

# INTERDISCIPLINARY EVALUATION ARGENTINE PAIN CENTER

**Authors: Dr. Fernando Salvat, Dr. Julio Honorio Pueyrredon.**

## **Summary**

In this research we describe the population and interdisciplinary assessment of chronic pain patients who were assisted at the Fleni Pain Center (Centro Integral de Dolor de Fleni - CIDFE), first Spanish-speaking center accredited by CARF. 525 patients with chronic pain were evaluated between January 2004 and December 2005, out of which 194 met the inclusion criteria: 129 women (66.49%) and 65 men (33.5%). We could observe a 2-1 prevalence in women, mostly related to spine diseases (79%), personality disorders (75%), depression (64%), anxiety (59.5%), and overweight disorders (61%). With a low back pain disability degree of 36.5% (ODI), a moderate to severe difficulty to perform ADL (HAQ-20) and causing a decrease in the global quality of life of 68.6% (SF36). Most of our patients (79%) were active (working), only 6 on leave of absence, and 63% afforded the treatment payment by themselves. Our work confirms the multidimensional commitment caused by chronic pain in the quality of their life. The interdisciplinary assessment reveals the complexity of chronic pain. The analysis of the different factors involved in chronic pain allows us to design an interdisciplinary pain program focused on common objectives.

## **Introduction**

Pain is a frequent symptom of the human being, which produces suffering, disability and a decrease in the quality of life<sup>15, 13, 27, 26</sup>.

It has a high incidence in the general population (53.7%)<sup>3, 26, 51</sup>: one out of five people suffers from chronic pain<sup>9, 16</sup> causing serious economic losses to society due to the high level of consumption of sanitary resources and labor absenteeism<sup>26, 34, 36, 40</sup>.

In patients with chronic pain, independently from the etiology, pain is the main symptom which makes the patient look for medical attention<sup>28, 18, 24, 34</sup>, being one of the most common reasons for consultation in medical practice<sup>28, 26, 34</sup>.

The Fleni's Pain Center (Centro Integral de Dolor) has developed an interdisciplinary assessment to evaluate the different aspects involved in chronic pain.

The aim of this work is to describe the population and assessment methodology used in patients with chronic pain assisted in the Fleni Pain Center.

## **Material and Methods**

Between January 2004 and December 2005, we analyzed the chronic pain population treated at the Fleni Pain Center located in Escobar, Buenos Aires Argentina (CIDFE) that met the inclusion criteria described in table 1.

The interdisciplinary assessment begins once the CIDFE physician diagnoses a chronic pain syndrome. The doctor explains to the patient the characteristics of chronic pain and the need to make an interdisciplinary evaluation, scopes, duration, costs and inclusion criteria considered at the feedback interview (within 2 weeks after the ID assessment) with the CIDFE physician who requested it.

The doctor gives the patient the interdisciplinary assessment questionnaires, explains the informed consent and the need to have the patient's signature in order to proceed with the assessment.

He prepares a summary of the clinical record for the CIDFE assessment team. A professional of each area of the CIDFE has an individualized interview with the patient

evaluated, where they review the set of questionnaires completed by the patient in order to measure significant parameters that permits the analysis and the referral to the most convenient program.

### **Instruments used**

SCID II Personality Disorders Questionnaire <sup>19</sup>

BECK Depression Inventory (BDI) <sup>7, 12, 54</sup>

Quality of life - SF36 <sup>1, 2, 6, 11, 37, 52</sup>

STAI Anxiety Questionnaire <sup>39, 47, 48</sup>

Visual Analogue Scale (VAS) level of pain <sup>10, 42</sup>

Oswestry Disability Index (ODI) low back pain disability <sup>20, 31, 41, 43, 44</sup>

Physical dysfunction for activities of daily living (ADL) HAQ 20 <sup>14, 17, 23</sup>

Body Mass Index (BMI) <sup>21, 32, 38</sup>

### **Results**

525 patients were evaluated, out of which 194 met the inclusion criteria: 129 women (66.49%) and 65 men (33.5%). The average age was 51.5 years old (18-85), 79% were active (working) and 21% retired. 6 patients (4%) were on leave of absence.

37% received the treatment under some kind of medical insurance, and 63% afforded the treatment payment by themselves.

As regards pathologies, most of them were related to chronic low back pain (65%), neck pain (14%) and headache (3%). The rest of the patients (18%) received other diagnoses (arthrosis, arthritis, fibromyalgia, etc.). Figure 1.

### **VAS level of pain**

The average level of pain reported by patients in the VAS was 5.75 mm.

### **SCID II Personality Disorders Questionnaire**

In figure 2, we observe the distribution of personality disorders according to SCID II. 24.8% revealed no personality traits, 35.6 % showed one disorder, and 39.45% showed more than one.

### **BECK Depression Inventory**

64% of patients assessed presented depressive disorder criteria. From this percentage, 32% had mild depressive disorder symptoms, 23% moderate and 10% severe symptoms.

### **Quality of life - SF36**

Figure 3 shows the quality of life percentage of the evaluated chronic pain patients.  
General average: 42.39%

### **STAI Anxiety Questionnaire**

41% revealed no anxiety traits  
30.5% state anxiety  
29% trait anxiety

### **ODI low back pain disability**

Low back pain disability degree: 36.5%

### **Physical dysfunction for activities of daily living (ADL) HAQ 20**

Considering 40 patients analyzed, results are:

43% mild to moderate difficulty to perform ADL  
52% moderate to severe difficulty to perform ADL  
5% severe difficulty to serious disability

### **Body Mass Index - BMI**

Normal weight 39%

Overweight 41%

Obesity 20%

## **Discussion**

Pain is an unpleasant subjective experience<sup>9, 35, 51</sup> which not only modifies and decreases the quality of life of the person suffering it<sup>9</sup>, but also affects his/her social, work, familiar and economic environment<sup>26</sup>.

Chronic pain may be produced or caused by the continuous stimulation of nociceptors in the injury area (e.g. secondary chronic pain to osteoarthritis)<sup>34</sup>. In other cases chronic pain persists after the healing of the injury or sometimes ..... without being able to identify tissue damages or related injury antecedents<sup>10</sup>.

Many chronic pain patients suffer from syndromes for which there is no confirmed laboratory serological data, and which are diagnosed according to the clinic they show. Within these chronic pain syndromes we can find: chronic low back pain, headache, myofascial pain, fibromyalgia, neuropathic pain, phantom limb pain and central pain. Knowledge of the physiopathology of most of these disorders is limited<sup>27, 10</sup>.

Pain of musculoskeletal origin is one of the main representatives of chronic pain (neck pain, low back pain, chronic joint pain and diffuse muscular pain).<sup>18, 3, 34</sup>

Medical consultation for chronic pain is related to different factors such as intensity and perception of pain, depressive symptoms, socio-economic level, race and age.<sup>26, 3</sup>

Chronic pain partially responds to treatments commonly used; its approach requires interdisciplinary teams composed of neurologists, anesthesiologists, traumatologists, psychologists, psychiatrists, kinesiologists, nutritionists, occupational therapists, nurses and social workers specialized in pain management.<sup>5, 9, 33, 42, 50</sup>

In this first work we examined the population with chronic pain derived for treatment at the Fleni Pain Center (CIDFE) located in Escobar, first Spanish-speaking center accredited by CARF.

As this center is unique due to its characteristics, results do not represent the population with chronic pain in Argentina.

Our patients show different pathologies, where chronic pain is a common factor (Figure 1)

Chronic pain was evaluated in its different dimensions: functional, social behavior and psychological.

We used the Visual Analogue Scale (VAS) to register the pain level informed by patients because it is commonly used nowadays, easy to implement and clearly understandable by all patients. This scale can measure the Intensity of Pain in a 0-10 range (0-100 millimeters), where values at the right mean “the maximum imaginable level of pain” and values at the left mean “absence of pain”<sup>10, 42</sup>

The SCID II was chosen to assess personality aspects: it is a questionnaire useful to evaluate personality disorders. It is based on DSM-IV Axis II criteria, and widely validated and used.<sup>19</sup>

The different personality disorders (avoidant, paranoid, obsessive-compulsive, schizotypal, schizoid, depressive, histrionic, narcissistic, borderline and antisocial) can be assessed with this set of questions, where the patient and a relative answer yes or no to the set of questions about personality traits the patient had before the pain diagnosis.<sup>19</sup>

In Argentina, the cultural adaptation was carried out by the Argentine Oncological Foundation FUNDONAR La Plata (Bs.As.)

The SF 36 was chosen as a scale to assess the quality of life, because it is widely used and validated <sup>1, 2, 6, 11, 37</sup>. It is a quality of life survey developed from a large set of questionnaires used in the Medical Outcomes Study -MOS-. This test detects changes in the “quality of life” of people, both positive and negative health status. The content of the items is focused on the functional status and emotional well-being. Its application field comprises general population and patients, and it is used in descriptive and evaluation studies.

The psychological assessment was complemented with the Beck Depression Inventory <sup>7</sup>, which evaluates depression symptoms. It takes into account physiological, cognitive and behavioral aspects of depression (mood, depressive ideation, loss of interest/energy, sleep, appetite and sex life) <sup>1, 7, 12, 54</sup>. And also with the STAI Anxiety Questionnaire, because it is easy to be answered by the patients, providing a unique final figure. It distinguishes the trait anxiety from the state anxiety of the patient when being evaluated, and differentiates the final score according to the gender. <sup>39, 47, 48</sup>

Physical evaluation was complemented with the Oswestry Disability Index <sup>20, 44, 41</sup> and the HAQ-20 (The Health Assessment Questionnaire) <sup>14, 17, 23</sup> since they consider the spine as central axis of the body (directly or indirectly involved with any movement).

The Oswestry Disability Index (ODI) is a questionnaire that evaluates the Low Back Pain Disability Degree in patients with low back pain of any origin. It assesses 10 domains that separately measure intensity of pain, personal care, lifting, walking, sitting, standing, traveling, sleeping, sex life and social life. Many studies have proved its validity, reliability and adequate correlation with other clinical parameters. <sup>20,31,41,43,44.</sup>

HAQ-20 is an instrument that evaluates physical dysfunction for activities of daily living (ADL). It contains 8 categories: dressing and grooming, arising, eating, walking,

hygiene, reaching, gripping and other activities. Besides, it describes if any help from other people or use of adaptation devices are regularly needed for carrying them out.

14, 17, 23

Final score goes from 0 to 3:

Score up to 1: mild to moderate difficulty to perform ADL

Score up to 2: moderate to severe difficulty to perform ADL

Score up to 3: severe difficulty to serious disability to perform ADL

It was used in populations with rheumatoid arthritis and other rheumatic pathologies, osteoarthritis, lupus, psoriatic arthritis, ankylosing spondylitis, fibromyalgia <sup>1, 17</sup>

Out of the population analyzed, we found a 2-1 prevalence of chronic pain in women, with an average age of 49 years old.

Most of our patients (79%) were working at that time and afforded the treatment by themselves (63%). Only 21% were retired, 37% received the treatment under some kind of medical insurance and 4% were on leave of absence. This contrasts with other publications where the patients perform the treatment under any kind of work compensation or medical insurance <sup>15,22,26,34,36</sup>.. We believe this difference has to do with the type of population treated at the CIDFE and the size of the sample.

We found that the average pain informed by patients was 5.75 mm in the Visual Analogue Scale (VAS).

76% of the patients showed one or more personality disorders, being the most frequent one the obsessive-compulsive disorder (59.7%)

When analyzing the population with chronic low back pain (62%), 48.9% showed obsessive personality traits; 23.4% narcissistic traits, and 17% borderline. The avoidant, depressive and passive/aggressive traits were present in 10.6% of the patients. 12.7% were reported to have paranoid traits, 4.2% schizoid and histrionic and

8.5% schizotypal. None of the patients of the sample revealed dependent or antisocial personality characteristics. The most frequently associated personality traits were those corresponding to narcissistic and borderline personalities, followed by the narcissistic-borderline-obsessive/compulsive association.

Personality disorders observed in this research were only used to portray the population.

SF-36 values found in chronic low back pain were similar to those found by other studies.<sup>25, 29, 30</sup>

Our research confirms the multidimensional commitment caused by chronic pain in the patients' quality of life<sup>46, 22</sup>. This decrease in the quality of life of patients with chronic pain (we observed a general average of 42.39% in the SF36) is equal or worse than the one showed by patients with severe cardiopulmonary diseases or major depression.<sup>1, 4, 49, 52, 53</sup>

Levels of depression observed are similar to other studies reporting 50% of significant depression levels in patients suffering from chronic pain<sup>17, 29, 45, 46</sup>.

59.28% revealed anxiety traits or disorders.

Low back pain disability was 40% according to the Oswestry (ODI) analysis, in agreement with other studies<sup>20, 43, 31</sup>, and activities of daily living (ADL) presented a 57% moderate to severe difficulty.

Chronic pain is also related to overweight, because it contributes to the decrease of the functional status and quality of life<sup>21, 32, 38</sup>. In our sample, 61% of the patients showed overweight or obesity problems.

## **Conclusions**

We could observe a 2-1 prevalence of chronic pain in women, mostly related to spine diseases (79%), personality disorders (75%), depression (64%), anxiety (59.5%), and overweight disorders (61%). With a low back pain disability degree of 36.5% (ODI), a moderate to severe difficulty to perform activities of daily living -ADL- (HAQ-20) and causing a decrease in the global quality of life of 68.6% (SF36).

Most of our patients (79%) were active at that time (working), only 6 on leave of absence, and 63% afforded the treatment by themselves.

Our research confirms the multidimensional commitment caused by chronic pain in the patients' quality of life.

Interdisciplinary assessment proves the complexity of chronic pain.

The analysis of the different factors involved in chronic pain allows us to design an interdisciplinary treatment program focused on common objectives.

The Fleni Pain Center (CIDFE) is devoted to the diagnosis and treatment of patients with chronic pain. Its objectives are pain relief, functionality increase and improvement of the quality of life.

## **Bibliography**

1. Alonso J, Ferrer M, Gandek B, Ware JE Jr, Aaronson NK, Mosconi P, Rasmussen NK, Bullinger M, Fukuhara S, Kaasa S, Lepège A. Health-related quality of life associated with chronic conditions in eight countries: results from the International Quality of Life Assessment (IQOLA) Project. *Quality of Life Research* 2004 March;13(2):283-98.

2. Alonso J, Prieto L, Antó JM. La versión española del SF-36 Health Survey (Cuestionario de Salud SF-36): un instrumento para la medida de los resultados clínicos. *Med Clin* 1995; 104: 771-6.
3. Andersson HI, Ejlertsson G, Leden I, Rosenberg C. Chronic pain in a geographically defined general population: studies of differences in age, gender, social class and pain localization. *Clin J Pain* 1993;9:174-82.
4. Asadi-Lari M., Packham C., and Gray D., Unmet health needs in patients with coronary heart disease: implications and potential for improvement in caring services. *Health Qual Life Outcomes*. 2003; 1: 26. Published online 2003 July 23. doi: 10.1186/1477-7525-1-26.
5. Ashburn M, Staats P. Management of chronic pain. *The Lancet* 1999;353;1865-69.
6. Ayuso-Mateos JI, Lasa L, Vázquez-Barquero JL, Oviedo A, Díez-Manrique JF. Measuring health status in psychiatric community surveys: internal and external validity of the Spanish version of the SF-36. *Acta Psychiatr Scand* 1999; 99: 26-32.
7. Beck At, Ward Ch, Mendelson M, Mock J, Erbaugh J. An inventory for measuring depression. *Arch. Gen. Psychiatry*, 1961; 4: 561-571.
8. Becker N, Bondegaard Thomsen A, Olsen AK, Sjogren P, Bech P, Eriksen J. Pain epidemiology and health related quality of life in chronic non-malignant pain patients referred to a Danish multidisciplinary pain center. *Pain* 1997;73:393-400.
9. Blyth FM, March LM, Brnabic AJM, Jorm LR, Williamson M, Cousins MJ. Chronic pain in Australia: a prevalence study. *Pain* 2001;89:127-34.

10. Bonica J. Definition and taxonomy of pain. In: The management of pain, 2<sup>nd</sup> edn. Philadelphia: Ed. Lea and Febiger; 1990.
11. Bonicatto y cols. "Adaptación del SF-36 Health Survey a la Argentina. Una falla en la traducción literal". Revista Argentina de Oncología, 1996 Vol 3 N 1.
12. Bonicatto S, Dew AM, Soria JJ. Analysis of the psychometric properties of the Spanish version of the Beck Depression Inventory in Argentina. Psychiatry Res. 1998 Jul 13;79(3):277-85.
13. Bowsher D, Rigge M, Sopp L. Prevalence of chronic pain in the British population: a telephone survey of 1037 households. Pain Clinic 1991;4:223-30
14. Bruce, B.; Fries, J.F.: The Stanford Health Assessment Questionnaire: Dimensions and Practical Applications. Review. Health and Quality of Life outcomes; 2003
15. Buskila D, Abramov G, Biton A, Neumann L. The prevalence of pain complaints in a general population in Israel and its implications for utilization of health services. J Rheumatol 2000;27:1521-5.
16. Catala E, Reig E, Artes M, Aliaga L, Lopez JS, Segu JL. Prevalence of pain in the Spanish population: telephone survey in 5000 homes. Eur J Pain 2002;6:133-40
17. Citera G.; Arriola M. ;. Maldonado-Cocco J.A ; Rosemfet M. ; Sanchez M.;. Goñi M.A ;. Spindler A M.; Lucero E.; Berman A.: "Validation and cross-cultural adaptation of an Argentine Spanish version of the Health Assessment Questionnaire Disability Index". J. Clin Rheumatol 2004; 10:110-115
18. Elliott AM, Smith BH, Penny KI, Smith WC, Chambers WA. The epidemiology of chronic pain in the community. Lancet 1999;354:1248-52.

19. Ericsson M., Poston W., Linder J., Taylor J., Haddock C., and Foreyt J. Depression predicts disability in long-term chronic pain patients. *Disabil Rehabil.* 2002 Apr 15;24(6):334-40.
20. Fairbank JC, Couper J, Davies JB, O'Brien JP. The Oswestry low back pain questionnaire. *Physiotherapy* 1980;66:271–3.
21. Fanuele JC, **Abdu** WA, Hanscom B, Weinstein JN. Association between Obesity and Functional Status in Patients With Spine Disease. *Spine* 2002;27:306-312
22. Flor H., Fydric T. and Turk D., Efficacy of multidisciplinary pain treatment centres: a meta-analytic review, *Pain* 1992; 49:221-230.
23. Fries JF, Spitz PW, Young DY. The dimensions of health outcomes: the health assessment questionnaire, disability and pain scales. *J. Rheumatol* 1982;9:5.
24. Frolund F, Frolund C. Pain in general practice. *Scand J Prim Health Care* 1986;4:97-100
25. Garratt, A., Rutta D., Abdala M., Buckingham J. and Russel I., The SF-36 health survey questionnaire: an outcome measure suitable for routine use within the NHS, *Br. Med. J.*, 1993;306:1440-1444.
26. Gerdle B, Björk J, Henriksson C, and Bengtsson A. Prevalence of Current and Chronic Pain and Their Influences Upon Work and Healthcare-Seeking: A Population Study. *J Rheumatol* 2004;31:1399–406
27. Goldenberg D. Fibromyalgia syndrome. An emerging but controversial condition. *JAMA* 1987;257:2782-87.
28. Gureje O, Von Korff M, Simon GE, Gater R. Persistent pain and well-being: A World Health Organization study in primary care. *JAMA* 1998;280:147-51.

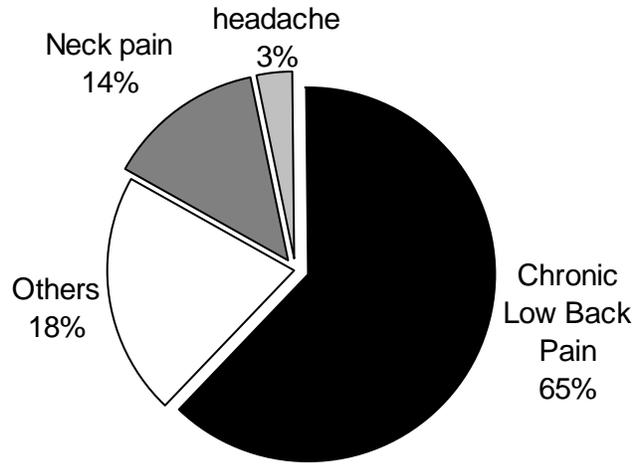
29. N. Katz , M. Kosinski , J. Schein , S. Ascher , S. Vallow , C. Harte , G. Vorsanger and M. Clark. Opioids in non-cancer pain: Depression and pain: The relationship between chronic low back pain, depression, and opioid therapy. *Journal of Pain* 2005;5(3):s70.
30. M. Kosinski, J. Schein, S. Ascher, S. Vallow, C. Harte, R. Shikiar, L. Frank, M. Margolis, M. Brennan and G. Vorsanger Extent of physical, social and role activity limitations in Chronic Low Back Pain (CLBP) patients receiving opioid therapy: Results of an observational study. *Journal of Pain* 2005;6(3):s44.
31. Lauridsen H., Hartvigsen J., Manniche C., Korsholm L, Grunnet-Nilsson N. Danish version of the Oswestry Disability Index for patients with low back pain. Part 1: Cross-cultural adaptation, reliability and validity in two different populations. *Eur Spine J.* 2006 May 31; [Epub ahead of print]
32. Lake JK, Power C, Cole TJ. Back pain and obesity in the 1958 British Birth cohort: cause or effect ? *J Clin Epidemiol.*2000; 53:245-250
33. Ledingham J, Doherty S, Doherty M. Primary fibromyalgia syndrome — an outcome study. *Br J Rheumatol* 1993;32:139-42.
34. Le Pen C, Reygrobellet C and Gérentes I. Financial cost of osteoarthritis in France: The “COART” France study.doi:10.1016/j.jbspin.2005.01.011 In Press, Uncorrected Proof. Available online at [www.sciencedirect.com](http://www.sciencedirect.com)
35. Magni G, Caldieron C, Rigatti-Luchini S, Merskey H. Chronic musculoskeletal pain and depressive symptoms in the general population. An analysis of the 1st National Health and Nutrition Examination Survey data. *Pain* 1990;43:299-307.
36. Mansson NO, Rastam L, Adolfsson A. Disability pension in Malmöhus county: aspects on long-term financial effects. *Scand J Soc Med* 1998;26:102-5.

37. Mc Horney C, Ware J, Lu J and Sherbourne,C. The MOS 36-item Short-Form Health Survey (SF-36): III. Tests of data quality, scaling assumptions, and reability across diverse patient groups, *Med. Care*, 32(1994) 40-66
38. Marcus D. Obesity and the impact of Chronic Pain. *Clin J Pain* 2004;20:186-191
39. Pagano T, Matsutani LA, Ferreira EA, Marques AP, Pereira CA. Assessment of anxiety and quality of life in fibromyalgia patients. *Sao Paulo Med J*. 2004 Nov 4;122(6):252-8. Epub 2005 Feb 2.
40. Persson G, Barlow L, Karlsson A, Rosén M, Stefansson CG, Theorell T, Tüll P, Aberg Major health problems. *Scand J Pub Health* 2001;Suppl 58:37-102.A.
41. Rae S., Blood Smyth J., Ivens M., and Penney C. Designing a Back Management Service: the Exeter experience and first year results. *Clin Rehabil*. 1998 Aug;12(4):354-61.
42. RAJ, P. Tratamiento práctico del Dolor tercera edición. Madrid: Ed. Harcourt; 2002
43. Roland M, Fairbank J. The Roland–Morris Disability Questionnaire and the Oswestry Disability Questionnaire. *Spine* 2000; 25: 3115–3124
44. Roland M, Morris R. A study of the natural history of back pain: Part I. *Spine* 1983;8:141–4.
45. Romano J. and Turner J., Chronic pain and depression: does the evidence support a relationship?. *Psicol.. Bull.*, 1985;97:18-34.
46. Rudy T., Kerns R. and Turk D., Chronic pain depression: toward a cognitive-behavioral model, *Pain*,1988;35:129-140

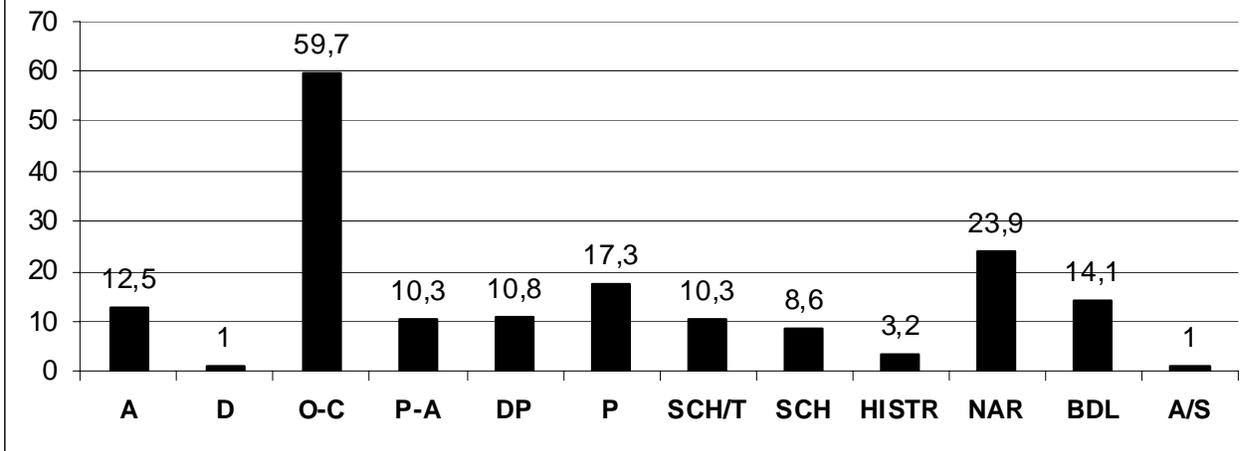
47. Schuler M, Njoo N, Hestermann M, Oster P, Hauer K. Acute and chronic pain in geriatrics: clinical characteristics of pain and the influence of cognition. *Pain Med.* 2004 Sep;5(3):253-62.
48. Seki E, Watanabe Y, Sunayama S, Iwama Y, Shimada K, Kawakami K, Sato M, Sato H, Mokuno H, Daida H. Effects of phase III cardiac rehabilitation programs on health-related quality of life in elderly patients with coronary artery disease: Juntendo Cardiac Rehabilitation Program (J-CARP). *Circ J.* 2003 Jan;67(1):73-7.
49. Stewart A., Greenfield S., Hays R., Wells K., Rogers W., Berry S., McGlynn E. and Ware J., Functional status and well-being of patients with chronic conditions, *J. Am. Med. Assoc.*, 1989;262:907-913.
50. Turk D. Interdisciplinary approach to pain management: philosophy, operations and efficacy. In: Ashburn M, Rice L, eds. *The management of pain.* New York: Churchill Livingstone, 1998: 235-48.
51. Von Korff M, Le Resche L, Dworkin SF. First onset of common pain symptoms: a prospective study of depression as a risk factor. *Pain* 1993;55:251-8.
52. Ware J., Snow K., Gandek B., and the IQOLA Project Group, The SF-36 Health Survey: development and use in mental health research and the IQOLA Project. *Int. J. Ment. Health.* 1994;23:49-73.
53. Wells K., Stewart A., Hays R., Burham M., Rogers W., Daniels M., Berry S., Greenfield S., and Ware J., The functioning and well-being of depressed patients. *J. Am. Med. Assoc.*, 1989; 262:914-919
54. Williams A., and Richardson P., What does the BDI measure in chronic pain? *Pain*, 1993 (2);55:259-266.

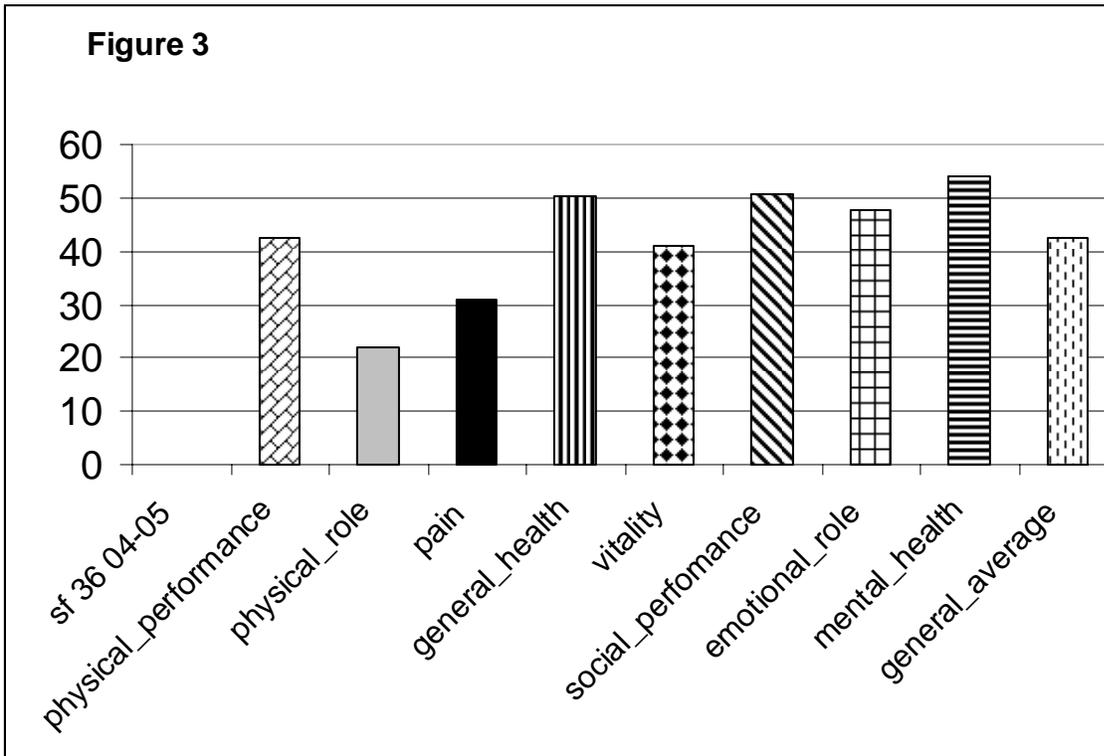
Figures:

**Figure1**



**Figure 2**





**Table 1: Inclusion criteria**

1	Patients over 21 years old with chronic pain
2	Pain refractory to conventional treatments (physical therapy, medication)
3	Sign the informed consent
4	Should not present psychiatric diagnoses of psychosis or serious personality disorders
5	Should not reveal psychiatric pathologies implying a risk to themselves or to others
6	Accept being admitted during the time proposed
7	Show cognitive capacity, so as to take advantage of the components of the program
8	Accept the change of medication (analgesics, narcotics, muscle relaxants, etc.) if this is deemed necessary to achieve a better response to the treatment
9	Complete studies and consultations needed for the diagnosis of the pathology affecting each patient (laboratory, CT, MRI, EMG.)
10	Be clinically stable
11	Should have not failed in previous interdisciplinary treatments
12	Should not be facing a labor lawsuit due to circumstances related to pain
13	Should not be under the effects of substance abuse (alcohol, drugs) when undertaking the program.
14	Be able to afford the program (by themselves, medical or state insurance.)

Figure 1: Pathologies distribution

Figure 2: Personality disorders distribution

Figure 3: Quality of life according to SF36: note the variation in the different domains.

