Dual sensory impairment in the older adult: Effectivity of a Dual Sensory Loss-protocol.

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Ethische beoordeling	Positief advies
Status	Werving nog niet gestart
Type aandoening	-
Onderzoekstype	Interventie onderzoek

Samenvatting

ID

NL-OMON27968

Bron
NTR

Aandoening

- Dual sensory impairment
- Dual sensory loss
- Vision loss
- Hearing loss
- Visual impairment
- Hearing impairment
- Gecombineerde visuele en gehoorbeperkingen
- Auditief-visuele beperking
- Visuele beperking
- Auditieve beperking
- Gehoorbeperking

Ondersteuning

Primaire sponsor: VU university medical center, Amsterdam
Overige ondersteuning: ZonMw, programma Inzicht

Capita Foundation

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

1. Hearing-aid use;
2. Hearing-aid satisfaction;
3. Skills;
4. Compliance;
5. Communication.

Toelichting onderzoek

Achtergrond van het onderzoek

Recent studies have shown that relatively many older adults suffer from a dual sensory impairment (5-9%), caused by degenerative processes in the eye (e.g. macular degeneration) and inner-ear (e.g. presbycusis). In a number of studies it has been reported that a dual sensory impairment relates to great problems in communication, health and social participation, but also in the use of hearing aids. In the low vision rehabilitation centers, no structural care is provided to detect hearing loss in visually impaired patients. Occasionally the dual sensory impairment will be addressed, but usually only when hearing loss is obvious. Providing a structural and integrated approach to care for dual sensory impairments is necessary from the perspective that maximizing the use of remaining vision will become more effective if the other senses are used to the maximum as well.
The development and evaluation of multidisciplinary interventions addressing the bi-modal difficulties of older people has recently been considered as one of the most urgent research needs.

In a multi-center international single blind randomized controlled trial, we propose to develop and test a “Dual Sensory Loss-protocol” (DSL-protocol) for older adults with dual sensory impairment who enter multidisciplinary low vision rehabilitation centers in the Netherlands and Belgium. The objective of this study is to develop and test a DSL-protocol which will focus on proper use of hearing-aids, and will also provide patients (and their significant others) with specific skills to improve the use of
the senses and communication. Specific research questions are:
1. What is the prevalence of hearing impairments among visually impaired older adults?

2. What is the effect of using a DSL-protocol in older adults with dual sensory impairment on the use of hearing-aids, such as basic managing skills and compliance?

3. What is the effect of using a DSL-protocol on communication, coping, social participation and quality of life?

The DSL-protocol will be based on existing interventions and protocols and will be further developed together with
professionals in eye and ear care, patients and their significant others. Qualitative techniques, such as focus groups and face-to-face interviews will be used in the development phase. A limited pilot-study will be performed to try out the DSL-protocol.

In the quantitative phase, every visually impaired older adult (50+) with a visual acuity < 0.5 of the best eye who comes to the participating low vision rehabilitation centers will be screened at the end of the visual function assessment to detect significant hearing loss (mean hearing loss of > 40 dB or more in the best ear at frequencies of 1, 2 and 4 kHz). Screening will be done with a speech-in-noise test and some questions on subjective hearing loss. It is expected that approximately 600 patients need to be screened in order to include 96 patients in the trial. When hearing loss is detected, patients will be invited by the low vision specialist to participate in the study and will be referred to an Audiology center, where a hearing-aid will be fitted. After the baseline measurements, the patient will be randomized into the intervention or control group. Trained occupational therapists will administer the DSL-protocol to patients and proxies in the intervention group.

The intervention consists of a training and exercises on (1) using and managing the hearing-aid; (2) making maximum use of the senses; and (3) communication skills. Up to five appointments will be made in the intervention group by the occupational therapist at the multidisciplinary rehabilitation center or in the patients home, depending on the performance by the patient and/or proxy. In the control group only the hearing-aid will be fitted and, similar to the intervention group, baseline and 3-month follow-up
measurements will be performed by a research assistant.

The effects of the intervention will be evaluated in terms of hearing-aid use, skills, compliance, communication, coping, social participation and perceived quality of life, using several questionnaires: Communication Strategies; Communication Profile for the Hearing Impaired; ICF domains ‘Interpersonal Interactions and Relationships’ and ‘Community, Social and Civil Life’ (Dutch Activity Inventory); Low Vision Quality Of Life questionnaire; ‘Reaction of Others’ scale (Hearing Handicap and Disability
Inventory). In addition, patient and disease characteristics will be assessed.

It is expected that the use of the DSL-protocol by occupational therapists who work at the regional low vision rehabilitation centers in the Netherlands and Belgium will increase the use of hearing-aids, and will enhance communication, coping with a dual sensory impairment, social participation and quality of life in older adults with dual sensory impairment.

Doel van het onderzoek

It is expected that the use of the DSL-protocol by occupational therapists who work at the regional low vision rehabilitation
centers in the Netherlands and Belgium will increase the use of hearing-aids, and will

enhance communication, coping with a
dual sensory impairment, social participation and quality of life in older adults with dual sensory impairment.

Onderzoeksopzet

1. 2 measurements;

2. The second measurement will take place approximately 3 months after the baseline measurment;

3. Both measuments include a structured interview. The first measurement also includes an audiological test.

Onderzoeksproduct en/of interventie

Occupational therapists will teach patients and proxies (1) how to use and manage the hearing-aid; and (2) how to make maximum use of the senses with available low vision and hearing aids. After two weeks, a second appointment will be scheduled. (3) The patient and/or proxy will receive training in hearing-strategies and communication skills. The intervention will take place at the multidisciplinary rehabilitation center in the Netherlands and Belgium or in the patients home environment, depending on his/her ability to visit the center. After every session, the participants will be provided with exercises to practice their newly learned skills. During the third session, the patient and/or proxy will be monitored by giving them the opportunity to ask questions about things that remained unclear. Also some important aspects of the DSL-protocol may be repeated and exercises may be performed, if necessary. Although it is expected that three appointments are sufficient, if after the third appointment the patient and/or proxy still have difficulty using the techniques learned from the DSL-protocol, a fourth (and a fifth) appointment will be scheduled, again after 2 weeks. This way, up to five appointments will be made in the intervention group by the occupational therapist, depending on the performance by the patient and/or proxy. In every session, the occupational therapist will keep track of the patients' and/or proxies' skills. This way, the decision on the number of sessions becomes transparent.

In the control group only the hearing-aid will be fitted and, similar to the intervention group, baseline and 3-month follow-up measurements will be performed by a research assistant.

Contactpersonen

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Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

1. Older adults (>50 years) with dual sensory impairment (visually and auditively impaired);

2. Clients of rehabilitation centers in The Netherlands (Bartiméus) and Belgium (Blindenzorg Licht en Liefde).

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

1. Cognitively impaired;

2. Not able to speak and/or understand Dutch.

Onderzoeksopzet

Opzet

Type:	Interventie onderzoek
Onderzoeksmodel:	Parallel
Toewijzing:	Gerandomiseerd
Blindering:	Open / niet geblindeerd
Controle:	Geneesmiddel

Deelname

Nederland

Status:	Werving nog niet gestart
(Verwachte) startdatum:	01-08-2011
Aantal proefpersonen:	100
Type:	Verwachte startdatum

Voornemen beschikbaar stellen Individuele Patiënten Data (IPD)

Wordt de data na het onderzoek gedeeld: Nog niet bepaald

Ethische beoordeling

Positief advies

Datum:	05-04-2011
Soort:	Eerste indiening

Registraties

Opgevolgd door onderstaande (mogelijk meer actuele) registratie

Geen registraties gevonden.

Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

In overige registers

Register	ID
NTR-new	NL2705
NTR-old	NTR2843
Ander register	ZonMw : 60-00635-98-082
ISRCTN	ISRCTN wordt niet meer aangevraagd.

Resultaten

Samenvatting resultaten
N/A