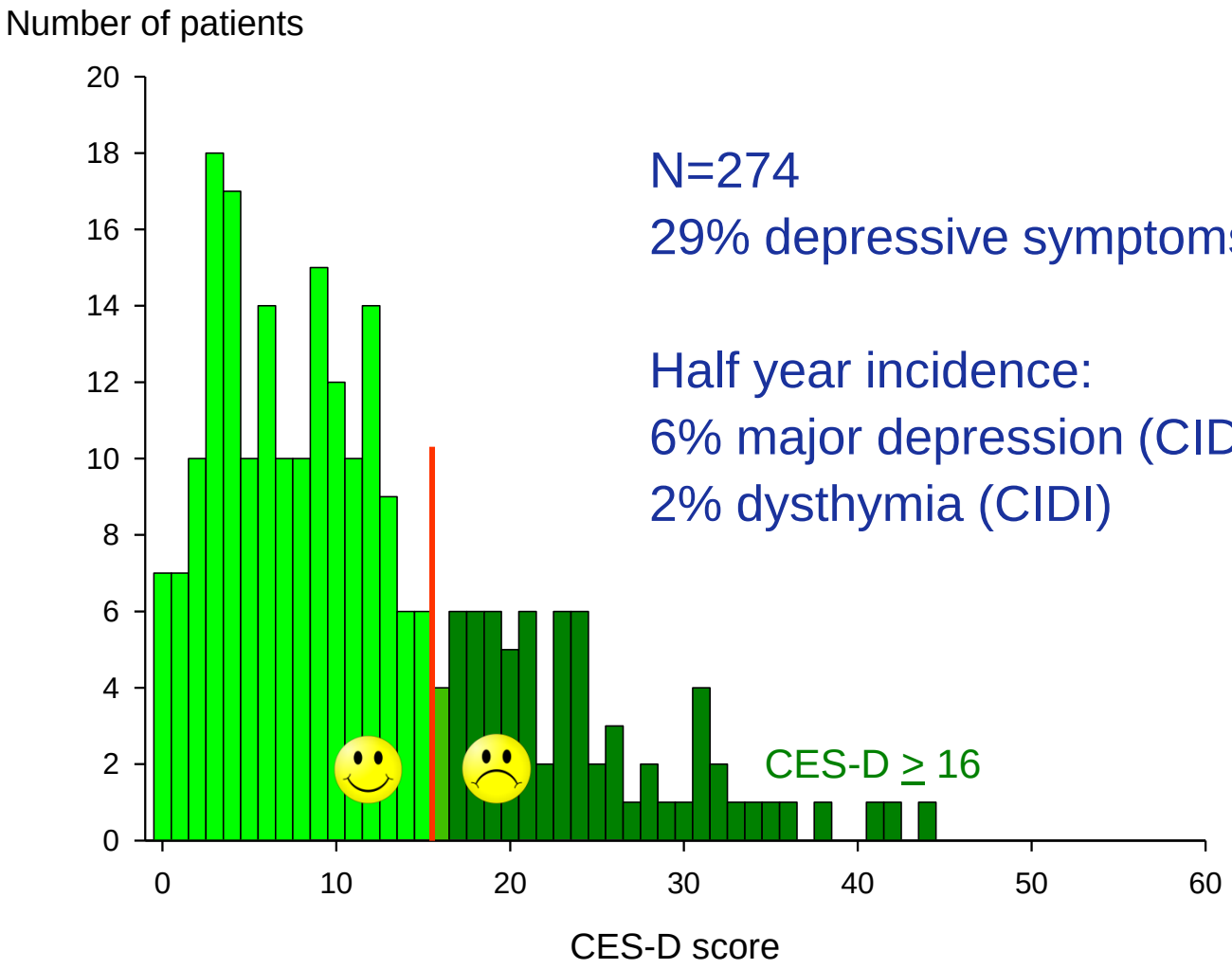
Prevalence



N=274

29% depressive symptoms (CES-D ≥ 16)

Half year incidence:

6% major depression (CIDI)

2% dysthymia (CIDI)

International example studies

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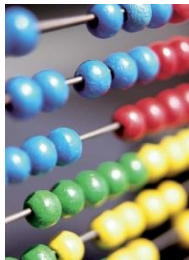
Authors	Country	Population	Age	N	%
Van Nispen et al 2011*	Netherlands	Low vision	78	274	29%
Van Nispen et al 2011*	Netherlands	General VA<0.5	75	102	27%
Rees et al 2010	Australia	Low vision	76	143	42%
Skalicky et al 2008	Australia	Glaucoma	73	165	32%
Augustin et al 2007	Italy/France/Germany	AMD	77	336	22%
Horowitz et al 2005	USA	Low vision	80	584	34%
Horowitz et al 2003	USA	Low vision	77	95	34%
Rovner et al 2002	USA	AMD	81	51	33%
Brody et al 2001	USA	AMD	80	151	33%

* To be published



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Final regression model

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Associated with CES-D total score

	Standardised regression coefficient	P-value
Gender (female)	0.21	<0.001
Activities Daily Living	-0.12	0.06
Coping (Pearlin mastery scale)	-0.23	<0.001
Adaptation vision loss (AVL)	-0.13	0.04
Mobility (LVQOL)	0.12	0.06

$R^2 = 0.27$

Not associated to CES-D

- Age
- Education
- Marital status
- Religious
- Financial situation
- VA best/worst eye
- Comorbidity
- Serious life events
- Youth trauma

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Focus group

- Psychologists / social workers (N=11)
- 30 November 2010
- Goal:
  - Present and discuss meaning of results
  - Give an overview of evidence-based treatments to reduce depression / anxiety
  - Formulate advice for referral or treatment of visually impaired (older) adults with depression and anxiety symptoms

Improve care and referral

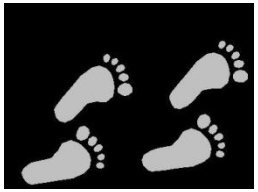
Which direction?

- Collaborative care: psychology, occupational therapy
- Screening / improve recognition (education)
- Offer support groups
- Long term monitoring (case-management)
- Depression protocol: stepped-care

Stepped-care

- Indicated prevention for clients with subthreshold depression and anxiety at risk for development of psychiatric disorders

- Principles:
  - No intensive treatment (e.g. medication) for mild complaints
  - Expensive care (e.g. psychiatry) as late as possible in the care trajectory
  - Increase independence



- (Cost-)effective for elderly in a general population*

*van ‘t Veer-Tazelaar et al (2009)

Curious?

Development of a stepped-care programme

to reduce the incidence of depressive and anxiety disorders in visually impaired older adults

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Introduction

Background: International studies report that the prevalence of depressive symptoms in visually impaired older adults is between 22-42%. As opposed to 10-15% in general populations. Treatment is crucial: symptoms are the most important predictors of developing a depression or anxiety disorder according to DSM-IV.

Objective: The aim of this study (2012-2015) is to develop and investigate the effectiveness and cost-effectiveness of a stepped-care programme for visually impaired older adults with subclinical depression and anxiety levels to prevent the development of full-blown disorders. We expect that the programme will reduce the cumulative incidence of disorders by 50% after two years.

Method

Design: An international multi-centre randomized controlled trial. Participants (N=230) from Dutch and Belgian rehabilitation centres are randomly assigned to stepped-care (treatment) or usual care (control group).

Measurements: Every 3,6,9,12,18,24 months.

Primary outcome: Development/prevention of depression and anxiety disorders: Mini International Neuropsychiatric Interview (MINI): major depression, dysthymia, agora/social phobia, panic and generalized anxiety disorder

Secondary outcomes:

- Symptom reduction: CES-D and HADS-A;
- Vision and health related outcomes: LVQOL, AVL and EQ5D;
- Cost-effectiveness from a societal perspective: intervention costs, psychiatric illness costs, medication use, health / rehabilitation care, productivity losses (Tic-P and SF-HLQ).

Stepped-care programme

The intervention consists of 4 steps which increase in intensity (and costs). If the first step does not lead to reduced symptoms after three months, then the client moves to the next step.

(1) Watchful waiting

- Symptoms may disappear spontaneously;
- Some patients experience grief or difficulty to adapt to the disability and dependency;
- If that period takes longer than three months, professional care is required.

(2) Self-help course

- Cognitive-behavior based bibliotherapy;
- 2-3 encounters with a trained occupational therapist at home, rehab-centre, telephone;
- Self-help (audio)book with information on mild depression and anxiety and simple advice on how to cope with it (improve social skills, address depresso/anxiogenic thinking; increase pleasant activities).

(3) Problem solving treatment (PST)

- Brief cognitive behavioural intervention;
- Stages of problem solving are explained and applied to problems in daily life;
- Goal is to help regain control over life;
- Encounters (7x) with a trained psychologist or social worker at home or rehab-centre;
- Therapists keep track of sessions followed and skills learned by the participants.

(4) Referral to general practitioner (GP)

- GPs in the Netherlands are "gate keepers" for all (mental) health care facilities; they may prescribe medication, or refer elsewhere.

Discussion

After providing the necessary evidence of stepped-care in a population of visually impaired older adults, it will be implemented in Dutch and Belgian rehabilitation centres. We expect that the stepped-care programme will offer a solution to psychosocial problems suffered by visually impaired older adults.

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Conclusion

- Prevalence and severity
  - 29% in NL (international: 22 – 42% versus 10-15%)
  - Half year incidence 6% (versus 0.5 – 3.0%)

- Factors related to depression in visually impaired older adults are
  - **Gender** (female)
  - Loss of **independence** (ADL, mobility)
  - Ability to **cope with stress and vision loss** (mastery and AVL)

Development of a depression (anxiety) protocol seems warranted to improve the lives of our older depressed patients!

Thank you for your attention

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