



LOW BACK PAIN

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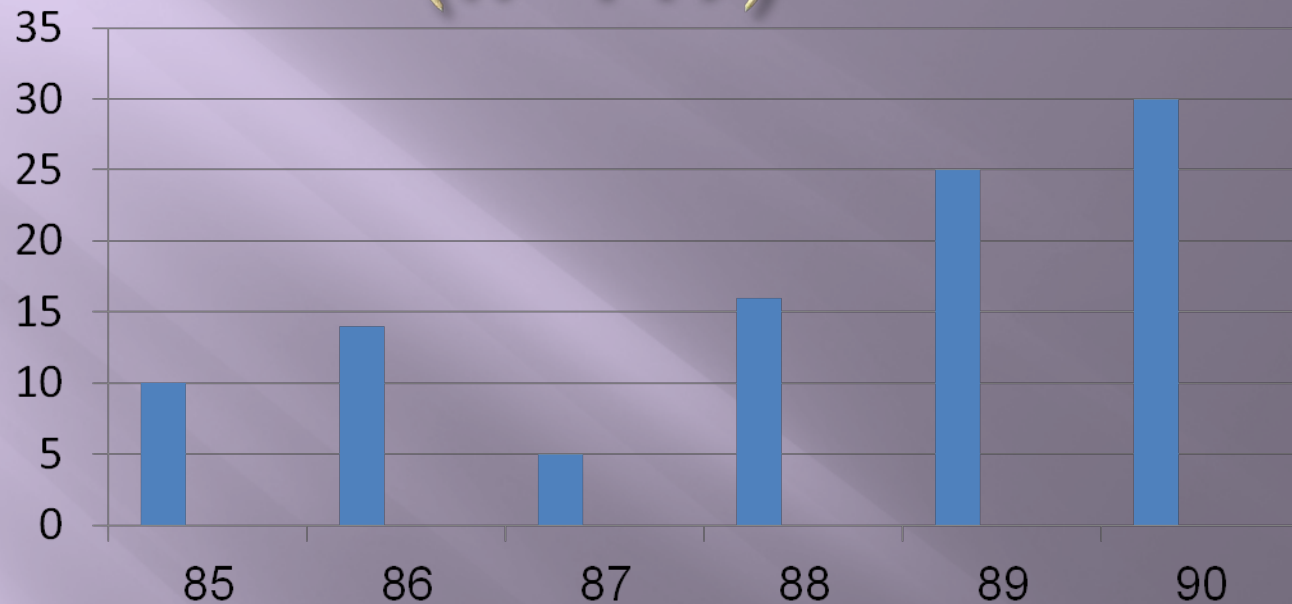
Internist

Shefa Inter-disciplinary Pain Center

epidemiology

- ▣ The 2nd most common symptom-related reason for clinician visits.
- ▣ 84% of adults have LBP at some time.
- ▣ In a 1989 - 90 US survey: 2.5% of medical visits → 15 million office visits; the percent of office visits due to back pain was essentially the same in 2002.
- ▣ Total costs of LBP in US > \$100 billion/ year.

Low Back Pain Referral to Shefa Inter-disciplinary Pain center (n=117)



117 from 500 patients evaluated in pain inter-disciplinary clinic

sex

male

• 76.9%

female

• 19.7%

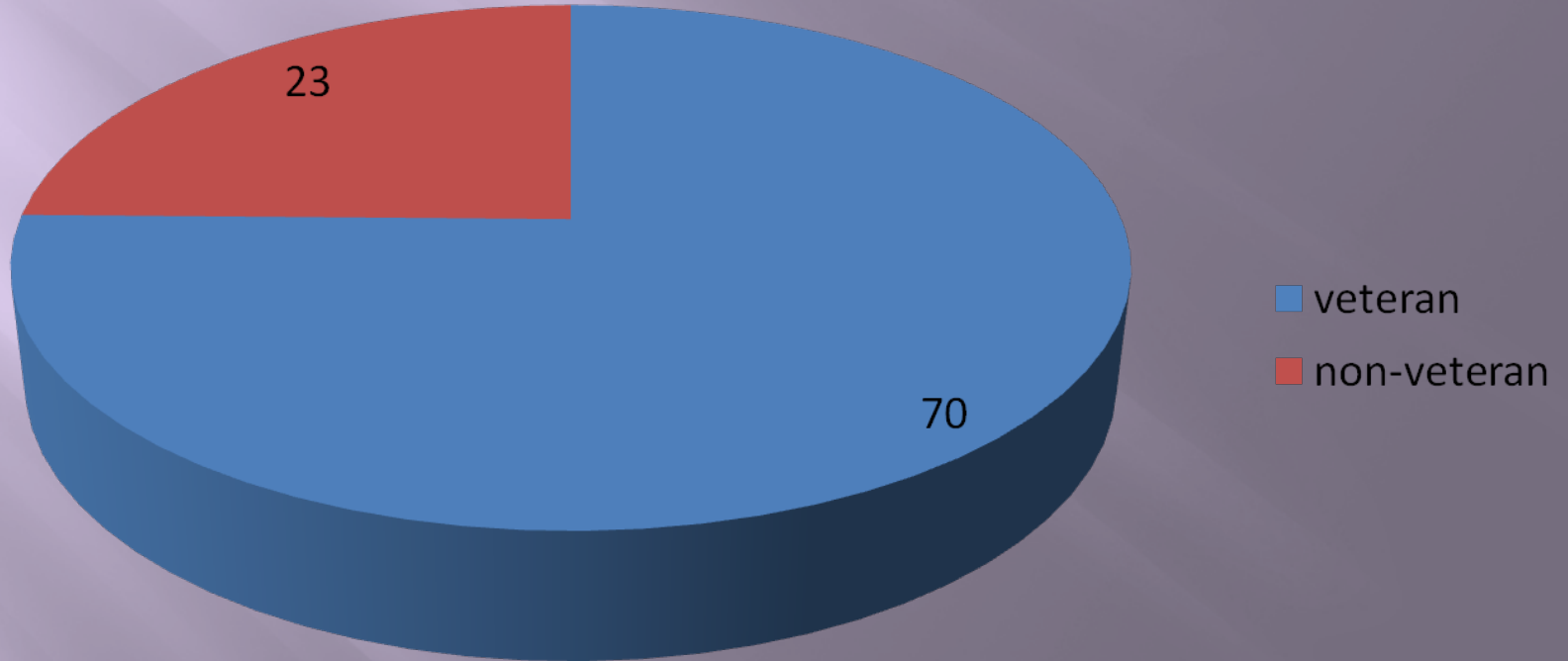
age

- Range: 30-83 yr
- Mean: 51.35 yr (SE= 1.06)

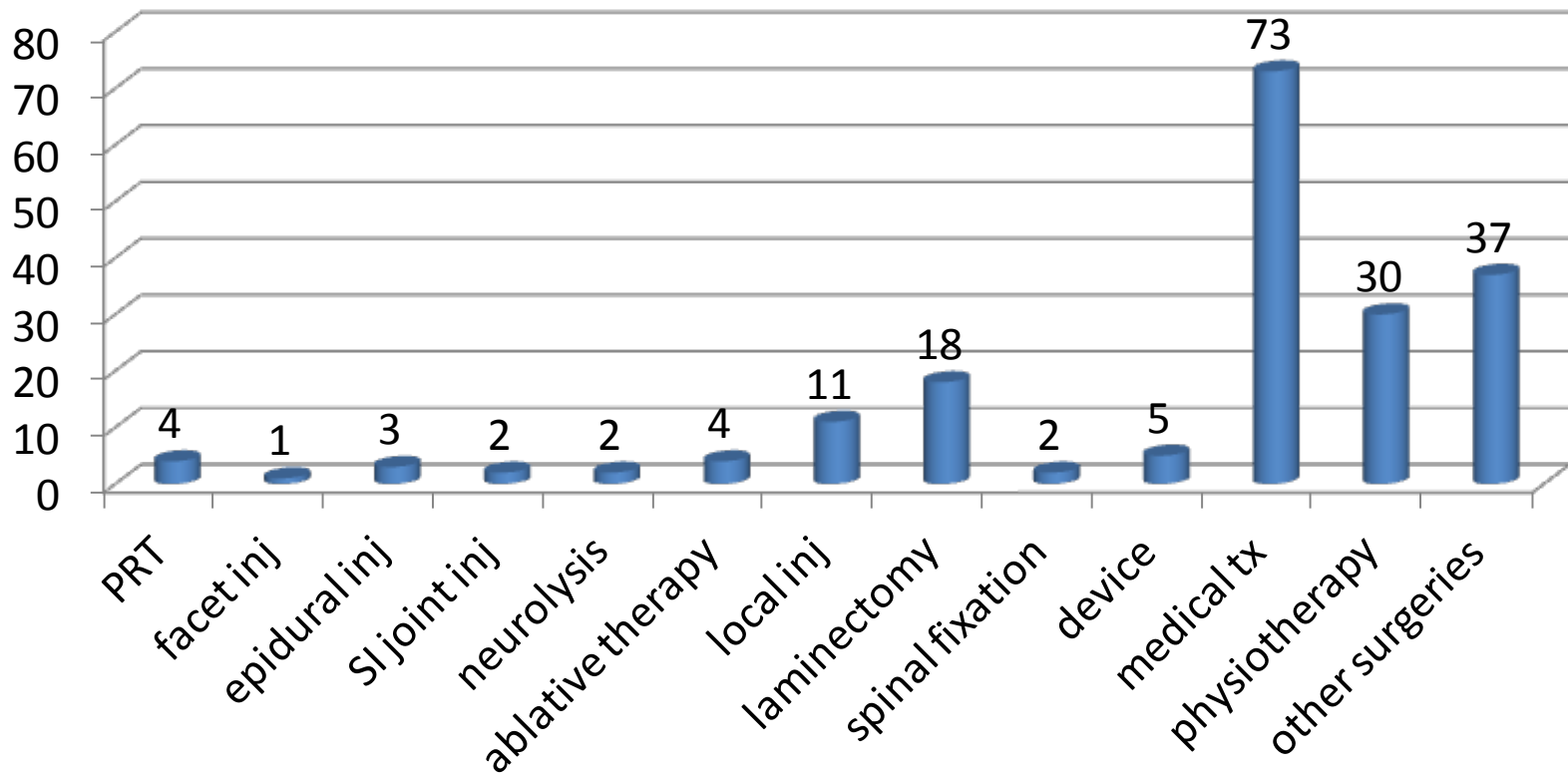
Pain clinic services

Days of admission	Outpatient referrals	Day clinic admissions	Total visits	Pain Committee
• 223	• 546	• 35	• 1321	• 1

war injuries

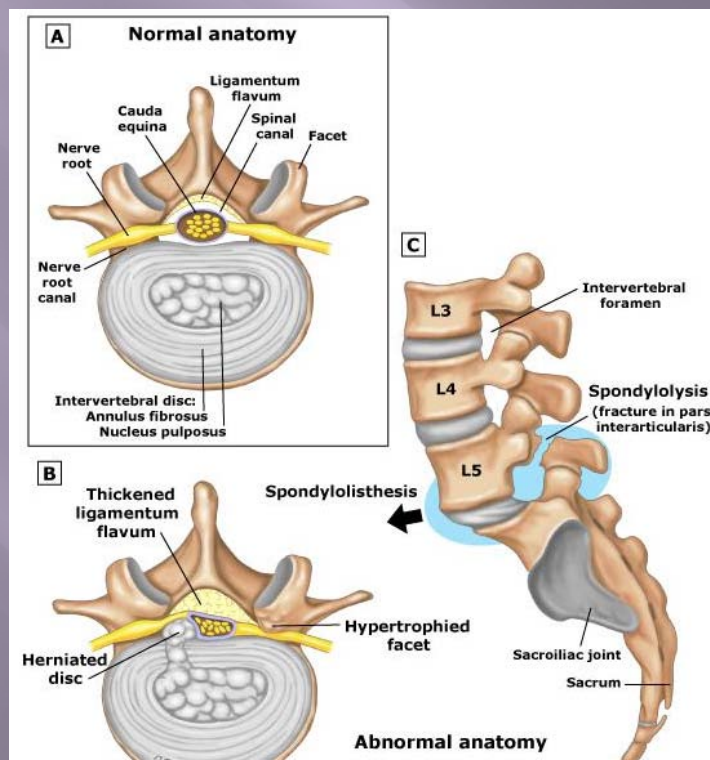


previous treatments



The prevalence of back pain has been estimated in multiple surveys, representing different populations and different definitions:

- ❑ 14% of respondents in the US had back pain, and 2% LBP + sciatica, lasting ≥ 2 weeks.
- ❑ Annular tears are tears or fissures of the annulus fibrosus of the intervertebral disk, typically discovered on MRI.



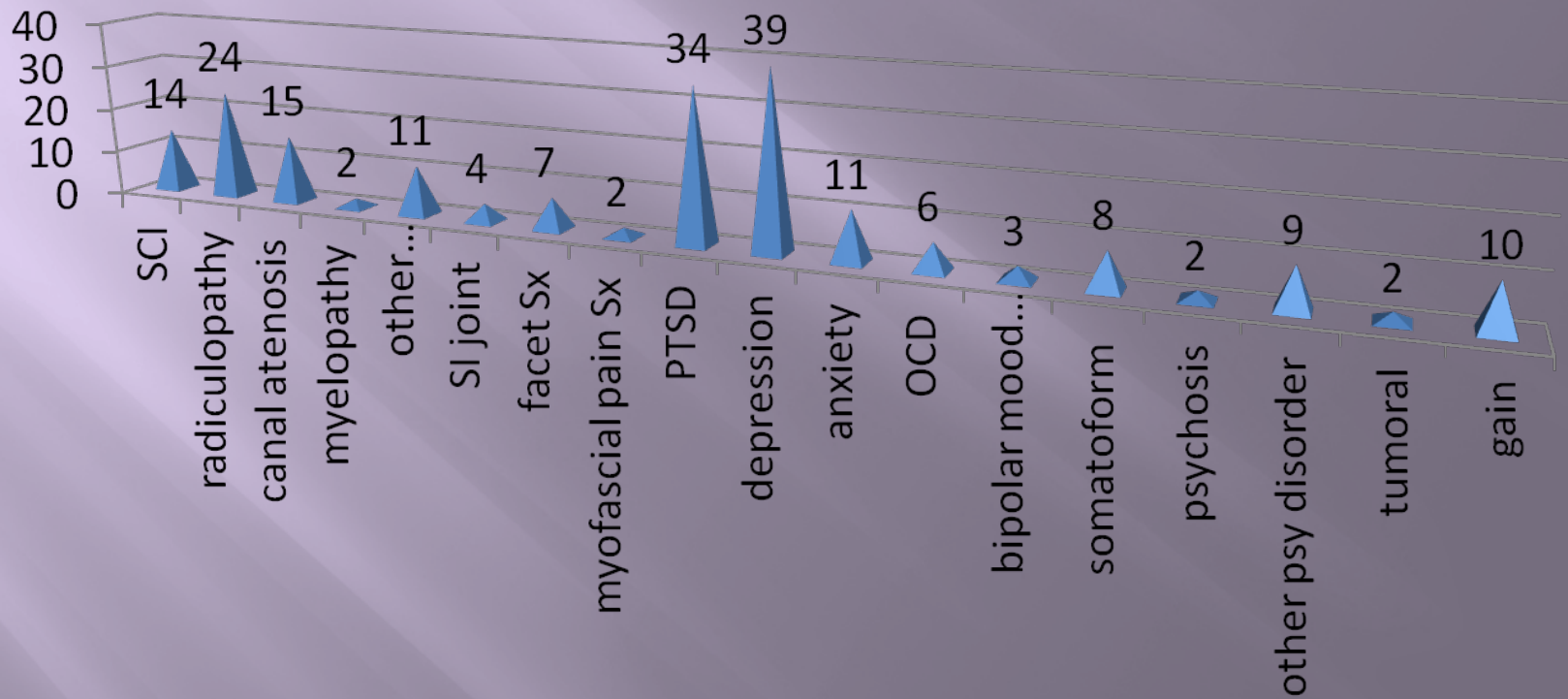
Mechanical low back or leg pain, 97 percent●
Lumbar strain, sprain (70 percent)◊
Degenerative processes of disks and facets, usually age-related (10 percent)
<i>Herniated disk (4 percent)</i>
<i>Spinal stenosis (3 percent)</i>
Osteoporotic compression fracture (1 percent)
Spondylolisthesis (2 percent)
Traumatic fracture (<1 percent)
Congenital disease (<1 percent)
Severe kyphosis
Severe scoliosis
Transitional vertebrae
Spondylolysis§
Internal disk disruption or diskogenic low back pain¥
Presumed instability‡

Visceral disease, 2 percent
Disease of pelvic organs
Prostatitis
Endometriosis
Chronic pelvic inflammatory disease
Renal disease
Nephrolithiasis
Pyelonephritis
Perinephric abscess
Aortic aneurysm
Gastrointestinal disease
Pancreatitis
Cholecystitis
Penetrating ulcer

Nonmechanical spinal conditions, about 1 percentΔ
Neoplasia (0.7 percent)
Multiple myeloma
Metastatic carcinoma
Lymphoma and leukemia
Spinal cord tumors
Retroperitoneal tumors
Primary vertebral tumors
Infection (0.01 percent)
Osteomyelitis
Septic diskitis
Paraspinous abscess
Epidural abscess
<i>Shingles</i>
Inflammatory arthritis (often associated with HLA-B27) (0.3 percent)
Ankylosing spondylitis

- ▣ The associated spectrum of illness and morbidity is broad.
- ▣ Has a substantial impact on lifestyle and QOL.

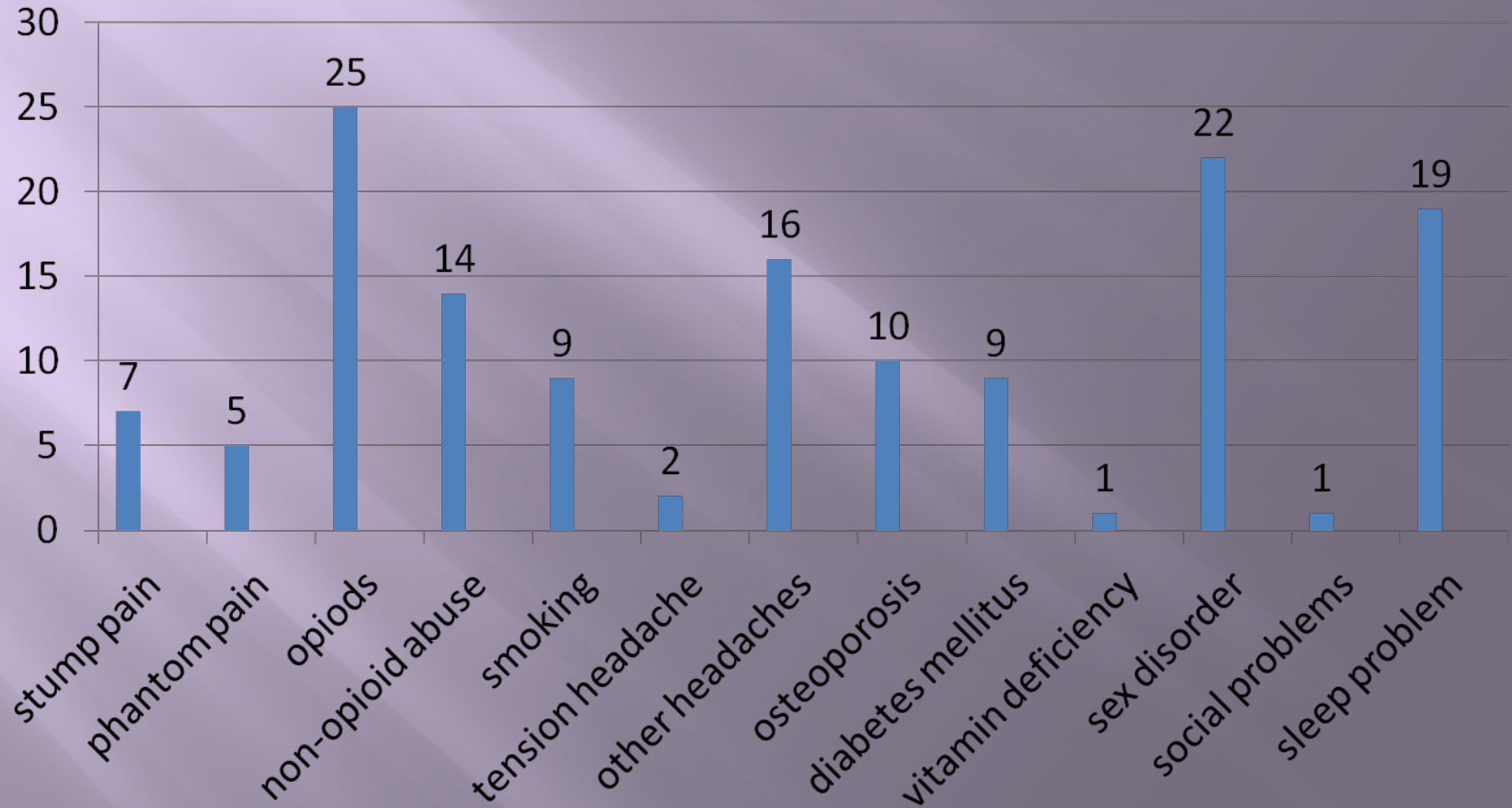
main Dx

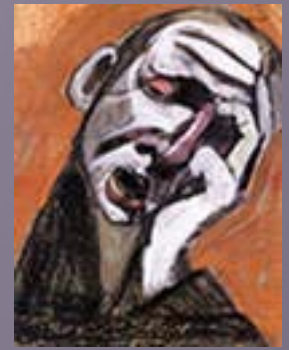


Risk factors

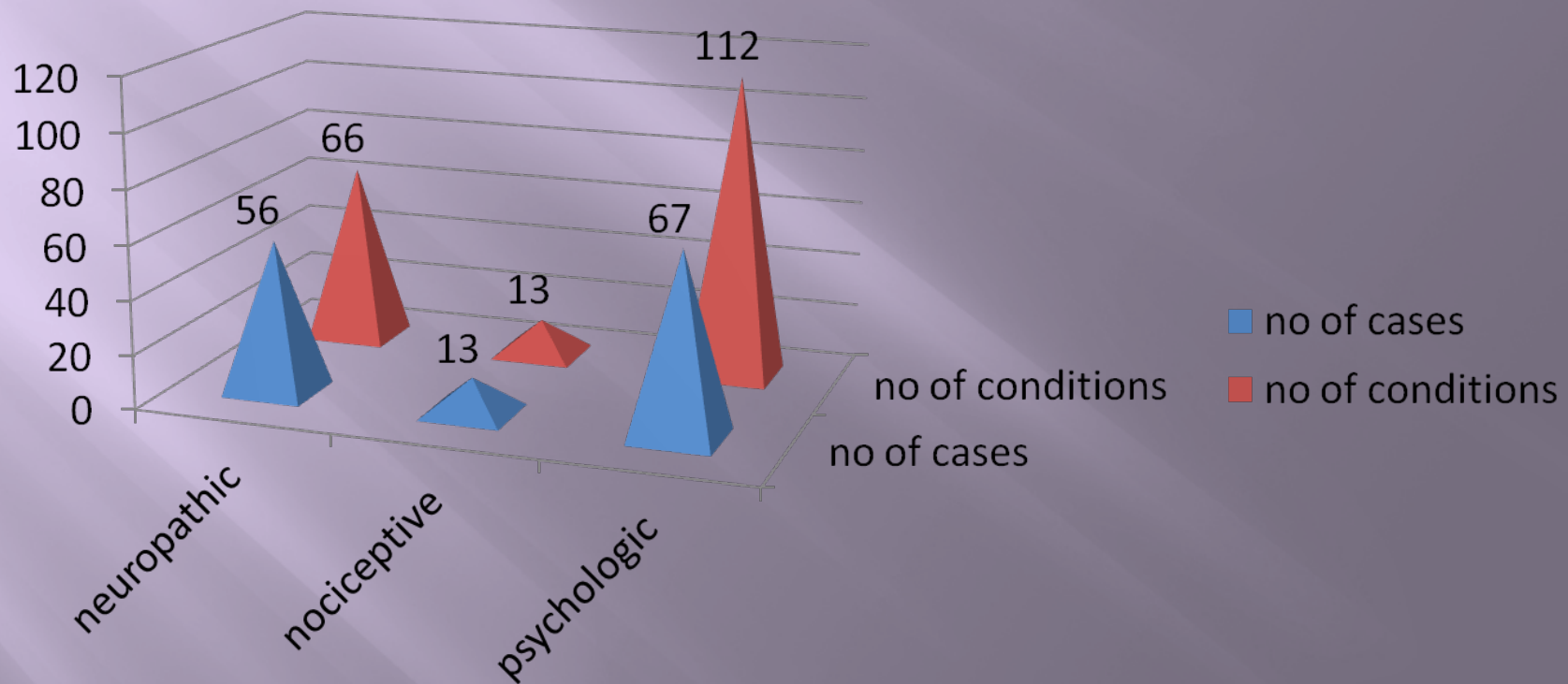
- ▣ smoking,
- ▣ obesity,
- ▣ older age,
- ▣ female gender,
- ▣ physically strenuous work,
- ▣ sedentary work,
- ▣ psychological factors such as somatization disorder, anxiety, and depression
- ▣ psychologically strenuous work,
- ▣ low educational attainment,
- ▣ Workers' Compensation insurance,
- ▣ job dissatisfaction,
- ▣ Poor physical health,
- ▣ Overweight.

Accompanying conditions





- ▣ Prospective studies have found that psychosocial variables strongly predicted both long-and short-term disability, but structural spine changes were only weakly associated with adverse outcomes.
- ▣ Psychosocial variables are stronger predictors of long-term disability than anatomic findings found on imaging studies.



While it may not be possible to define a precise cause of low back symptoms for most patients, it is important to evaluate three concerns in Hx:

- ▣ Is there evidence of systemic disease?
- ▣ Is there evidence of neurologic compromise?
- ▣ Is there social or psychological distress that may contribute to chronic, disabling pain?

The psychosocial history helps to estimate prognosis and plan therapy.

Clues that may suggest underlying systemic disease include:

Hx of cancer

Age > 50 yrs

Unexplained weight loss

Duration of pain > 1 month

Nighttime pain

Unresponsiveness to previous tx

Pain that is not relieved by lying down can be found in patients whose back pain is due to cancer or infection, but is not specific for these conditions.

Prognosis

- ▣ The long-term outcome is generally favorable.
- ▣ Patients who have high expectations for recovery have better outcomes.
- ▣ A longitudinal study of 973 primary care patients with recent onset LBP found that 83% had mild or no pain & 86% had minimal or no disability at 1 year follow-up; however, only 72% had completely recovered.

- ▣ Improvement in all QOL scales might be related to two factors:
 - (i) the reduction of bodily pain which eases the performance of daily activities
 - (ii) diminishing the risk of disability due to leaning to have a more healthy body mechanics.

It has been shown that different interventions can reduce the burden of the disease. The back program education patients improves significantly on all QOL subscales.

INTEERVENTION	NO OF CASES	RESPONSE RATE
PRT	5	40%
Facet inj	7	86%
Epidural inj	5	60%
SI joint inj	4	67%
Medical tx	82	85%
psychotherapy	17	100%
Itrathecal pump	1	50%
physiotherapy	42	5%
orthosis	4	100%
Local inj	7	100%