20 Gennaio 2012

Le malattie tipiche della terza e quarta età

Gruppo di ricerca geriatrica

La riabilitazione del paziente anziano depresso

Sara Morghen

Outline

- Introduzione
- La depressione nel paziente ospedalizzato
- La depressione in riabilitazione
- Quale influenza?
- Strategie riabilitative
- Conclusioni

Introduzione

- Depression is one of the most common psychiatric disorders in old age.

- There is no sharp demarcation between a case and a non case. Depression is a continuum, ranging from feeling sad to experiencing major depression.

Introduzione

- Although treatment is effective for older patients as for younger adults, the condition is often under-recognized and untreated (BMJ 2011; 343).

- Up to one-third of all depressed elderly seen by primary care physicians are not identified as depressed (Clin Psychol 2005; 12(3): 321-335.

Perché?

- Atteggiamento ageista
- Scarsa attenzione al problema da parte dei MMG
- Sovrapposizione sintomi depressione/demenza
- Multiple manifestazioni cliniche

Table 1. Presentation

American Psychiatric Association DSM-IV-TR criteria

- Five or more of the following symptoms present for a minimum of 2 weeks:
  - Depressed mood
  - Loss of interest or pleasure in activities
  - Changes in weight or appetite
  - Insomnia or hypersomnia
  - Psychomotor agitation or retardation
  - Low energy
  - Feelings of worthlessness
  - Poor concentration
  - Recurrent suicidal ideation or suicide attempt

From Lapid, M. I., & Rummans, T. A. (2003). Evaluation and management of geriatric depression in primary care. Mayo Clinic Proceedings, 78, *1423–1429.*

Atypical presentation of depressed older adult

- Deny sadness or depressed mood
- May exhibit other symptoms of depression
- Unexplained somatic complaints
- Hopelessness
- Helplessness
- Anxiety and worries
- Memory complaints (may or may not have objective signs of cognitive impairment)
- Anhedonia
- Slowed movement
- Irritability
- General lack of interest in personal care

From Gallo, J. J., & Rabins, P. V. (1999). Depression without sadness: alternative presentations of depression in late life. American Family Physician, *60(8), 820–826.*

Perché?

- Atteggiamento ageista
- Scarsa attenzione al problema da parte dei MMG
- Sovrapposizione sintomi depressione/demenza
- Multiple manifestazioni cliniche
- Atteggiamento del paziente

Do Depressed Older Adults Who Attribute Depression to "Old Age" Believe It Is Important to Seek Care?

Catherine A. Sarkisian, MD, MSPH, Mary H. Lee-Henderson, BA, Carol M. Mangione, MD, MSPH

OBJECTIVE: **To determine whether depressed older adults who attribute becoming depressed to "old age" rather than illness are more likely to believe it is not important to seek treatment for depression.**

DESIGN: **Cross-sectional mailed survey.**

SETTING: **Academically affiliated primary care physicians' network.**

PARTICIPANTS: **Surveys were mailed to 588 patients age ≥65 years who were randomly identified from patient lists of 20 physicians. Surveys were returned by 429 patients (73%). Patients were eligible for this study if they scored ≥2 points on the 5-item Geriatric Depression Scale (n = 94) and were not missing key variables (final n = 90).**

MEASUREMENTS AND MAIN RESULTS: **Of the 90 depressed patients, 48 (53%) believed that feeling depressed was very important to discuss with a doctor. In unadjusted analysis, older adults who did not believe it is very important to discuss feeling depressed with a doctor were more likely to attribute becoming depressed to aging (41% vs 17%; P = .012). In a logistic regression model adjusting for sociodemographic characteristics, number of impairments in basic and instrumental activities of daily living, medical comorbidity, and physical (PCS-12) and mental (MCS-12) component summary scores from the Medical Outcomes Study Short-Form-12, depressed older adults who attributed depression to aging had a 4.3 times greater odds than those who attributed depression to illness to not believe it is very important to discuss depression with a doctor (odds ratio [OR], 4.3; 95% confidence interval [CI], 1.3 to 14.5).**

44%: non è molto importante discutere la condizione col proprio MMG

Table 2. Independent Association Between Attributing Depression to Aging and Responding that When Older People Feel Depressed, This is Not Something "Very Important" to Discuss With a Doctor*

Characteristic	OR	95% CI	*P* Value
Attributing depression to aging	4.3	1.3 to 14.5	.017

** Logistic regression model adjusted for age, gender, nonwhite ethnicity, low income, # activities of daily living unable to do without assistance, # comorbidities, MCS-12, PCS-12, and clustering at the level of the physician. None of these other characteristics were significantly associated with responding that when older people feel depressed, this is not something "very important" to discuss with a doctor (P > .1 for all).*
CI, confidence interval; OR, odds ratio.

J Gen Intern Med 2003; 18: 1001-1005

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La depressione nel paziente ospedalizzato

- Può essere pre-esistente, o di nuova insorgenza
- Physical illness can cause or be the result of depression
- Depression may lead to changes in behavior which bring about physical problem, such as non-compliance with medication, poor nutrition and reduced mobility (Postgrad Med J 2000; 76: 153-156).
- On the other hand, many medical conditions are associated with a higher risk to develop depression

Box 1 Risk factors for depression in elderly people[30]

Physical factors

- Chronic disease, such as diabetes, ischaemic heart disease, heart failure, chronic obstructive pulmonary disease
- Acute myocardial infarction
- Organic brain disease: dementia, stroke, Parkinson's disease, cerebrovascular disease
- Endocrine/metabolic disorders: thyroid disease, hypercalcaemia, B12 and folate deficiency
- Malignancy
- Chronic pain and disability

Psychosocial factors

- Social isolation
- Change in financial circumstances
- Being a carer
- Change of role and loss of social status
- Bereavement and loss
- Difficulty in adapting to illness/pain/disability
- Poor defences against anxiety about death
- History of depression
- Being in institutional care

BMJ 2011; 343

Depressive Symptoms and 3-Year Mortality in Older Hospitalized Medical Patients

Kenneth E. Covinsky, MD, MPH; Eva Kahana, PhD; Marshall H. Chin, MD, MPH;
Robert M. Palmer, MD, MPH; Richard H. Fortinsky, PhD; and C. Seth Landefeld, MD

Table 2. Characteristics of Patients at Hospital Admission*

Characteristic	Patients with ≤ 5 Depressive Symptoms (n = 376)†	Patients with ≥ 6 Depressive Symptoms (n = 197)†	P Value
Median age (interquartile range), *y*	79.2 (75.4–83.8)	78.7 (74.8–83.0)	>0.2
Women, %	66	71	>0.2
Nonwhite ethnicity, %	40	38	>0.2
Living alone, %	43	44	>0.2
Median Charlson Comorbidity Index score (interquartile range)	2 (1–3)	2 (1–3)	<0.001
Mean Charlson Comorbidity Index score ± SD	2.0 ± 2.1	2.6 ± 2.3	0.004
Comorbid conditions, %			
Previous myocardial infarction	19	20	>0.2
Congestive heart failure	20	37	<0.001
Chronic obstructive pulmonary disease	14	26	<0.001
Diabetes	17	19	>0.2
Cancer	20	20	>0.2
Median APACHE II score (interquartile range)	12 (9–15)	12 (10–15)	>0.2
Median cognitive function score (interquartile range)‡	19 (15–20)	18 (14–20)	0.15
Median dependent activities of daily living (interquartile range), *n*	1 (0–4)	3 (0–5)	<0.001

* APACHE = Acute Physiology and Chronic Health Evaluation.
† Depressive symptoms were measured with the 15-item Geriatric Depression Scale.
‡ Measured with the first 21 items of the Folstein Mini-Mental State Examination.

34%: sintomi depressivi

Arch Inter Med 1999; 130:563-569

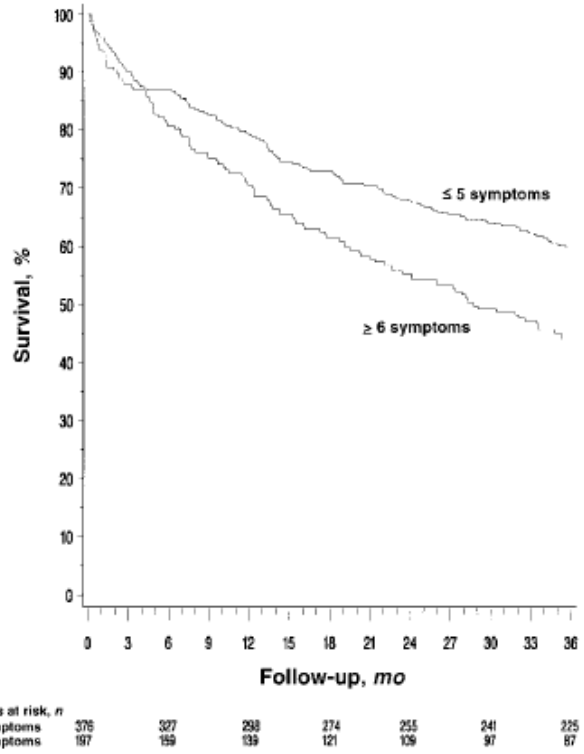

Figure. Mortality over 3 years (1095 days) in patients who had six or more depressive symptoms compared with patients who had five or fewer symptoms.

Table 3. Association between Depressive Symptoms and 3-Year Mortality

Variable in Model	Hazard Ratio (95% CI)					
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6*
≥6 depressive symptoms†	1.56 (1.22–2.00)	1.53 (1.20–1.96)	1.38 (1.07–1.76)	1.47 (1.14–1.88)	1.49 (1.16–1.91)	1.34 (1.03–1.73)
Physiologic severity (per point)‡	–	1.08 (1.05–1.11)	–	–	–	1.05 (1.02–1.08)
Comorbid illness (per point)§	–	–	1.23 (1.17–1.28)	–	–	1.21 (1.15–1.26)
Dependence in activities of daily living (per dependency)‖	–	–	–	1.11 (1.05–1.17)	–	1.07 (1.01–1.14)
Cognitive function (per error)¶	–	–	–	–	1.05 (1.02–1.09)	1.04 (1.00–1.07)

* Model also adjusts for age, ethnicity, sex, and living alone.

Arch Inter Med 1999; 130:563-569

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ORIGINAL ARTICLE

Geriatric Depression, Medical Diagnosis, and Functional Recovery During Acute Rehabilitation

Jeffrey A. Cully, PhD, Jeffrey D. Gfeller, PhD, Richard A. Heise, PhD, Michael J. Ross, PhD, Cayla R. Teal, PhD, Mark E. Kunik, MD, MPH

Objective: to examine and compare the prevalence and functional impact of depressive symptoms for older adult stroke and non-stroke rehabilitation inpatients (509 patients).

Table 1: Participant Demographics by Group Based on Diagnosis and Depression

	Stroke		Nonstroke	
Characteristic	No Depression	Depression	No Depression	Depression
n (%)	141 (68.1)	66 (31.8)	207 (68.5)	95 (31.5)
Women, n (%)	79 (56.0)	45 (68.2)	137 (66.2)	50 (52.6)
Age (y)	75.04±7.75	77.89±8.02	74.94±8.00	77.11±7.49
LOS (d)	17.52±7.72	19.45±8.35	15.30±7.31	16.39±8.43
GDS total	4.84±2.93	15.00±3.92	5.18±2.99	15.93±4.41

NOTE. Values are mean ± standard deviation (SD) or as indicated.

Stroke → 31.8%

Non stroke → 31.5%

Arch Phys Med Rehab, 2005

Table 2: ANCOVA for Depression and Diagnosis

Source	*df*	Mean Square	F	Partial η^2
FIM self-care discharge score (n=421)				
LOS	1	42.69	4.60	.011
Age	1	38.64	4.17*	.010
Sex	1	22.82	2.46	.006
Self-care admission score	1	3459.27	373.07†	.475
Diagnosis‡	1	3.54	0.38	.001
Depression	1	91.64	9.88†	.023
Diagnosis by depression	1	20.90	2.25	.005
Error	413	9.27		
FIM body mobility discharge score (n=420)				
LOS	1	138.66	6.72†	.016
Age	1	36.48	1.77	.004
Sex	1	9.66	0.47	.001
Body mobility admission score	1	6821.69	330.76†	.445
Diagnosis‡	1	46.45	2.25	.005
Depression	1	214.02	10.38†	.025
Diagnosis by depression	1	11.56	0.56	.001
Error	412	20.63		
FIM communication/social interaction discharge score (n=420)				
LOS	1	207.32	35.60†	.080
Age	1	124.60	21.39†	.049
Sex	1	14.31	2.46	.006
Communication/social interaction admission score	1	9413.90	1616.40†	.797
Diagnosis‡	1	0.20	0.34	.000
Depression	1	25.79	4.43*	.011
Diagnosis by depression	1	19.48	3.35	.008
Error	412	5.24		
FIM sphincter control discharge score (n=419)				
LOS	1	3.93	0.75	.002
Age	1	7.39	1.41	.003
Sex	1	44.45	8.49†	.020
Sphincter control admission score	1	1400.73	267.49†	.394
Diagnosis‡	1	48.78	9.32†	.022
Depression	1	58.30	11.13†	.026
Diagnosis by depression	1	27.00	5.16*	.012
Error	411	5.24		

*$P<.05$.
†$P<.01$.
‡Diagnosis was broken down into 2 groups (stroke, nonstroke).

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Adverse effects of depression and cognitive impairment on rehabilitation participation and recovery from hip fracture

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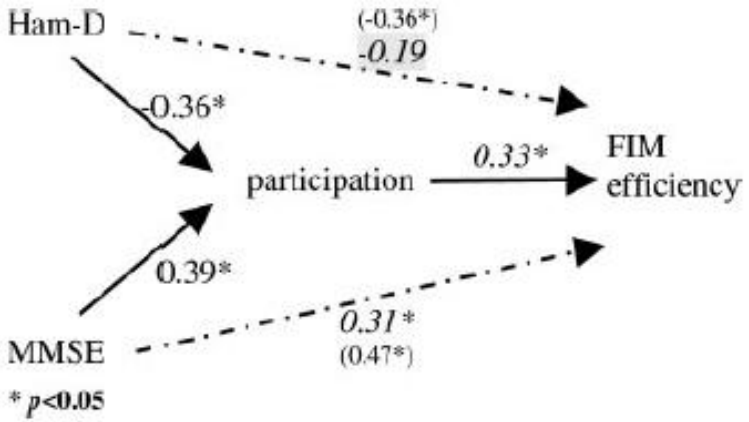
Objectives This study examines the effects of depression and cognitive impairment in elderly hip fracture patients receiving inpatient rehabilitation. Our goal was to determine whether any association of depression and cognitive impairment with rehabilitation outcome is accounted for by more immediate effects of these variables on rehabilitation participation.
Methods We measured depression using the Hamilton Rating Scale for Depression (Ham-D), cognition using the Mini Mental State Examination (MMSE), and rehabilitation outcomes using the motor scale of the Functional Independence Measure (motor FIM) in a prospective observational study of 57 elderly rehabilitation hospital patients admitted to a university-affiliated, freestanding rehabilitation hospital with primary diagnosis of hip fracture. We also assessed rehabilitation participation, to determine whether this accounted for (mediated) any relationship of depression and cognitive impairment with rehabilitation outcome.

57 pz; età media: 80.3; MMSE medio: 25.3

Table 1. Correlations among demographic and clinical variables

	Ham-D	MMSE	Rehab partic	Motor FIM efficiency	Age	Length of stay	CIRS	Admission motor FIM	Change in motor FIM
Ham-D	—	−0.23	−0.46[c]	−0.44[c]	0.10	0.57[c]	0.17	−0.18	−0.18
MMSE		—	0.47[c]	0.52[c]	−0.23	−0.27[a]	−0.23	0.50[c]	0.50[c]
Rehab partic			—	0.57[c]	0.16	−0.32[a]	−0.32[a]	0.48[c]	0.60[c]
Motor FIM efficiency				—	−0.09	−0.71[c]	−0.24	0.49[c]	0.64[c]
Age					—	0.23	−0.12	−0.27[a]	0.10
Length of stay					—	—	0.02	−0.40[b]	−0.19
Admission motor FIM					—	—	—	—	0.15

[a] $p < 0.05$.
[b] $p < 0.01$.
[c] $p < 0.001$.
Ham-D = Hamilton Rating Scale for Depression; MMSE = Mini Mental Status Examination; Rehab partic = rehabilitation participation scale mean score; CIRS-G = Cumulative Illness Rating Scale for Geriatrics; Motor FIM Efficiency = (discharge motor FIM—admit motor FIM)/length of stay.



Factors Affecting Short-Term Rehabilitation Outcomes of Disabled Elderly Patients With Proximal Hip Fracture

Avital Hershkovitz, MD, MHA, Zulicha Kalandariov, MD, Vered Hermush, MD, Roni Weiss, MD, Shai Brill, MD, MPH

Objective: To identify factors associated with postacute rehabilitation outcome of disabled elderly patients with proximal hip fracture.

Setting: Geriatric rehabilitation center.

Participants: One hundred thirty-three older patients.

Interventions: Not applicable.

Main Outcome Measures: FIM instrument, motor FIM score, absolute functional gain on the FIM and motor FIM scores, relative functional gain on the FIM and motor FIM scores, rate of improvement on the FIM and motor FIM scores, proportion of patients discharged to home, and length of stay (LOS).

Results: Mean FIM score improved by 14 points (22%) with a functional gain rate of .56 point per day. No significant differences ($P>.05$) were found between weight-bearing and non–weight-bearing patients regarding the above outcome measures. Functionally independent and cognitively intact patients achieved significantly better score changes and rates of improvement and showed a higher ability to extract their rehabilitation potential than dependent and cognitively impaired patients. Their LOSs were significantly shorter. Patients with latency time (time delay from fracture to operation) of more than 5 days and patients with a history of stroke had significantly longer LOSs. Mini-Mental State Examination score, albumin levels on admission, and prefracture functional status were the most important parameters associated with FIM discharge scores ($r=.756$) and relative functional gain on the FIM ($r=.583$). Depression was the most important factor associated with LOS in patients with weight-bearing instructions on admission. The presence of a caregiver was the significant predictive value variable for returning home.

Conclusions: Cognitive function, nutritional status, preinjury functional level, and depression were the most important prognostic factors associated with rehabilitation success of older patients with proximal hip fracture. Of these, depression and nutritional status are correctable, and early intervention may improve rehabilitation outcome.

Table 6: Multiple Linear Regression Analysis of Significant Admission and Rehabilitation Predictors of LOS*

Predictors	Standardized Coefficient	Standard Error	*P*
Depression	.284	0.297	.004
MMSE score	−.266	0.214	.007
Albumin level	−.217	3.730	.026

*$r^2=.189$.

Arch Phys Med Rehab 2007; 88:916-921

Major Depressive Disorder Predicts Completion, Adherence, and Outcomes in Cardiac Rehabilitation: A Prospective Cohort Study of 195 Patients With Coronary Artery Disease

Walter Swardfager, MSc; Nathan Herrmann, MD, FRCPC; Susan Marzolini, BPHE, MSc; Mahwesh Saleem, BSc; Shale B. Farber, BSc; Alexander Kiss, PhD; Paul I. Oh, MD, FRCPC; and Krista L. Lanctôt, PhD

Table 1. Characteristics of Cardiac Rehabilitation Participants With and Without MDD at Baseline

Characteristic	MDD Diagnosed (n = 43)	MDD Not Diagnosed (n = 152)	*P* Value[a]
Sociodemographic			
Age, mean ± SD, y	60.7 ± 13.9	65.3 ± 10.7	.02
Employed, n (%)	20 (47)	72 (47)	.95
Partnered, n (%)	28 (65)	118 (77)	.07
Male, n (%)	31 (72)	125 (82)	.16
Cardiac factors, n (%)			
Hypertension	21 (49)	82 (54)	.58
PCI	17 (40)	69 (45)	.51
Diabetes	7 (16)	40 (26)	.17
Angina,	12 (28)	34 (22)	.47
Myocardial infarction	20 (47)	73 (48)	.89
CABG	5 (12)	12 (8)	.42
Psychometric			
CES-D score, mean ± SD	28.1 ± 10.4	6.7 ± 6.0	< .001
CES-D ≥ 16, n (%)	40 (93)	11 (7)	< .001
Premorbid depressive episode, n (%)	16 (37)	23 (15)	< .001

[a]Two-tailed significance (Pearson χ^2 or 1-way analysis of variance).
Abbreviations: ASA = acetylsalicylic acid, BMI = body mass index, BP = blood pressure, bpm = beats per minute, CABG = coronary artery bypass graft, CES-D = Center for Epidemiologic Studies-Depression scale, MDD = major depressive disorder, PCI = percutaneous coronary intervention, VO_{2peak} = peak oxygen uptake.

195 pz, 21% MDD
Programma RC ambulatoriale di 48 settimane

No completion of RC:
44,2% MDD vs 28.9 no MDD

J Clin Psychiatry 2011; 72(9):1181-1188

Table 4. Coefficients of Adjusted Regression Models Predicting Cardiac Rehabilitation Noncompletion and Nonadherence[a]

Variable	B	SE	Wald	Adjusted Relative Risk (95% CI)	*P* Value[b]
Noncompletion ($\chi^2_6 = 14.35$)					.03
MDD	.920	.325	8.005	2.51 (1.33–4.75)	.005
Age	–.006	.011	0.351	0.99 (0.97–1.02)	.55
Years of education	.014	.041	0.120	1.01 (0.94–1.10)	.73
Use of an ACE inhibitor	.506	.307	0.099	1.66 (0.91–3.03)	.10
Use of a β-blocker	.289	.319	0.821	1.34 (0.72–2.49)	.37
Use of ASA	.882	.608	2.104	2.42 (0.73–7.96)	.15
Nonadherence ($\chi^2_8 = 20.95$)					.007
MDD	.869	.293	8.774	2.38 (1.34–4.23)	.003
Age	–.014	.009	2.521	0.99 (0.97–1.00)	.11
Years of education	.039	.033	1.385	1.04 (0.98–1.11)	.24
Weeks since event	.001	.005	0.074	1.00 (0.99–1.01)	.79
White	–.092	.278	0.111	0.91 (0.53–1.57)	.74
Use of psychosocial support	–.146	.385	0.144	0.86 (0.41–1.84)	.70
Use of an ACE inhibitor	.569	.241	5.556	1.77 (1.10–2.84)	.02
Use of a β-blocker	.088	.254	0.121	1.09 (1.09–1.79)	.73

[a]Models contain all variables found to influence the unadjusted B for major depression by ≥ 10%.
[b]Two-tailed significance.
Abbreviations: ACE = angiotensin-converting enzyme, ASA = acetylsalicylic acid, MDD = major depressive disorder.

J Clin Psychiatry 2011; 72(9):1181-1188

Depression in Older Patients Admitted for Postacute Nursing Home Rehabilitation

Adam P. Webber, BSc (Hons), MRCP(UK), Jennifer L. Martin, PhD,*† Judith O. Harker, PhD,* Karen R. Josephson, MPH,* Laurence Z. Rubenstein, MD, MPH,*† and Cathy A. Alessi, MD*†*

Table 1. Baseline Patient Characteristics (N = 151)

Characteristic	Depressed* (n = 42)	Not Depressed† (n = 109)	F value	*P*-value
Age, mean ± SD‡	82 ± 7.7	82 ± 6.9	0.06	.81
Female, %§	61.9	55.0		.47
GDS-15 score, mean ± SD (n = 144)‡	8.4 ± 2.8	2.5 ± 1.5	276.6	<.001
CSDD, mean ± SD (n = 7)	8.3 ± 4.2	1.0 ± 1.6	20.1	.02
Caucasian, %§	88.1	94.5		.18
Mini-Mental State Examination score, mean ± SD‡‖	22.1 ± 5.9	22.9 ± 6.9	0.39	.53
Reason for admission, %§				
Medical problem	42.9	45.0		.59
Orthopedic problem				
Hip fracture	14.3	15.6		
Other fracture	7.1	13.7		
Elective joint replacement	9.5	11.0		
Other surgical problem	21.4	11.0		
Stroke	4.8	3.7		

* Fifteen-item Geriatric Depression Scale (GDS-15) score ≥6 (range 1–15) or Cornell Scale for Depression in Dementia (CSDD) score ≥5 (range 0–38).
† GDS-15 <6 or CSDD <5.
‡ Examined using analysis of variance.
§ Examined using chi-square analysis.
‖ Range 0–30; higher scores indicate better cognitive functioning.
¶ Overall *P*-value.

JAGS, 2005

Table 2. Therapy Process and Outcomes (N = 151)

Therapy Process	Depressed* (n = 42)	Not Depressed† (n = 109)	F value	*P*-value
Amount of therapy received, minutes, mean ± SD‡	1,572.0 ± 587.27	1,473.0 ± 696.9	0.66	.42
Therapy quotient‡§	1.05 ± 0.15	1.04 ± 0.18	0.12	.74
Admission mFIM, mean ± SD‡‖	35.4 ± 9.5	37.1 ± 9.1	0.96	.33
Discharge mFIM, mean ± SD‡	52.7 ± 13.9	53.4 ± 13.8	0.08	.78
Discharge mFIM change, mean ± SD‡¶	17.3 ± 9.4	16.1 ± 10.9	0.38	.54
Length of stay in days, mean ± SD‡††	28.5 ± 12.6	22.8 ± 11.2	7.17	.01
mFIM efficiency, mean ± SD‡	0.68 ± 0.40	0.82 ± 0.55	2.2	.14
Discharged to community, n/N (%)#	31/41 (75.6)	92/105 (87.6)		.18
Follow-up mFIM, mean ± SD (n = 98)‡	56.4 ± 22.7	67.0 ± 23.7	4.10	.05
2-month mFIM change, mean ± SD (n = 98)‡**	2.4 ± 16.0	11.5 ± 19.0	4.92	.03
Independent at 2 months, n/N (%) (n = 98)#	9/27 (33.3)	46/71 (64.7)		.04
Living in the community at 2 months, n/N (%) (n = 109)#	29/38 (76.3)	80/93 (86.0)		.18

* Fifteen-item Geriatric Depression Scale (GDS-15) score (range 1–15) score ≥6 or Cornell Scale for Depression in Dementia (CSDD) score ≥5 (range 0–38).
† GDS-15 <6 or CSDD <5.
‡ Variables examined using analysis of variance.
§ Received therapy/prescribed therapy (higher scores indicate better process of therapy).
‖ Motor component of the Functional Independence Measure (mFIM) (range 13–91; higher scores indicate better functioning).
¶ Discharge mFIM–baseline mFIM.
# Variables examined using chi-square analysis.
** 2-month mFIM–discharge mFIM.
†† Normalized scores.

JAGS, 2005

Impact of Mental Disorders on Cost and Reimbursement for Patients in Inpatient Rehabilitation Facilities

Deborah Dobrez, PhD, Allen W. Heinemann, PhD, Anne Deutsch, RN, PhD, CRRN, Elizabeth M. Durkin, PhD, Orit Almagor, MA

Table 2: Regressions of Cost on the Presence of Reported Mood, Major Depression, Anxiety, and Substance Use Disorders, Controlling for Tier and CMG

	Cost Coefficient (95% Confidence Interval)			
Mental Disorder	Mood	Major Depressive Disorders	Anxiety	Substance Use
Mood disorders	433.23† (321.94, 544.52)			
Major depressive disorders		1,641.82† (1163.51, 2120.14)		
Anxiety disorders			247.35* (111.98, 382.72)	
Substance use disorders				−77.32 (−279.98, 125.34)
R^2	.29	.29	.29	.29

*$P<.01$; †$P<.001$.

Table 1: Patient Characteristics by the Presence of a Reported Mental Disorder

	Mood Disorders		Major Depressive Disorders		Anxiety Disorders		Substance Use Disorders	
Variable	Present (n=146,088)	Absent (n=1,000,711)	Present (n=10,431)	Absent (n=1,136,368)	Present (n=40,679)	Absent (n=1,106,120)	Present (n=12,279)	Absent (n=1,134,520)
Age (mean)	72.8†	75.4	72.0†	75.1	73.9†	75.1	66.7†	75.2
Female (%)	70.6†	63.2	67.8†	64.1	79.2†	63.6	32.1†	64.5
Admission motor FIM score (mean)	40.5†	42.0	38.8†	41.8	42.1†	41.8	42.1*	41.8
Admission cognitive FIM score (mean)	26.1†	27.7	24.8†	27.5	27.5	27.5	25.0†	27.5

*$P<.01$; †$P<.001$.

Arch Phys Med Rehab 2010; 91:184-188

Table 3: Impact of Reported Mood, Major Depression, and Anxiety Disorders on Cost for Each of 21 Rehabilitation Impairment Categories

Rehabilitation Impairment Categories	Regression Coefficients ($)		
	Mood Disorders	Major Depressive Disorders	Anxiety Disorders
Stroke	528*	863	229
Traumatic brain injury	390	1397	342
Nontraumatic brain injury	154	793	431
Traumatic spinal cord injury	956	1795	136
Nontraumatic spinal cord injury	267	1206	326
Neurologic	238	1276*	84
Fracture of the lower extremity	341*	1915*	135
Replacement of the lower extremity joint	426*	2013*	400*
Other orthopedic	453*	1712*	−18
Amputation, lower extremity	448	1579	−85
Amputation, nonlower extremity	−78	−1232	−1286
Osteoarthritis	658*	1331	209
Rheumatoid, other arthritis	599	378	69
Cardiac	495	2911*	219
Pulmonary	555*	2973*	457
Pain syndrome	825	2683*	351
Major multiple trauma, nonbrain and spinal injury	511	3533*	771
Major multiple trauma, brain and spinal injury	−1176	−2155	−1514
Guillain-Barré	1641	3286	1362
Miscellaneous	388*	1684	328
Burns	8225	4155	3657

*$P < .002$ (.05/21).

7 RIC → mood disorders

8 RIC → MDD

1 RIC → anxiety disorders

Arch Phys Med Rehab 2010; 91:184-188

Pazienti CdC “Ancelle della Carità” stratificati per presenza-assenza sintomi depressivi Luglio 2009-Dicembre 2011

	Assenza sintomi depressivi (n= 731) **55.4%**	**Sintomi depressivi lievi** (n=277) **21.0%**	**Sintomi depressivi severi** (n=312) **23.6%**	**P**
Età	80.3 ± 7.3	81.7 ± 6.5	81.9 ± 6.2	<.0001
Sesso femminile	488 (66.8)	195 (70.4)	245 (78.5)	<.0001
Vive solo	259 (35.6)	125 (45.3)	139 (44.6)	.003
BMI	25.7 ± 5.5	25.0 ± 5.5	25.5 ± 5.9	.272
Albumina	3.2 ± 0.4	3.2 ± .05	3.3 ± 0.4	.017
APS	1.5 ± 2.2	1.8 ± 2.1	1.8 ± 2.3	.271
Numero farmaci	5.7 ± 2.8	6.2 ± 2.7	6.7 ± 4.3	<.0001
Antidepressivo	111 (15.2)	70 (25.3)	119 (38.1)	<.0001
GDS	2.7 ± 1.5	6.9 ± 0.8	10.9 ± 1.7	<.0001
MMSE	24.2 ± 3.9	23.2 ± 3.8	22.8 ± 3.8	<.0001
Demenza	50 (6.9)	24 (8.8)	33 (10.9)	.104
Delirium	32 (4.4)	13 (4.7)	10 (3.2)	.616
Barthel pre-amm	86.4 ± 15.4	80.8 ± 19.4	76.9 ± 20.3	<.0001
Barthel ingresso	61.3 ± 22.4	56.5 ± 25.0	57.6 ± 25.2	.005
Barthel dimissione	83.9 ± 17.8	76.6 ± 21.4	75.4 ± 22.6	<.0001
Guadagno medio barthel	22.4 ± 17.0	19.8 ± 17.9	16.5 ± 17.3	<.0001
Partecipazione media	4.5 ± 1.0	4.2 ± 1.0	4.1 ± 1.5	<.0001
Durata degenza	28.6 ± 11.7	29.6 ± 12.8	31.2 ± 12.6	.006
Esito negativo	50 (6.8)	22 (7.9)	38 (12.2)	.016

Outline

- Introduzione
- La depressione nel paziente ospedalizzato
- La depressione in riabilitazione
- Quale influenza?
- Strategie riabilitative
- Conclusioni

La specificità della riabilitazione

Physical rehabilitation requires a high degree of patient collaboration, which typically exceeds that required for compliance with relatively brief procedures associated with shorter hospital stays.

Possibili effetti dei sintomi depressivi sul processo riabilitativo

- Il pessimismo induce il paziente a ritenere inutili gli sforzi che il trattamento riabilitativo comporta e ne riduce l'impegno (Gantner et al., Int J Psychiatry in Med, 2003)

- Condizionamento del terapista sulla progettazione dell'intervento riabilitativo → esercizi riabilitativi a minore complessità ed intensità (Bellelli e Trabucchi, 2009)

Possibili effetti dei sintomi depressivi sul processo riabilitativo

Outline

- Introduzione
- La depressione nel paziente ospedalizzato
- La depressione e gli outcome riabilitativi
- Quale influenza?
- Strategie riabilitative
- Conclusioni

The effects of physical exercise on depressive symptoms among the aged: a systematic review

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SUMMARY

Objective To determine the effects of physical exercise on depression or depressive symptoms among the aged.

Method A literature search covering various medical databases was conducted to identify randomised controlled trials (RCT's) about the effects of exercise treatments on depression or depressive symptoms among the aged. The studies were classified according to the baseline depression status of participants and assessed in relation to allocation concealment, blinding at outcome assessment, follow-up and whether intention to treat analysis was used. Studies meeting the inclusion criteria were accepted.

Results Exercise was effective in treating depression among those suffering from minor or major depression and in reducing depressive symptoms among those with a high amount of depressive symptoms at baseline. However, both the allocation concealment and the blinding method were adequately described in only four studies. Furthermore, intention-to-treat analysis was conducted in half of the studies and some follow-up information after the intervention has been published for five studies.

Conclusions Physical exercise may be efficient in reducing clinical depression and depressive symptoms in the short-term among the aged suffering from depression or a high amount of depressive symptoms. More well controlled studies are needed. Copyright © 2006 John Wiley & Sons, Ltd.

Int J Ger Psychiatry 2006; 21:410-418

Effects of a group-based exercise program on the mood state of frail older women after discharge from hospital

L. Timonen[1]*, T. Rantanen[2], T. E. Timonen[3] and R. Sulkava[4]

SUMMARY

Background Older people with somatic illnesses are at increased risk of depression. It is not known whether exercise alleviates depressive symptoms in frail, very old people recuperating from an acute illness.

Objective To determine the effects of a group-based exercise training program on mood.

Methods Sixty-eight women (mean age 83.0, SD 3.9 years) who were hospitalized due to an acute illness, and were mobility impaired at admission, were randomized into group-based 10-week strength training intervention (N = 34) and home exercise control (N = 34) groups. Twenty-four women in the training and 28 in the control group completed the follow-up. Measures of mood state with the Zung Self-Rating Depression Scale (ZSDS) were performed before and after the training intervention, and follow-up data was collected 3 and 9 months after the end of the intervention.

Results After the intervention, there was a significant improvement in mood in the intervention group compared to the home exercise control group: −3.1 (SD 9.0) points *vs* +1.3 (SD 7.6) points ($p = 0.048$) and the positive effect was still apparent three months after the intervention ceased: −2.6 (SD 7.7) points *vs* +3.5 (SD 9.7) points ($p = 0.015$). Improvement of mood state at the first follow-up measurement was associated with the improvement in lower limb isometric muscle strength.

Conclusions Group-based exercise program organized in the context of a Finnish health care organization improved mood in frail older women recuperating from an acute illness. Copyright © 2002 John Wiley & Sons, Ltd.

Età media: 83.5 SD 4.1 IG vs 82.6 SD 3.7 CG

Riab ambulat 2 volte e sett per 10 sett

Int J Ger Psychiatry 2002; 17: 1106-1111

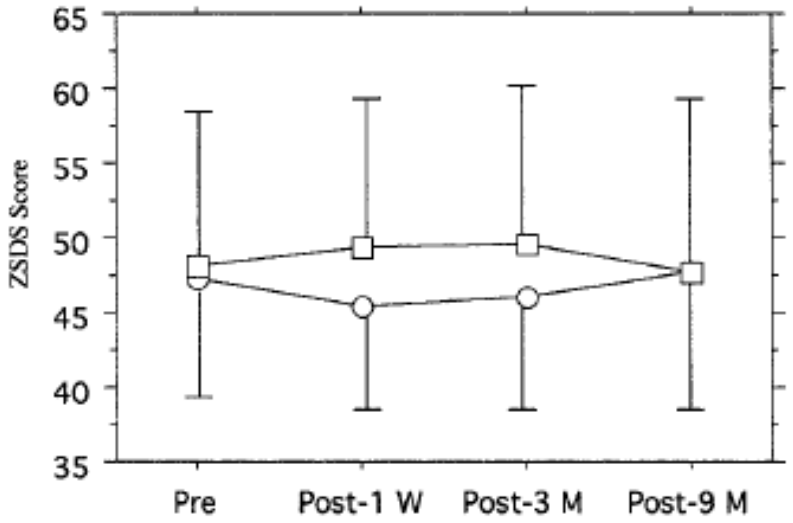


Figure 1. The absolute values (±SD) of the Zung SDS-test. ○ = intervention group; □ = control group; Pre = prior to intervention; Post-1 W, Post-3 M, Post-9 M = follow-up tests one week, 3 months and 9 months after intervention

Table 1. Changes in the Zung Self-Rating Depression Scale (ZSDS) scores in the intervention and control groups. Mean change values were calculated by subtracting the baseline values from the follow-up values. Negative change values indicate improvement in mood

	Intervention group			Control group			*t*-test
	Mean	SD	*n*	Mean	SD	*n*	*p*
Post-1W *vs* Pre	−3.1	9.0	26	1.3	7.6	32	0.048
Post-3M *vs* Pre	−2.6	7.7	26	3.5	9.7	29	0.015
Post-9M *vs* Pre	−0.9	10.8	24	2.0	9.6	28	0.299

Pre = Baseline score before the intervention; Post-1W = Follow-up score measured 1 week after the end of the intervention; Post-3M = Follow-up score measured 3 months after the end of the intervention; Post-9 M = Follow-up score measured 9 months after the end of the intervention.

Int J Ger Psychiatry 2002; 17: 1106-1111

Possibili effetti del trattamento riabilitativo sui sintomi depressivi

- Azione neurotrasmettitoriale → cambiamenti del livello di endorfine nel sangue

- Azione funzionale → miglioramento nella disabilità con conseguente miglioramento dell'umore

- Azione psicosociale → potenziamento capacità di coping e miglioramento dell'autoefficacia, > opportunità di socializzazione e riduzione del senso di isolamento sociale

JAGS 2006

"…Physical activity has been shown to have anti-depressant effects. However, symptoms of depression may be debilitating, often to the point of preventing them from leading an active participation. Thus, the very action that could help them seemed out of reach. "

«Illness takes us out of the ordinary. It makes us acutely aware of our personal humanity in terms of priorities, individual truths, and capacity to be resourceful. Illness breaks into our illusions of health, control, and safety and makes us re-evaluate our sense of efficacy»

J Clin Psychol 2002; 58(11): 1347-1350

Table 1. Description of interventions to strengthen self-efficacy and outcome expectations

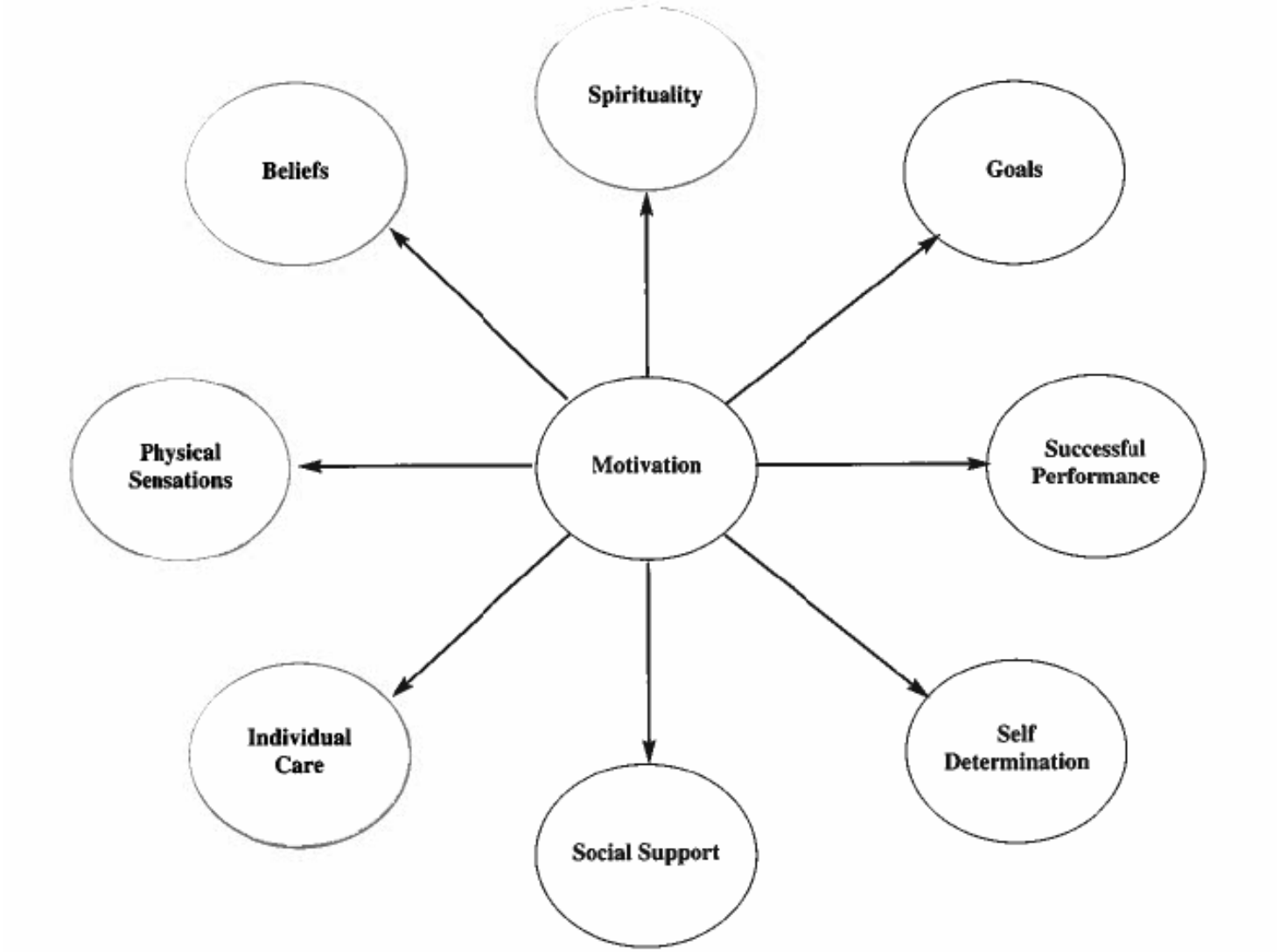
Interventions	Activities
Role modeling	1. Expose older adult to a videotape that focuses on positive role models with regard to ability to participate in the rehabilitation program and the progression from dependence to independence 2. Partner with others in similar physical condition through the rehabilitation process
Verbal encouragement	1. Establish realistic short- and long-term goals, and review these goals regularly 2. Discuss progress toward the stated goal(s), and give reinforcement for achievements during recent therapy sessions 3. Educate the older adult about the benefits of rehabilitation and physical activity, especially following a disabling event; focus on the benefits that will improve quality of life; prevent falls and fractures; and help strengthen bones, muscles, and sense of well-being
Individualized care	1. Get to know the individual and demonstrate caring by providing special care interventions such as scheduling performance of functional activities at a time that is convenient for the individual, not the care provider 2. Share with the older adult your joy and excitement as his or her functional ability improves 3. Use humor and kindness
Social supports	1. Use social supports as allies to help encourage the older adult to perform functional activities and participate in rehabilitation 2. Use social supports as a source of rewards
Decrease unpleasant sensations associated with functional activities	1. Assess the impact of pain, discomfort, fatigue, and fears on the individual's ability and willingness to perform functional activities 2. Help the individual develop ways to cope with the identified problems. Techniques include: exploring thoughts and feelings; helping patients develop a more realistic attitude toward their current level of ability; encouraging patients to experiment with new attitudes and thoughts in stressful situations; using relaxation and distraction techniques; encouraging and empowering patients to request and use interventions to decrease pain such as medication/ice/heat

Top Geriatr Rehab 2002; 17(4): 1-10 tab1

Strategie cognitivo-comportamentali

- Concentrarsi su piccoli guadagni, concordati con il paziente sulla base delle sue possibilità
- Utilizzo di grafici relativi ai miglioramenti, associati a rinforzo da parte del personale sanitario
- Incoraggiare il paziente a richiedere informazioni sulle proprie condizioni e a parlare realisticamente delle proprie difficoltà
- Coinvolgere il paziente in attività per lui piacevoli
- Tecniche di ristrutturazione cognitiva

Figure 1. The Wheel of Motivation



Rehabil Nurs 2002; 4: 152-159

Ma perché non tutti i pazienti di fronte allo stesso evento negativo sviluppano depressione?

- Strategie di coping
- Storia del paziente
- Fattori di personalità

- Supporto sociale

- Fattori relativi alla malattia stessa

Conclusioni

- La depressione nel paziente anziano in riabilitazione è una condizione clinica estremamente eterogenea.

- La riabilitazione come luogo di eccellenza per la presa in carico della depressione nell'anziano (se depressione pre-esistente e persistente) (importanza dell'indagine sulla temporalità dei sintomi)

- I sintomi depressivi in riabilitazione possono essere temporanei, necessario monitoraggio attento

Conclusioni

- Prevenire la depressione tramite l'identificazione dei pazienti a rischio

- Ancora una volta, importanza della presa in carico interdisciplinare

- There is a need for interventions aimed at not only improving physical impairment and disability, but also addressing mood status, participation and HRQoL (coinvolgimento familiari? Psicoterapia? Attività di significato per l'individuo?).