

The social costs of chronic pain in Spain



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Introduction

- In Spain chronic pain is the most frequent cause for seeking medical care.
- Important public health problem due to:
 - Impact on patient's behaviour
 - Impact on patient's quality of life (suffering, depression; family, work and social interactions)
 - Impact on labour market
 - Impact on family (informal care)

Pain in Europe

- Breivik H, et al. “Survey of chronic pain in Europe: prevalence, impact on daily life, and treatment.” *Eur J Pain*. 2006;10(4):287-333
- Large survey on chronic pain in Europe (46.000 respondents).
- October 2002 - June 2003.
- Chronic pain defined as pain with:
 - average duration \geq 6 months
 - intensity \geq 5 (10 point rating scale), in last episode.

Pain in Spain

- European prevalence: 19% (75 million people).
 - Highest in Norway (30%), Poland (27%), Italy (26%)
 - Lowest in Spain: 12%
- Respondents with severe pain (8-10 on rating scale):
 - Spain: 44%
 - Europe: 33%
- Average duration of pain:
 - Spain: 9,1 years
 - Europe: 7 years
- Osteoarthritis and rheumatoid arthritis most common causes of pain (47%)

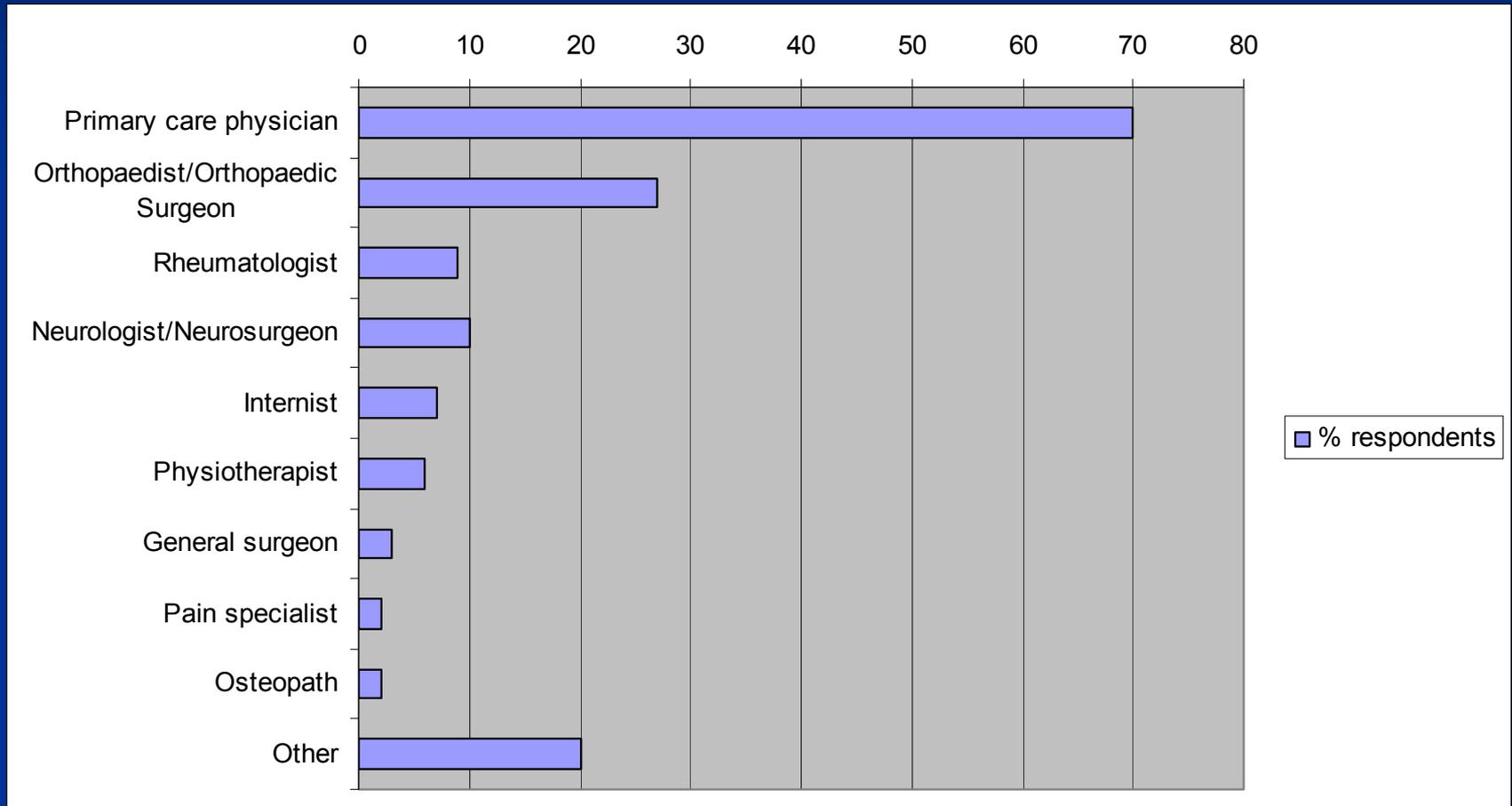
Pain in Spain

- Impact on quality of life:
 - 22% lost job
 - 8% changed job responsibilities
 - 4% changed jobs entirely
 - 29% diagnosed with depression
 - Average work days lost in past 6 months: 8.4

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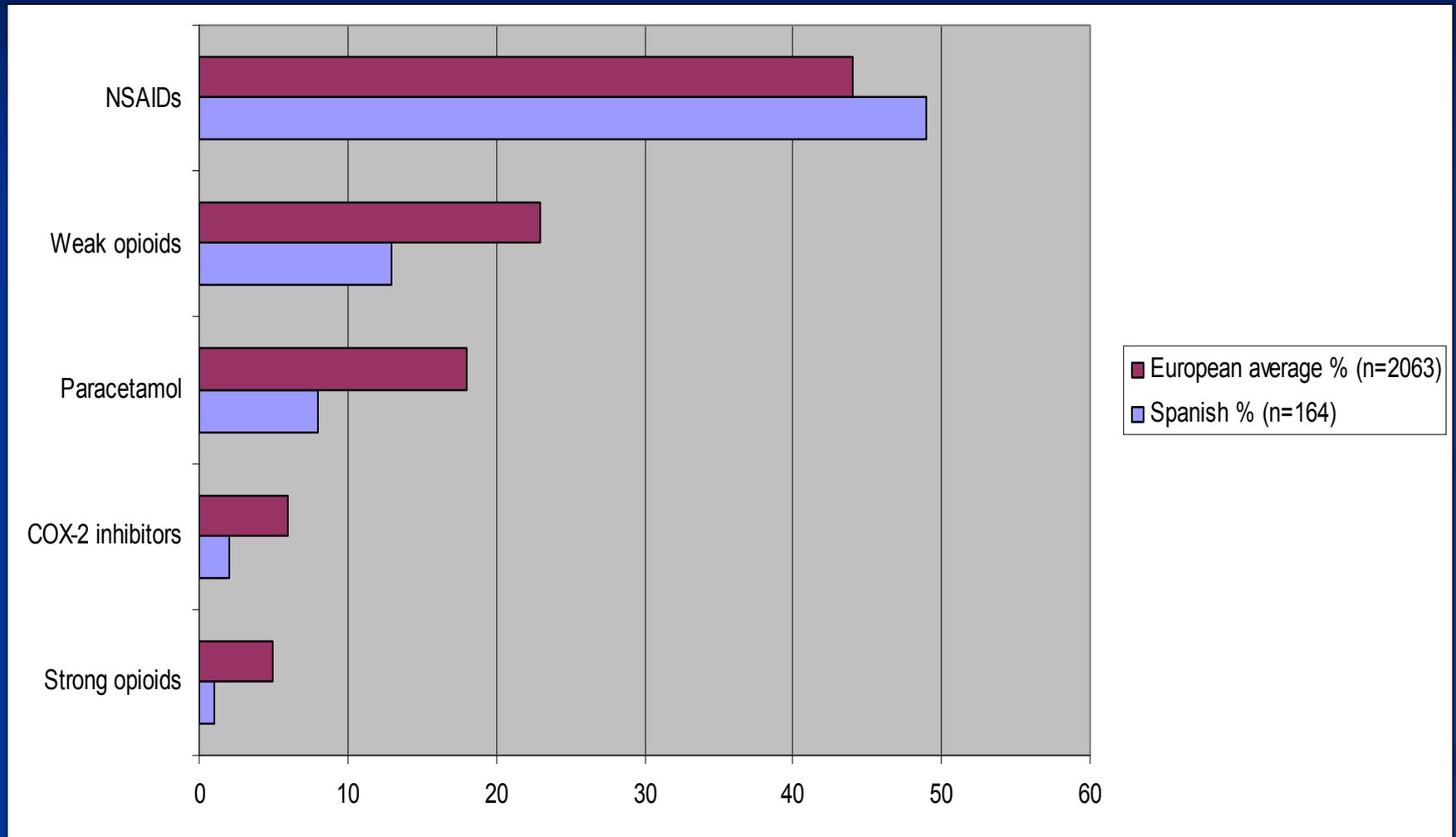
Pain in Spain: Health care utilisation

60% of patients: 2-9 visits to PC or specialist (past 6 months)



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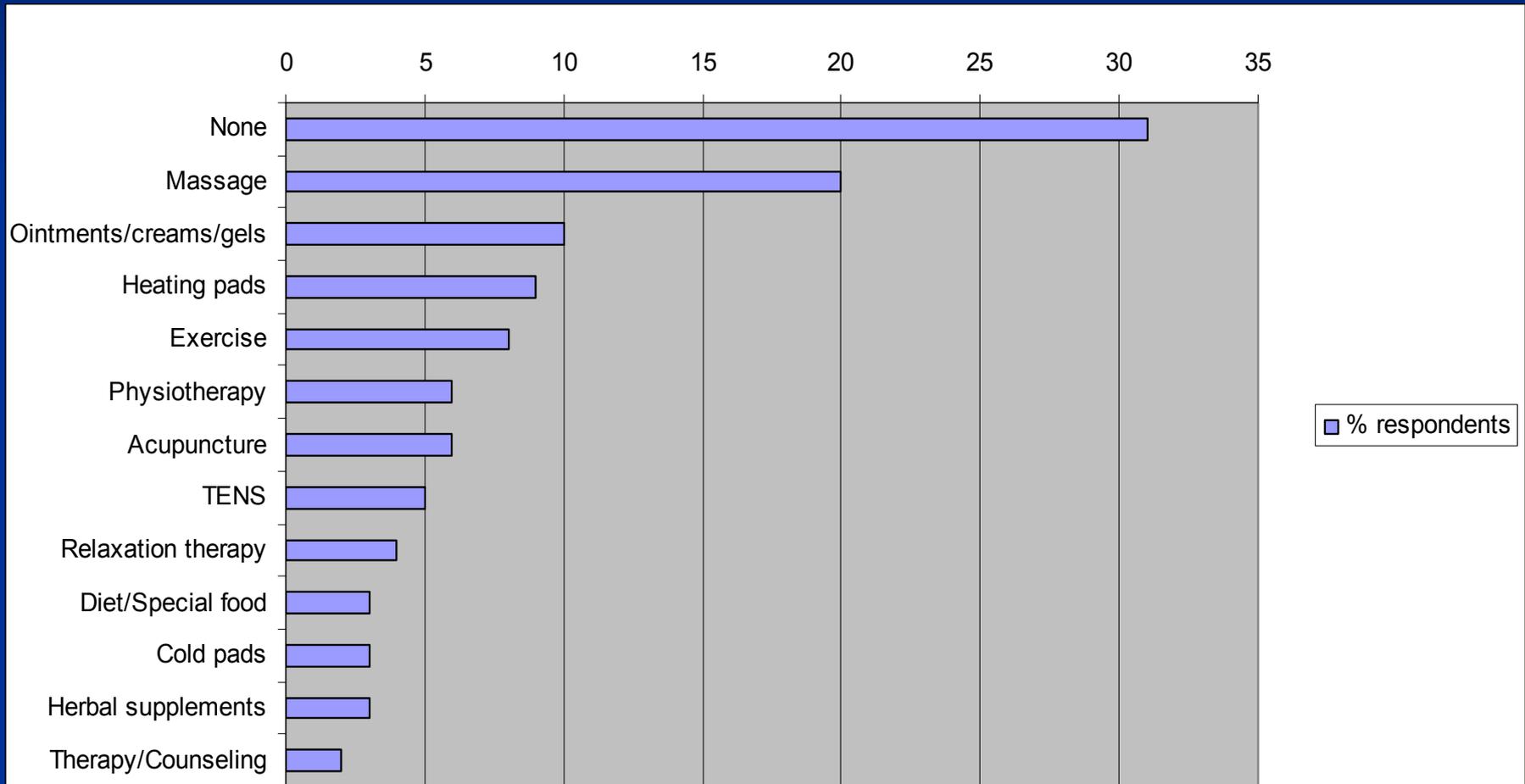
Utilisation of pharmaceutical treatments



Breivik H, Collett B, Ventafridda V, Cohen R, Gallacher D. Survey of chronic pain in Europe: prevalence, impact on daily life, and treatment. *Eur J Pain.* 2006;10(4):287-333

Utilisation of non-pharmaceutical treatments

Average utilisation: Europe, 72% ; Spain, 56%



Breivik H, Collett B, Ventafridda V, Cohen R, Gallacher D. Survey of chronic pain in Europe: prevalence, impact on daily life, and treatment. *Eur J Pain.* 2006;10(4):287-333

Cost of illness studies

- The higher the disability associated to an illness the higher its impact on a person's wellbeing and the higher its social costs.
- Cost of illness studies include *all* economic and social costs derived from illness.
- Help elicit true social magnitude of a health problem.
- Provide information on costs distribution among different types of resources.
- Allow more accurate estimation of the way health system is leading with the problem.
- Starting point for economic evaluation studies.

Costs classification

- Direct costs: due to treatment
 - Medical costs: primary care, hospital, drugs, etc.
 - Non medical costs: informal care
- Indirect costs: due to lost productivity (temporary + permanent sick leave)
- Intangible costs: suffering, quality of life losses.

Indirect costs of pain

- Chronic pain: non-medical and indirect costs expected to be higher than direct medical.
- Indirect costs caused by:
 - rates of absenteeism
 - reduced productivity
 - leaving the labour market.
- Differences in methodology, patient management and treatment approaches result in cost differences between countries.

Indirect costs of pain

- Sweden (2003): costs of sick leave resulting from chronic pain = 91% of total cost (€ 9.2 billion).
- USA (2003/2004): impact of arthritis:
 - lost productive work time = US\$ 7.1 billion (€ 4.9 billion)
 - 66% of this attributed to chronic pain.
- UK (1998): Productivity cost of back pain estimated between £5 and £ 10.7 billion (€ 6.7 - € 14.4 billion).
- Canada (1998): Total costs of musculoskeletal disease were 3.4% of GDP. Indirect costs almost triplicate direct costs.

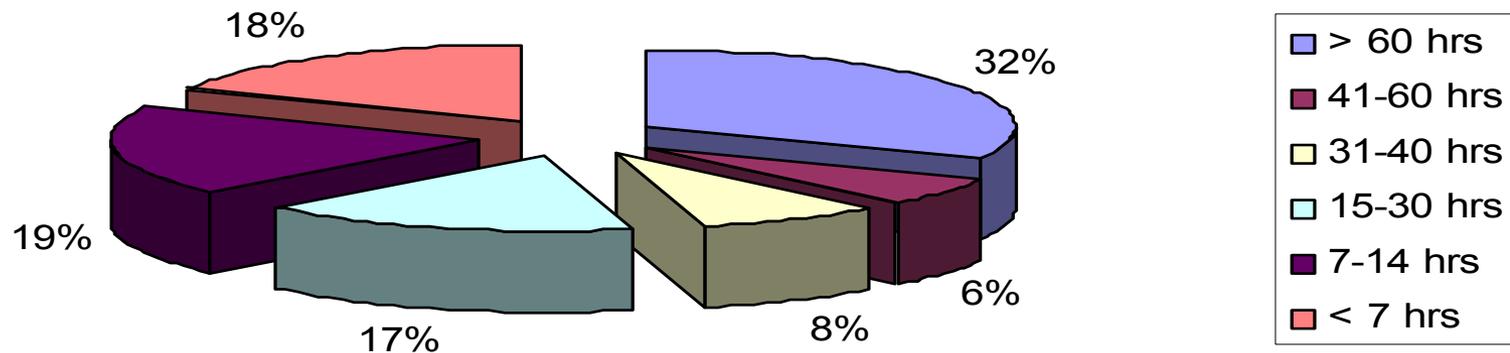
Measuring the social cost of chronic pain in Spain

- In this new measurement we include:
 - Non medical direct costs due to informal care
 - Indirect costs due to temporary sick leave
 - Indirect costs due to permanent sick leave

Informal care

- Disability, Deficiencies and Health Status Survey (Encuesta sobre Discapacidades, Deficiencias y Estado de Salud, EDDES) by Instituto Nacional de Estadística (INE), Spain, 1999.
- Individual questionnaire.
- Representative at the national level, and at the household level.
- 79.000 households, 290.000 individuals.

Hours devoted to care: musculoskeletal diseases

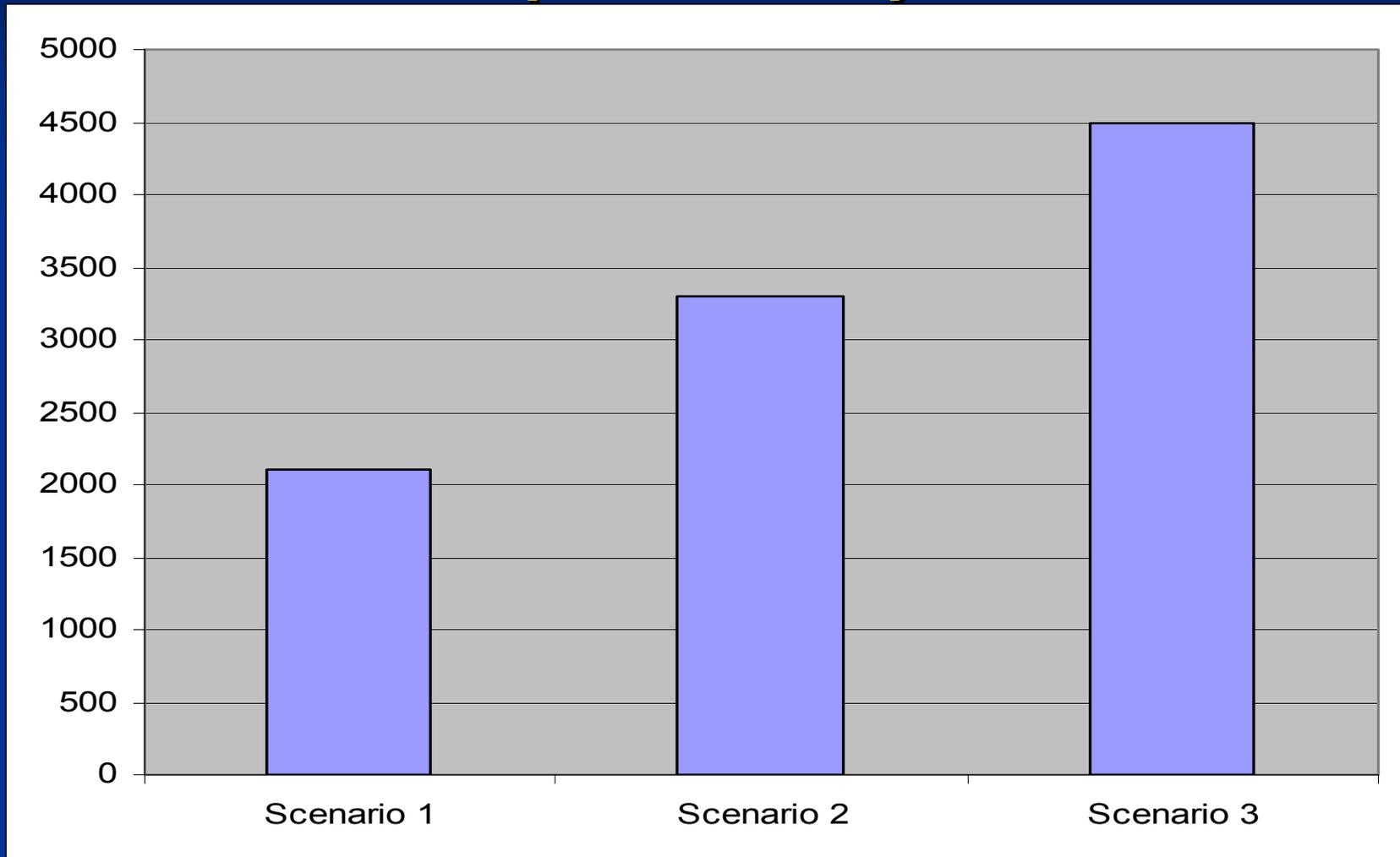


Juan Oliva and Rubén Osuna. Los costes económicos de los cuidados informales. Presupuesto y Gasto Público (in press).

Costs of informal care: musculoskeletal diseases

- Reference year: 2002
- Costs of total hours devoted to care estimated using 3 scenarios:
 - Scenario 1: using gross hourly wage of professional home care (collective bargaining agreement). (4.5 €/hr)
 - Scenario 2: using gross hourly female wage from sub-sector “Other social and communitarian activities and personal services”, Income Survey, 2002 (INE) (7 €/hr)
 - Scenario 3: using value of one hour of public home help service in Spain, Observatory of the Elderly (Ministry of work and social affairs, 2003) (9.5 €/hr)

Costs of informal care: musculoskeletal diseases (million €)



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Costs due to temporary sick leave

- Data: Wage Structure Survey (2005), National Institute of Social Security (2005).
- Human capital approach
- Musculoskeletal and connective tissue diseases:
 - first cause of days lost (24.5%)
 - Estimated cost € 2 488 million

Costs due to permanent sick leave

- Data does not allow for an analysis of costs by cause of PSL.
- Total productivity lost to PSL = €18 577 million
- In 1994 musculoskeletal diseases are first cause of permanent sick leave (39.1%) (Spanish NHS).
- Assuming percentage constant over time:
cost of PSL due to musculoskeletal diseases in 2005 = €7,263 million

Adding up...

- Social costs (2005) of chronic pain in Spain:
Informal care (million euros)= €3300 million
(intermediate scenario, 2002)
3% annual discount rate to convert to 2005= **€3012**
+ Indirect costs TSL: **€2488**
+ Indirect costs PSL: **€7263**
= **€12 763 million**
- These costs represent 1.5 % of Spanish GDP (2005).
- Do not include direct medical costs, indirect costs due to presentism, nor intangible costs. Plus only musculoskeletal diseases included.

Conclusions

- Chronic pain important in terms of prevalence in Spain.
- Data used indicates chronic pain is a costly factor for society.
- Non-medical costs can be as high as medical costs.
- No data on non medical and indirect costs associated with chronic pain in Spain (only on pathologies associated with CP).
- Scarcity of studies related to social costs of pain in Europe and Spain.

Conclusions

- Urgent need for more accurate epidemiological and cost data on chronic pain to:
 - help identify true magnitude of welfare loss.
 - help economic evaluations of pain management alternatives provide more accurate cost effectiveness information.
 - help resource allocation decisions be more rational, transparent and efficient.

Thank you very much.



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