mutualia

PATTERNS OF LUMBAR PAIN: AN EFFECTIVE APPROACH TO LUMBAR AND SCIATIC PAIN IN PRIMARY CARE IN OCCUPATIONAL MEDICINE. COMPARATIVE STUDY OF TWO RETROSPECTIVE COHORTS OF 3534 PATIENTS.

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DISCLOSURE

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•The authors declare that they do not have any kind of relationship with any medical company or related institution. None of the authors has any potential conflict of interest.

•The authors have not received any kind of external funding (institutional, government or private institution) for research on which this lecture is based.

•This research does not contain explicit information about medical device(s)/drug(s).

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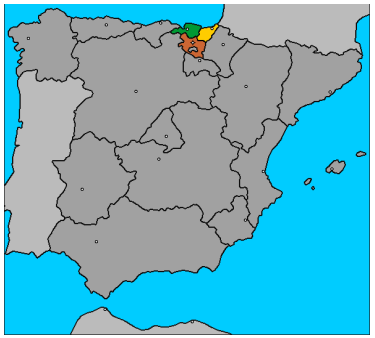
WHO ARE WE?



Mutualia is a Spanish Workers' Compensation Insurance Company

BASQUE COUNTRY'S MARKET SHARE 42%

SPAIN`S MARKET SHARE 5%

INSURED WORKERS 323.215

EMPLOYEES 580

WHO ARE WE?

Some medical facts during 2013 about Mutualia…

Workers` Compensation Consultations	141,557/yr
Other medical Consultations	32,680/yr
Physical Therapy Consultations	20,727/yr
Surgeries (2014)	1,929/yr

WHO ARE WE?

Type & Number of total disabilities during 2013 in Mutualia (Workers' Compensation Disabilities)…

No disabling injuries (minor injuiries)	1,103
Disability (mild)	35
Disability (moderate)	107
Disability (severe)	19
Disability (Absolute)	4
Deaths	47

WHO ARE WE?

Some economical facts about Mutualia;
A Spanish Workers' Compensation Insurance Company…

Annual Profitability (2013)	16% / yr
Annual Income (2014)	29,540,106.00 ($)
Annual Budget (2014)	328,223,400.00 ($)

INTRODUCTION

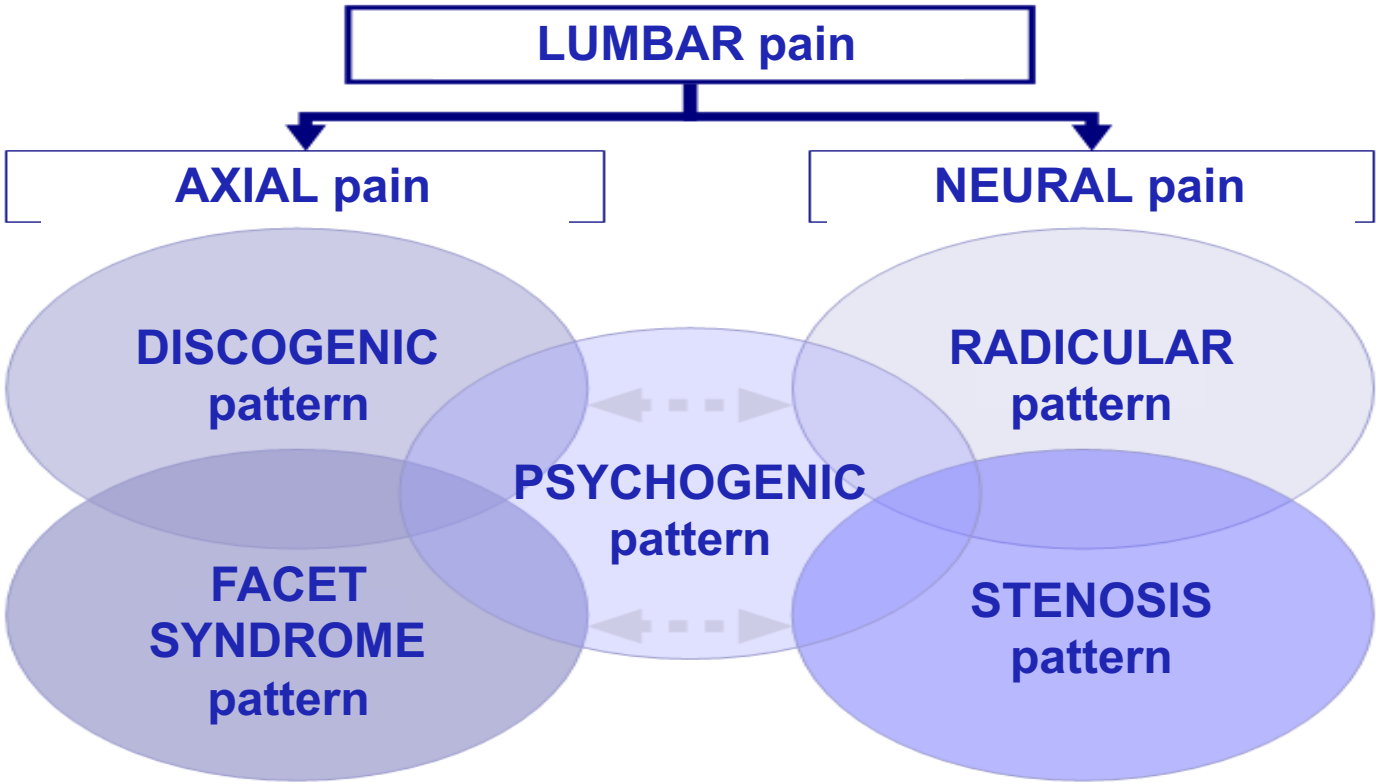
•Low back pain is one of the most prevalent medical diagnoses as well as as one of the most onerous in terms of health care and its socio-economic impact.

•We present a new approach to lumbar and sciatic pain in primary care and labour related accidents.

•Patients can be grouped according to the different pain patterns identified during the medical interview and physical examination.

•The variability in its definition, intensity, assessment, treatment and recovery, makes difficult to establish a consensus and clinical or public health decision making for lack of studies in comparable groups.

LOW BACK PAIN PATTERNS



LOW BACK PAIN PATTERNS

	AREA OF PAIN	RADIATION	TYPE OF PAIN	EXAMINATION
1 DISCOGENIC	Central low back and/or buttocks	No	Constant or intermittent	Worsens with bending
2 FACET SYNDROME	Localised central low back and/or buttocks	Non-segmental radiation	Recurrent	Worsens with stretching and increases with repetition
3 RADICULAR	Below the buttocks	Radicular signs below the knee	Constant	Influenced by movements and position of the spinal column
4 CANAL STENOSIS	Below the buttocks	Non-segmental radiation	Intermittent	Triggered by neurogenic claudication
5 PSYCHOGENIC	Moves around, non-localised	No	Constant excessive with added symtoms (sleep disorders, mood swings, etc.)	Variable
6 MUSCULAR	Sudden onset (overexertion) on both or one side of low back	No	Constant and/or localised dysaethesia	In movements involving the affected muscle
7 DEGENERATIVE	Low back	Variable	Insidious evolution over years	Worsens with repeated movements, no functional blocks
8 MIXED				

METHODS

- We performed a retrospective cohort study of 3534 patients (435 in Alava and 3099 in Vizcaya) treated for low back pain or sciatica at the workplace in a workers' compensation insurance company (Mutualia) in the provinces of Alava and Vizcaya (Basque Country, Spain) in 2012.

- The Alava patients (G1) were managed according with to pain patterns, while the Vizcaya patients (G2) were treated conventionally.

METHODS

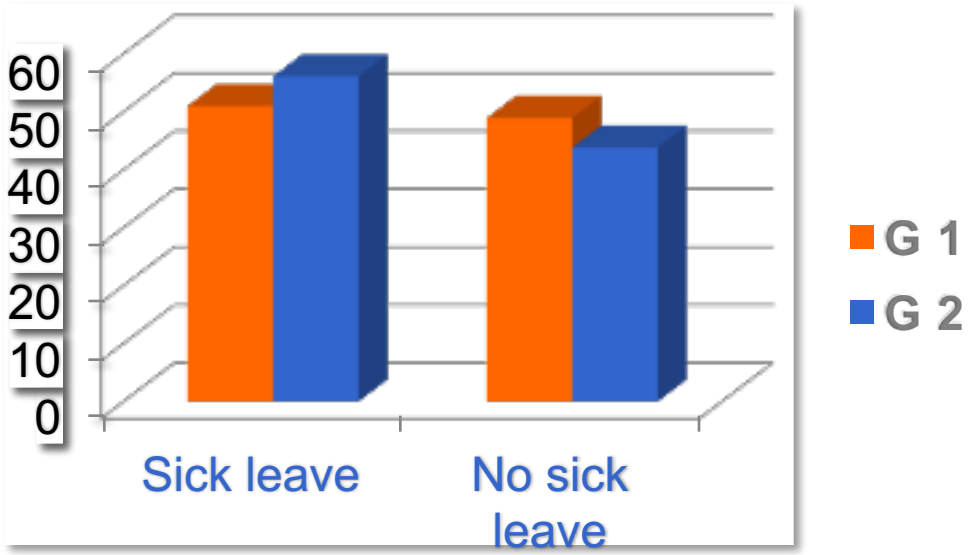
- The parameters studied were as follows:
  - Diagnosis,
  - Number of days resulting in sick leave,
  - Average duration of sick leave,
  - Number of additional tests carried out,
  - Number of hospital admissions,
  - Number of surgical procedures,
  - Number of physiotherapy referrals, and duration of physiotherapy treatment.

- The statistics were analysed using SPSS (Chi-square and Mann-Whitney's U) with 95% sensitivity ($p<0,05$).

1. NUMBER OF SICK LEAVES

	Cases	Sick leaves	%	No sick leave	%
G1	435	222	51.03	213	61.21
G2	3099	1740	56.15	1359	56.15

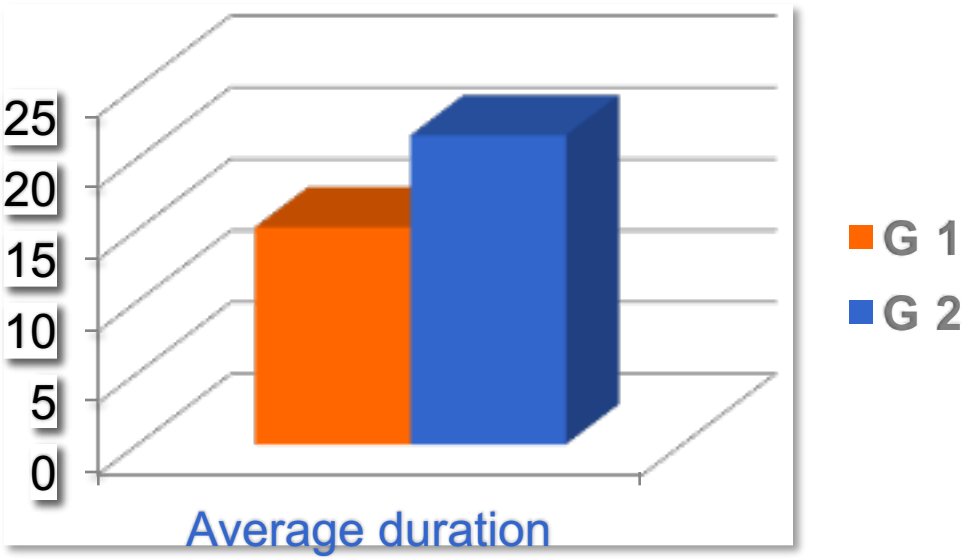
Probability chi² p<0.04



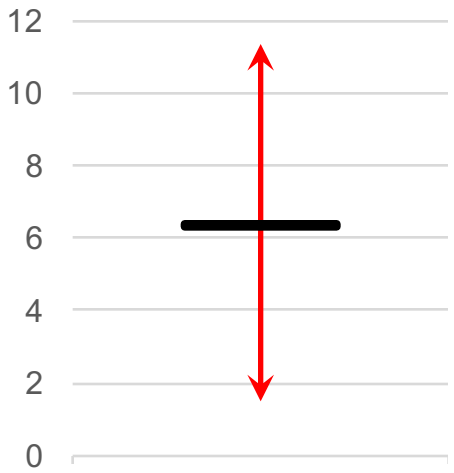
2. DURATION OF SICK LEAVE

	Sick leaves	No. days	Average	SD
G1	222	3364	15.15	28.67
G2	1740	37535	21.57	36.11

Mann-Whitney's U Test p<0.002



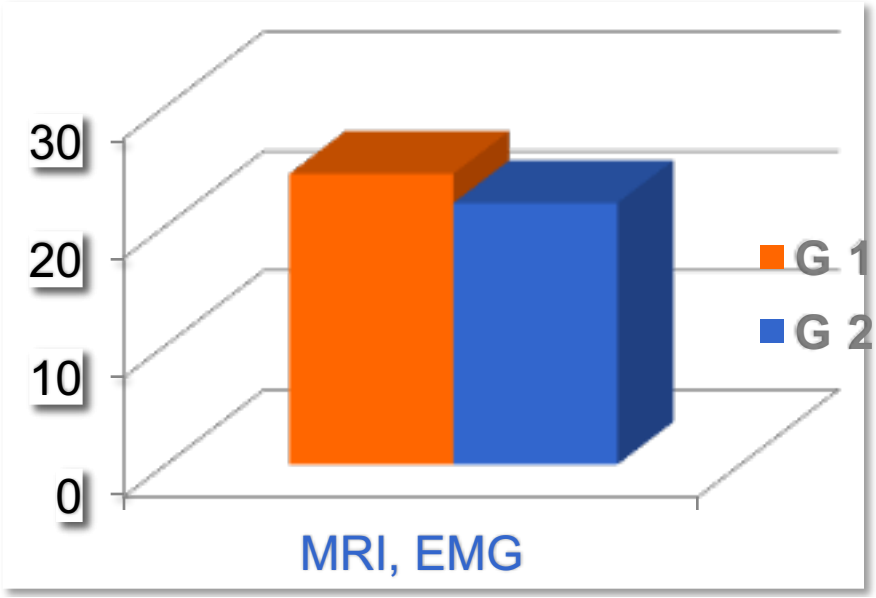
Confidence interval (95%) of difference between averages



3. ADDITIONAL TESTS

	Cases	Tests	%
G1	435	106	24.36
G2	3099	679	21.91

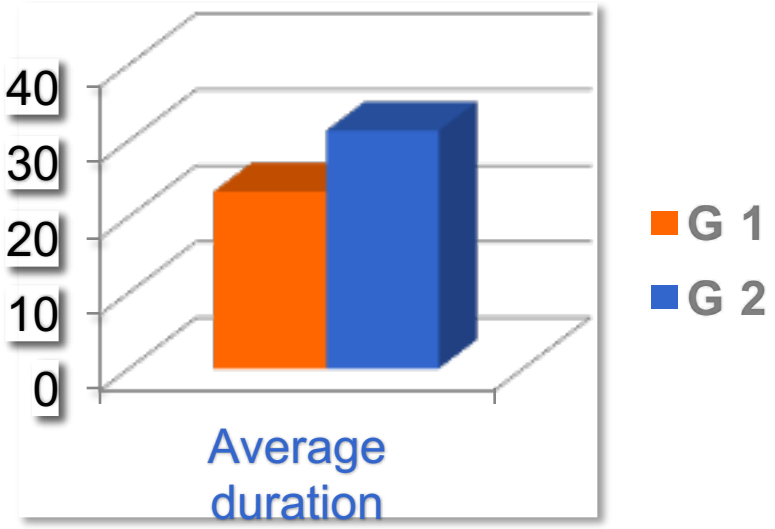
Probability chi² n.s.

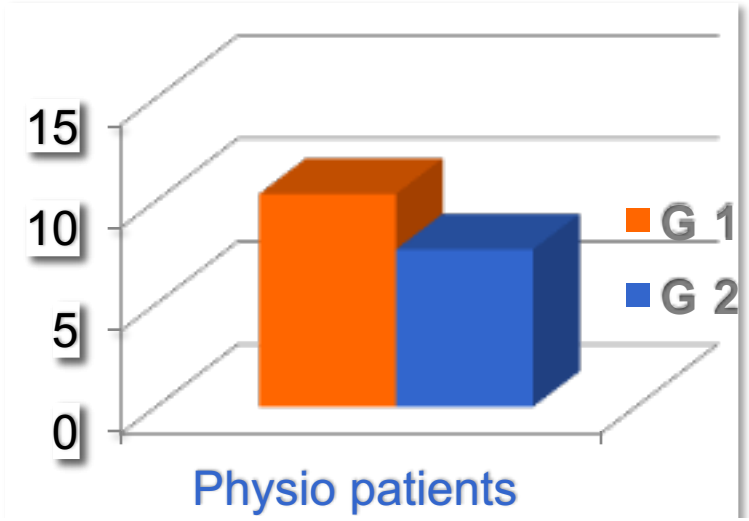


4. PHYSIOTHERAPY REFERRALS AND DAYS OF PHYSIOTHERAPY

	Cases	Physio patients	Physio days	Average	SD
G1	435	45	3364	23.31	17.23
G2	3099	237	37535	31.32	21.79

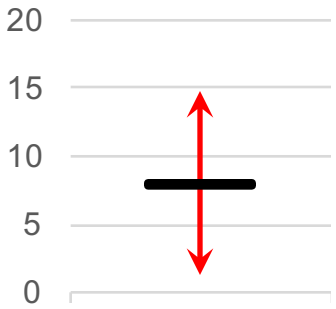
	Cases	Physio	%
G1	435	45	10.34
G2	3099	237	7.65





Mann-Whitney's U p<0.007

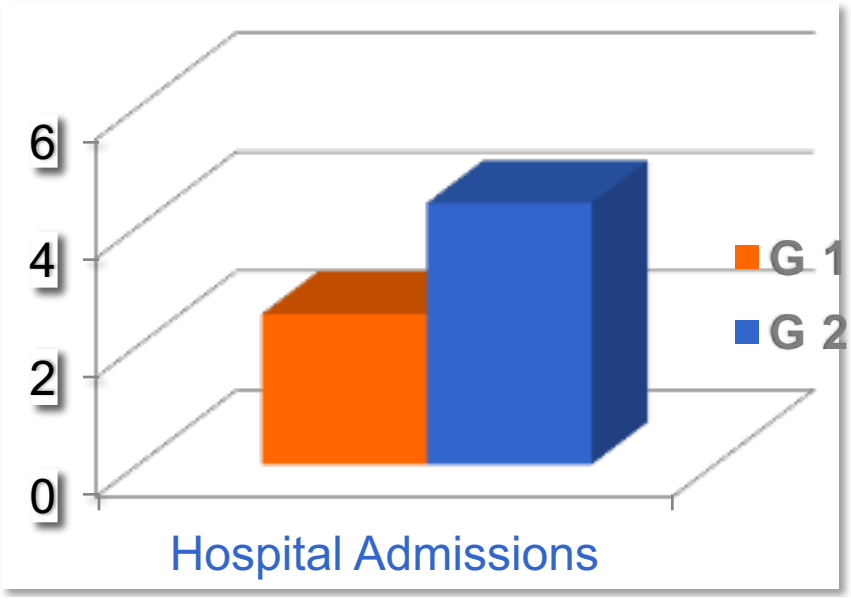
Probability chi² n.s.

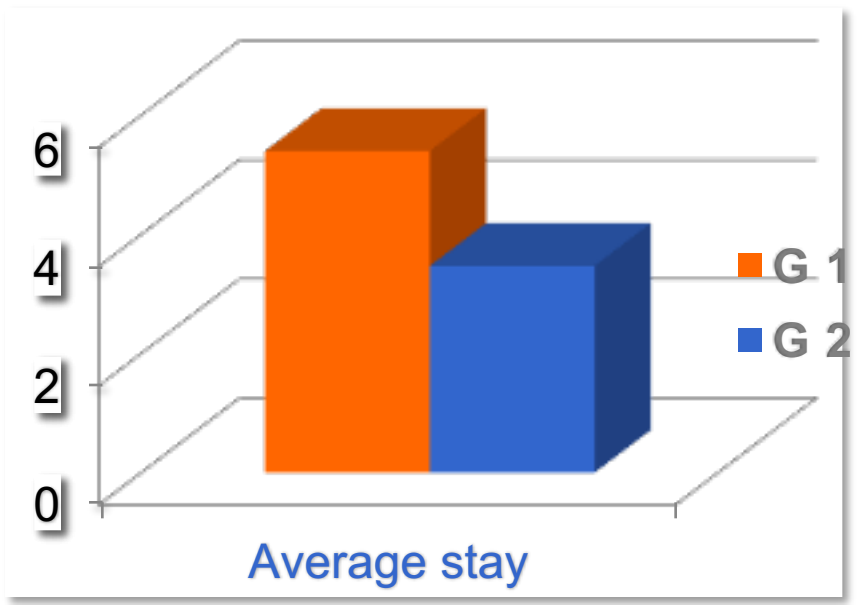


Confidence interval (95%) of difference between averages

5. NUMBER OF HOSPITAL ADMISSIONS AND AVERAGE STAY

	Cases	Hospital admissions	%	Average stay
G1	435	11	2.53	5.40
G2	3099	136	4.39	3.47



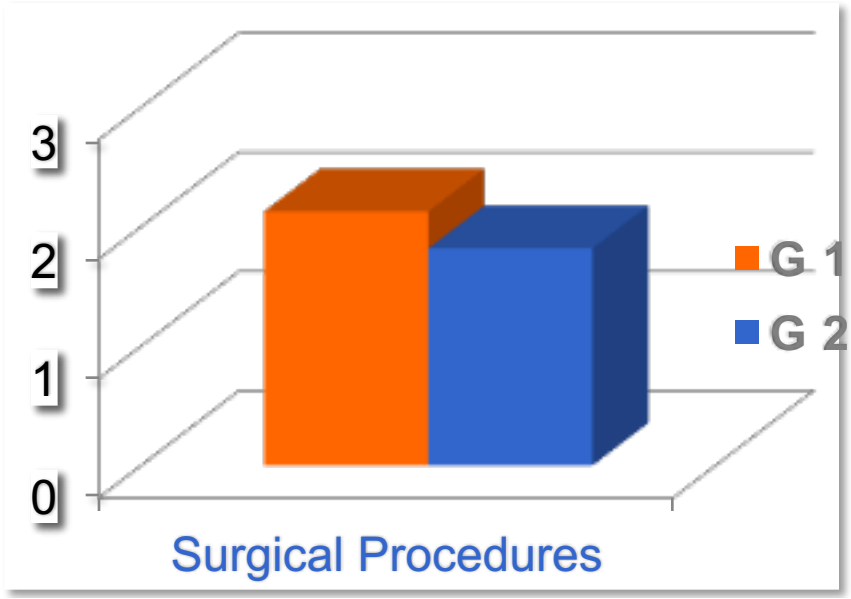


Probability chi² n.s.

6. SURGICAL PROCEDURES

	Cases	Ops.	%
G1	435	12	2.13
G2	3099	66	1.82

Probability chi² n.s.



CONCLUSIONS I

A marked difference in pain management was observed after patients were grouped according to pain patterns.

CONCLUSIONS II

In primary care, this is an effective way to:

1) Indicate the sick leave,

2) The average time of the sick leave and

3) Access to Physiotherapy treatment.

CONCLUSIONS III

However, there is no impact on the specialist management of this condition in both groups . These groups were also similar in:

1. Additional tests,
2. Number of surgical procedures performed
3. The average hospital stay.

CONCLUSIONS IV

These results have already modified treatment in G2, given the resulting financial and health care repercussions for Mutualia.

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