



4. Aalener Schmertag Die Last mit dem Kreuz Was tun bei chronischen Rückenschmerzen



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4. Aalener Schmerztag

- **Leitlinien**
- **Effekte**
- **Was können wir tun/ändern?**



Leitlinien

- **In nahezu allen industrialisierten Staaten**
- **DGAM: Leitlinie 4: Kreuzschmerzen**
 - **Im Fokus vorwiegend akute Rückenschmerzen**
 - Nicht interdisziplinär, Stand 2002
 - Hinweise auf *red flags*
 - Beratung, NSAR, Bewegung, Chirotherapie
- **Europäische Rückenschmerzleitlinie**
- **www.backpain-europe.org**
 - Interdisziplinär, Stand 2004
 - Unterscheidung zwischen akut und chronisch
 - Review ohne Metaanalyse



- **Akute Rückenschmerzen**
 - Ausschluss wesentlicher körperlicher Erkrankungen
 - Vorübergehend Medikamente
 - Beratung und Motivation zur Bewegung
 - Zunächst (vier Wochen) keine apparative Diagnostik
 - Reevaluierung wenn innerhalb von 4 Wochen nicht Halbierung der Schmerzen



Positiv

- *The diagnostic and therapeutic recommendations in the guidelines for acute LBP were mainly comparable while the recommendations for the management of chronic LBP varied widely. CONCLUSION.: Compared to the quality assessment performed in 2004, **the average quality of guidelines has improved**. However, guideline developers **should still improve the quality transparency of the development process**. Especially the applicability of guidelines and the editorial independence need to be ensured in future guidelines.*

Bouwmeester W et al. Quality of Low Back Pain Guidelines Improved. Spine 2009



Akute Rückenschmerzen - Leitlinien

Problematisch

- Erheblicher Sozialgradient in der Kenntnis z.B. Notwendigkeit der Bewegung
- *Radiography of the lumbar spine in primary care patients with low back pain of at least six weeks' duration is not associated with improved patient functioning, severity of pain, or overall health status but is associated with an increase in doctor workload. ...Patients receiving radiography are more satisfied with the care they received.*

Kendrick D et al. BMJ 2001; 322: 400-405

- *Work advice was significantly related the PABS.PT scores with higher biomedical and lower behavioural scores associated with advice to remain off work...Many health care practitioners held the belief that LBP necessitates some avoidance of activities and work. The attitudes and beliefs of these HCPs were associated with their self reported clinical behaviour regarding advice about work.*

Bishop A et al. Pain 135 (2008) 187-195

Assessment of diclofenac or spinal manipulative therapy, or both, in addition to recommended first-line treatment for acute low back pain: a randomised controlled trial

Mark Hancock, Chris G Maher, Jane Latimer, Andrew I MacLachlan, Chris W Conner, Richard O Day, Megan F Spindler, James H McAuley

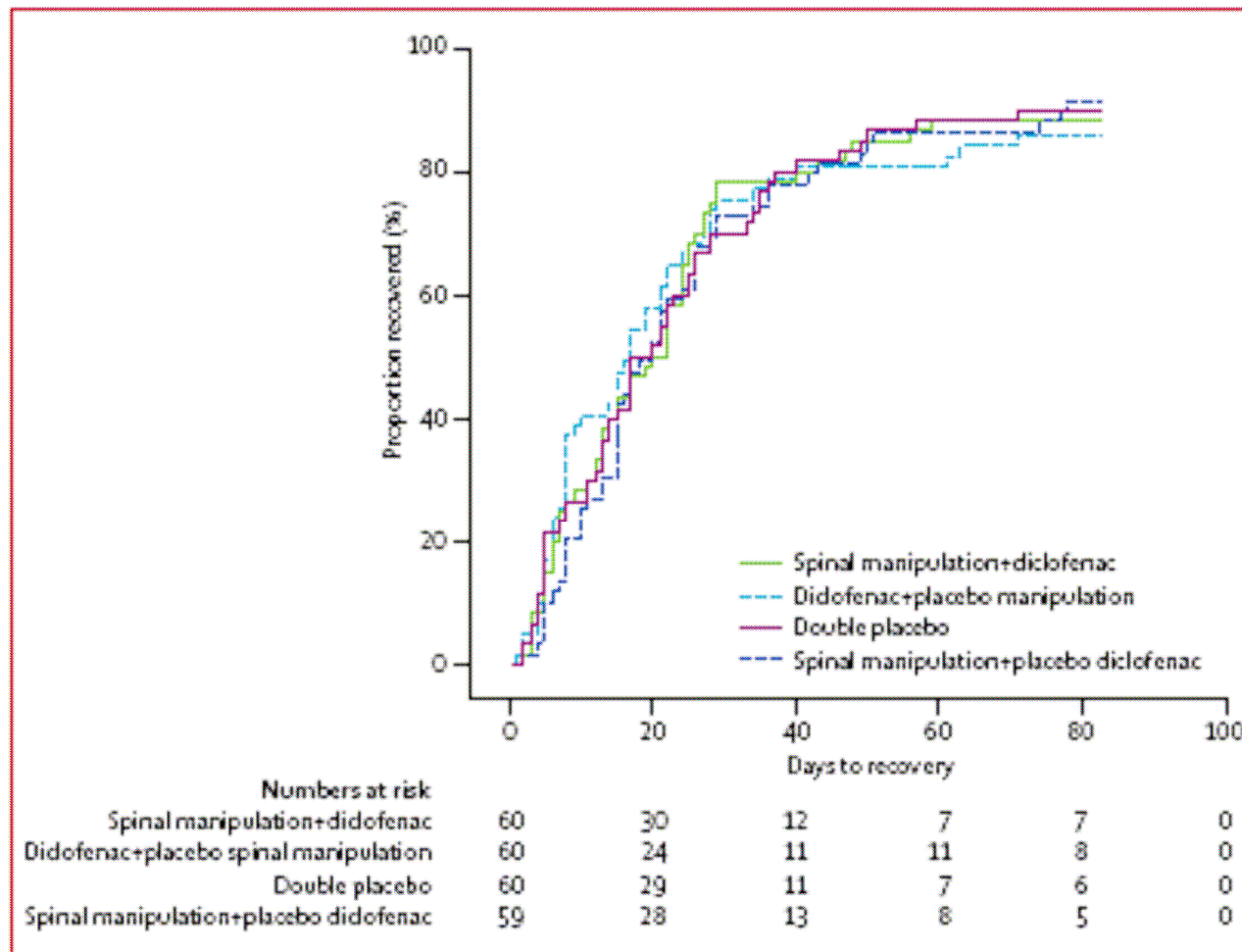


Figure 3: Survival curves for days to recovery from low back pain. Recovery is defined as a pain score of 0 or 1 for 7 consecutive days.



Akute Rückenschmerzen - Effekte

Effektstärken

For acute LBP, the effect size of non-steroidal anti-inflammatory drugs (NSAIDs) and manipulation were only modest (ES: 0.51 and 0.40, respectively) and there was no effect of exercise (ES: 0.07).

Keller A et al. Effect sizes of non-surgical treatments of non-specific low-back pain. Eur Spine J 2007; 16:1776-1788

Clinicians should provide patients with evidence-based information on low back pain with regard to their expected course, advise patients to remain active, and provide information about effective self-care options...

≡ Keine Physiotherapie bei akuten Rückenschmerzen, eigenverantwortlich aktiv sein!

Chou R et al. Diagnosis and Treatment of Low Back Pain: A Joint Clinical Practice Guideline from the American College of Physicians and the American Pain Society. Ann Intern Med 2007; 147: 478-491



Chronische Rückenschmerzen

- Monotherapie
 - Medikamente
 - Injektionen
 - Üben
 - Schmerzpsychotherapie
- Multimodale Therapie
- OP



LONTS

- **Langzeit- Opioidtherapie von nicht Tumor Schmerzen**
- **Interdisziplinäre S3-Leitlinie**
- Kein kontrollierten Studien über 3 Monate hinaus
- **Effekte erreichen Schmerzlinderung um 15 Punkte auf Skala 0 - 100**
- **Kein Wirkunterschied zwischen NSARs und Opioiden**
- Nachlassende Wirkung mit Einnahmedauer
- Zunehmende Nebenwirkungen:
 - **Kognitive Beeinträchtigungen**
 - **Hyperalgesie**
 - **Keine Verhaltensförderung**
 - **Substanzmissbrauch**
- **Bei psychischer Komorbidität nicht verordnen**



LONTS

„Ein Anwendungsversuch mit opioidhaltigen Analgetika von dreiwöchiger bis zu dreimonatiger Dauer ist bei Patienten mit CNTS wegen der geringen Einzelwirkung nur bei Berücksichtigung spezieller Gegenindikationen und anderer Anwendungsbeschränkungen sowie einer Inanspruchnahme zusätzlicher schmerzlindernder (z.B. kognitiv-behavioraler, konflikt- und problemlösender, physikalischer, soziotherapeutischer) Maßnahmen zu erwägen.“



Chronische Rückenschmerzen - Injektionen

We cannot recommend

- *the use of **epidural corticosteroids** ...*
 - *Do not use epidural steroid injections for acute non-specific low back pain.*
 - *Conflicting evidence for the use of epidural steroid injections for acute radicular low back pain.*
- *the use of intraarticular injections of **steroids to the facet joints or nerve blocks** ...*
- *the use of **intradiscal injections** ...*
- *the use of **sacroiliac joint injections** with corticosteroids ...*
- *the injection of **sclerosants (prolotherapy)**...*
- *the use of **trigger point injections**...*

- ***Acupuncture.***



Chronische Rückenschmerzen - Effekte

*For chronic LBP, acupuncture, behavioral therapy, exercise therapy, and NSAIDs had the largest effect sizes (SMD: 0.61, 0.57, and 0.52, and RR: 0.61, respectively), all with only a modest effect. Transcutaneous electric nerve stimulation and manipulation had small effect sizes (SMD: 0.22 and 0.35, respectively). **As a conclusion, the effect of treatments for LBP is only small to moderate.** Therefore, there is a dire need for developing more effective interventions.*

Keller A et al. Effect sizes of non-surgical treatments of non-specific low-back pain. Eur Spine J 2007; 16:1776-1788



Cochrane Database

Psychological therapies for the management of chronic pain (excluding headache) in adults

Eccleston C, Williams AC, Morley S. Cochrane Database Syst Rev 2009; (2): CD007407

Overall there is an *absence of evidence for BT*, except for pain immediately following treatment compared with treatment as usual (TAU). CBT has *some small positive effects for pain, disability and mood...*

CBT and BT have *weak effects in improving pain*. CBT and BT have minimal effects on disability associated chronic pain. *CBT and BT are effective in altering mood outcomes...*

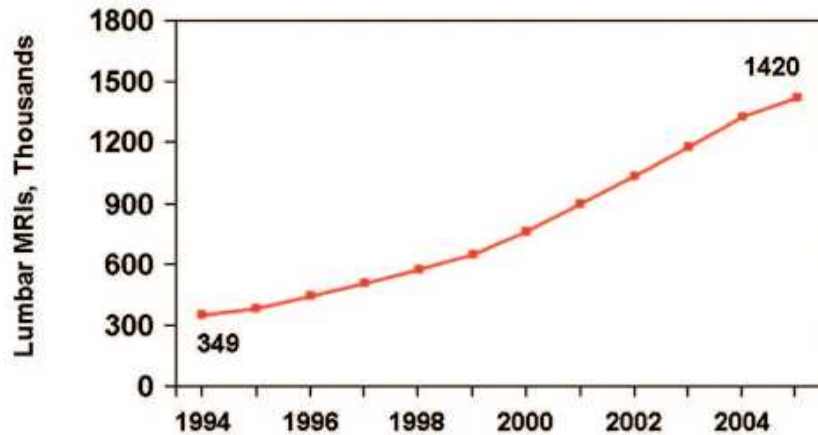


Chronische Rückenschmerzen - OP

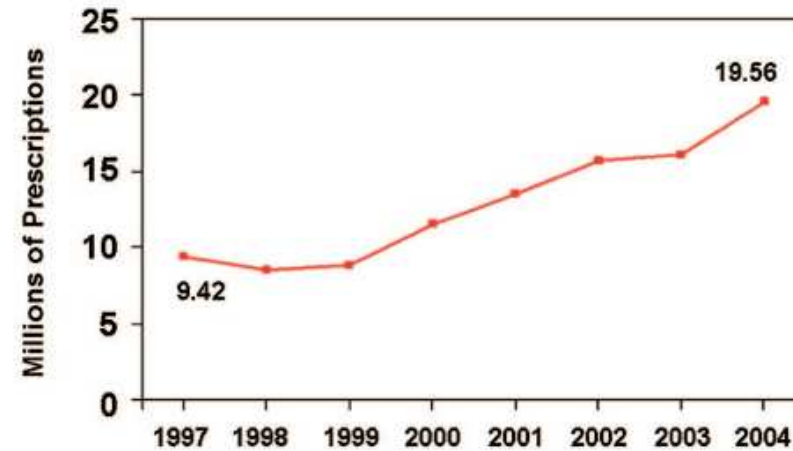
*In the Norwegian study (N=64), at the 1-year follow-up, 97% of the patients were examined, including 6 who had either not attended treatment or had changed groups (four patients randomised to lumbar fusion did not have surgery, and two patients randomised to cognitive/exercises did not attend treatment (Brox 2003). The Oswestry Disability Index was significantly reduced from 41 to 26 after surgery, compared with 42 to 30 after the cognitive intervention and exercises. The mean difference between groups was 2.3 (-6.7 to 11.4) (P = 0.33). Improvements in back pain, use of analgesics, emotional distress, life satisfaction, and return to work were not different. Fear-avoidance beliefs and fingertip-floor distance were reduced more after the conservative treatment, and lower limb pain was reduced more after the surgical treatment, in each case significantly. **The success rate according to an independent observer was 70% after surgery and 76% after cognitive intervention and exercises.** In the UK Medical Research Council trial (N=349), at the 2-year follow-up there was no clinical or statistical difference in outcome (pain, Oswestry disability, quality of life, SF36 physical or mental components) between spinal fusion and an intensive 3week (15 day) programme of exercise therapy, spine stabilisation exercises and education using cognitive-behavioural principals (Fairbank et al 2004). The surgery results paralleled those reported in the other two trials (Brox 2003, Fritzell et al 2001).*

Aus der europ. Rückenschmerzleitlinie: www.backpaineurope.org

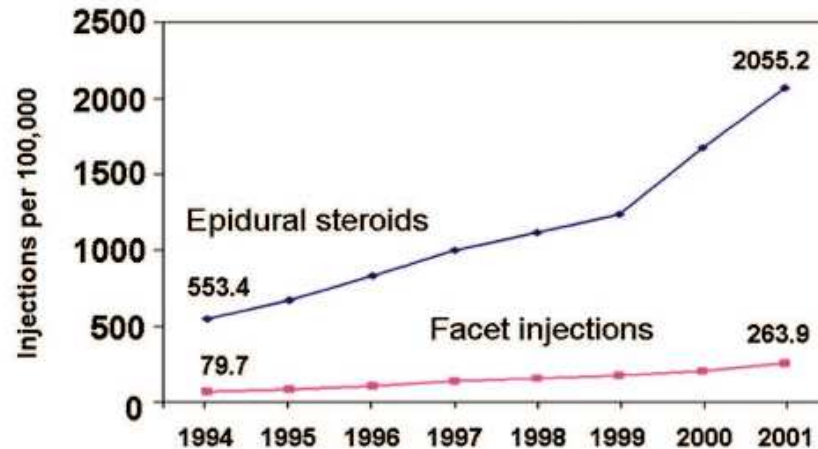
a Lumbar spine MR imaging, Medicare



b Opioid analgesic prescriptions for spine problems



c Lumbosacral injection rates, Medicare



d Lumbar fusion rates, degenerative spine conditions

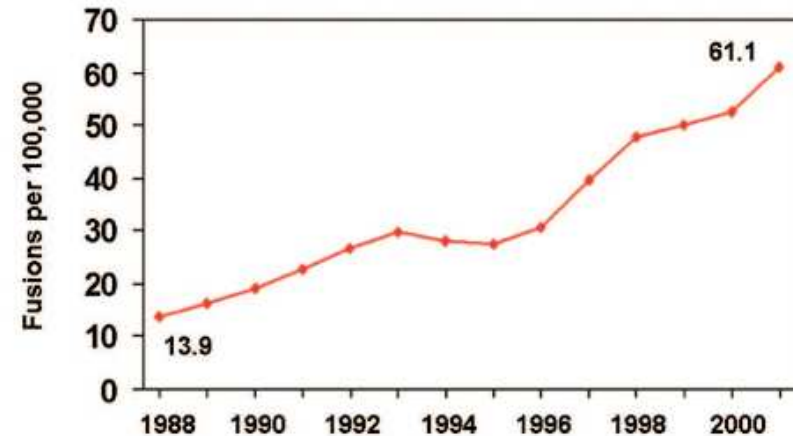


Figure 1. Increases in the use of various services for low back pain. A: Lumbar spine magnetic resonance imaging (CPT codes 72148, 72149, 72158); numbers of scans among Medicare beneficiaries from Part B claims. B: Numbers of opioid prescriptions for spine conditions, national data from the Medical Expenditure Panel Survey.¹¹ C: Rates of lumbosacral injections in the Medicare population, age- and sex-adjusted. (Data are from reference 2, adapted with permission.) D: Lumbar spine fusion rates for degenerative conditions, age- and sex-adjusted, National Inpatient Sample. (From reference 3, reproduced with permission.) Deyo et al. JABFM 2009; 22: 62-68



FOCUS ON RESEARCH

Back Surgery — Who Needs It?

Richard A. Deyo, M.D., M.P.H.

...So who needs back surgery? The consensus seems ... absent major deficit, patients with herniated discs, degenerative spondylolisthesis, or spinal stenosis do not need surgery, but the appropriate surgical procedures may provide valuable pain relief...

The NEW ENGLAND JOURNAL *of* MEDICINE

ESTABLISHED IN 1812

MAY 31, 2007

VOL. 356 NO. 22

Surgery versus Prolonged Conservative Treatment for Sciatica

Wilco C. Peul, M.D., Hans C. van Houwelingen, Ph.D., Wilbert B. van den Hout, Ph.D., Ronald Brand, Ph.D., Just A.H. Eekhof, M.D., Ph.D., Joseph T.J. Tans, M.D., Ph.D., Ralph T.W.M. Thomeer, M.D., Ph.D., and Bart W. Koes, Ph.D., for the Leiden–The Hague Spine Intervention Prognostic Study Group*

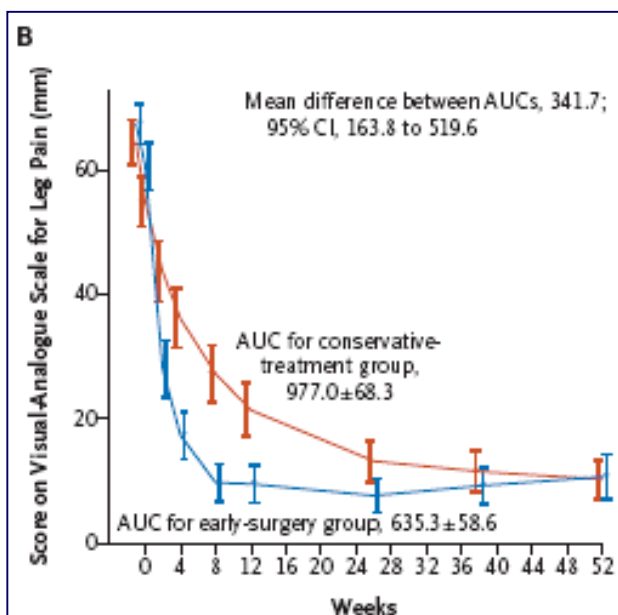


The NEW ENGLAND
JOURNAL *of* MEDICINE



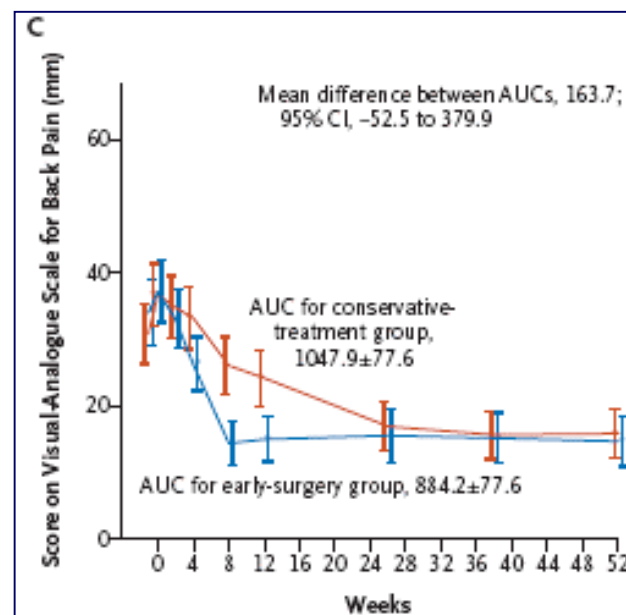
Ergebnisse

Beinschmerz



$p < 0.001$

Rückenschmerz



**N Engl J Med 2007; 356: 2239 - 2243**

Another unresolved question concerns the use of spinal fusion or disc replacement for patients with only back pain and degenerated discs. European trials have reached conflicting conclusions, though the discrepancies may be explained by differences in nonsurgical treatments; structured rehabilitation incorporating cognitiv-behavioral therapy seems to be nearly equivalent to surgery for such patients...



Chronische Rückenschmerzen – multimodale Therapie

Multimodale Therapie

- **Das integrierte Wirken von verschiedenen Modulen unter einem gemeinsamen Störungskonzept**
 - Multimodale Therapie > Multikomponententherapie
- ***Das Ganze ist nicht die Summe der Teile, sondern mehr, ist ein selbstständiger Ursprung, ist Gestalt.***

Karl Jaspers



Chronische Rückenschmerzen – multimodale Therapie

Wochenplan „Hochintensive tagesklinische Therapie“ 8-918 2c

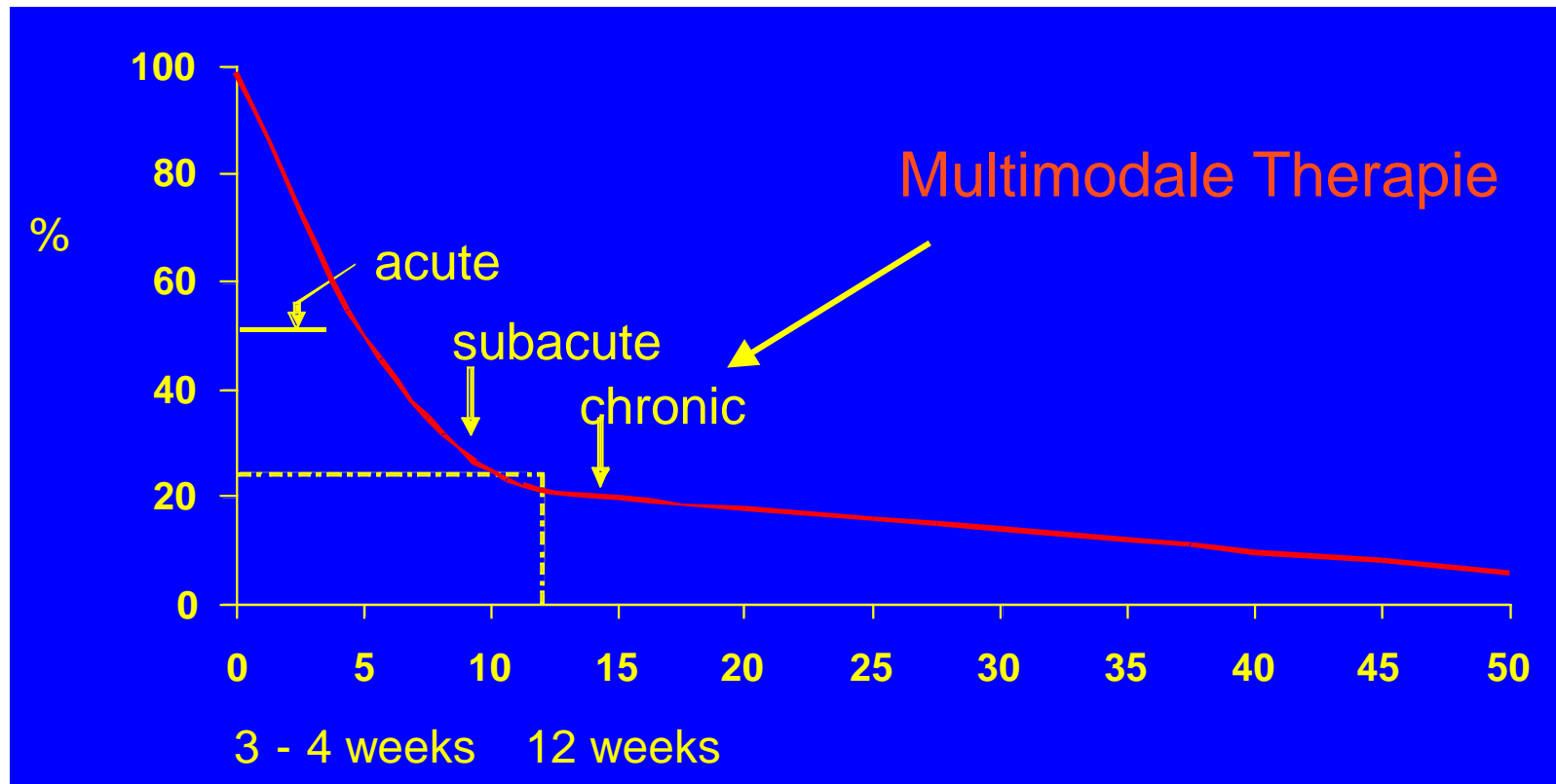
<i>Uhrzeit</i>	<i>Montag</i>	<i>Dienstag</i>	<i>Mittwoch</i>	<i>Donnerstag</i>	<i>Freitag</i>
08:00	Visite	Visite	Visite	Visite	Visite
08:30					
09:00	Verhaltensth. Belastungsaufbau	Verhaltensth. Belastungsaufbau	Verhaltensth. Belastungsaufbau	Verhaltensth. Belastungsaufbau	Verhaltensth. Belastungsaufbau
09:30					
10:00	Team				
10:30					
11:00		Bewegungs- erfahrung	Bewegungs- erfahrung	Bewegungs- erfahrung	Bewegungs- erfahrung
11:30					
12:00					
12:30					
13:00	Bewegungs- erfahrung				
13:30					
14:00			Tanztherapie	Gruppengespräch Arzt	Gruppengespräch Arzt
14:30					
15:00	Musiktherapie	Psych. Schmerz- bewältigung			Entspannung
15:30					
16:00			Entspannung	Psych. Schmerz- bewältigung	Psych. Schmerz- bewältigung
16:30					
17:00					

- 3 – 4 Wochen tagesklinisch, tägliche Therapiedosis 5 – 6 Stunden
- offene Gruppen
- 2 – 3 x krankengymnastische, sporttherapeutische, ergotherapeutische Einzeltherapie
- 3 x psychologische Einzeltherapie
- 2 x ärztliche Einzeltherapie



Multimodale Therapie - Indikation

Dauer der Arbeitsunfähigkeit

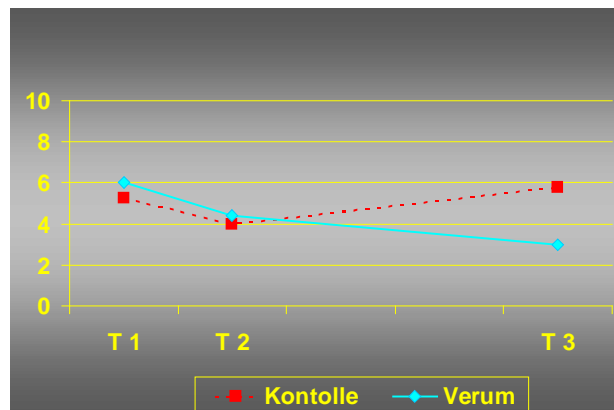


Disability resulting from occupational low back pain. Part II: What do we know about secondary prevention? A review of the scientific evidence on prevention after disability begins.
Frank JW et al. Spine (Phila Pa 1976). 1996 21(24):2918-29

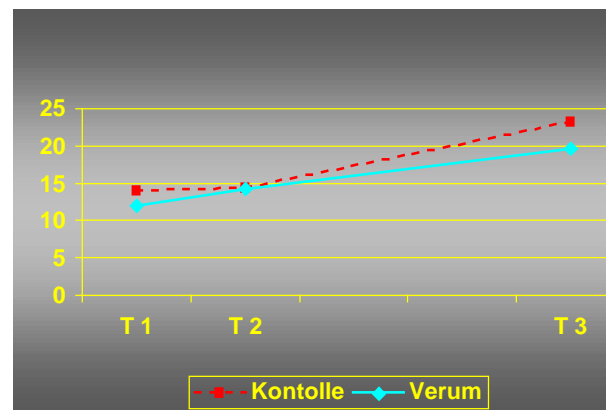


Multimodale Therapie - Therapieeffekte

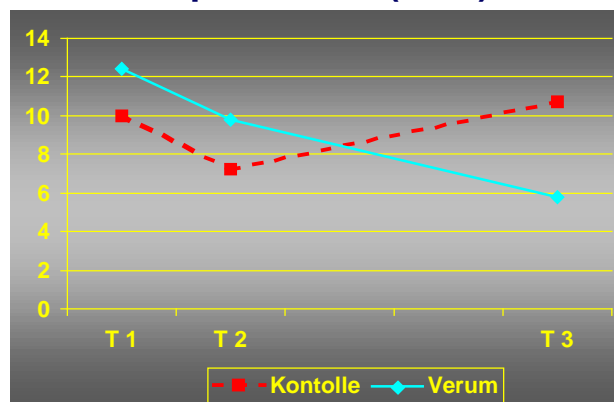
Schmerz (VAS)



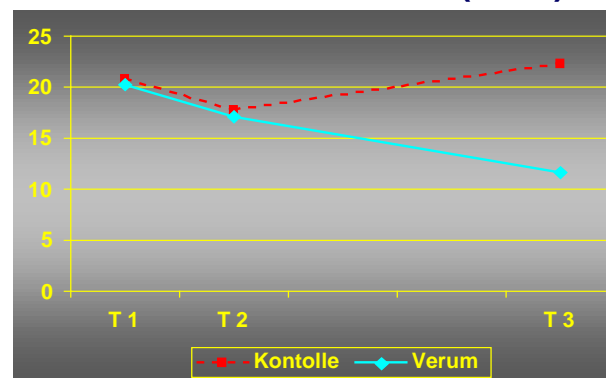
Beweglichkeit (Schober)



Depressivität (ADS)



Gesamtbeschwerden (GBB)



Schiltenswolf M et al. Comparison of a biopsychosocial therapy (BT) with a conventional biomedical therapy (MT) of subacute low back pain in the first episode of sick leave: a randomized controlled trial. Eur Spine J 2006

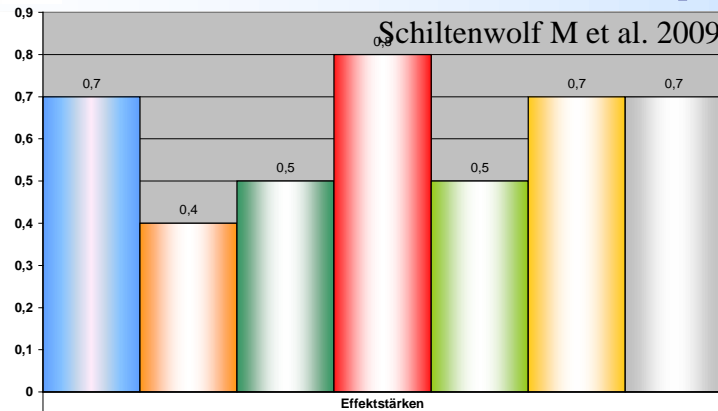
Sick leave data	T 3		p
	During first two years after therapy		
	MT	BT	
Percentage of patients without sick leave following therapy	10 %	59 %	
Percentage of patients with sick leave more than 6 months following therapy	35 %	18 %	
Sick leave periods per patient	11.4	3.86	0.004 *
Sick leave days per patient	111.40	41.45	0.001 *



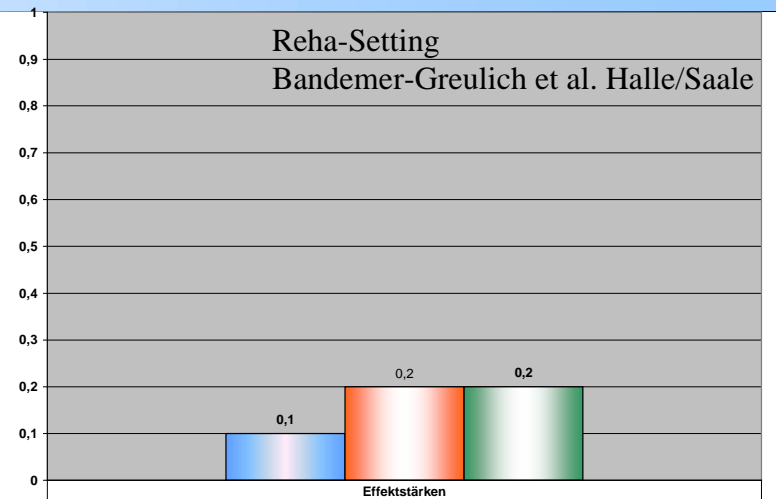
Skala	Aufteilung der Stichprobe	Effektstärke d
VAS	<i>gesamt</i>	0.7
FFbH	<i>gesamt</i>	-0.4
SF36 Fkt	<i>gesamt</i>	-0.5
SF36 Psy	<i>gesamt</i>	-0.8
SF36 Vit	<i>gesamt</i>	-0.5
ADS	<i>gesamt</i>	0.7
	Gerbershagen I	0.6
	Gerbershagen II	0.8
	Gerbershagen III	0.7
	HWS	0.6
	LWS	0.4
	HWS+LWS	1
	Frauen	0.8
	Männer	0.5
	monolokulär	0.7
	bilokulär	0.6
	multilokulär	0.6
PDI	<i>gesamt</i>	0.7
	Gerbershagen I	0.8
	Gerbershagen II	0.7
	Gerbershagen III	0.5
	HWS	0.8
	LWS	0.8
	HWS+LWS	0.4
	Frauen	0.8
	Männer	0.6
	monolokulär	1
	bilokulär	0.6
	multilokulär	0.6



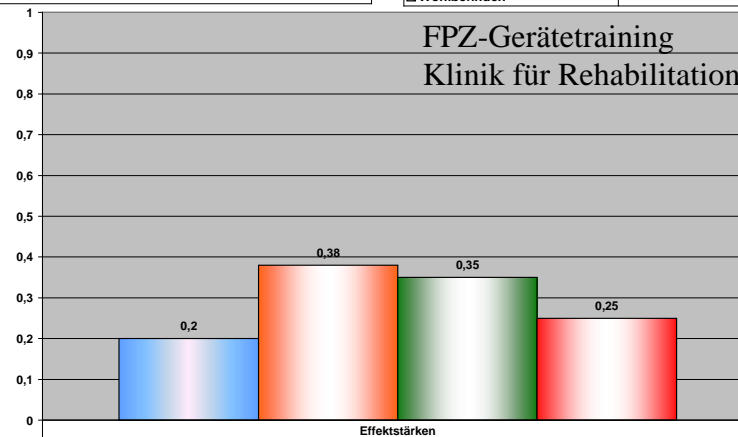
Multimodale Therapie – Therapieeffekte



Outcome	Effektstärke
Schmerzstärke (VAS)	0,7
Alltagstätigkeiten (FFbH)	0,4
Lebensqualität körperlich (SF 36)	0,5
Lebensqualität psychisch (SF 36)	0,8
Lebensqualität psychosozial (SF 36)	0,5
Depressivität gesamt (ADS)	0,7
Rückkehr zur Arbeit (PDI)	0,7



Outcome	Effektstärke
Schmerzempfinden	0,1
subjektiver Leistungsfähigkeit	0,2
Wohlbefinden	0,2



Outcome	Effektstärke
Angst	0,2
Depressivität	0,38
gehobene Stimmung	0,35
Duchhalteappel	0,25



Multimodale Therapie – Therapieeffekte

100 Stunden pro Woche!

There was strong evidence that intensive multidisciplinary biopsychosocial rehabilitation with functional restoration improves function when compared with inpatient or outpatient non-multidisciplinary treatments ... Less intensive outpatient psychophysical treatments did not improve pain, function, or vocational outcomes when compared with non-multidisciplinary outpatient therapy or usual care.

Guzman J et al. BMJ. 2001 Jun 23;322(7301):1511-6



Dauer der Arbeitsunfähigkeit

*...Further, the results indicate that participants ... who have **more than 60 sick days before rehabilitation have a statistically significant increased risk a disability persion.** Tbis means increased cost in terms of loss of production of 44,593 EUR per referred individual...A direct comparison strengthened the assumption that **long-term sickness absence prior to rehabilitation is associated with more days on sick leave after rehabilitation...***

Jensen IB et al.: Cost effectiveness of two rehabilitation programmes for neck and back pain patients: A seven year follow-up. Pain 142 (2009)202-208



Multimodale Therapie - Indikation

Dauer der Schmerzen

Figure 3

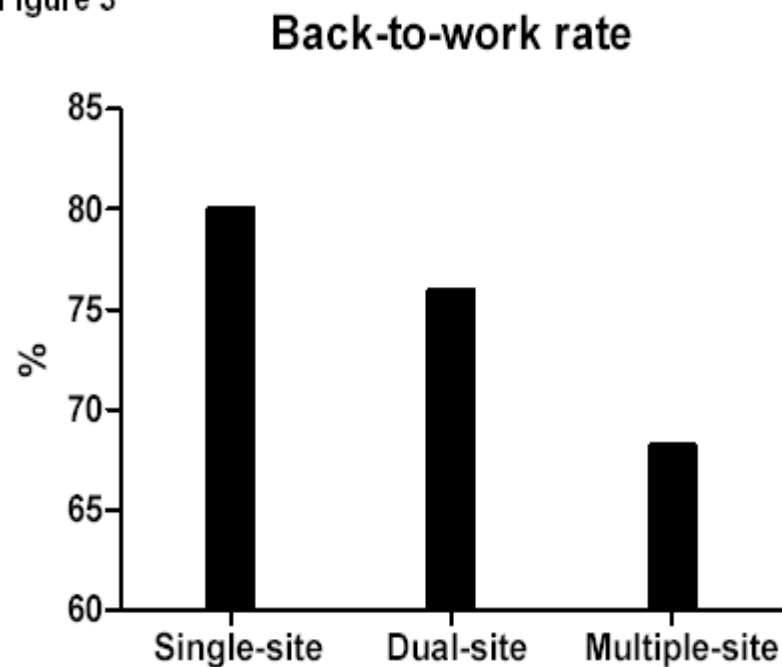


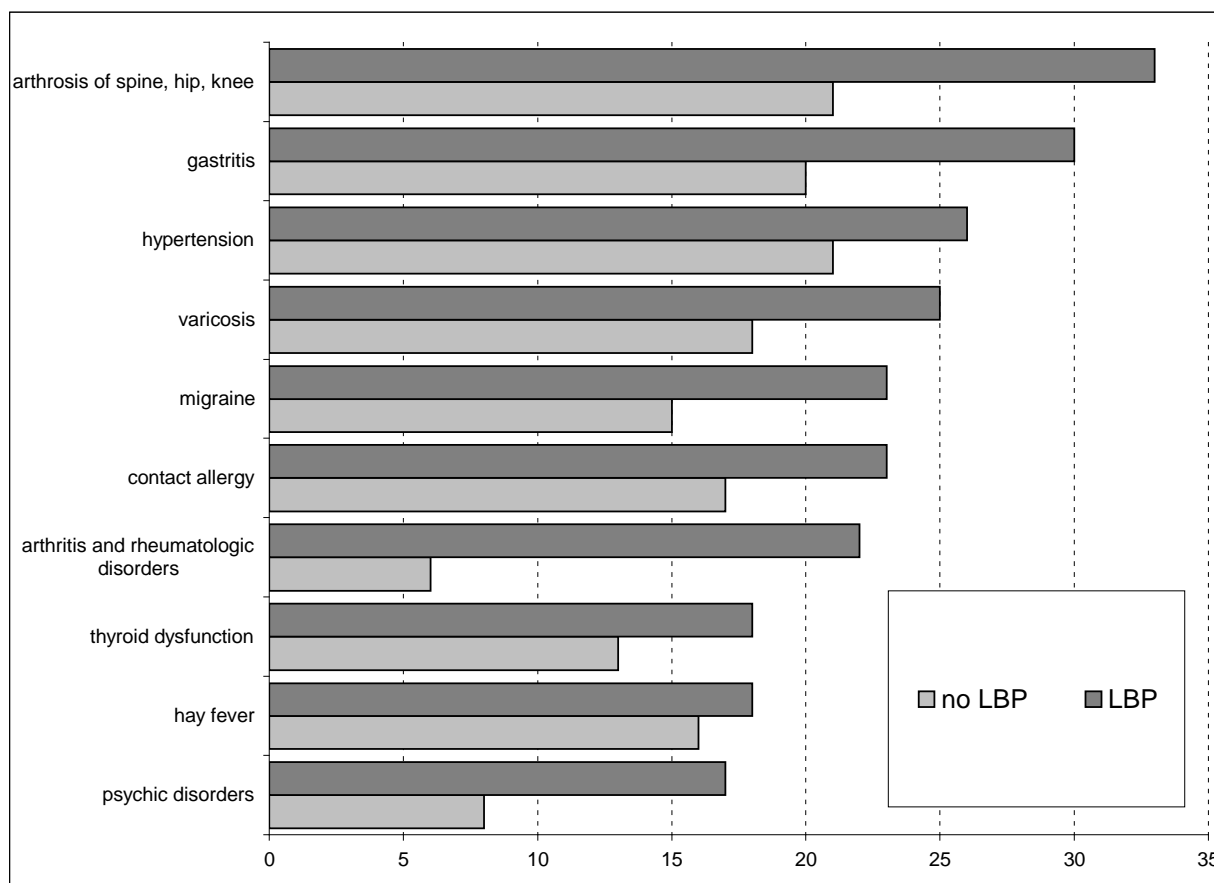
Figure 3: Back-to-work rate at T2

Moradi B, Neubauer E, Schiltewolf M Eur J Pain 2009



Ach - wer wird eigentlich chronisch?

hohe Tendenz zur Generalisierung

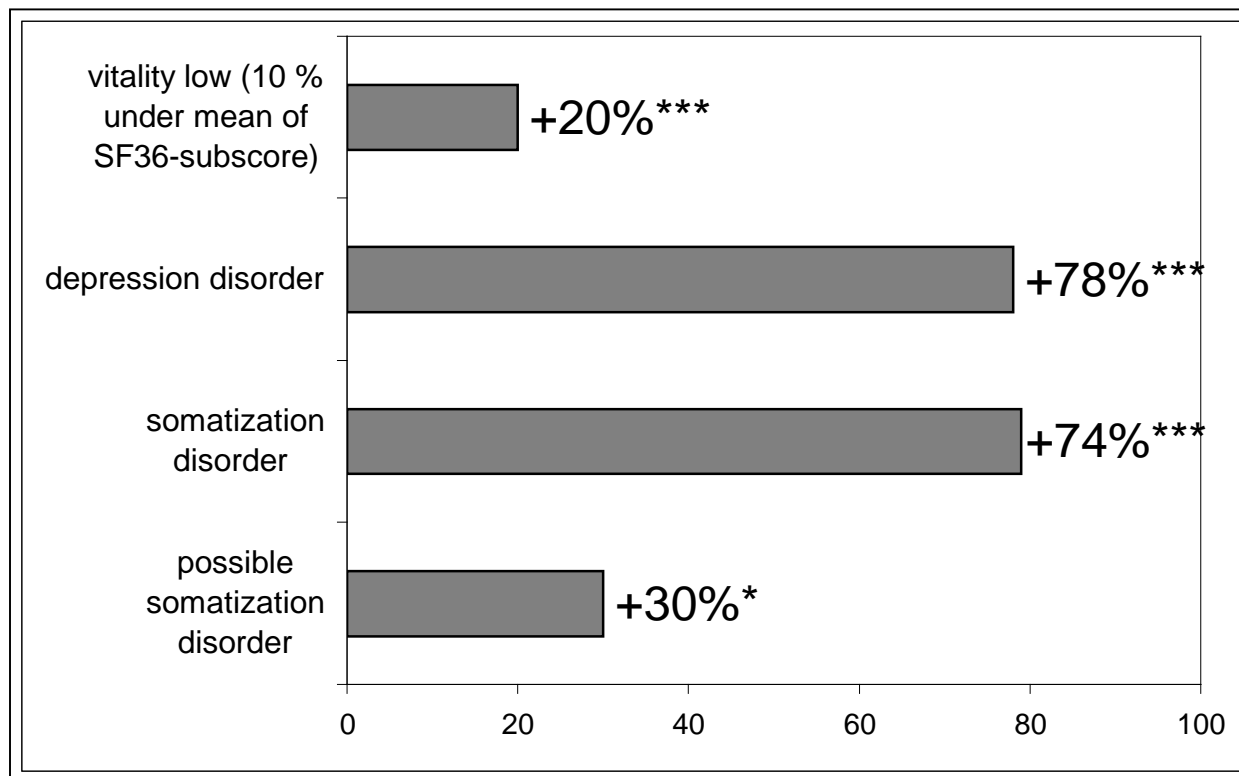


Schneider, Mohnen, Schiltewolf, Rau (2006) Eur J Pain



Ach - wer wird eigentlich chronisch?

psychische Komorbidität



Schneider, Randoll, Schiltenswolf (2006) Clin J Pain



Ach - wer wird eigentlich chronisch?

- **Geringe Arbeitszufriedenheit**
- Niedriger Sozialstatus
- Stress, schwere Arbeit
- Alter, weibliches Geschlecht
- Möglichkeit des Krankheitsgewinns
- Passiver Lebensstil
- Rauchen, Alkohol, Drogen
- BMI hoch
- Mangelnde Selbstregulation
 - Katastrophisieren
 - Vermeiden

Schneider et al. Int Arch Occup Environ Health
2005;78:253-269

- **Niedrige körperliche und psychische Gesundheitsreserven**

- Nicht unterstützte Kindheit
- Belastende Ereignisse

Nickoll BI et al. Pain 2009;141: 119-126

Gupta A et al. Rheumatology (Oxford) 2007; 46:666-71

Schneider S et al. Dtsch Med Wochenschr 2006;
131: 1998-2003

- Eher **psychosozialer Stress** und Somatisierung als physische Arbeitsplatz-Stressoren

McBeth J et al. Rheumatology (Oxford) 2003; 42:1486-1494



Was Sie mit nach Hause nehmen können

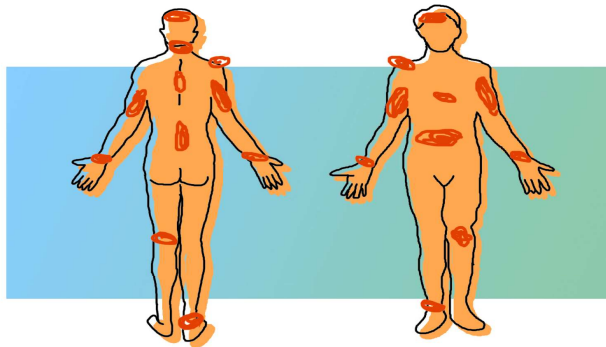
**Rückenschmerzen
benötigen weniger Interventionen
als einen autonomen Patienten, der seinen
Schmerz versteht und aktiv bewältigt.**



Zum Nachlesen

M. Schiltenswolf / P. Henningsen
**Muskuloskelettale
Schmerzen**

Diagnostizieren und therapieren
nach biopsychosozialem Konzept



Deutscher
Ärzte-Verlag