

52° CONGRESSO NAZIONALE SIGG

Firenze 29-30 novembre 2007

Evidenze di efficacia della terapia occupazionale nell'ictus

Alessia Tafani

Corso di Laurea in Terapia Occupazionale

Università Cattolica del Sacro Cuore

Roma

Qual è il miglior intervento?



Best practice is the
evidence based practice



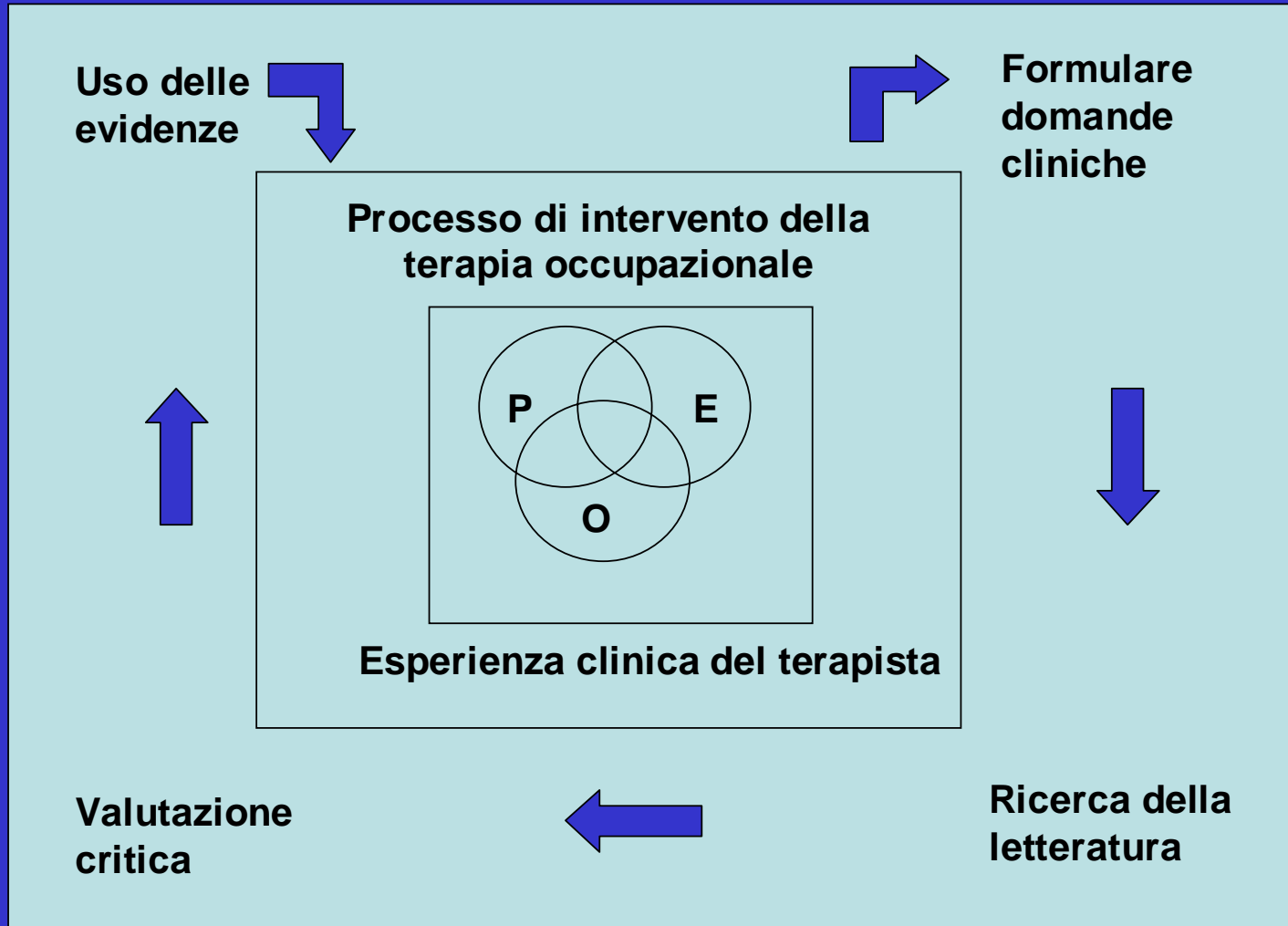
Evidence based practice defined.....

‘The conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients.’

Sackett, D. L., Rosenberg, W. M., Gray, J. A., Haynes, R. B., & Richardson, W. S. (1996). Evidence based medicine: what it is and what it isn't. *British Medical Journal*, 312 (7023) ,71-72.

Evidence Based Occupational Therapy Model

(Bennet and Bennet – 2000)



Formulare domande specifiche

- Tipologia di intervento
- Risultato
- Specificità del pz (patologia, età, etc.)

“Il training delle attività di base della vita quotidiana (INTERVENTO) migliora l'autonomia (RISULTATO) nei pazienti anziani con ictus (PAZIENTE)”?



Cercare la letteratura

- PubMed
- MEDLINE
- Embase
- CINAHL
- Cochrane library
- OTseeker (www.otseeker.com)
- PEDRO (Physiotherapy Evidence Database)
- Critically appraised papers:
 - www.OTCATS.com
 - The Australian Occupational Therapy Journal
 - OT Now (CAOT)
 - AOTA's Evidence Brief Series
 - Evidence Based Medicine Journal series
 - Clinical Evidence

All Databases PubMed Nucleotide Protein Genome Structure OMIM PMC Journals Books

Search PubMed for stroke AND "occupational therapy" Go Clear Save Search

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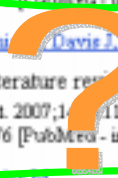
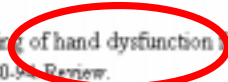
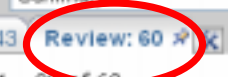
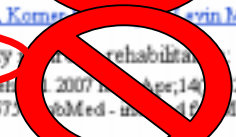
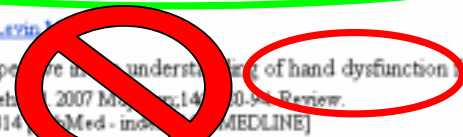
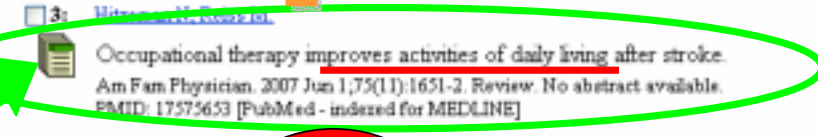
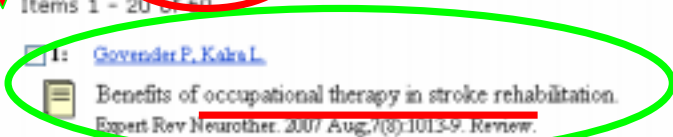
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- 3: [Witkowski M, Roszjan J.](#) Occupational therapy improves activities of daily living after stroke. *Am Fam Physician.* 2007 Jun 1;75(11):1651-2. Review. No abstract available. PMID: 17575653 [PubMed - indexed for MEDLINE]
- 4: [Sangols AP, Levin M.](#) A new perspective on understanding of hand dysfunction following neurological injury. *Top Stroke Rehabil.* 2007 May;14(3):20-9. Review. PMID: 17573314 [PubMed - indexed for MEDLINE]
- 5: [Henderson A, Kornblith S, Levin M.](#) Virtual reality in stroke rehabilitation: a systematic review of its effectiveness for upper limb motor recovery. *Top Stroke Rehabil.* 2007 May;14(3):42-61. Review. PMID: 17517575 [PubMed - indexed for MEDLINE]
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 PMID: 17307395 [PubMed - indexed for MEDLINE]

7: [Lamora A, Steinhilber J, Wang J.](#) Related Articles, Links
 Physiologic evaluation of autonomic disturbances post stroke.
Clin Neurophysiol. 2007 Apr;118(4):717-29. Epub 2007 Feb 16. Review.
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8: [Frog LA, Drummond AE, Langhorne P.](#) Related Articles, Links
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11: [Wolter M.](#) Related Articles, Links
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Using video to clarify teaching roles and demonstrate clinical reasoning in stroke rehabilitation.
Disabil Rehabil. 2006 Oct;30(20):1661-7. Review.
 PMID: 1698581 [PubMed - indexed for MEDLINE]

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Application of the CITT concept in the clinical environment: hurdles, practicalities, and clinical benefits.
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 PMID: 1648019 [PubMed - indexed for MEDLINE]

14: [Hastik P, Maly M.](#) Related Articles, Links
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Cogn Behav Neurosci. 2006 Mar;19(1):34-40. Review.
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12: [Tempest S, McIntyre A.](#) Related Articles, Links
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PMID: 16633017 [PubMed - indexed for MEDLINE]

1: [Expert Rev Neurother.](#) 2007 Aug;7(8):1013-9.

Benefits of occupational therapy in stroke rehabilitation.

[Govender P, Kalra L.](#)

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Stroke is the largest single cause of severe physical disability and rehabilitation to reduce functional deficits is the most effective treatment. Occupational therapists play a central role in rehabilitation as members of a multidisciplinary team. Occupational therapy is a client-centered profession that uses meaningful activities across the spectrum of physical and mental domains to reduce limitations after stroke. Where remediation is not possible, occupational therapists implement compensatory strategies to promote independence. Rehabilitation is based on the concept of brain plasticity, which implies that it is possible to modulate or facilitate cerebral reorganization by external inputs. Occupational therapy activities are specifically geared to promote this re-education process and encourage the development of lost skills while accommodating for specific physical, cognitive or affective impairments. Principles of motor, sensory, cognitive and affective rehabilitation are incorporated into effective task-specific activities and environments are adapted to create the optimum conditions for successful rehabilitation. Several promising new rehabilitation approaches, based on neuropsychology and technological advances, have been developed to complement therapy inputs and exploit the brain's capacity to recover from stroke.



1: [Occup Ther Int.](#) 2007;14(1):11-27.

Systematic literature review of treatment interventions for upper extremity hemiparesis following stroke.

[Urton ML](#), [Kohia M](#), [Davis J](#), [Neill MR](#).

Department of Occupational Therapy Education, Rockhurst University, Kansas City, Missouri 64110, USA.

The primary purpose of this review article is to critically analyse the literature from 1999 to 2005 regarding effective interventions for upper extremity hemiparesis following stroke. The researchers narrowed the scope of the review based on inclusion and exclusion criteria, which yielded 11 pertinent studies congruent with the selection criteria. Studies were categorized using Sackett's levels of evidence, level I being the highest degree of certainty and level V the lowest. Grades of recommendations were then developed, grade A being highly recommended, grade B discretionary and grade C not endorsed. Two studies were endorsed as level I - grade A, six were level II - grade B, and three were level III - grade C. Clinical recommendations inferred from the present evaluation are as follows: * Electrical stimulation can be used to improve upper limb outcomes in patients with moderate to severe upper limb dysfunction and is feasible for home-based interventions.* Therapy that utilizes goal-directed reaching behaviours promotes more typical reaching patterns than non-goal-directed interventions.* Reach-to-grasp movements show greater improvement when compensatory trunk movements are reduced.* As an addition to regular exercise therapy time, Arm BASIS training may enhance selective movements of the upper extremity (i.e. reaching).* When performed in conjunction with active neuromuscular stimulation, random and blocked practice may improve pre-motor, motor and total reaction times of the upper extremity.



Occupational Therapy Improves Activities of Daily Living After Stroke (3 November)

NATHAN HITZEMAN, MD, and

Determinare se la TO, focalizzata sulle ADL, nei pz con ictus migliora i risultati del processo riabilitativo

Cochrane Abstract

Background. Occupational therapy improves independence in all aspects of daily living.

Objectives. To determine whether occupational therapy improves activities of daily living (ADL) in stroke survivors.

Search Strategy. We searched Medline, Embase, Cinahl, Cochrane Database, Psycinfo, Allied, Wilson Social Sciences Abstracts, Science Citation Index (1956 to March 2006), and Art and Therapy Research Index and articles, contacted authors and

Selection Criteria. We identified randomized controlled trials of occupational therapy intervention (compared with usual care) in which performance in ADL or in which performance in ADL or in which performance in ADL

Data Collection and Analysis. We collected data for prespecified outcomes: ADL, personal ADL, and ADL at the end of follow-up.

Main Results. We included 1258 participants. Occupational therapy improved ADL (Peto odds ratio = 0.67; 95% confidence interval [CI], 0.51 to 0.87; $P = .003$), and increased personal ADL scores (standardized mean difference = 0.11; 95% CI, 0.07 to 0.15) for every 11 patients receiving an occupational therapy intervention compared with usual care. One patient was spared a poor outcome.

Authors' Conclusions. Patients with stroke are less likely to deteriorate and are more likely to improve in ADL. However, the exact nature of a poor outcome needs to be defined.

1. Medline
2. Embase
3. Cinahl
4. Cochrane Database

1. Ictus
2. Intervento di TO focalizzato sulle ADL

1. 1258 partecipanti
2. Da 4 a 18 interventi in 6 mesi
3. > nelle ADL
4. NNTT= 11\6 mesi

1. < deterioramento cognitivo
2. < dipendenza nelle ADL



Occupational therapy for patients with problems in activities of daily living after stroke.

[Legg LA](#), [Drummond AE](#), [Langhorne P](#).

Glasgow Royal Infirmary, Academic Section of Geriatric Medicine, Glasgow, UK.
step@clinmed.gla.ac.uk

BACKGROUND: Occupational therapy aims to help people reach their maximum level of function and independence in all aspects of daily life. **OBJECTIVES:** To determine whether occupational therapy focused specifically on personal activities of daily living improves recovery for patients following stroke. **SEARCH STRATEGY:** We searched the Cochrane Stroke Group Trials Register (last searched January 2006). In addition, we searched the Cochrane Central Register of Controlled Trials (CENTRAL) (The Cochrane Library Issue 1, 2006), MEDLINE (1966 to March 2006), EMBASE (1980 to March 2006), CINAHL (1983 to March 2006), PsycLIT (1974 to March 2006), AMED (1985 to March 2006), Wilson Social Sciences Abstracts (1984 to March 2006) and the following Web of Science databases: Science Citation Index (1945 to March 2006), Social Science Citation Index (1956 to March 2006) and Arts and Humanities Citation Index (1975 to March 2006). In an effort to identify further published, unpublished and ongoing trials we searched The Occupational Therapy Research Index and Dissertation Abstracts register, scanned reference lists of relevant articles, contacted authors and researchers and handsearched relevant journals. **SELECTION CRITERIA:** We identified randomised controlled trials of an occupational therapy intervention (compared to usual care or no care) where stroke patients practiced personal activities of daily living, or performance in activities of daily living was the focus of the occupational therapy intervention. **DATA COLLECTION AND ANALYSIS:** Two review authors independently selected trials and extracted data for pre-specified outcomes. The primary outcomes were the proportion of patients who had deteriorated or were dependent in personal activities of daily living and performance in personal activities of daily living at the end of follow up. **MAIN RESULTS:** We identified 64 potentially eligible trials and included 10 studies (1348 participants). Occupational therapy interventions reduced the odds of a poor outcome (Peto odds ratio 0.67 (95% confidence interval (CI) 0.51 to 0.87; P = 0.003), and increased personal activity of daily living scores (standardised mean difference 0.18 (95% CI 0.04 to 0.32; P = 0.01). For every 11 (95% CI 7 to 30) patients receiving an occupational therapy intervention to facilitate personal activities of daily living, one patient was spared a poor outcome. **AUTHORS' CONCLUSIONS:** Patients who receive occupational therapy interventions are less likely to deteriorate and are more likely to be independent in their ability to perform personal activities of daily living. However, the exact nature of the occupational therapy intervention to achieve maximum benefit needs to be defined.



□ 1: [NeuroRx](#). 2006 Oct;3(4):525-34.

Community neurorehabilitation: a synthesis of current evidence and future research directions.

[Chard SE](#).

Department of Sociology and Anthropology, University of Maryland, Baltimore County, Baltimore, Maryland 21250, USA. schard@umbc.edu

Over the past decade, community neurorehabilitation has emerged as a promising extension of neurological rehabilitation. The goal of community neurorehabilitation is to maximize functional ability and quality of life through multidimensional rehabilitation that occurs while the individual is living in a home versus acute or transitory care setting. Because of its multidisciplinary focus, many variations of community neurorehabilitation teams have been implemented. Critical gaps exist, however, in understanding of the influence of structural and procedural differences among programs, as well as patient level variables such as social support, on recovery. This paper examines the current evidence of the effectiveness of community neurorehabilitation through a review of the findings of systematic reviews and meta-analyses of four neurological conditions: stroke, multiple sclerosis, traumatic brain injury, and Parkinson's disease. It focuses in particular on the data regarding physical therapy and occupational therapy, which are two of the primary components of community neurorehabilitation programs.



Occupational therapy for patients with problems in activities of daily living after stroke.

[Legg LA](#), [Drummond AE](#), [Langhorne P](#).

Glasgow Royal Infirmary, Academic Section of Geriatric Medicine, Glasgow, UK.
step@clinmed.gla.ac.uk

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Usare le evidenze



Evidence Based Occupational Therapy

Limiti della EBOT

- Tempo
- Accessibilità PC
- Inglese
- Mentalità

What will I do?

- ◆ Read one journal article every week
- ◆ Implement one outcome measure in your practice
- ◆ Each month, select a client and do a literature review related to that person and their occupational performance issues
- ◆ Start a journal club
- ◆ Include evidence when you communicate to clients, service providers, managers