

# The Impact of Health Literacy in Individuals with Chronic Pain – Preliminary Results

Mackey LM, Power C, Victory R, Hearty C, Casey MB,  
Fullen BM



UCD School of Public Health,  
Physiotherapy and Population  
Science

Scoil na Sláinte Poiblí, na  
Fisiteiripe agus Eolaíocht an  
Daonra UCD

# Background

## In Ireland....

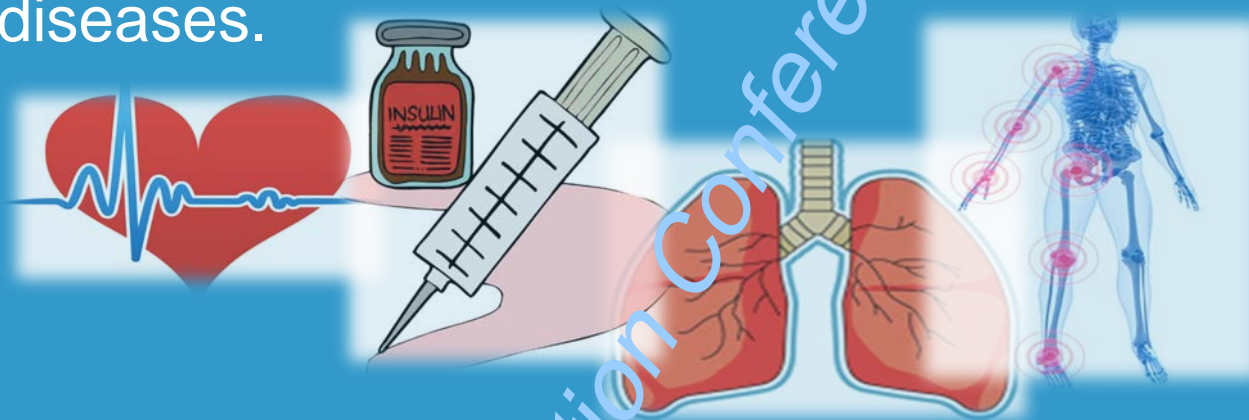
- One in three people suffer with chronic pain (Rafferty et al, 2011)
- Cost: 5.34 billion per year (Rafferty et al, 2011)
- Services under-resourced (Rafferty et al, 2011)
- Prolonged waiting times for treatment (Fullen et al, 2006)
- Inadequate health literacy has been established at over 40% (Doyle et al, 2012)



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# Background

- Health literacy assessed in a range of chronic diseases.



- Health literacy linked to outcomes and behaviours.
- Little research in the area of health literacy and chronic pain currently.

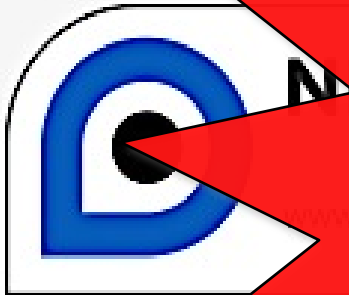
Management of fibromyalgia syndrome - an interdisciplinary evidence-based guideline

Winfried Häuser\*  
Bernhard Arnold\*  
Wolfgang Eich\*  
Eva Felde\*  
Christl Flügge\*  
Peter Henningsen\*  
Markus Herrmann\*  
Volker Köllner\*  
Edeltraud Kühn\*  
Detlev Nützing\*\*  
Martin Offenbächer\*\*  
Thomas Schiltenwolf\*\*  
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## Chapter 4 European guidelines for the management of chronic nonspecific low back pain

- Self-management
- Adherence
- Decision-making skills



www.nice.org.uk/accreditation/management-of-chronic-pain

deline

December 2013

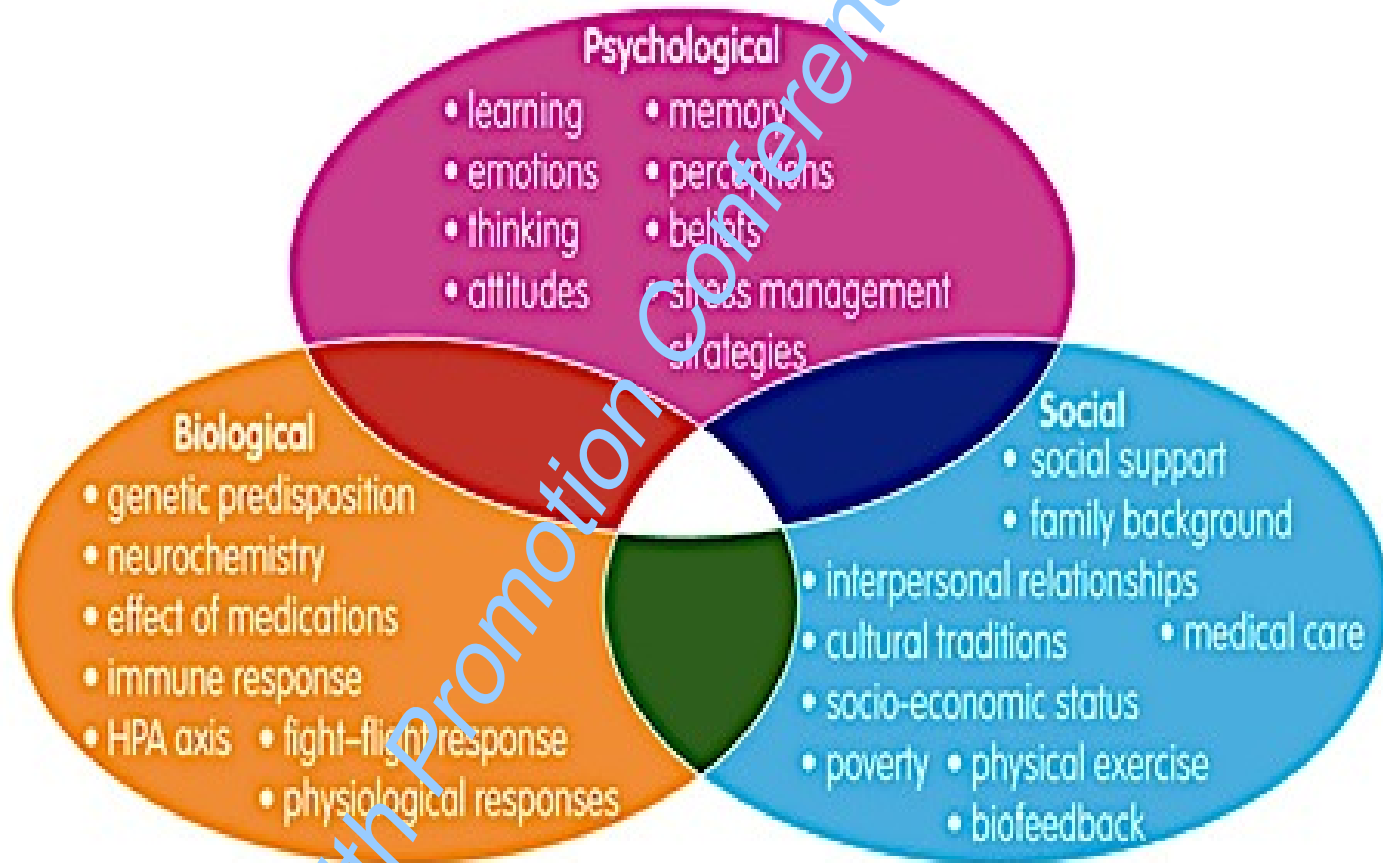


Best Practice Statement ~ February 2006  
Management of chronic pain in adults



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# Biopsychosocial Framework



# Aims

- To assess health literacy levels in people with and without chronic pain.
- To determine the impact of demographic factors on health literacy between both groups.
- To investigate an association between health literacy and demographic factors in pain group only.



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# Methods

- Ethical approval granted at each site.
- Cross sectional survey distributed to various pain clinics in Dublin hospitals.
- Survey comprised:

Demographics	Adherence
Health Literacy (NWS)	Beliefs (BPCQ)
Health Behaviours	Knowledge
Health Service Usage	Quality of Life (SF-36)



# Methods

- Recruited both pain and controls participants.
- Pain patients attending pain clinic for the first time.
- Bivariate analysis between pain and non-pain groups.
- Bivariate analysis between adequate and inadequate health literacy participants **IN PAIN GROUP ONLY.**



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# Results

- 262 participants.
- Pain group (n=131).
- Control group (n=131).



	Chronic Pain Group (N=131)	Control (no pain) Group (N=131)	Test Statistic
Health Literacy <i>N (%)</i>			0.55
Adequate	60 (45.8)	67 (51.1)	
Inadequate	71 (54.2)	64 (48.9)	
Age (years) <i>mean (SD)</i>	48.5 (14.8)	49.8 (16.5)	-.636
Gender (Male) <i>N (%)</i>	41 (31.3)	65 (49.6)	9.174*
Employment Status <i>N (%)</i>			39.032*
Employed	60 (45.8)	82 (62.6)	
Unemployed	17 (13)	10 (7.6)	
Unable to work	36 (27.5)	5 (3.8)	
Retired	17 (13.7)	34 (26)	
Education <i>N (%)</i>			10.336*
Primary	23 (17.6)	22 (16.8)	
Secondary	78 (59.5)	56 (42.7)	
Third level	30 (22.9)	51 (40.5)	
Social Class <i>N (%)</i>			10.445*
Low	14 (10.7)	6 (4.6)	
Middle	107 (81.7)	124 (94.7)	
High	2 (7.6)	1 (0.7)	
Insurance <i>N (%)</i>			12.801*
Private	29 (22.1)	55 (42.0)	
Medical Card	71 (54.2)	48 (36.6)	
GP only Medical Card	8 (6.1)	6 (4.6)	
None	23 (17.6)	22 (16.8)	
Number of co-morbidities <i>mean (SD)</i>	1.62 (1.29)	0.82 (0.87)	8.38*

\* = p-value of  $\leq 0.05$

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# Results

- Pain group only (n=131).
- Adequate health literacy: N=60 (45.8%).
- Inadequate health literacy: N=71 (54.2%).

	Adequate Health Literacy N =60	Inadequate Health Literacy N=71	Test Statistic
Age (years) <i>mean (SD)</i>	41.77 (13.02)	54.17 (13.93)	-4.796
Gender (Male) <i>N (%)</i>	15 (25)	26 (36)	2.2
Employment Status <i>N (%)</i>			<b>16.78*</b>
Employed	31 (51.7)	29 (40.8)	
Unemployed	10 (16.7)	7 (9.9)	
Unable to work	17 (28.3)	19 (26.8)	
Retired	1 (3.3)	16 (22.5)	
Education <i>N (%)</i>			<b>23.0*</b>
Primary	2 (3.3)	21 (29.6)	
Secondary	38 (63.4)	40 (56.3)	
Third level	20 (33.3)	10 (14.1)	
Social Class <i>N (%)</i>			3.18
Low	5 (9.4)	9 (12.9)	
Middle	48 (90.6)	59 (84.2)	
High	0	2 (2.9)	
Insurance <i>N (%)</i>			2.89
Private	17 (28.3)	12 (16.9)	
Medical Card	29 (48.3)	42 (59.2)	
GP only Medical Card	3 (5)	5 (7)	
None	11 (18.3)	12 (16.9)	
Number of co-morbidities <i>mean (SD)</i>	1.37 (1.24)	1.83 (1.3)	<b>-2.58*</b>

\* = p-value of  $\leq 0.05$



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# Discussion and Future Directions

- No difference between pain group and control group regarding health literacy.
- Differences observed in demographic profile between:
  - Pain and control group.
  - Adequate and inadequate health literacy in pain patients.
- Profile of pain patient in comparison to 'normal population' in development.



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# Discussion and Future Directions

- Further analysis regarding:
  - Quality of life
  - Health behaviours
  - Healthcare service use
  - Knowledge
  - Beliefs
  - Adherence



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# References

1. Doyle G, Cafferkey K, Fullam J. The European health literacy survey (HLS-EU): results from Ireland.
2. Fullen B, Hurley DA, Power C, Cahavan D, O'Keefe D. The need for a national strategy for chronic pain management in Ireland. Ir J Med Sci. 2006; 175(2):68-73
3. Raftery MN, Ryan P, Normand C, Murphy AW, de la Harpe D, McGuire BE. The economic cost of chronic non-cancer pain in Ireland; results from the PRIME study, part 2. J Pain. 2011; 13(2):139-145



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