Social participation, life satisfaction and depression among older adults with age-related macular degeneration

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Outline

- Theoretical background
- Aims
- Method
- Results
- Discussion & Conclusions
Theoretical background

State of Art

• Survive in the 21st Century
• Aging
  • Increasing number of people
  • Necessity of new skills
  • Decreasing competences
• Quality of life
  • Health (AMD, depression and other conditions)
  • Participation (social activity and network)
• Life satisfaction
Theoretical background

Social activity, social participation in age-related macular degeneration (AMD)

• **Social activity not only decreased** (Jang et al., 2003; Crews & Campbell, 2004; Wang & Boerner, 2008; Verstraten, 2009; Wahl, 2013), but

• **Less diverse activities are available** (Weih, Hassell, & Keeffe, 2002; Alma et al., 2011; Alma et al., 2012)

Theoretical background

Social activity, social participation in age-related macular degeneration (AMD)

Determining factors

- Age
- Comorbid health conditions
- Marital status
- Education and employment
- Gender: type of activities
- Psychological factors
- Visual functioning and use of aids
Theoretical background

Life satisfaction in AMD

• **Determined by** the congruency or discrepancy of **cognitive and emotional components** (Stevens-Ratchford & Krause, 2004, Brown és Barett, 2010, Renaud et al., 2010, Renaud & Bédard, 2013)

• Life satisfaction and adaptation to visual impairment
  • **common psychological source is the self-efficacy** (Horowitz, Reinhardt, & Kennedy, 2005, id. Brown & Barett, 2010)

• **Not necessarily lower life satisfaction among elderly with AMD** (Mathew et al., 2011)
Theoretical background

Life satisfaction in AMD

Determining factors

- Comorbid health conditions
- Everyday functioning
- Social participation
- Social support
- Depression
- Subjective visual status
- Rehabilitation
Theoretical background

Sense of control

• **Primary and secondary control** - selective or compensatory (Heckhausen & Schulz, 1995)

• Sense of control **may decrease, but not necessarily** (Brown & Barett, 2010, Wahl, 2013, Schilling et al., 2012)

• Adaptation to visual impairment by changing the control strategies

• Instead of selective → compensatory
Theoretical background

Depression among elderly with AMD

- Biological impairment → related psychological problems
- Initial experience of visual impairment → higher levels of depression at the beginning
- **One third of the AMD people have depression** (Brody et al., 2001, O’Donnell, 2005; Horowitz, Reinhardt, & Boerner, 2005; Hayman et al., 2007; Casten & Rovner, 2009; Papadopoulos et al., 2013, van der Aa et al. 2015)
- Inner factors of coping: *acceptance of visual impairment* and the *adaptation to the consequences* related to depression (Tolman et al., 2004)
- Negative effect on the visual functioning (O’Donnell, 2005; Casten & Rovner, 2009)
- **Rehabilitation:** positive effects on avoiding the depression (Tolman et al., 2004; Horowitz, Reinhardt, & Boerner, 2005)
Theoretical background

Depression among elderly with AMD

**Determining factors**
- Comorbid health conditions
- Marital status, age, gender
- Education and employment
- Social activity
- Everyday functioning
- Visual functions, the subjective perception of vision status, the worsening of the vision status
Aims

Exploratory goal was to measure:

Social participation
Life satisfaction
Personal control and
Depression
among people with AMD

We expected that

(1) significantly less people with AMD are members of different types of clubs and they significantly less often go to community programs, events, than the control

(2) the life satisfaction and the sense of control are significantly lower among older adults with AMD

(3) the level of depression is significantly higher among elderly with visual impairment
Methods

Participants

• Total sample N=80 people (40-40 in both groups)
• Age inclusion criteria: 65 years or above
• AMD group inclusion criteria: people with AMD
  • Mean duration of VI 5.14 years (SD 4.99), (1-24 years)
• Control group inclusion criteria: people with no VI and matched on gender, age, marital status to AMD group

<table>
<thead>
<tr>
<th>Gender (N)</th>
<th>Age (years)</th>
<th>Marital status (N)</th>
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<tbody>
<tr>
<td></td>
<td>F</td>
<td>M</td>
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<tr>
<td>AMD</td>
<td>30</td>
<td>10</td>
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<tr>
<td>Control</td>
<td>30</td>
<td>10</td>
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</tbody>
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Methods

Procedure

• Participant recruitment:
  • **Experimental group**: Eye Clinic of Semmelweis University, Budapest
  • **Control group**: four retirement communities in Budapest, three in the countryside

• Assessment individually by the first author

Assessment tools

1. **Functional Vision Questionnaire**
   5 questions (transportation, reading, watching TV, filling a cheque, face recognition, using of [medical] aids)

2. **Social Relationship Network Questionnaire** (English Longitudinal Study of Aging)
   25 questions were selected and translated in this study

3. **Geriatric Depression Scale (GDS)**
   30 questions (long form), Hungarian version
Results

1. Social activity and participation

- Membership of clubs, organizations:
  - Significantly less people with AMD (18) are members, than in the control group (31) ($\chi^2=8.901 \ p=0.003$)

- Frequency of going to community programs, events
  - AMD elderly less often (27.68 times/year), than the members of control group (48.25 times/year), significant difference ($t=-2.516 \ p=0.014$)

Non significant

- Number of membership:
  - People in both groups are members of 1 club or organization ($t=-0.607 \ p=0.546$).

- Social activity index (museum, theatre, restaurants, cinema)
  - Experimental group: 6.65 p; Control group: 7.43 p ($t=-1.417 \ p=0.161$)
Results

Activity and participation

Members of clubs (person)

- AMD
- Control

Going to community programs (times/year)

- AMD
- Control

Number of membership

Social activity index (score)

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2. Life satisfaction and sense of control

• The life satisfaction index
  • Experimental group: 28,08 p; Control group: 29,58 p. (t=-1,455 p=0,150)

• The sense of control index
  • Experimental group: 26,30 p; Control group: 27,25 p. (t=-0,667, p=0,506)

  Lower points were found, but no significant differences

• Correlations between:
  • life satisfaction and sense of control (r=0,43 p=0,006)
  • life satisfaction and depression (r=-0,84 p=0,001)
  • sense of control and depression (r=-0,43 p=0,006)
Results

Satisfaction and control scores

![Bar chart showing life satisfaction and sense of control scores for AMD and control groups.](chart.png)
3. Depression

- Depression among the elderly (Geriatric Depression Scale - GDS)
  - Mean scores of GDS under clinical depression
    - AMD: 8.90 (SD: 5.068)
    - Control: 7.75 (SD: 4.871)
    The difference was not significant (t=1.035 p=0.304)

- Gender differences in depression
  - AMD: females 9.2; males 8 (ns.)
  - Control: females 7.8; males 7.6 (ns.).
  - Total sample: females 8.5, males 7.8 (ns.)
  No significant differences in connection to gender
Results

GDS scores (N of participants)

0-9 „normal“

10-19 „mild depr.”

20-30 „severe depr.”
Discussion & Conclusion

- Social participation is more difficult with AMD
  - Social support and factors beyond AMD are essential

- The effect of AMD on life satisfaction and sense of control were not proven, but tendentiously lower scores were found

- The mean score of depression was not significantly higher
  - BUT: 2 AMD participants with severe depression were found
  - Important in personal level

- Further researches needed
  - Comprehensive, representative
  - Different aetiologies of visual impairment
THANK YOU!

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