

# Coping and its importance for quality of life in patients with multiple sclerosis

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## Background

Multiple sclerosis (MS), like most common neurological disease occurring in young adults [1], forces patients to cope with many disabling symptoms of both physical and mental health [2-3]. The aim of this study is to explore whether different types of coping (problem-focused, focused on getting support and focused on stopping unpleasant emotions and thoughts) are associated with different levels of physical and mental QoL (PCS, MCS).

## Methods

**SAMPLE**  
N=124, 76.6% women, 40.9±9.2 years  
Response rate: 79.6%

**MEASURES**  
Kurtzke Expanded Disability Status Scale (EDSS) – physical functioning  
Coping Self-efficacy Scale (CSE)  
- Problem-focused coping (12 items)  
- Coping focused on getting support (5 items)  
- Coping focused on stopping unpleasant emotions and thoughts (9 items)  
SF-36 (Quality of Life) - 2 dimensions: PCS (21 items) and MCS (14 items)

**ANALYSES**  
Multiple linear regression was used to determine predictors for PCS and MCS  
- Dependent variables: PCS, MCS  
- Independent variables: Age, Gender, EDSS and three types of CSE

## Results

All three models with different types of coping were associated with MCS (explained variance of problem-focused, focused on getting support and focused on stopping unpleasant emotions and thoughts was 28%, 24% and 35%, respectively), but these types of coping did not explain the variance in PCS. The model with stopping unpleasant emotions and thoughts explained the highest variance among three studied coping types.

FIGURE 3 Beta coefficients of the variables in the coping models for PCS

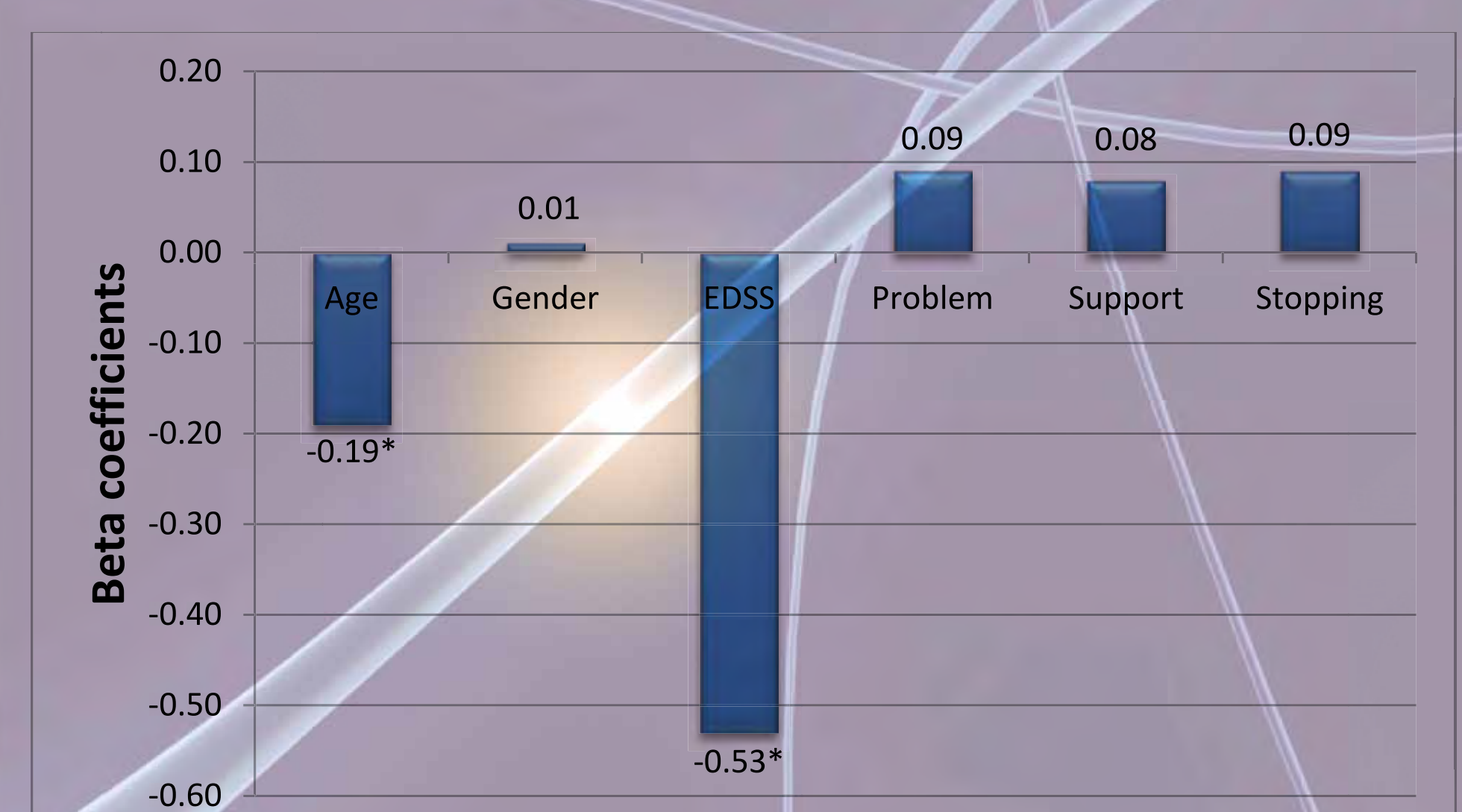


FIGURE 4 Beta coefficients of the variables in the coping models for MCS

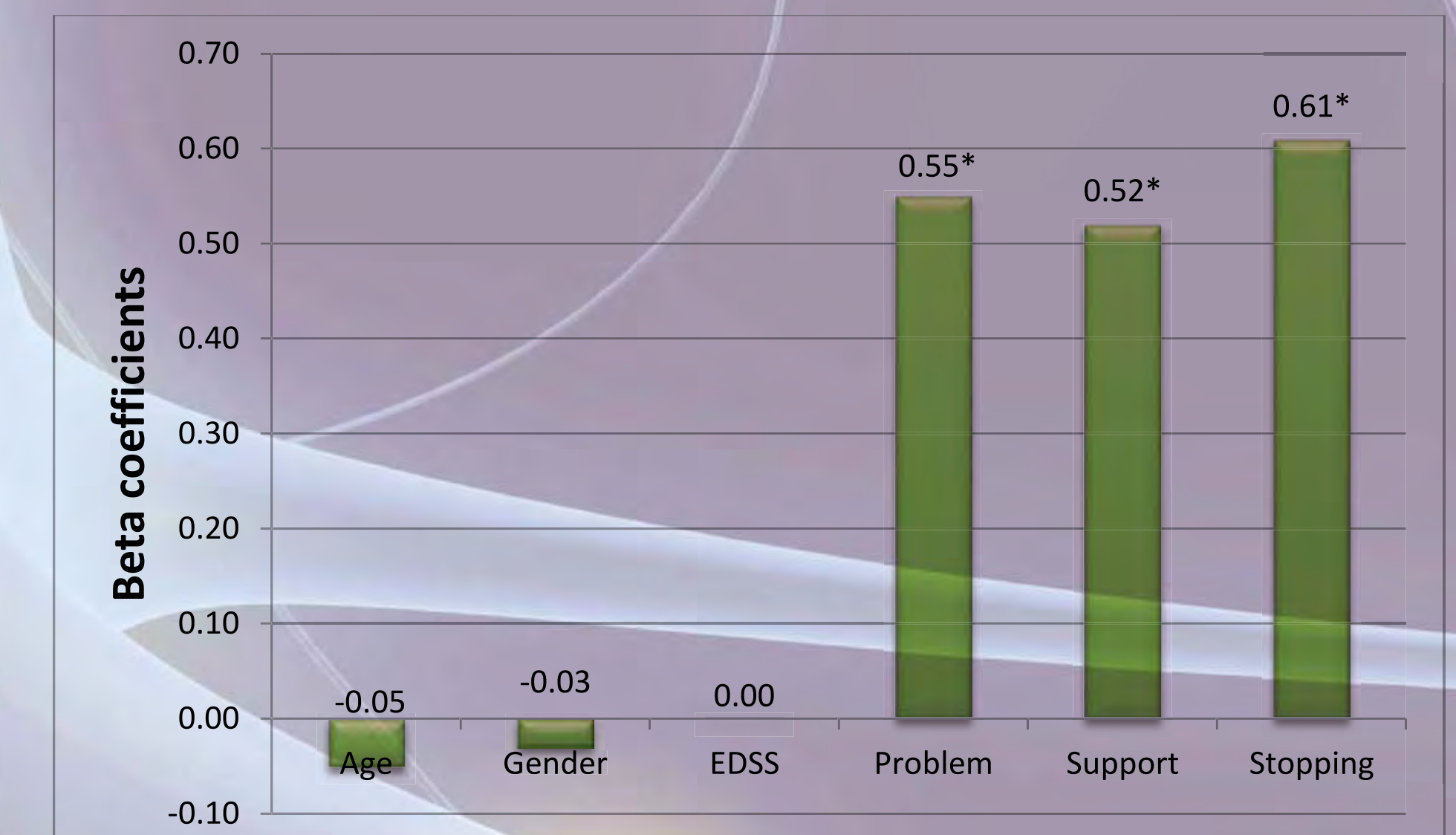


FIGURE 1 Explained variance by different coping models in PCS

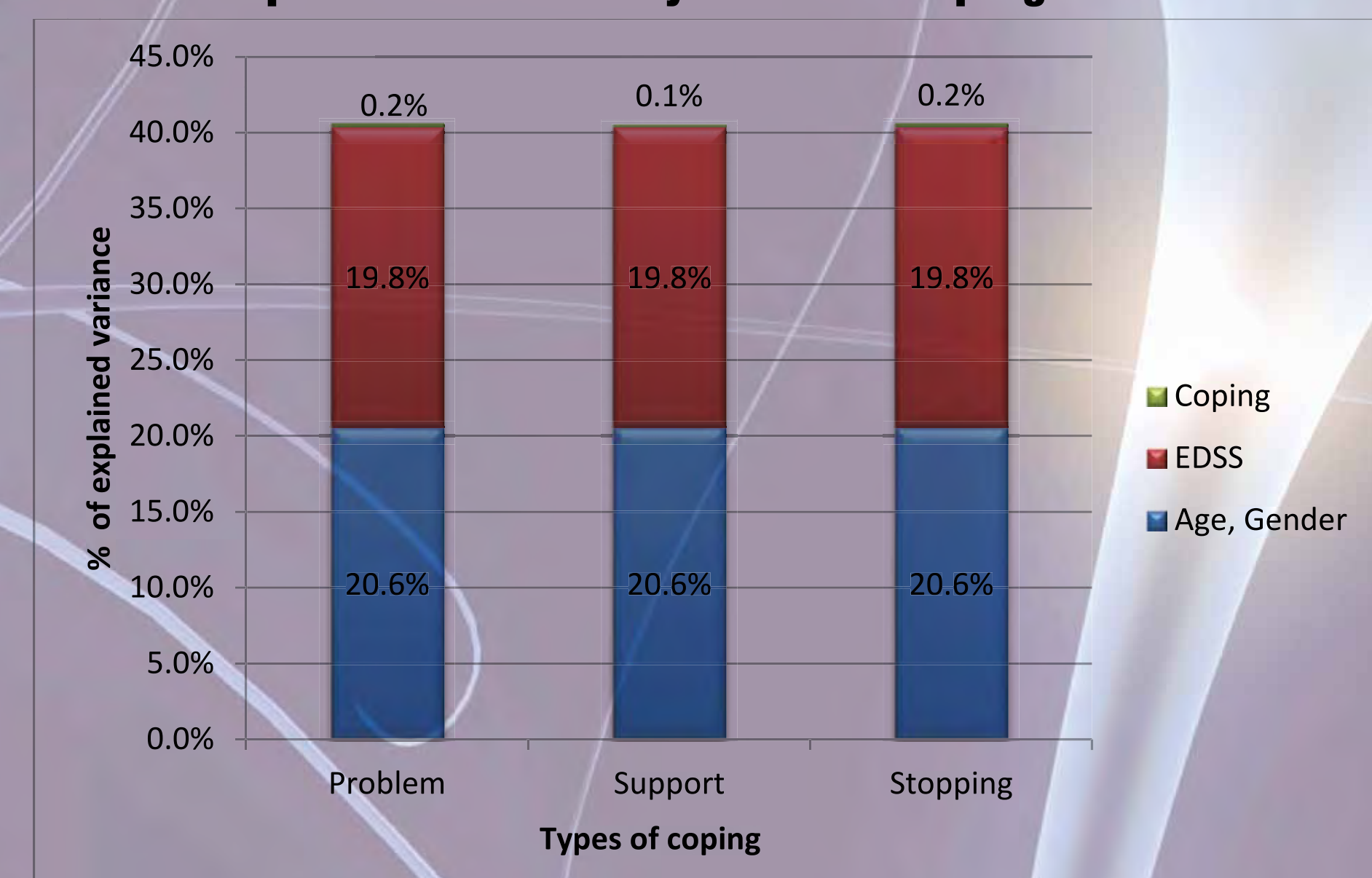
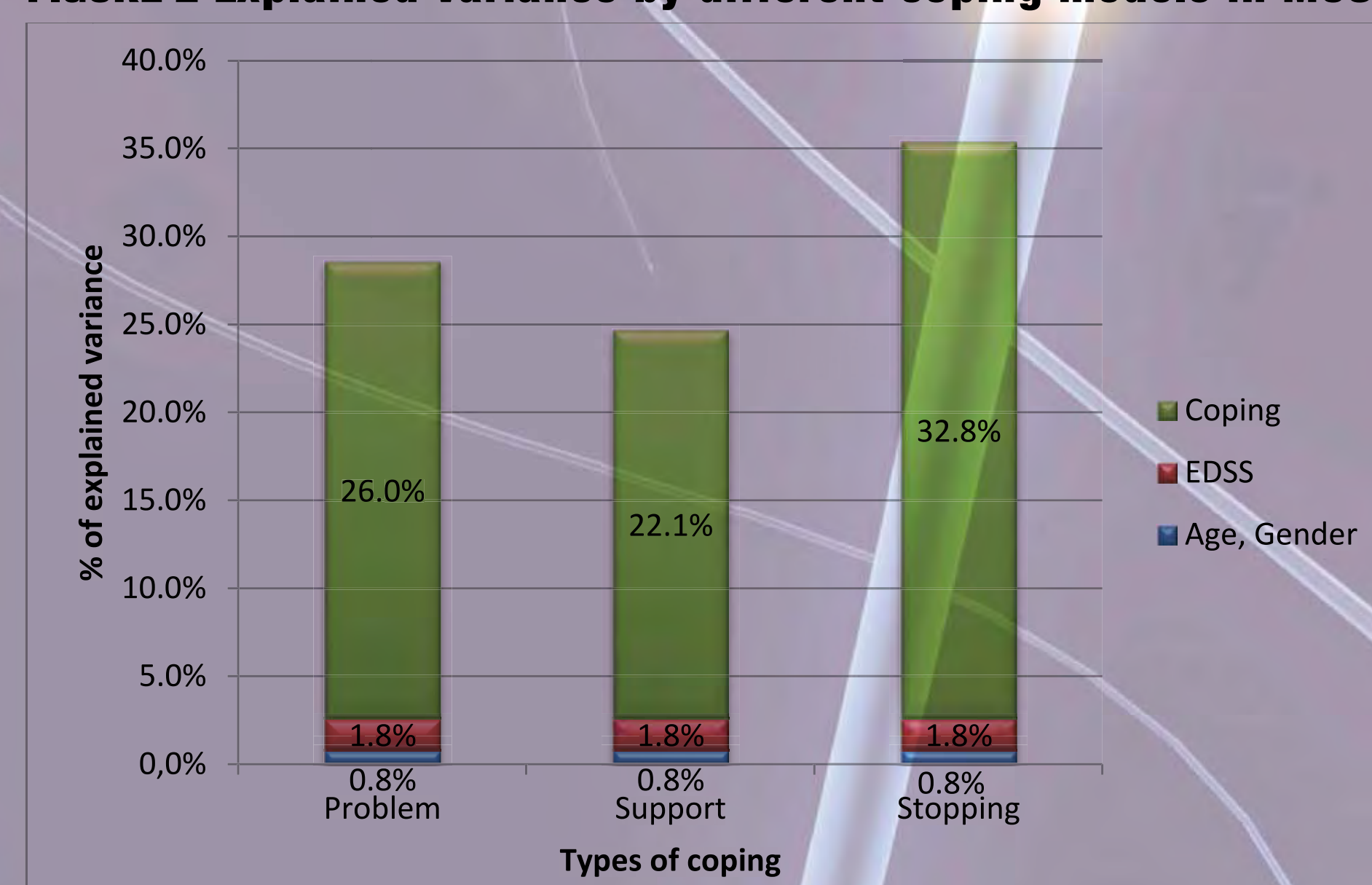


FIGURE 2 Explained variance by different coping models in MCS



## Conclusions and practice implications

Stopping unpleasant emotions and thoughts and not thinking about the disease were shown to be possibly adaptive and useful for patients with MS. This type of coping, often considered to be maladaptive, proved to be helpful, especially in MCS, as did the other two studied coping types, though to a lesser extent.

Physicians, caregivers and patients themselves should be educated about various ways of coping with MS. Patients should be encouraged to live their lives without constant worries about their symptoms or the progress of their disease, thus improving their mental quality of life.

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## SUPPLEMENT

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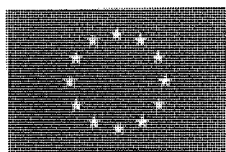
*Portomaso, St. Julian's, Malta, 8–10 November 2012*

ABSTRACT SUPPLEMENT

*Guest editors: Julian Mamo, Dineke Zeegers Paget*

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This publication arises from the conference "5th European public health conference" which has received funding from the European Union in the framework of the Health Programme.



### Conclusions

Education, occupational class, and individual income remained all independent determinants of sickness absence. The absolute inequalities remained large from 2001 to 2011,

but relative importance changed. The results reflect also overall increase in educational level and decrease of the number of manual workers in the workforce. Increase of the importance of individual income needs more research.

## M.7 QUALITY OF LIFE IN CHRONIC DISEASES

### The associations between adolescent patients' self-rated physical and mental health, and their parents' mental well-being

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#### Background

End-stage renal disease (ESRD), is a progressive chronic disease with serious consequences on quality of life of patients and also their family members. Both the patients and parents experience a variety of psychosocial strains which may have adverse effects on social and family life. Previous studies focused either on adolescents' or parents' health but did not evaluate the association between adolescent's physical and mental health and their parents' well-being. The aim of this study was to assess the self-rated physical and mental health of adolescents with ESRD and to explore their relationships with their parents' well-being.

#### Methods

The sample consisted of all adolescents with ESRD in Slovakia treated by dialysis or after receiving kidney graft; n=21 patients of age 14–19 years (15.97 ± 2.63 years, 28.6% girls). Medical and sociodemographic data were obtained from medical records and a structured interview. Self-rated health was measured using the Short Form Health Survey 36 (SF-36) from which the Physical and Mental Components Summary (PCS, MCS) were calculated. The adolescents' parents (age 41.14 ± 6.27 years; 81.0% mothers) completed forms for distress (PSI, GHQ-12) and anxiety and depression (HADS). Data were analysed using linear regression analyses with the bootstrap procedure.

#### Results

Adjusted for patients' age, gender and treatment modality, patients' PCS was significantly associated with their parents' psychological distress (B = 0.16, 95%CI = 0.01; 0.32), depression (B = 0.17, 95%CI = 0.00; 0.33) and social dysfunction (B = 0.17, 95%CI = 0.00; 0.33). Patients' MCS was not associated with parents' mental well-being.

#### Conclusions

There is a significant association between self-rated physical health of adolescents with ESRD and their parents' well-being. Support should thus be targeted both at adolescent ESRD patients and at their parents.

### Depression and diabetes: are there any consequences on self-care?

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#### Background

Diabetes is a medical condition growing in number swiftly. The medical community agrees that optimal outcomes in diabetes require diligent self-management, including eating a healthy diet, exercising, and regular glucose monitoring. Unfortunately among diabetic patients depression is twice as common as compared with subjects without diabetes. Depression not only affects mood but compromises functioning as well.

#### Methods

In the present cross sectional study, we investigated the presence of depression and its consequences of self management of diabetes. in a representative sample of 477 diabetics, in evidence of the ambulatory services of two major hospitals from Romania, in 2011. The patients were asked to answer to a questionnaire with demographical items. Self management behaviors were evaluated by using the revised version of the Summary of Diabetes Self-Care Activities and The Patient Health Questionnaire was used to assess depressive illness. Important elements of evolution and treatment were obtained from their medical records. Data was statistically analyzed

#### Results

The sample was in majority formed by type 2 diabetics, average age being 53.5 (min: 18; max 85). Depression was found at 14.5% of the sample, major depression at 8.2%. Depression increased with age and was more frequent for women; only major depression correlated significantly with gender (exact sig. two sided = .036). Depressed patients were prone not to know the last value of their glycated hemoglobin. Depression (major or not) predicted an inadequate behavior regarding a minimal exercising plan (at least 30 min per day) (U = 911, z = -3.17, p = .002, r = -.25). Though non statistically significant, the number of days per month in which the diet plan and the foot hygiene measures were carried out was smaller for depressive patients.

#### Conclusions

This study highlights suboptimal coping with self care management measures in patients with depression. These patients need support for self-management activities such as lifestyle modifications and medication adherence. Further research is needed to evaluate whether integrating depression screening and treatment into comprehensive care of diabetes could enhance self-management and patient outcomes.

### Coping and its importance for quality of life in patients with multiple sclerosis

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## Background

Multiple sclerosis (MS) is a chronic inflammatory disease of the central nervous system that causes high levels of distress for patients. The aim of this study was to analyse the associations between coping strategies used to be related to MS, and to the physical and mental components of health-related quality of life (HRQoL).

## Methods

The study comprised 109 MS patients (response rate 78.4%) from Eastern Slovakia (78% women, mean age  $40.0 \pm 9.2$ ). Patients filled in the Short-Form Health Survey (SF-36) measuring HRQoL and the Coping Self-Efficacy Scale (CSE) measuring three coping strategies: problem-focused coping, getting support from family and friends and stopping unpleasant emotions and thoughts. Disability was assessed using the Expanded Disability Status Scale (EDSS). The associations between EDSS, CSE and SF-36 were analysed with linear regression using the both components of the SF-36, the Physical Component Summary (PCS) and the Mental Component Summary (MCS).

## Results

EDSS and age were significantly associated with PCS, but not with MCS. All three types of coping strategies showed a significant association with MCS: problem-focused coping ( $\beta^2 = 0.58$ ,  $p < 0.05$ ), coping focused on getting support ( $\beta = 0.53$ ,  $p < 0.05$ ), and coping focused on stopping unpleasant emotions and thoughts ( $\beta = 0.62$ ,  $p < 0.05$ ), but not with PCS. The regression models for all three coping types explained 30%, 24% and 36%, respectively, of the MCS total variance. PCS was explained predominantly by EDSS and age. Other variables did not show any significant association with PCS or MCS.

## Conclusions

An association between three types of coping and MCS was found. Stopping unpleasant emotions and thoughts explained most of the variance in the MCS. Thus patients, their caregivers and health professionals might be educated about effective coping strategy like decreasing negative emotions and thoughts. This could improve the mental quality of life of MS patients.

## The benefits of nature-culture interplay on health, environment and wellbeing-Three evaluation studies

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## Introduction

Researchers have investigated the potential of nature-culture-health activities in terms of their health-promoting properties. The shaping of health-promoting settings at work, in hospitals, in schools, and in local communities has therefore been significantly supported by the WHO.

## Aim

To present results from three evaluation studies focusing on how art, music, nature and culture have a beneficial impact on health and wellbeing.

## Method

The first evaluation study describes the subjective experiences of people partaking in nature-culture-health activities at the National Centre for Nature-Culture-Health (NaCuHeal) in Asker, a municipality west of Oslo. The second evaluation study highlights the way that music can act as a sort of folk-medical practice in our contemporary culture to maintain, improve, or change health status, though it is administered in a non-professional setting. The third evaluation paper presents results from a study conducted by Eastern Norway Research Institute [ENRI] in collaboration with the Fron Rehabilitation Centre, Norway in 2008–2009. Qualitative methods were used. Patterns, tendencies, and main characteristics have been explored. A

total number from the three evaluations consists of ninety ( $n = 90$ ) in-depth ethnographic interviews and open narratives from men and women (age, 23–79) with long-term illnesses or diseases.

## Results

A common theme, and hence a major finding, is that nature-culture-health experiences may, from a salutogenic perspective, help participants to construct a meaning, to identify coping mechanisms, and to revitalize the energetic and resourceful parts of the self. Through participation in Nature-Culture-Health activities, hidden resources and creativity are awakened. Participants feel good about themselves and what they do is appreciated. In this way, one can strengthen the salutogenic factors in a person's life.

## Conclusion

These evaluation studies indicate how art, music, and nature-culture-health activities may have a beneficial impact on health and wellbeing, and hence be useful for rehabilitation. A salutogenic approach could create a solid theoretical framework for health promotion and it may counteract events leading to sickness absence.

## Attending religious services, depression and health-related quality of life in Parkinson's disease patients

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## Background

Recent studies have shown a significant inverse association between attending religious services and depressive symptoms across the general population and in clinical samples. Religious acts rather than religious orientation seem to dominate the relationship between religiosity and psychological well-being. We aimed to explore how depression is associated with health-related quality of life (HRQOL) in patients with Parkinson's disease (PD) who attend religious services and in those who do not.

## Methods

The sample consisted of 124 patients (47.6% female; mean age  $68.1 \pm 8.4$  years; mean disease duration  $6.3 \pm 5.5$  years). Attending religious services was obtained from a self-report sociodemographic questionnaire (Do you attend a religious service? Yes ( $N = 81$ )/No ( $N = 43$ )). Disease severity was measured using the Unified Parkinson Disease Rating Scale (UPDRS), depression with the Hospital Anxiety and Depression Scale (HADS; subscale HADS-D) and HRQOL with the Parkinson's Disease Questionnaire-39. Data were analysed using multiple linear regression.

## Results

The model consisting of age, education, disease duration, disease severity and depression explained 64% of the total variance of HRQOL in PD patients attending religious services, of which 14% was explained by depression. The above model explained 80% of the total variance of HRQOL in the group of PD patients who did not attend religious services, of which 38% was explained by depression.

## Conclusions

It seems that the association between depression and HRQOL differs between Parkinson disease patients who attend religious services and those who do not. Our results underline a very recent research finding showing that an extrinsic orientation to religion might protect or might delay the onset of depression.