# Il dolore cronico nelle strutture residenziali per anziani



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#### Pain as the 5<sup>™</sup>Vital Sign Toolkit



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Ruth Ann Terry, MPH, RN, Executive Officer



PAIN ASSESSMENT: THE FIFTH VITAL SIGN



# Differences in Chronic Pain: older vs. young adults

1. Assessment

### Assessment of pain

Assessment of pain in older adults is extremely difficult because:

- Inability to communicate symptoms
- Dementia
- Atypical presentation of symptoms

### Pain in End Stage Dementia

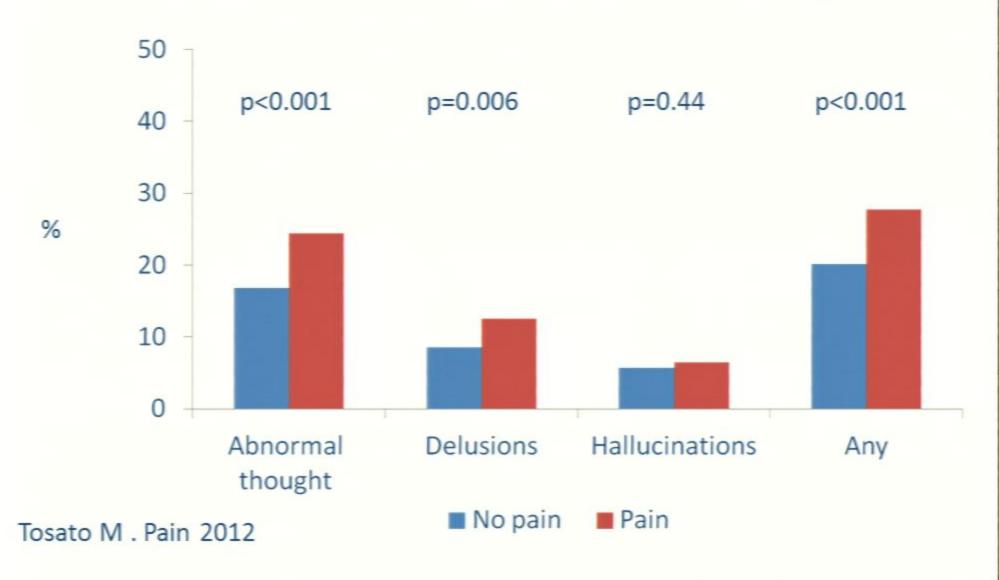
- Patients can't self-report
- Pain unrecognized and routinely under- or untreated
- Pain behaviors are often subtle, missed, or mistaken for something else
  - somnolence resulting from exhaustion
  - resistance to movement
  - Agitation, vocalization, moaning, screaming
  - grimacing and tense, rigid body posture

# Correlates of Pain in NH: SHELTER study

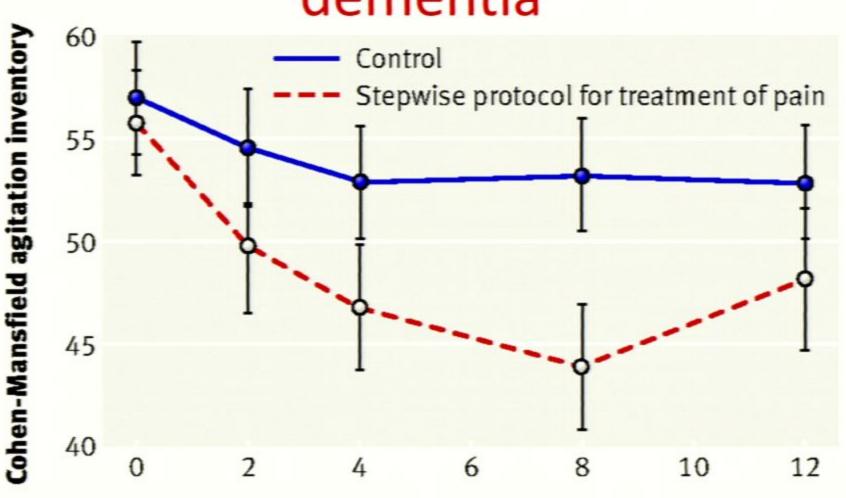
	Adj OR	95% CI
Age	1.01	1.00-1.02
Female gender	1.31	1.12-1.53
Unstable condition	1.38	1.18-1.62
Depression	1.66	1.43-1.92
Cognitive impairment		
no or mild impairment	Reference	
moderate impairment	0.86	0.72-1.03
severe impairment	0.60	0.47-0.76
Communication problems		
no or mild impairment	Reference	
moderate impairment	0.79	0.64-0.98
severe impairment	0.77	0.60-0.98

Lukas et al. In preparation

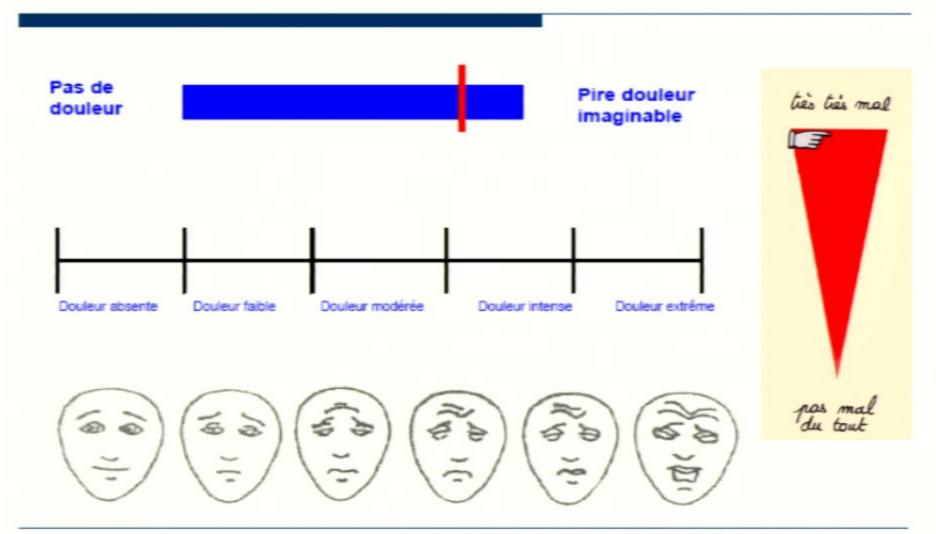
# Pain and psychiatric symptoms in NH residents: SHELTER study



# Treatment of pain and behavioural symptoms in NH residents with dementia

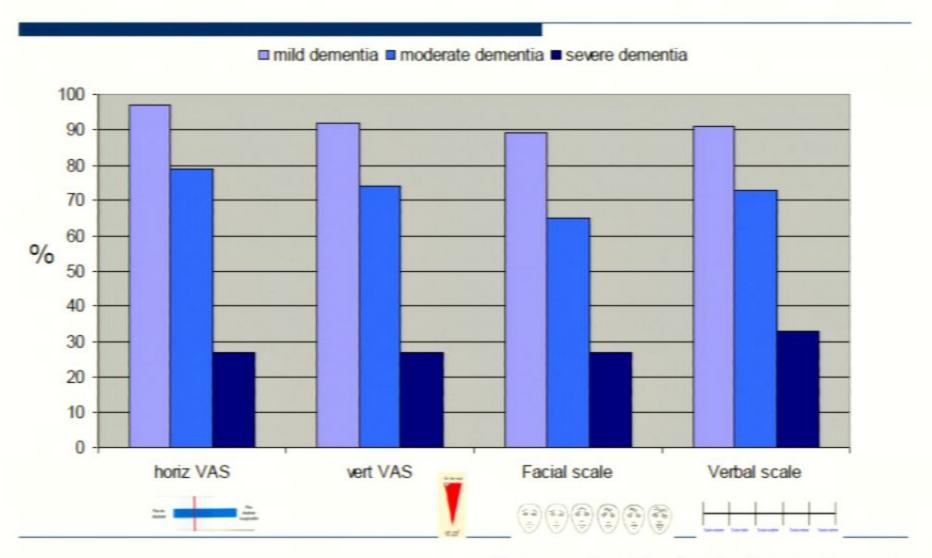


### Pain self-assessment

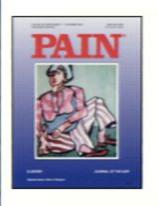


Pautex et al J Gerontol A Biol Sci Med Sci 2005 60: 524-9 Pautex et al J Am Geriatr Soc 2006 54: 1040-1045

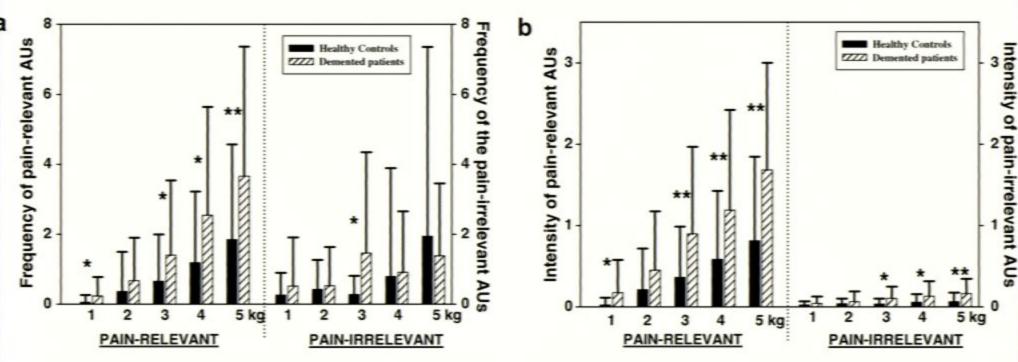
### Self assessment in dementia



Pautex et al J Gerontol A Biol Sci Med Sci 2005 60: 524-9



#### The facial expression of pain in patients with dementia



The preserved pain typicalness of facial responses to noxious stimulation suggests that pain is reflected as validly in the facial responses of demented patients as it is in healthy individuals.

Published: 27 January 2006

BMC Geriotrics 2006, 6:3 doi:10.1186/1471-2318-6-3



Research article



#### Pain in elderly people with severe dementia: A systematic review of behavioural pain assessment tools

#### Abstract

**Background:** Pain is a common and major problem among nursing home residents. The prevalence of pain in elderly nursing home people is 40–80%, showing that they are at great risk of experiencing pain. Since assessment of pain is an important step towards the treatment of pain, there is a need for manageable, valid and reliable tools to assess pain in elderly people with dementia.

Methods: This systematic review identifies pain assessment scales for elderly people with severe dementia and evaluates the psychometric properties and clinical utility of these instruments. Relevant publications in English, German, French or Dutch, from 1988 to 2005, were identified by means of an extensive search strategy in Medline, Psychinfo and CINAHL, supplemented by screening citations and references. Quality judgement criteria were formulated and used to evaluate the psychometric aspects of the scales.

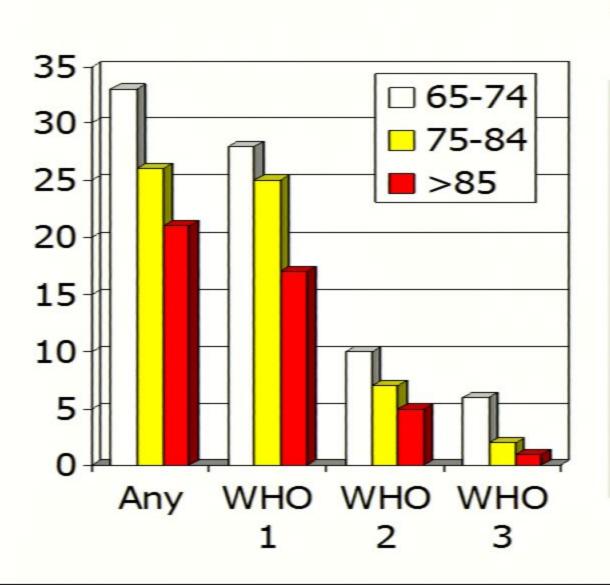
Results: Twenty-nine publications reporting on behavioural pain assessment instruments were selected for this review. Twelve observational pain assessment scales (DOLOPLUS2; ECPA; ECS; Observational Pain Behavior Tool; CNPI; PACSLAC; PAINAD; PADE; RaPID; Abbey Pain Scale; NOPPAIN; Pain assessment scale for use with cognitively impaired adults) were identified. Findings indicate that most observational scales are under development and show moderate psychometric qualities.

Conclusion: Based on the psychometric qualities and criteria regarding sensitivity and clinical utility, we conclude that PACSLAC and DOLOPLUS2 are the most appropriate scales currently available. Further research should focus on improving these scales by further testing their validity, reliability and clinical utility.

#### Unmet needs

 Tools or markers of pain in older adults with dementia or communication problems

### Pharmacologic treatment

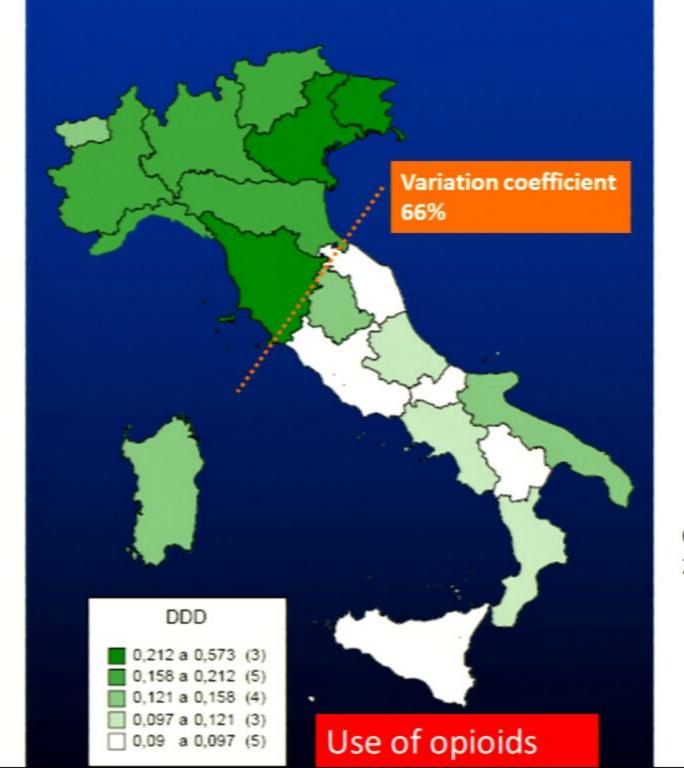




2001;161:2721-4

Onder G et al.

- As age increased a lower proportion of patients in pain received analgesic drugs.
- Only 1% of patients ≥ 85 years received morhine or other strong opioids
- Patients 85 or older were less likely to receive analgesics (OR 0.73, 0.60-0.89)



OSMED 2004 ... to remediate the mismatch between knowledge of pain care and its application will require a cultural transformation in the way clinicians and the public view pain and its treatment. Currently the attitude is often denial and avoidance.

Instead, clinicians, family members, employers, and friends inevitably must rely on a person's ability to express his or her subjective experience of pain and learn to trust that expression, and the medical system must give these expressions credence and endeavor to respond to them honestly and effectively.

Pizzo PA NEJM 2012;366:197-9.

#### Unmet needs

- Tools or markers of pain in older adults with dementia or communication problems
- Cultural transformation in the way clinicians and the public view pain and its treatment

# Differences in Chronic Pain: older vs. young adults

- 1. Assessment
- 2. Type of pain

#### Office Management of Chronic Pain in the Elderly

Debra K. Weiner, MD

Division of Geriatric Medicine, Department of Medicine, Department of Psychiatry, and Department of Anesthesiology, University of Pittsburgh, Pittsburgh, Penn.

#### ABSTRACT

Chronic pain plagues older adults more than any other age group; thus, practitioners must be able to approach this problem with confidence and skill. This article reviews the assessment and treatment of the most common chronic nonmalignant pain conditions that affect older adults—myofascial pain, generalized osteoarthritis, chronic low back pain (CLBP), fibromvalgia syndrome, and peripheral neuropathy. Specific topics include essential components of the physical examination; how and when to use basic and advanced imaging in older adults with CLBP; a stepped care approach to treating older adults with generalized osteoarthritis and CLBP, including noninvasive and invasive management techniques; how to diagnose and treat myofascial pain; strategies to identify the older adult with fibromyalgia syndrome and avoid unnecessary "diagnostic" testing; pharmacological treatment for the older adult with peripheral neuropathy; identification and treatment of other factors such as dementia and depression that may significantly influence response to pain treatment; and when to refer the patient to a pain specialist. While common, chronic pain is not a normal part of aging, and it should be treated with an emphasis on improved physical function and quality of life. © 2007 Elsevier Inc. All rights reserved.

**KEYWORDS:** Chronic pain; Elderly; Evaluation; Treatment; Low back pain; Fibromyalgia; Syndrome; Myofascial pain; Peripheral neuropathy; Generalized osteoarthritis

#### Osteoarthritis and Cartilage



Neuropathic pain symptoms in a community knee OA cohort

J.R. Hochman † t\*, L. Gagliese § ||, A.M. Davis ¶#, G.A. Hawker † t#

Conclusions: Among older adults with chronic symptomatic knee OA, over one-quarter had NP symptoms localized to their knees using the mPD-Q. The mPD-Q may facilitate the identification of a neuropathic component to pain in adults with knee OA who may benefit from further evaluation and/or treatment for NP.

Arthritis Care & Research Vol. 62, No. 7, July 2010, pp 1019-1023 DOI 10.1002/acr.20142 © 2010, American College of Rheumatology

BRIEF REPORT

#### The Nerve of Osteoarthritis Pain

JACQUELINE R. HOCHMAN,<sup>1</sup> MELISSA R. FRENCH,<sup>1</sup> SARAH L. BERMINGHAM,<sup>1</sup> AND GILLIAN A. HAWKER<sup>2</sup>

Conclusion. During focus groups, a subset of adults with chronic, symptomatic knee OA used pain quality descriptors that were suggestive of NP. Elicitation of NP descriptors in people with OA may help identify those who could benefit from further evaluation and perhaps treatment for NP.

#### Unmet needs

- Tools or markers of pain in older adults with dementia or communication problems
- Cultural transformation in the way clinicians and the public view pain and its treatment
- 3. Treatments targeting different types of pain

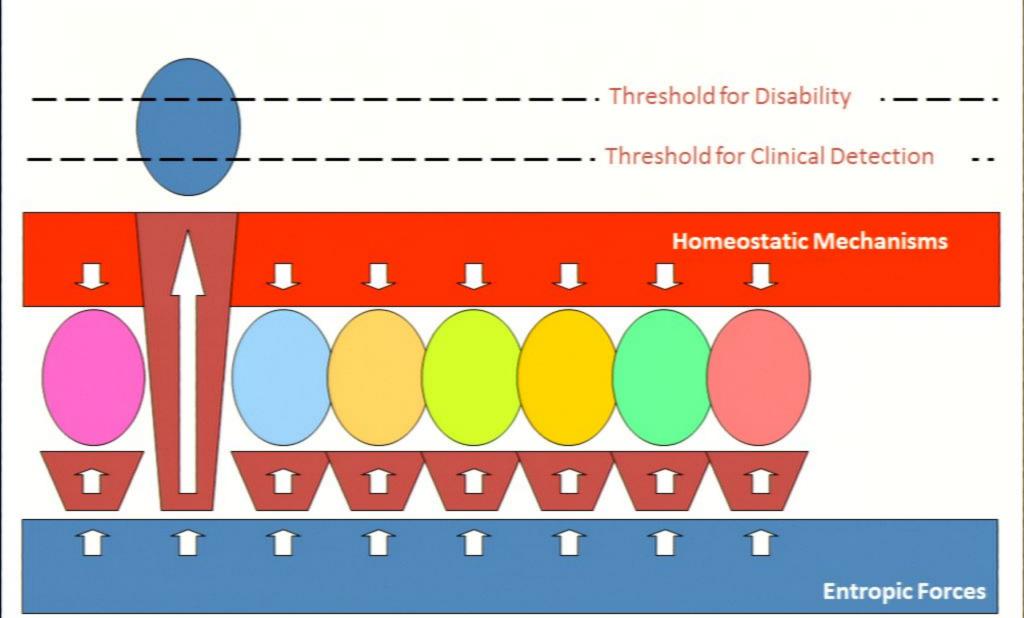
# Differences in Chronic Pain: older vs. young adults

- 1. Assessment
- 2. Type of pain
- 3. Consequences

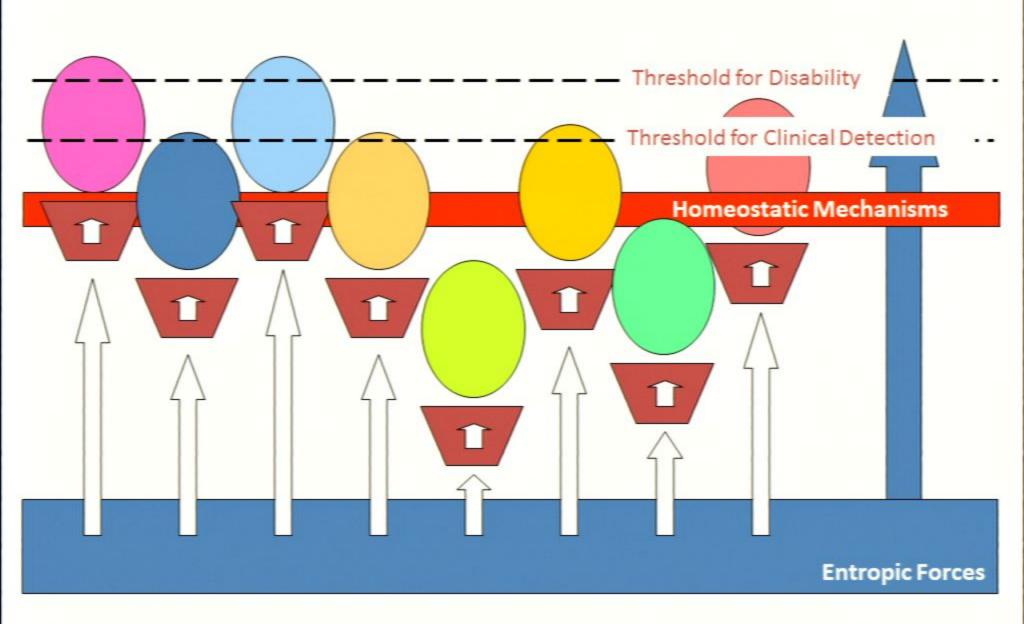
# Non malignant pain and risk of disability

	N of events	Crude incident rate per persons-year	Adjusted <sup>a</sup> hazard ratio (95% CI)
Pain frequency			
No daily pain	123/825 (14.9)	0.16	1 (Reference)
Daily pain	132/695 (19.0)	0.20	1.36 (1.05-1.78)
Pain severity			
No daily pain	123/825 (14.9)	0.16	1 (Reference)
Mild	17/129 (13.2)	0.14	1.09 (0.65-1.83)
Moderate-severe	101/510 (19.8)	0.21	1.39 (1.05-1.85)
Excruciating	11/47 (23.4)	0.26	1.77 (0.93-3.35)
Painful sites			
No pain	123/825 (14.9)	0.16	1 (Reference)
Single site	57/366 (15.6)	0.16	1.23 (0.89-1.71)
Multiple sites	74/323 (22.9)	0.25	1.56 (1.13-2.15)

## Disease in Young-Middle Age



# Frailty - Older adults



### Pain interference with everyday life

	Pain interference overall (%)
Overall	3002 (38.1)
50-59 years	433 (32.1)
60-69 years	481 (37.9)
70–79 years	502 (43.4)
80+years	322 (50.2)

# Treatment outcomes parameters for older adults with chronic pain

Pain interference with performance of:

- Basic activities of daily living
- Instrumental activities of daily living
- Discretionary activities

Mobility/activity level

Energy level

Appetite

Sleep

Mood - eg, irritability, depression

Interpersonal interactions

Attention and concentration

Frequency of prn analgesic ingestion

Pain severity

Pain intensity is only one of many parameters that may improve when chronic pain is managed successfully ...

#### Unmet needs

- Tools or markers of pain in older adults with dementia or communication problems
- Cultural transformation in the way clinicians and the public view pain and its treatment
- 3. Treatments targeting different types of pain
- Treatments showing a clear impact on pain and on other relevant outcomes associated with pain

# Differences in Chronic Pain: older vs. young adults

- 1. Assessment
- 2. Type of pain
- 3. Consequences
- 4. Treatment
  - a. Side effects / Compliance

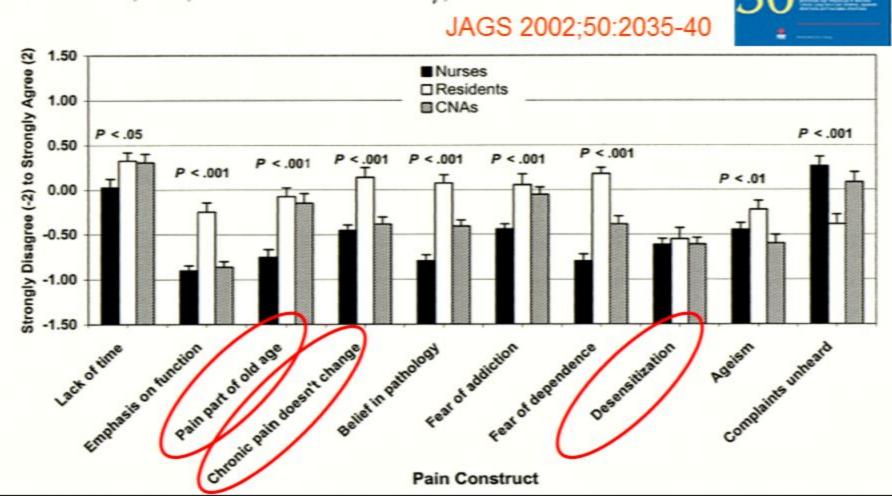
### Older adults and drug treatment

Factors influencing drug treatment in older adults:

- Comorbidity
- Polypharmacy
- Geriatric syndromes (dizziness, falls, etc..)

# Attitudinal Barriers to Effective Treatment of Persistent Pain in Nursing Home Residents

Debra K. Weiner, MD, \*†# and Thomas E. Rudy, PhD†#\$1



### NSAIDs and COX-2 selective

Nonselective NSAIDs and COX-2 selective inhibitors may be considered rarely, and with extreme caution, in highly selected individuals

- Absolute contraindications: current active peptic ulcer disease, chronic kidney disease, heart failure.
- Relative contraindications and cautions: hypertension, Helicobacter pylori, history of peptic ulcer disease, concomitant use of corticosteroids or SSRIs.

AGS. JAGS 2009;57:1331-46.

### NSAIDs and COX-2 selective

- Patients taking aspirin for cardioprophylaxis should not use ibuprofen.
- All patients taking nonselective NSAIDs and COX-2 selective inhibitors should be routinely assessed for gastrointestinal and renal toxicity, hypertension, heart failure, and other drug drug and drug—disease interactions.

### Opioids

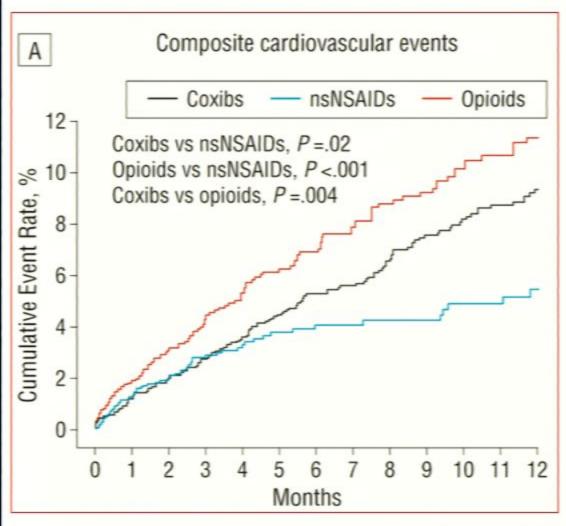
All patients with moderate to severe pain, painrelated functional impairment, or diminished quality of life due to pain should be considered for opioid therapy.

# Opioids for chronic noncancer pain: a meta-analysis

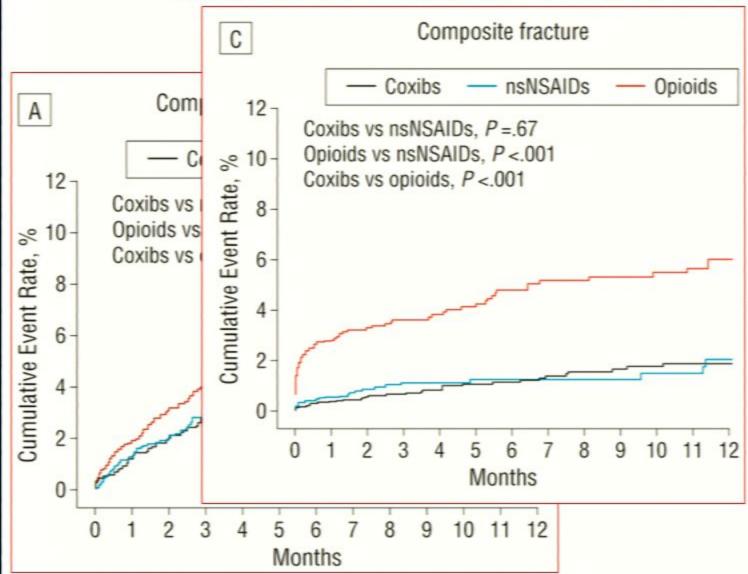
6 side effects occurred significantly more often with opioids than placebo:

- 1. constipation (RD 16%)
- 2. nausea (RD 15%)
- 3. dizziness or vertigo (RD 8%)
- 4. somnolence or drowsiness (RD 9%)
- 5. vomiting (RD 5%)
- 6. dry skin, itching or pruritus (RD 4%).

# The Comparative Safety of Analgesics in Older Adults With Arthritis

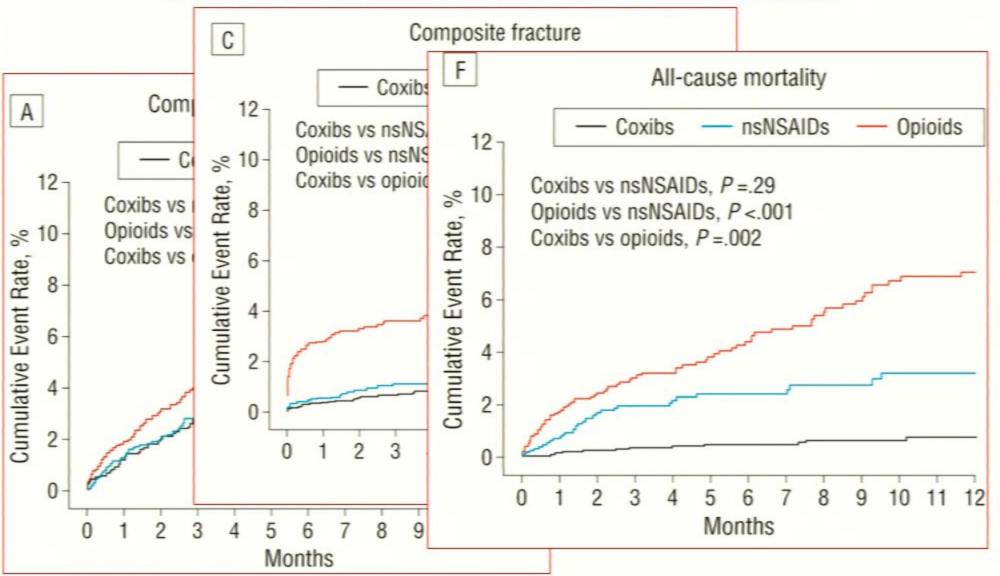


# The Comparative Safety of Analgesics in Older Adults With Arthritis

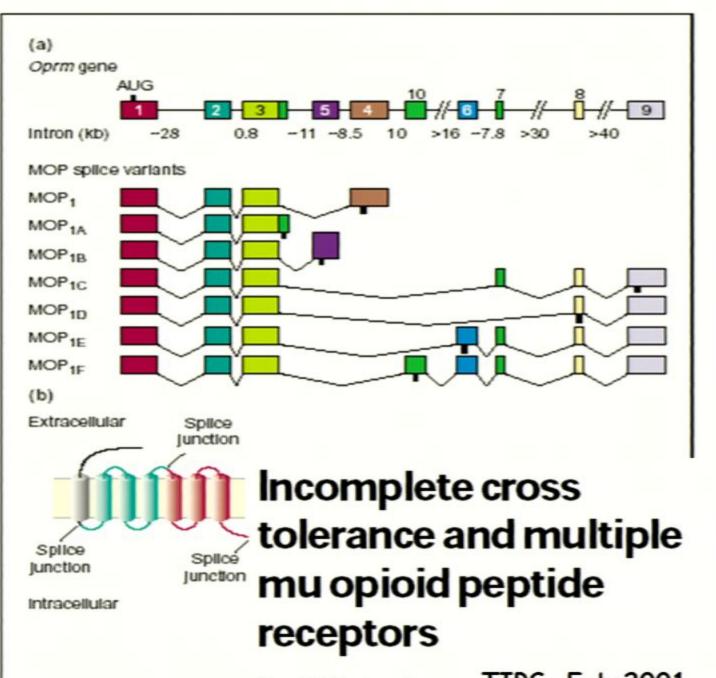


Solomon DH. Arch Intern Med 2010;170:1968-76.

# The Comparative Safety of Analgesics in Older Adults With Arthritis



Solomon DH. Arch Intern Med 2010;170:1968-76.



Side effects and analgesic responses can vary significantly among patients.

One explanation is the presence of multiple mu opioid receptors.

At least 7 different receptors have been identified.

Gavril W. Pastemak TIP:

TIPS, Feb 2001

CANCER TREATMENT REVIEWS (2006) 32, 304-315





www.elsevierhealth.com/journals/ctrv

GENERAL AND SUPPORTIVE CARE

#### Opioid switching: A systematic and critical review

Sebastiano Mercadante a,b,\*, Eduardo Bruera c

Opioid conversion should not be a mere mathematical calculation, but just a part of a more comprehensive evaluation of pain, adverse effect intensity, comorbidities, and concomitant drugs. The process of reaching an optimal dose should be highly individualized, particularly when patients are switched from high doses of opioids, given the wide conversion ratios reported in literature.

## Older adults and drug treatment

Factors influencing drug treatment in older adults:

- Comorbidity
- Polypharmacy
- Geriatric syndromes (dizziness, falls, etc..)

## Individualized treatment Safer and better tollerated alternatives

# Differences in Chronic Pain: older vs. young adults

- 1. Assessment
- Etiology
- 3. Consequences
- 4. Treatment
  - a. Side effects / Compliance
  - b. Easy to use / Route of administration

#### Rielaborazione Centro Studi Mundipharma dati IMS (YTD Dic 2007) e dati ISTAT 2006

Regioni	%Orali	%Transdermici
Sardegna	36,7	63,3
Veneto	35,8	64,2
Trentino Alto Adige	34,7	65,3
Friuli Venezia Giulia	33,4	66,6
Umbria	33,2	66,8
Lombardia	31,2	68,8
Toscana	30,4	69,6
Piemonte\Val d'Aosta	28,1	71,9
Lazio	28,0	72,0
Emilia Romagna	27,7	72,3
Italia	27,3	72,7
Abruzzo	21,9	78,1
Sicilia	20,6	79,4
Basilicata	19,9	80,1
Molise	19,8	80,2
Campania	19,7	80,3
Liguria	17,8	82,2
Marche	17,3	82,7
Puglia	15,4	84,6
Calabria	13,4	86,6

Is the use of transdermal fentanyl inappropriate according to the WHO guidelines and the EAPC recommendations? A study of cancer patients in Italy

## U.S. Food and Drug Administration

CENTER FOR DRUG EVALUATION AND RESEARCH

IMPORTANT DRUG WARNING

#### FDA Public Health Advisory

Safety Warnings Regarding Use of Fentanyl Transdermal (Skin) Patches

June 2005

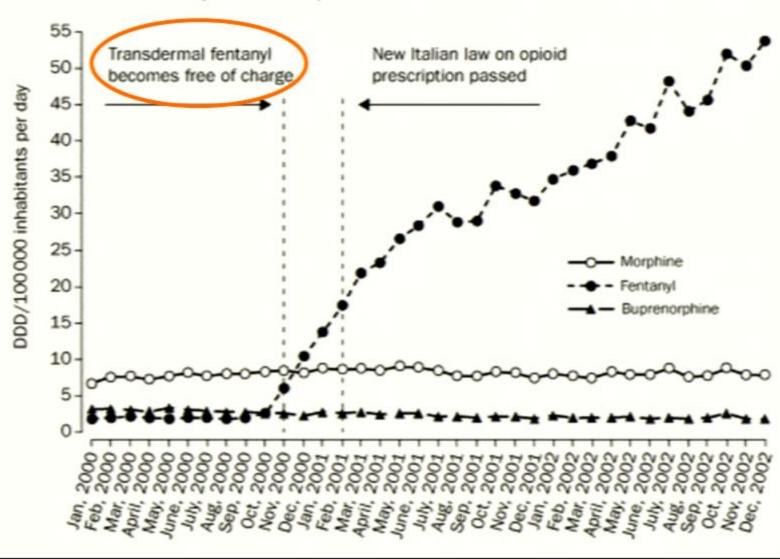
	Before	After
Opioids	0.22	0.22
Transdermal fentanyl	0.0005	0.0054
Morphine 1*	0.1904	0.0074
Morphine 2*	0.0240	0.1785

THE LANCET

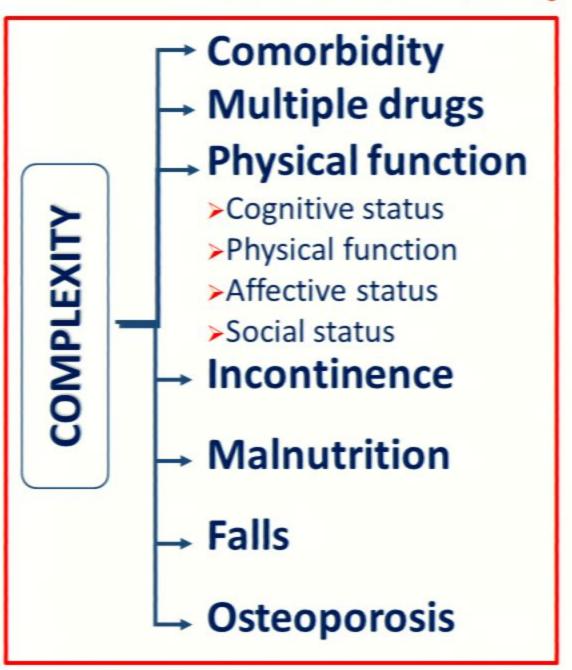
2002;360:1254

2203;362:78

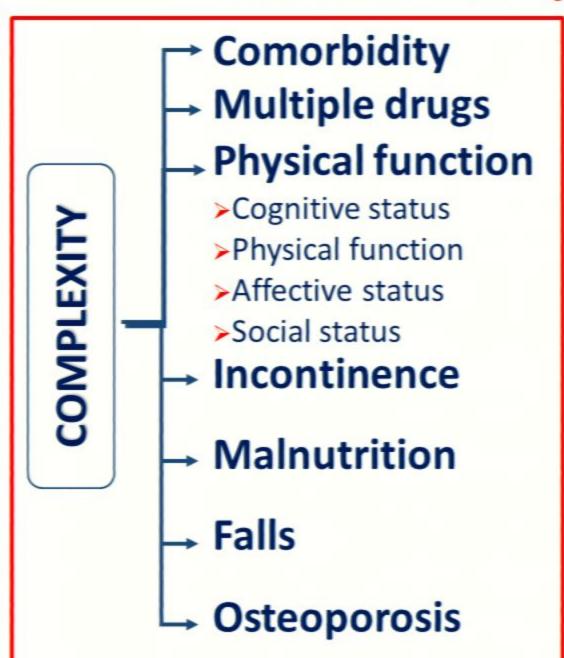
<sup>\*</sup>From two different anonymised companies.



## Ideal or real patient?



## Ideal or real patient?



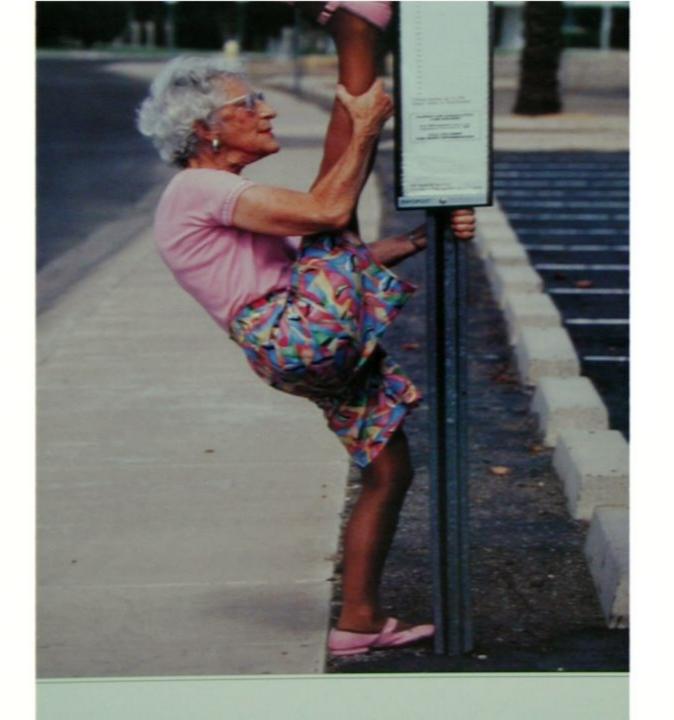
Researchers have largely shied away from the complexity of multiple chronic conditions avoidance that results in expensive, potentially harmful care of unclear benefit.

### Unmet needs

- Improve the concept of individualizing therapies
- Safer, better tollerated and easy to use treatments
- Treatments tested in a 'real geriatric' sample



"...Niente migliorerebbe la qualità della vita dei pazienti con dolore che la disseminazione e l'implementazione delle conoscenze esistenti..."



Anything is possible with a little Stretch of the imagination