Pain in Ireland

Prevalence, Impact and Cost of Chronic Pain.

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Context

- 28 pain clinics but few properly resourced
- Only 8 met IASP criteria for "multidisciplinary pain clinic", only 3 offer intensive multidisciplinary pain programmes
- Average wait for specialist treatment 2 years
- €350 million annual disability payments for back pain
- Inadequate focus in medical (4 hrs minimum) and health education
- Research funding – one project from 109. No national data on prevalence or cost.

(Fullen et al 2004, "The need for a national strategy for chronic pain management in Ireland", Ir J Med Sc)

PRIME Study 2008-2010 Background

- Breivik et al (2006) study - N=2000, prevalence rate of 13% in Ireland, 19% on average in Europe.
- No community epidemiological data on CP in Ireland using standardised measures.
- Elliot et al (1999, 2002) published a series of papers on prevalence of pain in Scotland. Prevalence rate of 46%.
- (Raftery et al, PRIME Study. Pain 2011, 152, 1096-1103).

Aims of the PRIME study

- Longitudinal, epidemiological study
- Chronic non-cancer pain.
- **Prevalence** of chronic pain.
- **Incidence** of pain in a 12-month period.
- **Persistence** of pain problems over 12-months.
- **Impact -** physical, psychological, social.
- **Cost** - health service utilisation, social welfare support, and lost productivity

Method.

- IASP definition of chronic pain “Have you been troubled by pain that has lasted more than 3 months?” Non-cancer pain.
- Postal questionnaire 3,300 participants aged 18+
- 33 GP practices. Urban/rural.
- 1204 responses.
- Presence of CP, impact, treatment.

Measures used

	PAIN	NO PAIN
Demographic questionnaire	X	X
Quality of life (SF-12)	X	X
Depressive symptoms (Hospital Anxiety and Depression Scale)	X	X
Functional impact, pain severity & disability (Chronic Pain Grade Questionnaire, Von Korff, 1990)	X	
Illness perceptions (IPQ – 8)	X	
Financial cost (Telephone interview based on the Client Services Receipt Inventory) N = 140	X	

Prevalence and Duration of Pain

- 35% had CP based on IASP definition.
- Average duration 7.6 years (range 3 months - 50 years).
- 23.6% pain for < 12 months.
- 26.4% pain from 1-5 years.
- 15.7% pain from 5-10 years.
- 21.5% pain more than 10 years.

Age and Gender Profile

		Chronic Pain	
		N	**%**
Gender	Women	246	57.5
	Men	182	42.5
		N (% of Total N)	**% of Age Group**
Age	18 – 34	91 (21.3%)	28%
	35 – 44	81 (18.9%)	30.4%
	45 – 54	88 (20.6%)	36%
	55 – 64	66 (15.4%)	39.3%
	65 – 74	61 (14.3%)	50.4%
	75 +	39 (9.1%)	50%

Pain Severity

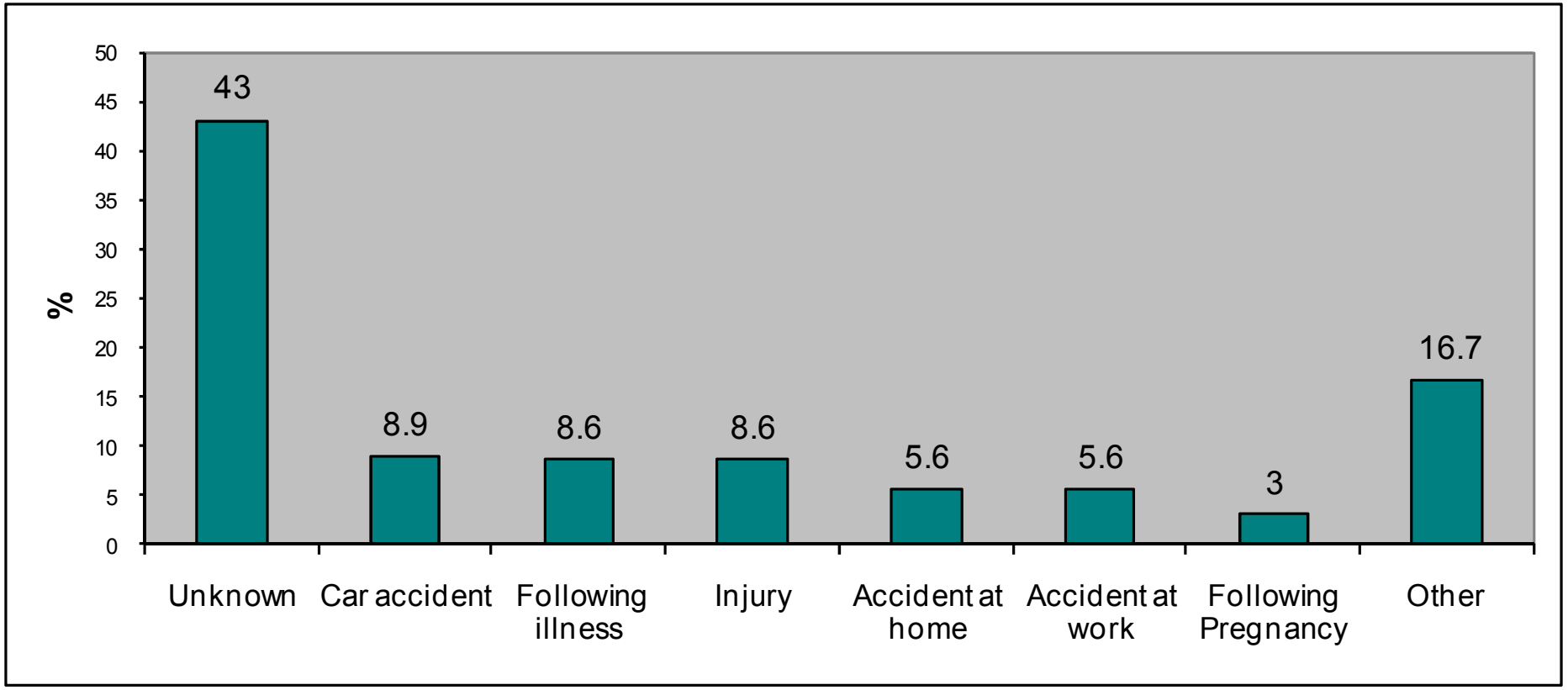
- 37.1% Grade 1 – Low Intensity, Low Interference
- 37.6% Grade 2 – High Intensity, Low Interference
- 14.6% Grade 3 – High Interference, Moderately Limiting
- 10.7% Grade 4 – High Interference, Severely Limiting.
- Persons (65+) twice as likely to report Grade 4 pain than those 18-34.

Site of pain

1. Low back
2. Knee
3. Neck
4. Shoulder
5. Hip

80% more than one site of pain.

Reported cause of pain



Work ability is affected by pain

- Vast majority of the chronic pain sample was working fulltime – **but 12% unable to work or working part time due to pain**.
- Those with chronic pain were over **3 times more likely to be unemployed.**
- **Semi skilled workers** were more than 3 times more likely than professionals to report chronic pain.

Depression and Pain.

Proportion of people with clinically significant HADS Depression score (>10)

	Pain Group	**No-Pain group**
Male	13%	3%
Female	15%	3.7%

Clinically significant depression nearly 5 times more common in chronic pain.

Health-related quality of life (SF-12)

	No Chronic Pain	Grade 1	Grade 2	Grade 3	Grade 4
Physical QoL Score	54.06	49.83	42.96	35.23	27.99
Mental QoL Score	48.65	48.47	46.02	39.29	33.39

Higher pain was associated with lower physical and emotional quality of life

One year follow-up.

- **Recontacted** n=1204, response rate 59% (n = 717).
- **Persistence: 59.9%** of those with CP at baseline had chronic pain at follow-up.
- **New pain: 12.7%** incidence of new pain from baseline to follow-up.
- Majority of those who no longer had chronic pain at follow-up were in the lower grades of pain at baseline.
- **High level of persistence among those with higher pain intensity and disability at baseline.**

Cost of Pain.

- Cost analysis from sub-sample of PRIME chronic pain respondents (n=140).
- Costs among most severely affected pain population i.e. those attending a Regional Pain Clinic, (n=100), average pain duration 9 years.
- Client Services Receipt Inventory plus Hospital Inpatient database (HIPE) and Pharmaceutical Benefits Scheme (PBS) – calculated for 1 year.

Costs Measured

- Direct costs:
  - inpatient stays
  - outpatient specialist appointments
  - paramedical appointments
  - cost of treatments (physiotherapy, occupational therapy, psychology, medication and medical intervention)
  - GP visits
  - adaptive equipment
  - wage replacement.

Costs Measured

- Indirect costs:
  - lost productivity
  - temporary work absences
  - informal care
  - community care.

Community Sample

- Average cost per chronic pain patient €5,665 per year
- Costs increased according to severity of pain.
- **Total cost estimated at €4.76 billion per year, 2.55% of Irish GDP in 2008.**

Intensive Users

- Intensive users – average 4 inpatient admissions per year, 8 outpatient visits per year, 9 GP visits per year.
- Small proportion of patients account for most of costs - **5% most expensive patients accounted for 26.4% of costs - average cost per patient €29,936.**

Total Cost of Chronic Pain for 100 high intensity service users is circa €1m per year

- Direct Costs 653,541
- Indirect Costs 302,956
- TOTAL 956,497
- Average Cost per Patient per year 9,564

- Extrapolated for average 25 years = €239,000 per patient

Conclusions

- Chronic pain is a significant health problem (up to 1 in 3)
- Most severe level of pain and disability reported by 10% with CP
- Highly persistent over 1 year (60%)
- Economic costs substantial (circa €6,000 per year per person in community sample, over €9,500 per year for Pain Clinic sample, almost €30,000 per year for most expensive 5% of patients)
- Total economic cost €4.76bn per year
- Inpatient admissions the highest economic cost – alternatives should be developed e.g. multidisciplinary outpatient pain management programmes
- Severe shortage of specialist pain services generally, and specifically there is a shortage of multidisciplinary pain management programmes

Changes underway?

- Some positive signs:
  - Active advocacy movement (Chronic Pain Ireland)
    - Charter of Rights
  - Active professional group (Irish Pain Society)
  - Faculty of Pain Medicine, College of Anaesthetists training programme
  - New Centre for Pain Research

- Better research funding e.g. basic science, epidemiology, professional development, intervention studies
- Service development – e.g. physiotherapy advanced practitioners for musculoskeletal triage

Where to next?

- National Pain Strategy (?European Pain Strategy, quality indicators)
  - Funnel resources into service development e.g. MDTs, spinal stimulators – better linkages Govt departments
  - Professional education and specialist recognition
  - Early access to specialist care
  - Case management and vocational rehabilitation
  - Neglected groups e.g. cognitively impaired (ID, dementia, ABI); refugees, travellers.
- Pain research funding – priority for Irish and EU FP8

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