



Congresso Nazionale SIGG Firenze, 2 dicembre 2010

# Riabilitare l'anziano depresso

**Giuseppe Bellelli**

Dipartimento di Riabilitazione Ancelle della Carità, Cremona

Gruppo di Ricerca Geriatrica, Brescia

**Perché non possiamo non occuparci di depressione in riabilitazione (geriatrica): le motivazioni di carattere generale**

Table 6. Association of Predictive Variables with Mortality in Men in the ILSA Cohort

	Mortality for All Causes ( <i>N</i> = 523)	Mortality for Diseases of Circulatory System ( <i>N</i> = 185)
	HR (95% CI)	HR (95% CI)
Age	2.47 (1.85–3.28)	4.59 (2.62–8.07)
Claudication		1.64 (0.90–2.99)
Diabetes	1.27 (0.89–1.79)	
Congestive heart failure	2.19 (1.54–3.12)	2.01 (1.06–3.83)
Stroke		2.78 (1.63–4.73)
Fibrinogen	1.71 (1.31–2.23)	
DS	2.02 (1.58–2.58)	2.49 (1.60–3.87)

*Note:* ILSA = Italian Longitudinal Study on Aging; HR = hazard ratio; CI = confidence interval; DS = depressive symptomatology.

Table 6. Association of Predictive Variables with Mortality in Men in the ILSA Cohort

	Mortality for All Causes ( <i>N</i> = 523)	Mortality for Diseases of Circulatory System ( <i>N</i> = 185)
	HR (95% CI)	HR (95% CI)
Age	2.47 (1.85–3.28)	4.59 (2.62–8.07)
Claudication		1.64 (0.90–2.99)
Diabetes	1.27 (0.89–1.79)	
Congestive heart failure	2.19 (1.54–3.12)	2.01 (1.06–3.83)
Stroke		2.78 (1.63–4.73)
Fibrinogen	1.71 (1.31–2.23)	
DS	2.02 (1.58–2.58)	2.49 (1.60–3.87)

*Note:* ILSA = Italian Longitudinal Study on Aging; HR = hazard ratio; CI = confidence interval; DS = depressive symptomatology.

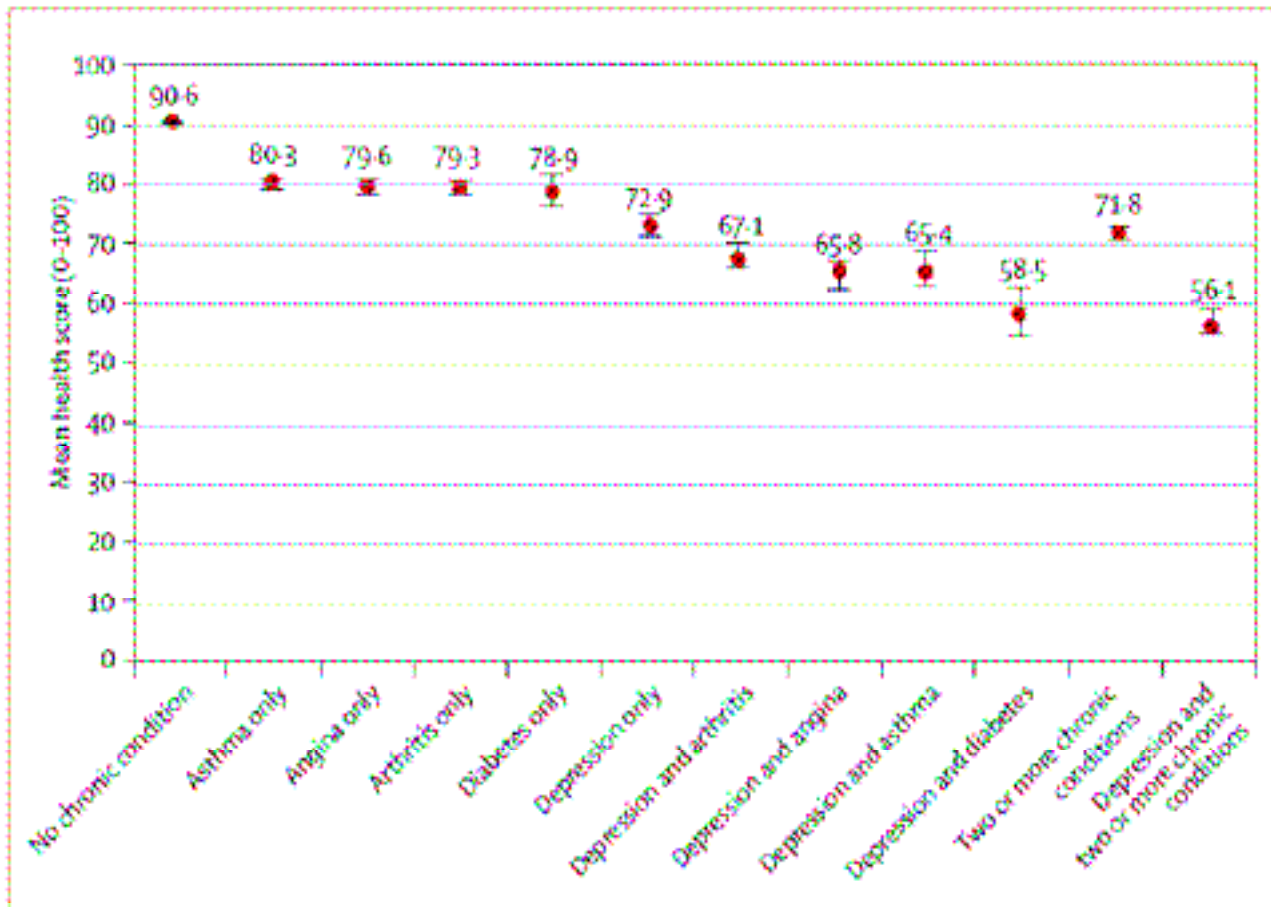
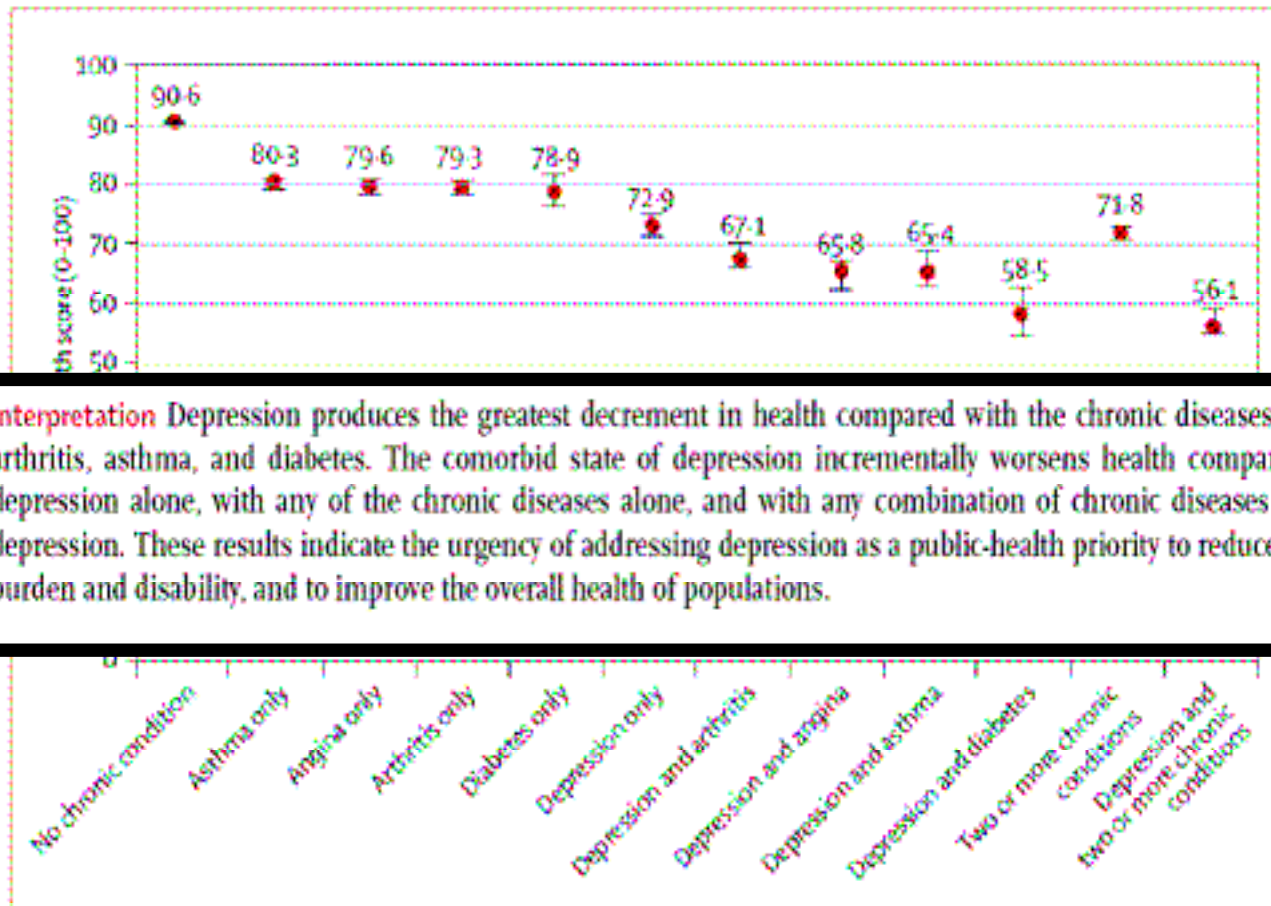


Figure: Global mean health by disease status  
Data from WHS 2003.

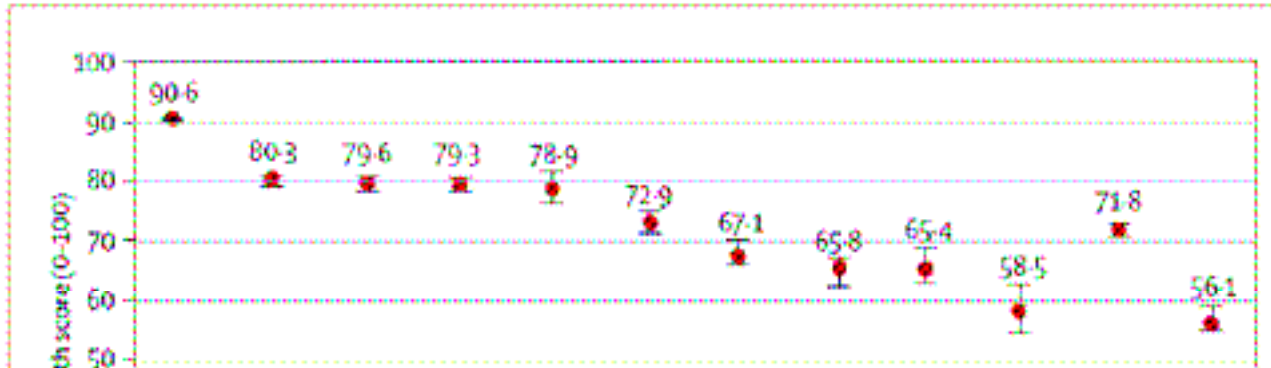
*Moussavi S et al, Lancet 2007; 370:851-58*



**Interpretation** Depression produces the greatest decrement in health compared with the chronic diseases angina, arthritis, asthma, and diabetes. The comorbid state of depression incrementally worsens health compared with depression alone, with any of the chronic diseases alone, and with any combination of chronic diseases without depression. These results indicate the urgency of addressing depression as a public-health priority to reduce disease burden and disability, and to improve the overall health of populations.

Figure: Global mean health by disease status  
Data from WHS 2003.

*Moussavi S et al, Lancet 2007; 370:851-58*



Interpretation Depression is a disease at least on a par with physical chronic diseases in damaging health. These findings suggest that depression alone, depression, and depression with physical chronic diseases have a similar burden and disability as physical chronic diseases.

**Depression is a disease at least on a par with physical chronic diseases in damaging health**

Depression is a disease at least on a par with physical chronic diseases in damaging health. Compared with physical chronic diseases without depression, depression alone, depression, and depression with physical chronic diseases have a similar burden and disability as physical chronic diseases.

Figure: Global mean health by disease status  
Data from WHS 2003.

Moussavi S et al, Lancet 2007; 370:851-58

## La frattura di femore è una condizione predisponente lo sviluppo di depressione

- Subthreshold symptoms of depression, anxiety, pain, and cognitive impairment at baseline, the premorbid level of mobility, and a history of (treated) depression are risk factors for **incident depression after hip fracture**.
- Incident depression was associated with a less favorable outcome at 3 months follow-up.

*Voshaar R et al, Am J Geriatr Psychiatry 2007; 15:807–814*



**Perché non possiamo non occuparci di depressione in riabilitazione (geriatrica): le motivazioni di tipo epidemiologico**

# Prevalence of depression in hip fracture patients

Author(s)	n	Mean age (yr)	Exclusions	Case-finding instrument	Prevalence (%)	Comment
Levitan et al., '81	24	N/A	--	DSM-III	36	Anxiety 29%
Sharmash et al., '92	50	80	< 60 years	HAS	26	--
Billig et al., '86	50	80	--	GHQ, ZSRDS, DSM-III	28	Dual diagnosis in >50%
Holmes, '96	50	81	--	GMS	16	--
Lyons et al., '89	69	78	MMSE <21	GDS-30	47	High prevalence with 10/11 cut off
Strain et al., '91	139	N/A	--	GDS-30 DSM-III	9	Included adjust disord.
Shepherd, '92	270	81	--	GDS-15	33	Prevalence approximated
Magaziner et al., '90	424	N/A	Severe dementia, NH	CES-D	32	Only 49% given CES-D

*Modified from Holmes et al, Age Ageing 2000*

## Modificazioni delle caratteristiche di utenza negli anni 2003, 2005 e 2007 (Dipartimento di riabilitazione, Ancelle della Carità Cr)

	2003	2005	2007
	<i>Media ± DS (%)</i>	<i>Media ± DS (%)</i>	<i>Media ± DS (%)</i>
GDS	6,1 ± 3,6	5,8 ± 3,3	6,1 ± 3,7
Depressione assente (GDS < 6/15)	(60,0)	(60,0)	(57,7)
Depressione presente (GDS > 6/15)	(40,0)	(40,0)	(42,3)
BMI (kg/cm <sup>2</sup> )	24,4 ± 4,9	25,7 ± 5,4	24,2 ± 5,6
CCI	2,7 ± 2,2	2,5 ± 2,0	-
CIRS Severità (IDS)	-	-	1,8 ± 0,3
CIRS Comorbilità (IDC)	-	-	4,2 ± 1,9
Barthel Index pre-ammissione (0-100)	81,8 ± 22,0	83,5 ± 21,1	80,8 ± 22,3
Barthel Index ingresso	55,6 ± 27,7	56,6 ± 26,0	55,1 ± 27,9
Barthel Index dimissione	74,0 ± 5,7	77,7 ± 25,2	72,6 ± 27,9
Eventi clinici avversi	0,5 ± 0,9	0,5 ± 0,9	0,7 ± 1,0
Nessun evento avverso	(63,4)	(65,5)	(59,5)
1 evento avverso	(25,0)	(21,3)	(21,7)
≥ 2 eventi avversi	(11,6)	(13,2)	(18,7)

## Modificazioni delle caratteristiche di utenza negli anni 2003, 2005 e 2007 (Dipartimento di riabilitazione, Ancelle della Carità Cr)

	2003	2005	2007
	<i>Media ± DS (%)</i>	<i>Media ± DS (%)</i>	<i>Media ± DS (%)</i>
GDS	6,1 ± 3,6	5,8 ± 3,3	6,1 ± 3,7
Depressione assente (GDS < 6/15)	(60,0)	(60,0)	(57,7)
Depressione presente (GDS > 6/15)	(40,0)	(40,0)	(42,3)
BMI (kg/cm <sup>2</sup> )	24,4 ± 4,9	25,7 ± 5,4	24,2 ± 5,6
CCI	2,7 ± 2,2	2,5 ± 2,0	-
CIRS Severità (IDS)	-	-	1,8 ± 0,3
CIRS Comorbidità (IDC)	-	-	4,2 ± 1,9
Barthel Index pre-ammissione (0-100)	81,8 ± 22,0	83,5 ± 21,1	80,8 ± 22,3
Barthel Index ingresso	55,6 ± 27,7	56,6 ± 26,0	55,1 ± 27,9
Barthel Index dimissione	74,0 ± 5,7	77,7 ± 25,2	72,6 ± 27,9
Eventi clinici avversi	0,5 ± 0,9	0,5 ± 0,9	0,7 ± 1,0
Nessun evento avverso	(63,4)	(65,5)	(59,5)
1 evento avverso	(25,0)	(21,3)	(21,7)
≥ 2 eventi avversi	(11,6)	(13,2)	(18,7)

# La depressione è un marcatore di disabilità futura

Variable	Odds Ratio	Wald Confidence Intervals (95%)	p value
<b>Model 1 (n=266)</b>			
Subjective Current Health	.47	.28 - .79	.004*
Depressive Symptoms (HDRS)	1.12	1.02 - 1.25	.024*
Intercept	.434	-	.243
<b>Model 2 (n=245)</b>			
Subjective Current Health	.53	.29 - .98	.042*
Somatic Subscale (HDRS)	1.19	1.04 - 1.38	.015*
# of ADL Limitations	1.63	1.10 - 2.39	.014*
Change in # of ADL Limitations	1.59	1.07 - 2.35	.022*
Intercept	.191	-	.062

Weinberger M et al, *Am J Geriatr Psychiatry*. 2009; 17: 802–809

# La depressione è un marcatore di disabilità futura

Variable	Odds Ratio	Wald Confidence Intervals (95%)	p value
<b>Model 1 (n=266)</b>			
Subjective Current Health	.47	.28 - .79	.004*
Depressive Symptoms (HDRS)	1.12	1.02 - 1.25	.024*
Intercept	.434	-	.243
<b>Model 2 (n=245)</b>			
Subjective Current Health Somatic Subscale (HDRS)			
# of ADL Limitations			
Change in # of ADL Limitations	1.59	1.07 - 2.35	.022*
Intercept	.191	-	.062

both persistent and new onset  
disability increase the risk of  
depression at 1-year

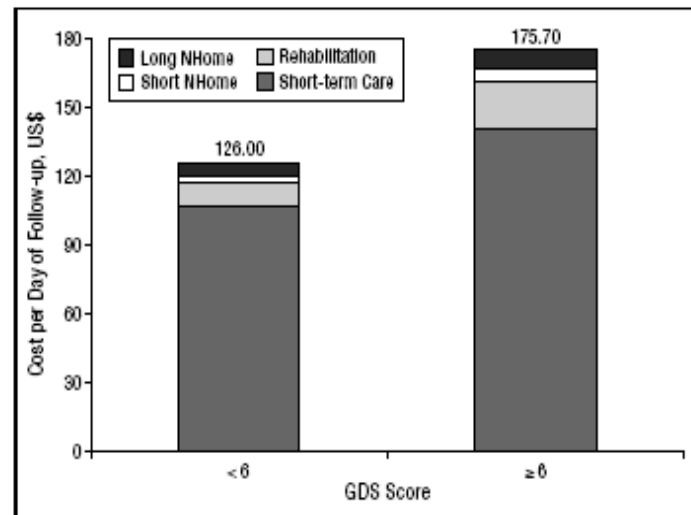
**Perché non possiamo non occuparci di depressione in riabilitazione (geriatrica): le motivazioni di tipo organizzativo**

# Depressive Symptoms as a Predictor of 6-Month Outcomes and Services Utilization in Elderly Medical Inpatients

Christophe J. Billé, MD; Vincent Wietlisbach, BA; Bernard Burnand, MD; Bertrand Yersin, MD

**Table 1. Results From Bivariate and Multivariate Cox Proportional Hazard Regression Analysis Predicting 6-Month Risk of Hospital Readmission\***

Characteristic	Unadjusted HR (95% CI)	P Value	Adjusted HR (95% CI)	P Value
Abnormal GDS score ( $\geq 6$ )	1.57 (1.08-2.26)	.02	1.50 (1.03-2.17)	.03
Comorbid illness (per point)†	1.14 (1.02-1.30)	.03	1.12 (1.00-1.26)	.06



**Figure 2.** Average costs per day of follow-up and type of inpatient stay for subjects with depressive symptoms (Geriatric Depression Scale [GDS]  $\geq 6$ ) vs without depressive symptoms (GDS,  $< 6$ ). Long NHome indicates permanent nursing home placement; short NHome, short stay in a nursing home.

*Arch Intern Med.* 2001;161:2609-2615

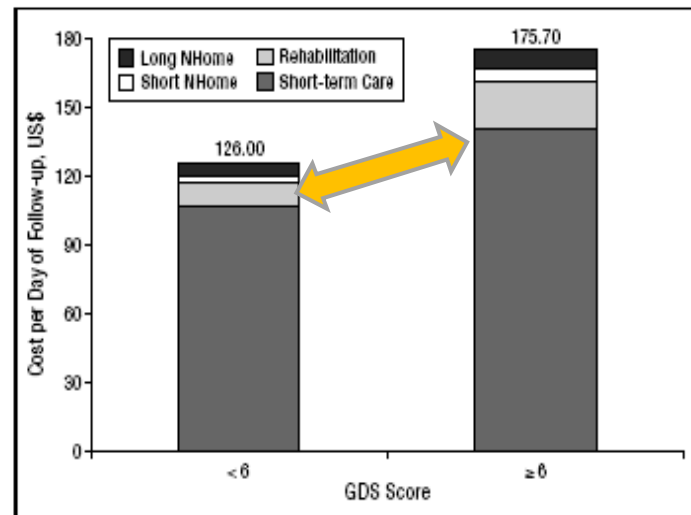


# Depressive Symptoms as a Predictor of 6-Month Outcomes and Services Utilization in Elderly Medical Inpatients

Christophe J. Billa, MD; Vincent Wietlisbach, BA; Bernard Burnand, MD; Bertrand Yersin, MD

**Table 1. Results From Bivariate and Multivariate Cox Proportional Hazard Regression Analysis Predicting 6-Month Risk of Hospital Readmission\***

Characteristic	Unadjusted HR (95% CI)	P Value	Adjusted HR (95% CI)	P Value
Abnormal GDS score ( $\geq 6$ )	1.57 (1.08-2.26)	.02	1.50 (1.03-2.17)	.03
Comorbid illness (per point)†	1.14 (1.02-1.30)	.03	1.12 (1.00-1.26)	.06



**Figure 2.** Average costs per day of follow-up and type of inpatient stay for subjects with depressive symptoms (Geriatric Depression Scale [GDS]  $\geq 6$ ) vs without depressive symptoms (GDS,  $< 6$ ). Long NHome indicates permanent nursing home placement; short NHome, short stay in a nursing home.

*Arch Intern Med.* 2001;161:2609-2615

# La sintomatologia depressiva condiziona l'accesso ai servizi di riabilitazione

Table 3. Hospital outcome by GDS-15 score

GDS-15 score	Discharge destination				
	Usual residence	Care home	Other hospital	Community hospital	Death
0-4	290 (83.5%)	8 (2.5%)	16 (4.5%)	14 (4.0%)	19 (5.5%)
5-7	101 (76.0%)	0 (0.0%)	4 (3.0%)	8 (6.0%)	20 (15.0%)
8-10	61 (68.5%)	2 (2.5%)	6 (6.5%)	9 (10.0%)	11 (12.5%)
11-15	30 (62.5%)	1 (2.0%)	6 (12.5%)	5 (10.5%)	6 (12.5%)
Total	482 (78.0%)	11 (2.0%)	32 (5.0%)	36 (6.0%)	56 (9%)

Odds of hospital outcome by GDS-15 score

# La sintomatologia depressiva condiziona l'accesso ai servizi di riabilitazione

Table 3. Hospital outcome by GDS-15 score

GDS-15 score	Discharge destination				
	Usual residence	Care home	Other hospital	Community hospital	Death
0-4	290 (83.5%)	8 (2.5%)	16 (4.5%)	14 (4.0%)	19 (5.5%)
5-7	101 (76.0%)	0 (0.0%)	4 (3.0%)	8 (6.0%)	20 (15.0%)
8-10	61 (68.5%)	2 (2.5%)	6 (6.5%)	9 (10.0%)	11 (12.5%)
11-15	30 (62.5%)	1 (2.0%)	6 (12.5%)	5 (10.5%)	6 (12.5%)
Total	482 (78.0%)	11 (2.0%)	32 (5.0%)	36 (6.0%)	56 (9%)

Odds of hospital outcome by GDS-15 score

*Cullum S et al, Age Ageing 2008*

# Rehabilitation Therapists' Recognition of Cognitive and Mood Disorders in Geriatric Patients

Robert Ruchinskas, PsyD

**Objective:** To determine if physical and occupational therapists can recognize 2 known predictors of rehabilitation outcome, cognition and mood, in their geriatric patients.

**Design:** Survey.

**Setting:** Urban academic medical center rehabilitation unit.

**Participants:** One hundred two consecutive geriatric admissions rated by 20 physical and 8 occupational therapists for the presence of cognitive or affective disorders.

**Interventions:** Not applicable.

**Main Outcome Measures:** Mini-Mental State Examination, Geriatric Depression Scale, and therapists' ratings.

**Results:** Both disciplines had low rates of accurate detection of both cognitive abnormalities and symptoms of depression. Patients scoring in the intact range of either domain were more likely to be correctly identified by the therapists than were patients whose results were possibly or probably impaired.

**Conclusion:** Rehabilitation therapists had difficulty recognizing patients with cognitive and affective disorders. I recommend including a mental health professional on the treatment team, staff inservicing, and/or the use of standardized measures of mood and mental status to increase recognition of these syndromes in geriatric rehabilitation patients.

Table 2: Agreement Between Physical and Occupational Therapists' Ratings and Group Classification by the GDS

	Group		
	Probable Depression	Possible Depression	No Depression
PT ratings (%)	1/8 (13)	2/9 (22)	58/95 (66)
OT ratings (%)	0/8 (0)	1/4 (11)	58/95 (66)

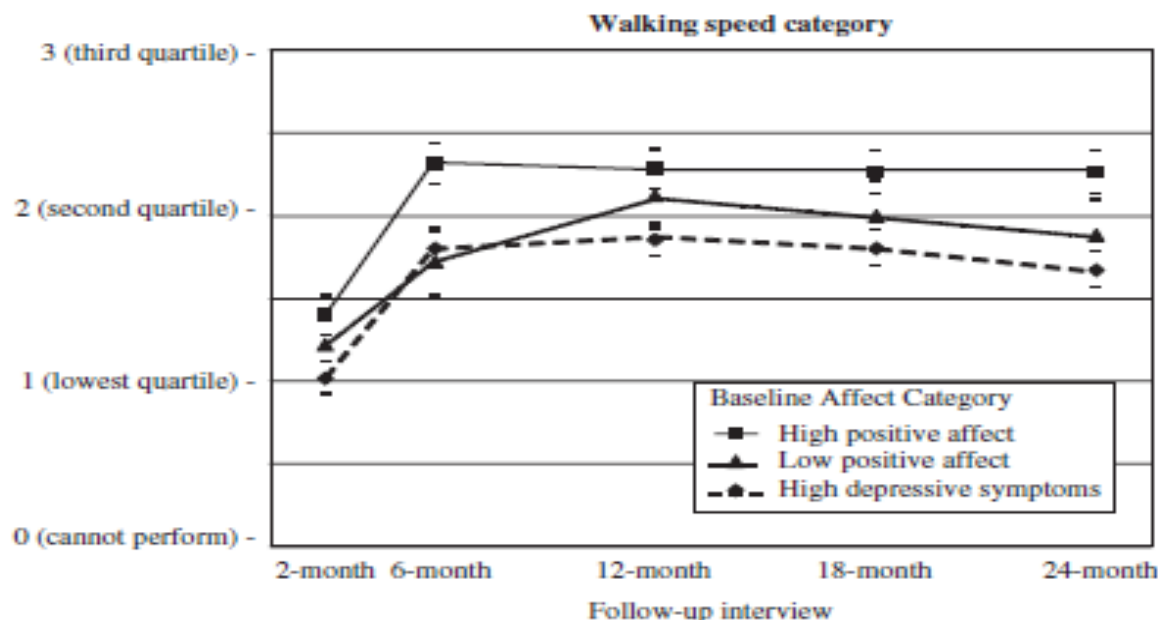
Table 4: Mean GDS Score of Groups Rated as Not Depressed, Possibly Depressed, and Probably Depressed by Therapists

	Group		
	Not Depressed	Possibly Depressed	Probably Depressed
Physical therapy	5.27	6.81	5.83
Occupational therapy	5.00	6.13	4.50
Actual GDS score	3.34	10.88	16.39

**Ma si può (è possibile)  
riabilitare un anziano  
depresso?**

## Elderly Patients with Hip Fracture with Positive Affect Have Better Functional Recovery over 2 Years

Lisa Fredman, PhD,\* William G. Hawkes, PhD,<sup>†</sup> Sandra Black, PhD,<sup>†</sup> Rosanna M. Bertrand, PhD,\* and Jay Magaziner, PhD, MSHyg<sup>†</sup>

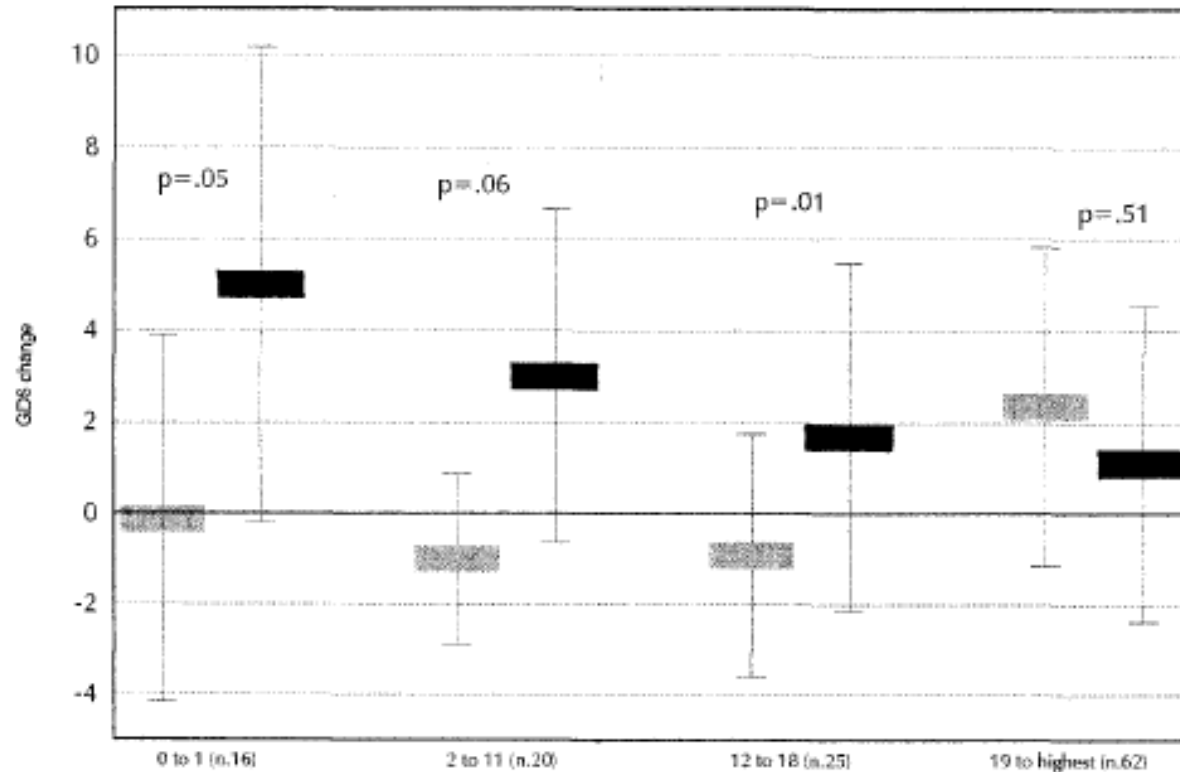


**Figure 1.** Adjusted usual walking speed, based on five-level ordinal variable, over 24 months after hip fracture.

# Mood Improvement in Elderly Women After In-Hospital Physical Rehabilitation

Piera Barbisoni, MD, Bruno Bertozzi, MD, Simone Franzoni, MD, Renzo Rozzini, MD,  
Giovanni B. Frisoni, MD, Marco Trabucchi, MD

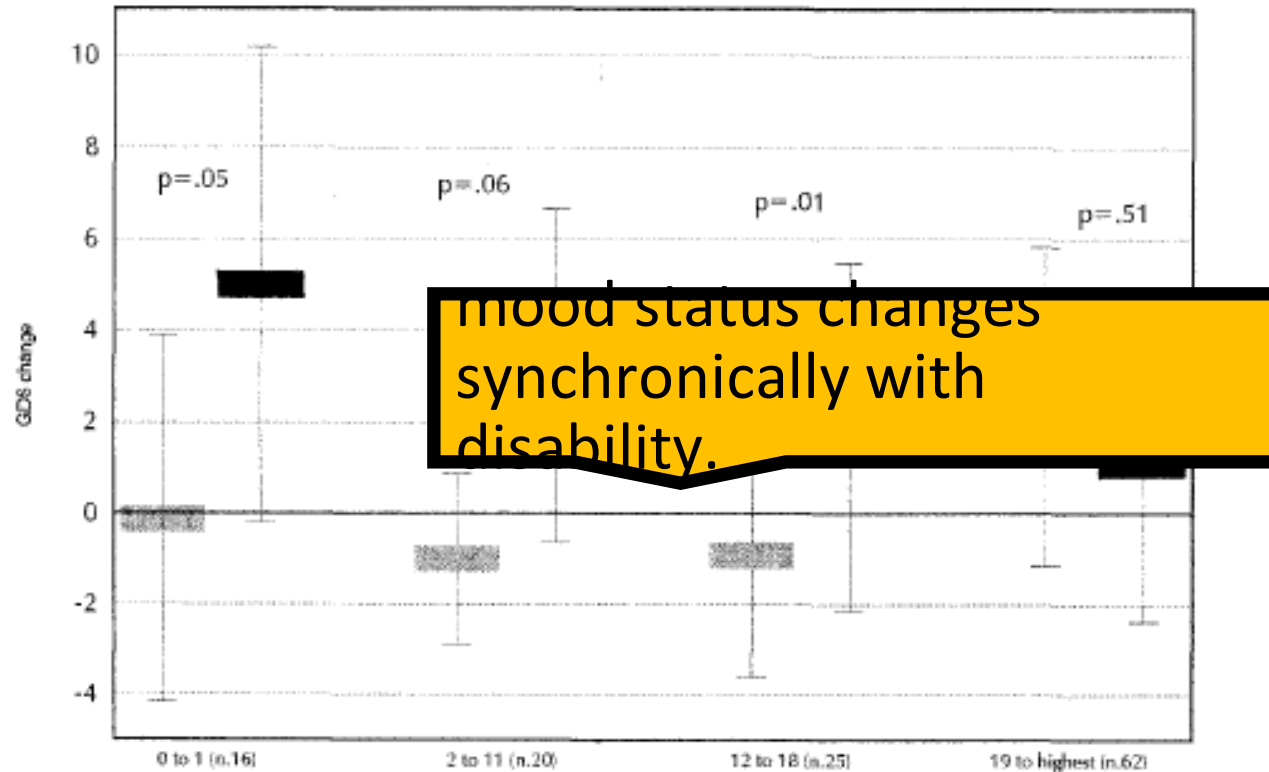
Arch Phys Med Rehabil Vol 77, April 1996



# Mood Improvement in Elderly Women After In-Hospital Physical Rehabilitation

Piera Barbisoni, MD, Bruno Bertozzi, MD, Simone Franzoni, MD, Renzo Rozzini, MD, Giovanni B. Frisoni, MD, Marco Trabucchi, MD

Arch Phys Med Rehabil Vol 77, April 1996





ORIGINAL ARTICLE

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

*Avital Hersikovitz, MD, MHA, Zulicha Kalandariou, MD, Vered Hermush, MD, Roni Weiss, MD, Shai Brill, MD, MPH*

**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

\* $r^2 = .189$ .

*Archives of Phys Med Rehab 2007*

ORIGINAL ARTICLE

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

Avital Hersikovitz, MD, MHA, Zulicha Kalandariou, MD, Vered Hermush, MD, Roni Weiss, MD, Shai Brill, MD, MPH

Table 6: Multiple Linear Regression Analysis of Significant

Pre	Cognitive function, nutritional status, preinjury functional level, and <b>depression</b> were the most important prognostic factors associated with rehabilitation success of older patients with proximal hip fracture.
Depre	
MMS	
Albur	
*r <sup>2</sup> = .18	

## ORIGINAL ARTICLE

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

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

Table 2: ANCOVA for Depression and Diagnosis

Source	df	Mean square	F	Partial $\eta^2$
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	2.48	.008
Self-care admission score	1	3459.27	373.07*	.475
Diagnosis <sup>a</sup>	1	3.54	0.38	.001
Depression	1	91.64	9.89*	.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 <sup>a</sup>	1	48.45	2.25	.005
Depression	1	214.02	10.39*	.025
Diagnosis by depression	1	11.58	0.58	.001
Error	412	20.63		

ORIGINAL ARTICLE

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

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

Table 2: ANCOVA for Depression and Diagnosis

Source	df	Mean square	F	Partial $\eta^2$
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	2.48	.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				
Error				
FIM body mobility discharge score (n=412)				
LOS	1	20.63	2.24	.001
Age	1	18.82	2.05	.001
Sex	1	11.54	1.25	.001
Body mobility admission score	1	1000.00	108.00*	.001
Diagnosis*	1	0.00	0.00	.001
Depression	1	10.00	1.08	.001
Diagnosis by depression				
Error	412	20.63		

In stroke and non stroke patients depressive symptoms are related to functional recovery across multiple domains and especially for sphincter control, self-care, and body mobility.

# La depressione non impatta sugli outcome in riabilitazione

ORIGINAL ARTICLE

## Inpatient Rehabilitation Outcome After Hip Fracture Surgery in Elderly Patients: A Prospective Cohort Study of 946 Patients

*Devora Lieberman, MD, Michael Friger, PhD, David Lieberman, MD* Arch Phys Med Rehabil 2006;87:167-71.

*Gen Hosp Psychiatry.* 2007 ; 29(2): 141-146.

**Does depression, apathy, or cognitive impairment reduce the benefit of inpatient rehabilitation facilities for elderly hip fracture patients?**

Eric J. Lenze, M.D.<sup>1,2</sup>, Elizabeth R. Skidmore, Ph.D.<sup>3</sup>, Mary Amanda Dew, Ph.D.<sup>1</sup>, Meryl A. Butters, Ph.D.<sup>1</sup>, Joan C. Rogers, Ph.D.<sup>3</sup>, Amy Begley, M.A.<sup>1</sup>, Charles F. Reynolds III, M.D.<sup>1</sup>, and Michael C. Munin, M.D.<sup>2</sup>

# La depressione non impatta sugli outcome in riabilitazione

ORIGINAL ARTICLE

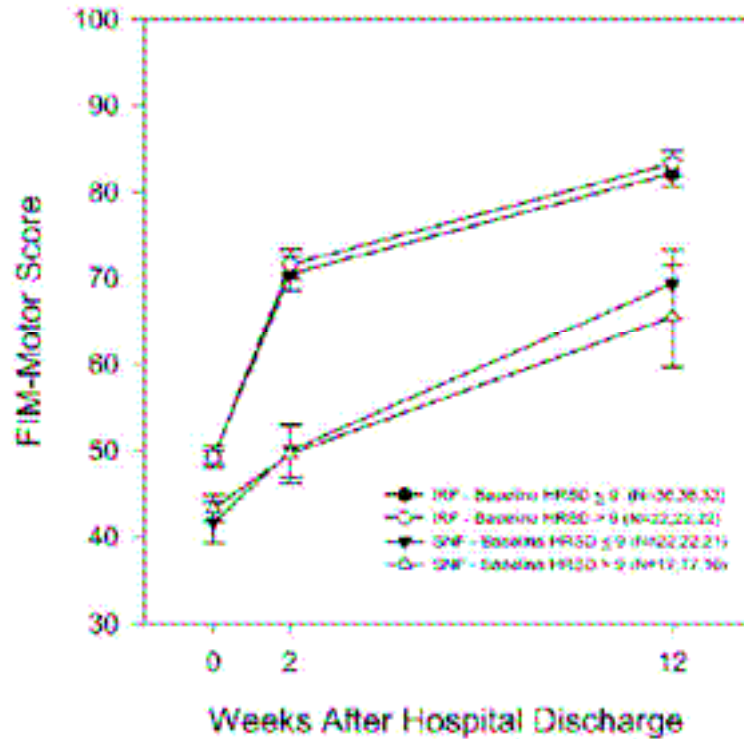
## Inpatient Surgery in of 946 Pat

Desora Lieberman

Gen Hosp Psyc

Does depr  
benefit of  
patients?

Eric J. Lenze,  
Butters, Ph.D.,  
and Michael C.



dy

rehabil 2006;87:167-71.

duce the  
hip fracture

Ph.D.<sup>1</sup>, Meryl A.  
ynolds III, M.D.<sup>1</sup>,

# Le possibili interpretazioni

- L'effetto della depressione sugli outcome è variabile in funzione del tempo
- La gravità dei sintomi depressivi (e/o della sindrome depressiva) è più importante della loro presenza/assenza
- La complessità il fenomeno «depressione»: non cogliamo il problema nelle sue sfaccettature e probabilmente definiamo depressione qualcosa che ne è profondamente diverso

# Le possibili interpretazioni

- L'effetto della depressione sugli outcome è variabile in funzione del tempo
- La gravità dei sintomi depressivi (e/o della sindrome depressiva) è più importante della loro presenza/assenza
- La complessità il fenomeno «depressione»: non cogliamo il problema nelle sue sfaccettature e probabilmente definiamo depressione qualcosa che ne è profondamente diverso



# The role of depressive symptoms in recovery from injuries to the extremities in older persons. A prospective study

Gertrudis I. J. M. Kempen<sup>1\*</sup>, Robbert Sanderman<sup>2</sup>, Winnie Scaf-Klomp<sup>2</sup> and Johan Ormel<sup>3</sup>

Table 3. Hierarchical multiple regression analyses: disability at baseline, depressive symptoms at baseline, age, gender, chronic medical morbidity, level of injury, cognitive functioning 8 weeks post-injury and depressive symptoms 8 weeks post-injury on disability at 8 weeks, 5 months and 12 months post-injury

	Level of Disability <sup>a</sup>											
	8 weeks post-injury				5 months post-injury				12 months post-injury			
	$\beta$	p-value	$\beta$	p-value	$\beta$	p-value	$\beta$	p-value	$\beta$	p-value	$\beta$	p-value
Disability at baseline <sup>b</sup>	0.509	0.000	0.479	0.000	0.593	0.000	0.570	0.000	0.559	0.000	0.542	0.000
Depressive symptoms at baseline <sup>b</sup>									0.761	0.053	0.459	
Age									0.002	0.197	0.001	
Gender (1 = male, 2 = female)									0.032	0.113	0.640	
Number of chronic medical conditions									0.315	0.644	0.452	
Level of injury <sup>b</sup>									0.049	0.113	0.040	
Cognitive functioning 8 weeks post-injury <sup>b</sup>									0.268	0.660	0.327	
Depressive symptoms 5 weeks post-injury <sup>b</sup>										0.147	0.032	
R <sup>2</sup>										0.544		
F-value									0.000	23.7	0.000	
R <sup>2</sup> change										0.013		
F-change										4.7	0.032	

$\beta$ , Standardized regression coefficient; R<sup>2</sup>, Amount

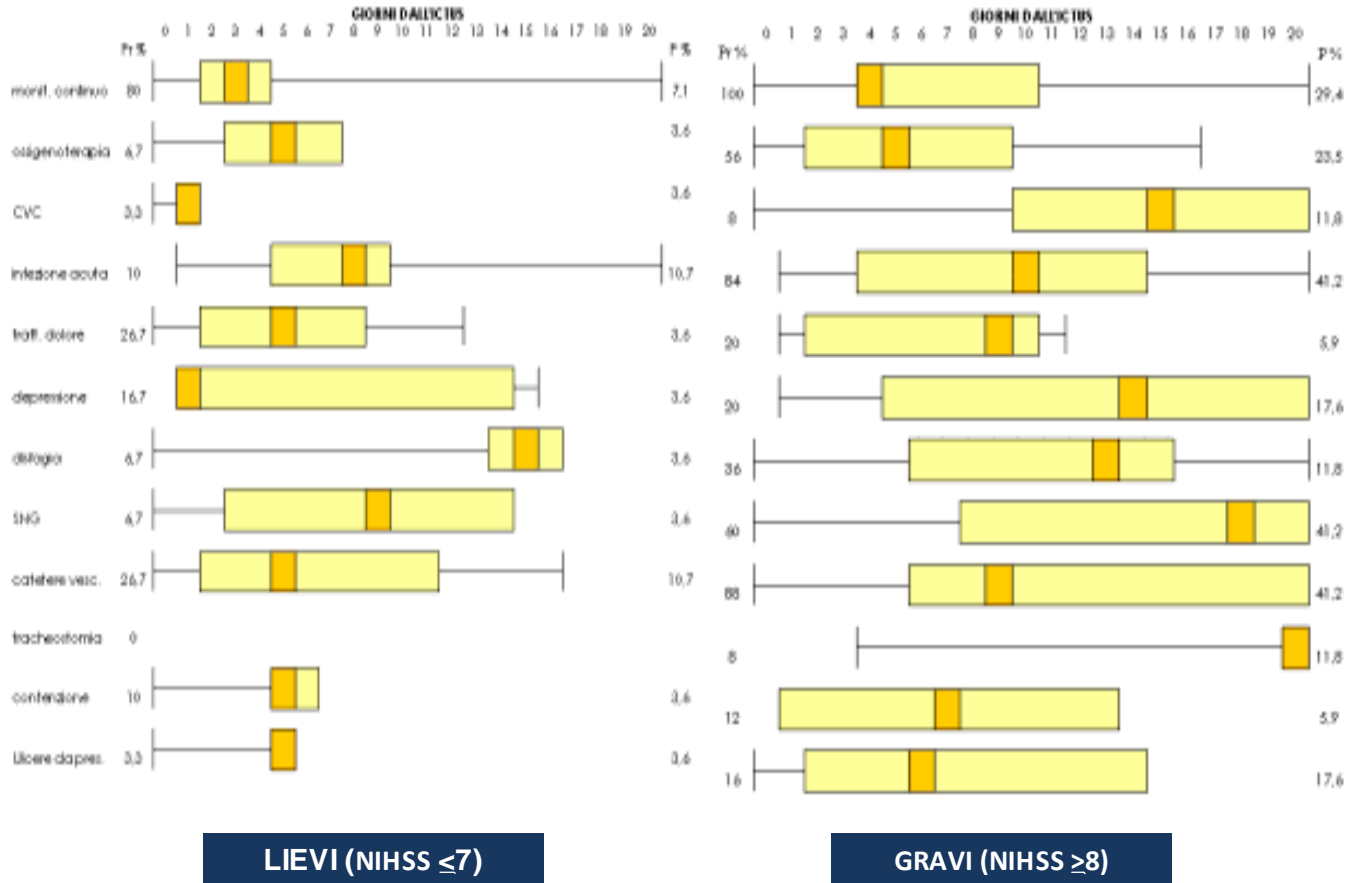
<sup>a</sup>Higher scores indicate poorer function.

<sup>b</sup>1 = hip fracture, 2 = other fracture, 3 = non-fracture.

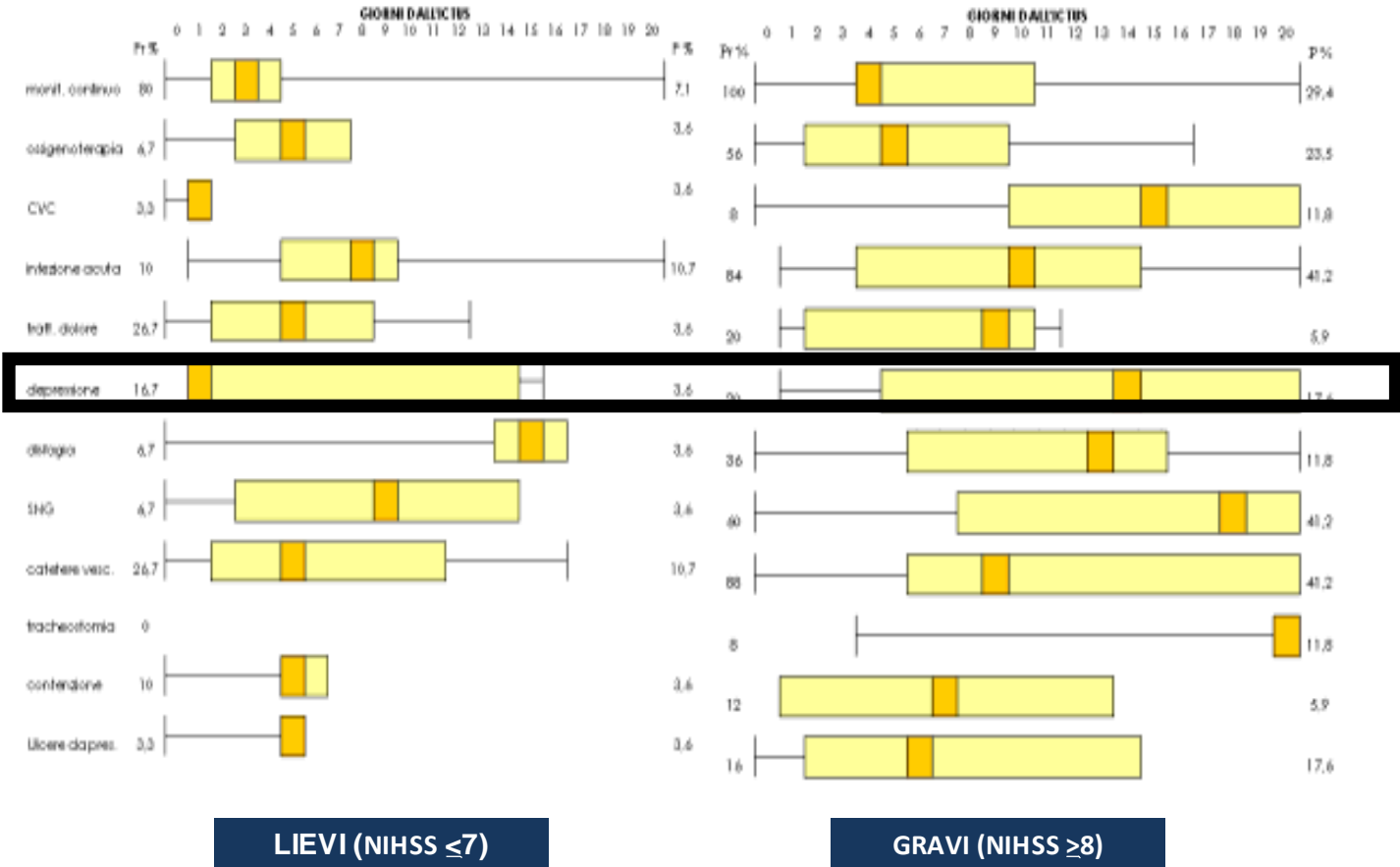
<sup>c</sup>Higher scores indicate better function.

Non è tanto la sintomatologia depressiva a determinare il mancato recupero funzionale quanto la persistenza dei sintomi depressivi nel tempo

# Analisi dei processi: Complessità Medico-Infermieristica



# Analisi dei processi: Complessità Medico-Infermieristica



# Le possibili interpretazioni

- L'effetto della depressione sugli outcome è variabile in funzione del tempo
- La gravità dei sintomi depressivi (e/o della sindrome depressiva) è più importante della loro presenza/assenza
- La complessità il fenomeno «depressione»: non cogliamo il problema nelle sue sfaccettature e probabilmente definiamo depressione qualcosa che ne è profondamente diverso

## Moderate to severe depressive symptoms and rehabilitation outcome in older adults with hip fracture

Sara Morghen<sup>1,2</sup>, Giuseppe Bellelli<sup>1,2</sup>, Sara Manuele<sup>3</sup>, Fabio Guerini<sup>1,2</sup>,  
Giovanni B Frisoni<sup>4</sup> and Marco Trabucchi<sup>1,5</sup>

Table 2 Independent predictors of failure to recover walking independence at discharge in 280 patients consecutively admitted to a Department of Rehabilitation and Aged Care Unit after hip fracture surgery in unadjusted and adjusted multiple logistic regression models

	Failure to recover walking independence at discharge							
	Unadjusted				Adjusted			
	OR	Wald $\chi^2$	95% CI	<i>p</i>	OR	Wald $\chi^2$	95% CI	<i>p</i>
Age	1.1	11.953	1.1–1.1	0.001	1.1	7.256	1.0–1.1	0.007
Female gender	0.5	4.661	0.2–0.9	0.031	0.5	1.796	0.2–1.4	0.180
Living alone	0.5	7.550	0.3–0.8	0.006	0.6	2.194	0.3–1.2	0.139
Mild depressive symptoms	1.0	0.002	0.6–1.7	0.968	1.6	1.743	0.8–3.3	0.187
Moderate to severe depressive symptoms	4.6	18.745	2.3–9.1	<0.0001	3.2	6.611	1.3–7.8	0.010
Mini Mental State Examination	0.9	14.198	0.8–0.9	<0.0001	1.0	0.308	0.9–1.1	0.579
Charlson Comorbidity Index	1.4	13.254	1.2–1.6	<0.0001	1.2	3.753	1.0–1.6	0.053
Albumin serum levels	0.4	11.559	0.2–0.8	0.016	0.3	5.404	0.1–0.8	0.020
Walking ability before fracture <sup>a</sup>	0.8	25.339	0.7–0.8	<0.0001	0.8	8.510	0.7–0.9	0.004
Number of drugs	1.2	5.842	1.1–1.4	0.001	1.1	3.132	1.0–1.3	0.077
Antidepressants	2.1	4.861	1.1–4.2	0.027	1.8	2.179	0.8–4.2	0.140

## Moderate to severe depressive symptoms and rehabilitation outcome in older adults with hip fracture

Sara Morghen<sup>1,2</sup>, Giuseppe Bellelli<sup>1,2</sup>, Sara Manuele<sup>3</sup>, Fabio Guerini<sup>1,2</sup>,  
Giovanni B Frisoni<sup>4</sup> and Marco Trabucchi<sup>1,5</sup>

Table 2 Independent predictors of failure to recover walking independence at discharge in 280 patients consecutively admitted to a Department of Rehabilitation and Aged Care Unit after hip fracture surgery in unadjusted and adjusted multiple logistic regression models

	Failure to recover walking independence at discharge							
	Unadjusted				Adjusted			
	OR	Wald $\chi^2$	95% CI	<i>p</i>	OR	Wald $\chi^2$	95% CI	<i>p</i>
Age	1.1	11.953	1.1–1.1	0.001	1.1	7.256	1.0–1.1	0.007
Female gender	0.5	4.661	0.2–0.9	0.031	0.5	1.796	0.2–1.4	0.180
Living alone	0.5	7.550	0.3–0.8	0.006	0.6	2.194	0.3–1.2	0.139
Mild depressive symptoms	1.0	0.002	0.6–1.7	0.968	1.6	1.743	0.8–3.3	0.187
Moderate to severe depressive symptoms	4.6	18.745	2.3–9.1	<0.0001	3.2	6.611	1.3–7.8	0.011
Mini Mental State Examination	0.9	14.198	0.8–0.9	<0.0001	1.0	0.308	0.9–1.1	0.579
Charlson Comorbidity Index	1.4	13.254	1.2–1.6	<0.0001	1.2	3.753	1.0–1.6	0.053
Albumin serum levels	0.4	11.559	0.2–0.8	0.016	0.3	5.404	0.1–0.8	0.020
Walking ability before fracture <sup>a</sup>	0.8	25.339	0.7–0.8	<0.0001	0.8	8.510	0.7–0.9	0.004
Number of drugs	1.2	5.842	1.1–1.4	0.001	1.1	3.132	1.0–1.3	0.077
Antidepressants	2.1	4.861	1.1–4.2	0.027	1.8	2.179	0.8–4.2	0.140

## Moderate to severe depressive symptoms and rehabilitation outcome in older adults with hip fracture

Sara Morghen<sup>1,2</sup>, Giuseppe Bellelli<sup>1,2</sup>, Sara Manuele<sup>3</sup>, Fabio Guerini<sup>1,2</sup>, Giovanni B Frisoni<sup>4</sup> and Marco Trabucchi<sup>1,5</sup>

Table 3 Independent predictors of adverse events at 1 year in 280 patients consecutively admitted to a Department of Rehabilitation and Aged Care Unit after hip fracture surgery in unadjusted and adjusted multiple logistic regression models

	Adverse events at 1 year							
	Unadjusted				Adjusted			
	OR	Wald $\chi^2$	95% CI	<i>p</i>	OR	Wald $\chi^2$	95% CI	<i>p</i>
Age	1.1	13.808	1.1–1.2	<0.0001	1.1	6.464	1.0–1.1	0.011
Female gender	0.6	1.179	0.3–1.4	0.278	0.5	1.640	0.2–1.4	0.200
Mild depressive symptoms	1.0	0.009	0.5–2.0	0.924	2.1	3.010	0.9–4.9	0.083
Moderate to severe depressive symptoms	5.0	20.089	2.5–10.2	<0.0001	3.6	7.331	1.4–9.1	0.007
Mini Mental State Examination	0.9	12.413	0.4–1.9	<0.0001	0.9	2.120	0.9–1.0	0.145
Albumin serum levels	0.4	3.539	0.2–1.0	0.060	0.3	4.584	0.1–0.9	0.032
Failure to recover walking independence at Discharge	4.9	22.808	2.6–9.5	<0.0001	2.5	5.659	1.2–5.2	0.017
Number of drugs	1.1	3.082	1.0–1.3	0.079	1.0	1.194	0.9–1.2	0.784
Antidepressants	1.5	1.471	0.8–2.9	0.225	1.8	2.079	0.8–4.0	0.149

## Moderate to severe depressive symptoms and rehabilitation outcome in older adults with hip fracture

Sara Morghen<sup>1,2</sup>, Giuseppe Bellelli<sup>1,2</sup>, Sara Manuele<sup>3</sup>, Fabio Guerini<sup>1,2</sup>,  
Giovanni B Frisoni<sup>4</sup> and Marco Trabucchi<sup>1,5</sup>

Table 3 Independent predictors of adverse events at 1 year in 280 patients consecutively admitted to a Department of Rehabilitation and Aged Care Unit after hip fracture surgery in unadjusted and adjusted multiple logistic regression models

	Adverse events at 1 year							
	Unadjusted				Adjusted			
	OR	Wald $\chi^2$	95% CI	<i>p</i>	OR	Wald $\chi^2$	95% CI	<i>p</i>
Age	1.1	13.808	1.1–1.2	<0.0001	1.1	6.464	1.0–1.1	0.011
Female gender	0.6	1.179	0.3–1.4	0.278	0.5	1.640	0.2–1.4	0.200
Mild depressive symptoms	1.0	0.009	0.5–2.0	0.924	2.1	3.010	0.9–4.9	0.083
<b>Moderate to severe depressive symptoms</b>	<b>5.0</b>	<b>20.089</b>	<b>2.5–10.2</b>	<b>&lt;0.0001</b>	<b>3.6</b>	<b>7.331</b>	<b>1.4–9.1</b>	<b>0.007</b>
Mini mental State Examination	0.9	12.413	0.4–1.9	<0.0001	0.9	2.120	0.9–1.0	0.143
Albumin serum levels	0.4	3.539	0.2–1.0	0.060	0.3	4.584	0.1–0.9	0.032
Failure to recover walking independence at Discharge	4.9	22.808	2.6–9.5	<0.0001	2.5	5.659	1.2–5.2	0.017
Number of drugs	1.1	3.082	1.0–1.3	0.079	1.0	1.194	0.9–1.2	0.784
Antidepressants	1.5	1.471	0.8–2.9	0.225	1.8	2.079	0.8–4.0	0.149



## Moderate to severe depressive symptoms and rehabilitation outcome in older adults with hip fracture

Sara Morghen<sup>1,2</sup>, Giuseppe Bellelli<sup>1,2</sup>, Sara Manuele<sup>3</sup>, Fabio Guerini<sup>1,2</sup>, Giovanni B Frisoni<sup>4</sup> and Marco Trabucchi<sup>1,5</sup>

Table 3 Independent predictors of adverse events at 1 year in 280 patients consecutively admitted to a Department of Rehabilitation and Aged Care Unit after hip fracture surgery in unadjusted and adjusted multiple logistic regression models

	Adverse events at 1 year							
	Unadjusted				Adjusted			
	OR	Wald $\chi^2$	95% CI	<i>p</i>	OR	Wald $\chi^2$	95% CI	<i>p</i>
Age	1.1	13.808	1.1–1.2	<0.0001	1.1	6.464	1.0–1.1	0.011
Female gender	0.6	1.179	0.3–1.4	0.278	0.5	1.640	0.2–1.4	0.200
Mild depressive symptoms	1.0	0.009	0.5–2.0	0.924	2.1	3.010	0.9–4.9	0.083
<b>Moderate to severe depressive symptoms</b>	<b>5.0</b>	<b>20.089</b>	<b>2.5–10.2</b>	<b>&lt;0.0001</b>	<b>3.6</b>	<b>7.331</b>	<b>1.4–9.1</b>	<b>0.007</b>
Mini Mental State Examination	0.9	12.413	0.4–1.9	<0.0001	0.9	2.120	0.9–1.0	0.143
Albumin serum levels	0.4	3.539	0.2–1.0	0.060	0.3	4.584	0.1–0.9	0.032
Failure to recover walking independence at Discharge	4.9	22.808	2.6–9.5	<0.0001	2.5	5.659	1.2–5.2	0.017
Number of drugs	1.1	3.082	1.0–1.3	0.079	1.0	1.194	0.9–1.2	0.784
Antidepressants	1.5	1.471	0.8–2.9	0.225	1.8	2.079	0.8–4.0	0.149

## Moderate to severe depressive symptoms and rehabilitation outcome in older adults with hip fracture

Sara Morghen<sup>1,2</sup>, Giuseppe Bellelli<sup>1,2</sup>, Sara Manuele<sup>3</sup>, Fabio Guerini<sup>1,2</sup>, Giovanni B Frisoni<sup>4</sup> and Marco Trabucchi<sup>1,5</sup>

Table 3 Independent predictors after hip fracture surgery in un

Failure to recover walking independence at discharge mediates the relationship between moderate to severe depressive symptoms and the long-term outcomes

	Wald $\chi^2$	95% CI	p	OR	Wald $\chi^2$	95% CI	p	
Age	1.1	13.808	1.1-1.2	<0.0001	1.1	6.464	1.0-1.1	0.011
Female gender	0.6	1.179	0.3-1.4	0.278	0.5	1.640	0.2-1.4	0.200
Mild depressive symptoms	1.0	0.009	0.5-2.0	0.924	2.1	3.010	0.9-4.9	0.083
Moderate to severe depressive symptoms	5.0	20.089	2.5-10.2	<0.0001	3.6	7.331	1.4-9.1	0.007
Mini mental State Examination	0.9	12.413	0.4-1.9	<0.0001	0.9	2.120	0.9-1.0	0.143
Albumin serum levels	0.4	3.539	0.2-1.0	0.060	0.3	4.584	0.1-0.9	0.032
Failure to recover walking independence at Discharge	4.9	22.808	2.6-9.5	<0.0001	2.5	5.659	1.2-5.2	0.017
Number of drugs	1.1	3.082	1.0-1.3	0.079	1.0	1.194	0.9-1.2	0.784
Antidepressants	1.5	1.471	0.8-2.9	0.225	1.8	2.079	0.8-4.0	0.149

# Le possibili interpretazioni

- L'effetto della depressione sugli outcome è variabile in funzione del tempo
- La gravità dei sintomi depressivi (e/o della sindrome depressiva) è più importante della loro presenza/assenza
- La complessità il fenomeno «depressione»: non cogliamo il problema nelle sue sfaccettature e probabilmente definiamo depressione qualcosa che ne è profondamente diverso

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

Eric J. Lenze<sup>1\*</sup>, Michael C. Munin<sup>2</sup>, Mary Amanda Dew<sup>1,3</sup>, Joan C. Rogers<sup>1,4</sup>, Karen Seligman<sup>1</sup>, Benoit H. Mulsant<sup>1,5</sup> and Charles F. Reynolds III<sup>1</sup>

Table 1. Correlations among demographic and clinical variables

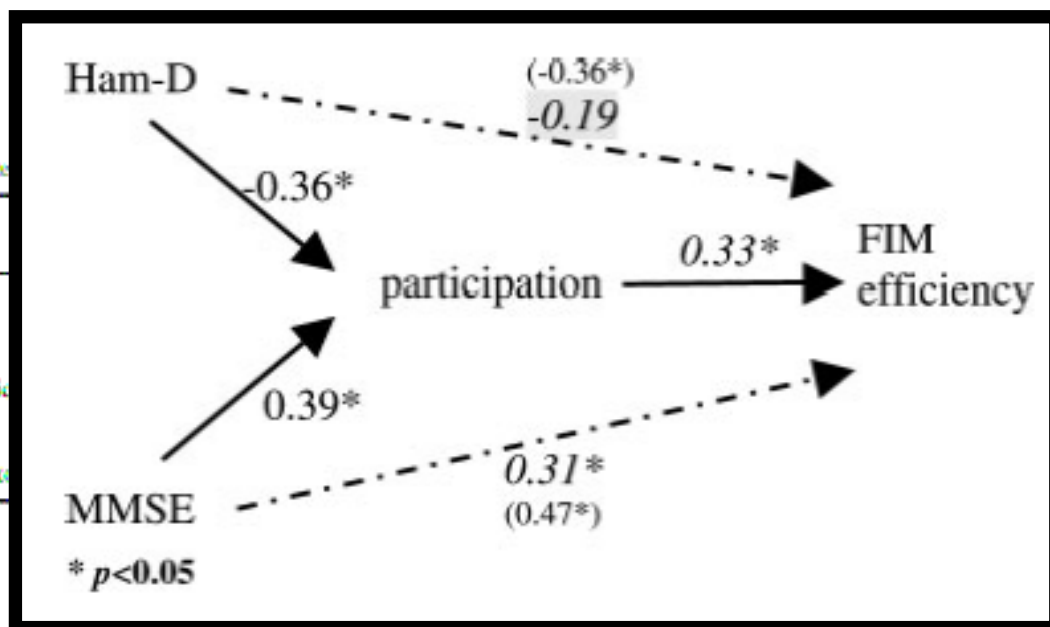
	Ham-D	MMSE	Rehab partic	Motor FIM efficiency	Age	Length of stay	GIRS	Admission motor FIM	Change in motor FIM
Ham-D	---	-0.23	-0.46 <sup>c</sup>	-0.44 <sup>c</sup>	0.10	0.57 <sup>c</sup>	0.17	-0.18	-0.18
MMSE		---	0.47 <sup>c</sup>	0.52 <sup>c</sup>	-0.23	-0.27 <sup>b</sup>	-0.23	0.50 <sup>c</sup>	0.50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

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

Eric J. Lenze<sup>1\*</sup>, Michael C. Munin<sup>2</sup>, Mary Amanda Dew<sup>1,3</sup>, Joan C. Rogers<sup>1,4</sup>,  
Karen Seligman<sup>1</sup>, Benoit H. Mulsant<sup>1,5</sup> and Charles F. Reynolds III<sup>1</sup>

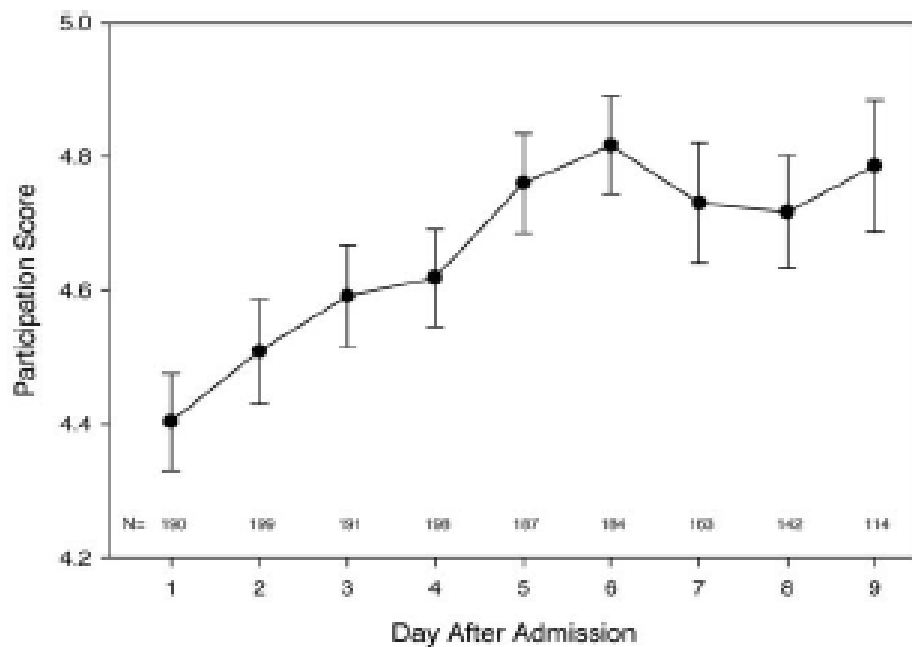
Table 1. Correlation

Ham-D  
MMSE  
Rehab partic  
Motor FIM effi  
Age  
Length of stay  
Admission mot



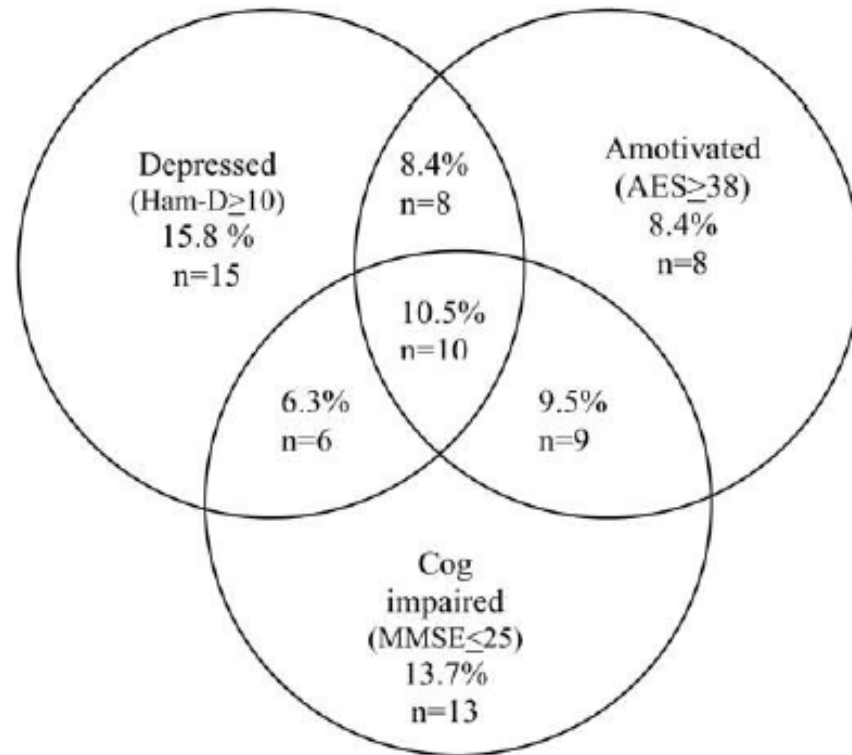
Admission FIM	Change in motor FIM
18	-0.18
50 <sup>c</sup>	0.50 <sup>b</sup>
48 <sup>c</sup>	0.60 <sup>b</sup>
49 <sup>c</sup>	0.64 <sup>c</sup>
27 <sup>a</sup>	0.10
40 <sup>b</sup>	-0.19
-	0.15

# Participation can improve during treatment

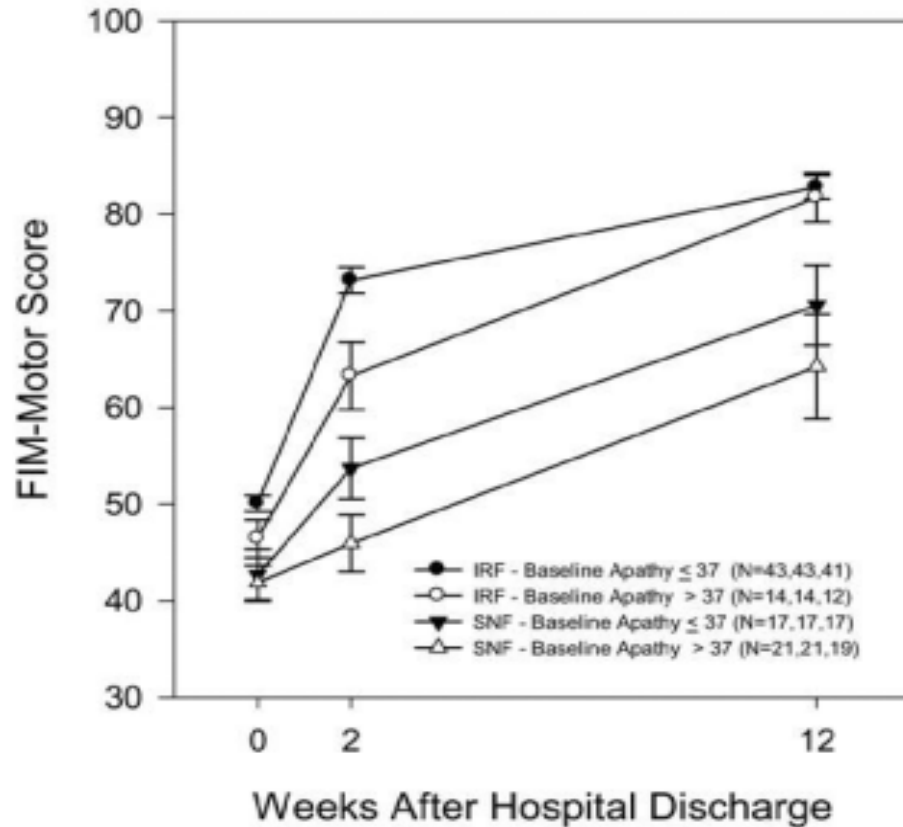


**Fig 1.** Trajectory of mean PRPS scores over the first 9 days of hospitalization. Note that decreasing sample size is due to subjects being discharged or participation score unavailable that day. Graph is shown with standard error.

# Is depression or apathy?



# Is depression or apathy?





## Depression and delirium: 1+1 doesn't always make 2

Table 1. Characteristics of 1,534 Patients Admitted to a Rehabilitation and Aged Care Unit from 2002 to 2005

Characteristic	No Delirium, No Depression (n = 938)	Depression, No Delirium (n = 575)	Delirium Alone (n = 10)	Overlap Syndrome (n = 11)	P-Value
Age, mean ± SD	77.1 ± 6.9	78.2 ± 6.8	80.0 ± 5.3	81.5 ± 5.6	<.001
Males, n (%)	277 (29.5)	104 (18.1)	2 (20.0)	1 (9.1)	<.001
Georried, n (%)	122 (13.0)	48 (8.0)	3 (30.0)	—	<.001
Nursing home residence before admission, n (%)	11 (1.2)	7 (1.2)	—	—	.02
Albumin serum level, g/dL, mean ± SD	3.2 ± 0.4	3.3 ± 1.0	3.3 ± 0.6	3.4 ± 0.3	.10
Body mass index, kg/m <sup>2</sup> , mean ± SD	26.1 ± 16.9	25.5 ± 7.8	22.8 ± 4.1	27.3 ± 6.0	.75
C-reactive protein, mg/dL, mean ± SD	3.0 ± 4.4	2.6 ± 0.4	5.3 ± 3.4	1.2 ± 2.3	.40
Charlson Comorbidity Index, mean ± SD	2.4 ± 2.1	2.8 ± 2.0	3.7 ± 2.7	4.1 ± 2.5	<.001
Number of drugs at discharge, mean ± SD	4.7 ± 1.9	5.1 ± 1.9	4.9 ± 2.1	4.6 ± 2.2	.001
Mini-Mental State Examination score (range 0–30), mean ± SD	25.3 ± 4.1	23.7 ± 4.2	19.4 ± 7.3	21.0 ± 4.9	<.001
Geriatric Depression Scale score (range 0–15), mean ± SD	3.4 ± 1.8	8.4 ± 2.0	3.0 ± 1.8	10 ± 2.5	<.001
Barthel Index (range 0–100), mean ± SD					
1 month before	87.6 ± 17.7	81.2 ± 19.6	72.8 ± 24.8	72.1 ± 21.8	<.001
On admission	65.3 ± 23.3	61.3 ± 25.2	35.2 ± 21.8	45.9 ± 26.8	<.001
At discharge	85.0 ± 18.2	79.8 ± 21.0	59.3 ± 25.0	53.7 ± 30.7	<.001
Rehabilitation and Aged Care Unit length of stay, days, mean ± SD	22.2 ± 9.4	23.7 ± 8.5	28.5 ± 18.9	30.0 ± 13.6	<.001
Death within 1 year, n (%)	58 (6.2)	57 (9.9)	2 (20.0)	4 (36.4)	<.001

## Depression and delirium: 1+1 doesn't always make 2

Table 1. Characteristics of 1,534 Patients Admitted to a Rehabilitation and Aged Care Unit from 2002 to 2005

Characteristic	No Delirium, No Depression (n = 938)	Depression, No Delirium (n = 575)	Delirium Alone (n = 10)	Overlap Syndrome (n = 11)	P-Value
Age, mean $\pm$ SD	77.1 $\pm$ 6.9	78.2 $\pm$ 6.8	80.0 $\pm$ 5.3	81.5 $\pm$ 5.6	<.001
Males, n (%)	277 (29.5)	104 (18.1)	2 (20.0)	1 (9.1)	<.001
Geosited, n (%)	122 (13.0)	48 (8.0)	3 (30.0)	—	<.001
Nursing home residence before admission, n (%)	11 (1.2)	7 (1.2)	—	—	.02
Albumin serum level, g/dL, mean $\pm$ SD	3.2 $\pm$ 0.4	3.3 $\pm$ 1.0	3.3 $\pm$ 0.6	3.4 $\pm$ 0.3	.10
Body mass index, kg/m <sup>2</sup> , mean $\pm$ SD	26.1 $\pm$ 16.9	25.5 $\pm$ 7.8	22.8 $\pm$ 4.1	27.3 $\pm$ 6.0	.75
C-reactive protein, mg/dL, mean $\pm$ SD	3.0 $\pm$ 4.4	2.6 $\pm$ 9.4	5.3 $\pm$ 3.4	1.2 $\pm$ 2.3	.40
Charlson Comorbidity Index, mean $\pm$ SD	2.4 $\pm$ 2.1	2.8 $\pm$ 2.0	3.7 $\pm$ 2.7	4.1 $\pm$ 2.5	<.001
Number of drugs at discharge, mean $\pm$ SD	4.7 $\pm$ 1.9	5.1 $\pm$ 1.9	4.9 $\pm$ 2.1	4.6 $\pm$ 2.2	.001
Mini-Mental State Examination score (range 0–30), mean $\pm$ SD	25.3 $\pm$ 4.1	23.7 $\pm$ 4.2	19.4 $\pm$ 7.3	21.0 $\pm$ 4.9	<.001
Geriatric Depression Scale score (range 0–15), mean $\pm$ SD	3.4 $\pm$ 1.8	8.4 $\pm$ 2.0	3.0 $\pm$ 1.8	10 $\pm$ 2.5	<.001
Barthel Index (range 0–100), mean $\pm$ SD					
1 month before	87.6 $\pm$ 17.7	81.2 $\pm$ 19.6	72.8 $\pm$ 24.8	72.1 $\pm$ 21.8	<.001
On admission	65.3 $\pm$ 23.3	61.3 $\pm$ 25.2	35.2 $\pm$ 21.8	45.9 $\pm$ 26.8	<.001
At discharge	85.0 $\pm$ 18.2	79.8 $\pm$ 21.0	59.3 $\pm$ 25.0	53.7 $\pm$ 30.7	<.001
Rehabilitation and Aged Care Unit length of stay, days, mean $\pm$ SD	22.2 $\pm$ 9.4	23.7 $\pm$ 8.5	28.5 $\pm$ 18.9	30.0 $\pm$ 13.6	<.001
Death within 1 year, n (%)	58 (6.2)	57 (9.9)	2 (20.0)	4 (36.4)	<.001



APIGRA-IPER 2

Sezione Riabilitazione Geriatrica

# Analisi delle problematiche PsicoGeriatriche nella Riabilitazione dell'Anziano (APIGRA-2)

Progetto APIGRA – IPER 2

Scheda Raccolta Dati # 2 / 3

## Complessità Clinica e Valutazione Primo Livello

### COMPLESSITA' CLINICA

	No	SI	
Demenza	<input type="checkbox"/>	<input type="checkbox"/>	
Ictus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text" value="ICD9"/>
Altra Malattia Neurologica	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text" value="ICD9"/>
Altre Malattie Somatiche	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text" value="ICD9"/>
Malattia psichiatrica magg.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text" value="ICD9"/>

### SEVERITA' D-AA

	Ammissione		Dimissione	
	Psich.	Soma	Psich.	Soma
Hamilton Depressione	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Hospital Anxiety Scale	<input type="text"/>		<input type="text"/>	
Apathy Evaluation Scale	<input type="text"/>		<input type="text"/>	

Note

*Bruno Bernardini, Giuseppe Bellelli\*, Luigi Baratto#, Marisa Gardella\**



APIGRA-IPER 2

Sezione Riabilitazione Geriatrica

# Analisi delle problematiche PsicoGeriatriche nella Riabilitazione dell'Anziano (APIGRA-2)

Progetto APIGRA – IPER 2

Scheda Raccolta Dati # 2 / 3

## Complessità Clinica e Valutazione Primo Livello

### COMPLESSITA' CLINICA

No SI

Demenza

Ictus

Altra Malattia Neurologica

Altre Malattie Somatiche

Malattia psichiatrica magg.

ICD9

ICD9

ICD9

ICD9

### SEVERITA' D-AA

Ammissione

Dimissione

Psich.

Soma

Psich.

Soma

Hamilton Depressione

Hospital Anxiety Scale

Apathy Evaluation Scale

Note

Bruno Bernardini, Giuseppe Bellelli\*, Luigi Baratto#, Marisa Gardella\*



APIGRA-IPER 2

Sezione Riabilitazione Geriatrica

# Analisi delle problematiche PsicoGeriatriche nella Riabilitazione dell'Anziano (APIGRA-2)

Progetto APIGRA – IPER 2

Scheda Raccolta Dati # 2 / 3

## Complessità Clinica e Valutazione Primo Livello

### COMPLESSITA' CLINICA

No SI

Demenza

Ictus

Altra Malattia Neurologica

Altre Malattie Somatiche

Malattia psichiatrica magg.

ICD9

ICD9

ICD9

ICD9

### SEVERITA' D-AA

Ammissione

Dimissione

Psich.

Soma

Psich.

Soma

Hamilton Depressione

Hospital Anxiety Scale

Apathy Evaluation Scale

Note

Bruno Bernardini, Giuseppe Bellelli\*, Luigi Baratto#, Marisa Gardella\*

## VALUTAZIONE 1° LIVELLO

### ANAMNESI PSICHIATRICA

#### FAMILIARE

	No	Si
Anamnesi positiva per MPM *	<input type="checkbox"/>	<input type="checkbox"/>
Anamnesi positiva per alcolismo / uso droghe	<input type="checkbox"/>	<input type="checkbox"/>
Fragilità Sociale	<input type="checkbox"/>	<input type="checkbox"/>

#### PERSONALE

	No	Si
Anamnesi positiva per alcolismo / uso droghe	<input type="checkbox"/>	<input type="checkbox"/>
Storia di violenza / abuso fisico-morale subito	<input type="checkbox"/>	<input type="checkbox"/>
Problemi con la Legge	<input type="checkbox"/>	<input type="checkbox"/>
Difficoltà inserimento / adattamento lavorativo	<input type="checkbox"/>	<input type="checkbox"/>
Presi in carico da parte servizi psichiatrici	<input type="checkbox"/>	<input type="checkbox"/>
Tentativo di suicidio	<input type="checkbox"/>	<input type="checkbox"/>
Stressful Life Events ultimo anno	<input type="checkbox"/>	<input type="checkbox"/>

\* MPM = Malattia Psichiatrica Maggiore

Helmus 8  
Rate score



### SINTOMI / SEGNI ASSOCIATI

	Ammissione		Dimissione	
	No	Si	No	Si
Dolore	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Disturbi comportamentali	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Disturbi del Sonno	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Anorexia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Altri disturbi comport. alimentari	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Segni extrapiramidali	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## INDICATORI DI TRANSIZIONE D-AA ORIENTATI

	No	Si
Trattamento con farmaci Antidepressivi	<input type="checkbox"/>	<input type="checkbox"/>
Trattamento con Benzodiazepine	<input type="checkbox"/>	<input type="checkbox"/>
Trattamento con farmaci Tranquillanti Maggiori	<input type="checkbox"/>	<input type="checkbox"/>
Trattamento Neuropsicologico	<input type="checkbox"/>	<input type="checkbox"/>
Supporto Psicologico	<input type="checkbox"/>	<input type="checkbox"/>
Terapia Occupazionale	<input type="checkbox"/>	<input type="checkbox"/>
Altro	<input type="checkbox"/>	<input type="checkbox"/>
Pittsburg Rehab. Partic. Scale	<input type="text"/>	

## VALUTAZIONE 1° LIVELLO

### ANAMNESI PSICHIATRICA

#### FAMILIARE

	No	Si
Anamnesi positiva per MPM *	<input type="checkbox"/>	<input type="checkbox"/>
Anamnesi positiva per alcolismo / uso droghe	<input type="checkbox"/>	<input type="checkbox"/>
Fragilità Sociale	<input type="checkbox"/>	<input type="checkbox"/>

#### PERSONALE

	No	Si
Anamnesi positiva per alcolismo / uso droghe	<input type="checkbox"/>	<input type="checkbox"/>
Storia di violenza / abuso fisico-morale subito	<input type="checkbox"/>	<input type="checkbox"/>
Problemi con la Legge	<input type="checkbox"/>	<input type="checkbox"/>
Difficoltà inserimento / adattamento lavorativo	<input type="checkbox"/>	<input type="checkbox"/>
Preso in carico da parte servizi psichiatrici	<input type="checkbox"/>	<input type="checkbox"/>
Tentativo di suicidio	<input type="checkbox"/>	<input type="checkbox"/>
Stressful Life Events ultimo anno	<input type="checkbox"/>	<input type="checkbox"/>

\* MPM = Malattia Psichiatrica Maggiore

Helmstet  
Risk score



### SINTOMI / SEGNI ASSOCIATI

	Ammissione		Dimissione	
	No	Si	No	Si
<b>Dolore</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Disturbi comportamentali	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Disturbi del Sonno	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Anorexia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Altri disturbi comport. alimentari	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Segni extrapiramidali	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## INDICATORI DI TRANSIZIONE D-AA ORIENTATI

	No	Si
Trattamento con farmaci Antidepressivi	<input type="checkbox"/>	<input type="checkbox"/>
Trattamento con Benzodiazepine	<input type="checkbox"/>	<input type="checkbox"/>
Trattamento con farmaci Tranquillanti Maggiori	<input type="checkbox"/>	<input type="checkbox"/>
Trattamento Neuropsicologico	<input type="checkbox"/>	<input type="checkbox"/>
Supporto Psicologico	<input type="checkbox"/>	<input type="checkbox"/>
Terapia Occupazionale	<input type="checkbox"/>	<input type="checkbox"/>
Altro	<input type="checkbox"/>	<input type="checkbox"/>
Pittsburg Rehab. Partic. Scale	<input type="text"/>	

## VALUTAZIONE 1° LIVELLO

### ANAMNESI PSICHIATRICA

#### FAMILIARE

	No	Si
Anamnesi positiva per MPM *	<input type="checkbox"/>	<input type="checkbox"/>
Anamnesi positiva per alcolismo / uso droghe	<input type="checkbox"/>	<input type="checkbox"/>
Fragilità Sociale	<input type="checkbox"/>	<input type="checkbox"/>

#### PERSONALE

	No	Si
Anamnesi positiva per alcolismo / uso droghe	<input type="checkbox"/>	<input type="checkbox"/>
Storia di violenza / abuso fisico-morale subito	<input type="checkbox"/>	<input type="checkbox"/>
Problemi con la Legge	<input type="checkbox"/>	<input type="checkbox"/>
Difficoltà inserimento / adattamento lavorativo	<input type="checkbox"/>	<input type="checkbox"/>
Presi in carico da parte servizi psichiatrici	<input type="checkbox"/>	<input type="checkbox"/>
Tentativo di suicidio	<input type="checkbox"/>	<input type="checkbox"/>
Stressful Life Events ultimo anno	<input type="checkbox"/>	<input type="checkbox"/>

\* MPM = Malattia Psichiatrica Maggiore

Helmstet  
Risk score



### SINTOMI / SEGNI ASSOCIATI

	Ammissione		Dimissione	
	No	Si	No	Si
<b>Dolore</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Disturbi comportamentali	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Disturbi del Sonno	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Anorexia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Altri disturbi comport. alimentari	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Segni extrapiramidali	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## INDICATORI DI TRANSIZIONE D-AA ORIENTATI

	No	Si
Trattamento con farmaci Antidepressivi	<input type="checkbox"/>	<input type="checkbox"/>
Trattamento con Benzodiazepine	<input type="checkbox"/>	<input type="checkbox"/>
Trattamento con farmaci Tranquillanti Maggiori	<input type="checkbox"/>	<input type="checkbox"/>
Trattamento Neuropsicologico	<input type="checkbox"/>	<input type="checkbox"/>
Supporto Psicologico	<input type="checkbox"/>	<input type="checkbox"/>
Terapia Occupazionale	<input type="checkbox"/>	<input type="checkbox"/>
Altro	<input type="checkbox"/>	<input type="checkbox"/>
<b>Pittsburg Rehab. Partic. Scale</b>	<input type="checkbox"/>	



VALUTAZIONE 1° LIVELLO

ANAMNESI PSICHIATRICA

FAMILIARE

No Si

Anamnesi positiva per MPM \*

Anam

Fragi

PERSO

Anam

Slors

Probl

Diffic

Pres

Tent

Stres

INDICATORI DI TRANSIZIONE D-AA ORIENTATI

No Si

Trattamento con farmaci Antidepressivi



Dolore

Disturbi comportamentali

Disturbi del Sonno

Anorexia

Altri disturbi comport. alimentari

Segni extrapiramidali



VALUTAZIONE 1° LIVELLO

ANAMNESI PSICHIATRICA

FAMILIARE

No Si

Anamnesi positiva per MPM \*

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

Anam

Fragi

PERSO

Anam

Storia

Probl

Diffic

Pres

Tenta

Stres

INDICATORI DI TRANSIZIONE  
D-AA ORIENTATI

No Si

Trattamento con farmaci Antidepressivi

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

- **Disegno:** multicentrico (30 reparti di riabilitazione distribuiti sul territorio nazionale)

Dolore

Disturbi comportamentali

Disturbi del Sonno

Anorexia

Altri disturbi comport. alimentari

Segni extrapiramidali

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------



VALUTAZIONE 1° LIVELLO

ANAMNESI PSICHIATRICA

FAMILIARE

No Si

Anamnesi positiva per MPM\*

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

Anam

Fragi

PERSO

Anam

Slora

Probl

Diffic

Pres

Tenta

Stres

INDICATORI DI TRANSIZIONE  
D-AA ORIENTATI

Trattamento con farmaci Antidepressivi

No Si

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

- **Disegno:** multicentrico (30 reparti di riabilitazione distribuiti sul territorio nazionale)
- **Scopi:** a) valutare la prevalenza e la relazione tra varie problematiche di pertinenza psicogeriatrica (depressione, ansia, motivazione, apatia); b) valutarne l'impatto sugli outcomes funzionali

Delira

Disturbi comportamentali

Disturbi del Sonno

Anorexia

Altri disturbi comport. alimentari

Segni extrapiramidali

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

# Acknowledgments

- Sezione di Riabilitazione Geriatrica AIP
  
- Bruno Bernardini (Milano, SIGG)
- Luigi Baratto (Arenzano, SIMFER)
- Marisa Gardella (Arenzano, SIMFER)
- PRO.LI.SI. (regione Liguria)

# Acknowledgments

Per informazioni:  
[giuseppebellelli@libero.it](mailto:giuseppebellelli@libero.it)

- Bruno Bernardini (Milano, SIGG)
- Luigi Baratto (Arenzano, SIMFER)
- Marisa Gardella (Arenzano, SIMFER)
- PRO.LI.SI. (regione Liguria)