Bilaga till rapport

SBU Utvärderar: Multimodala och inter-disciplinära behandlingar vid långvarig smärta, rapport nr 341 (2021)

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Multimodal and interdisciplinary treatments compared to control intervention

Nygaard 2019

Author	*Nygaard*
Year	*2019*
Country	*Norway*
Ref #	*[28]*
Study design	*Randomized controlled trial*
Setting	*Group setting in combined gym and teaching room, heated pool and therapy room*
Recruitment	*Not stated.*
Population	*Women with pelvis pain*
Inclusion criteria	*Women aged 20-65 with pelvic pain ≥6 months and referred for physical therapy*
Follow up	*12 months*
Intervention 1	*Combined body awerness therapy, patient education and acceptance and commitment therapy*
Participants (n)	*32*
Drop-outs (n)	*6*
Comparison	*Physical therapy in primary health care with competence in women's health*
Participants (n)	*30*
Drop-outs (n)	*5*
Outcomes	*Primary: Change in mean pain intensity (11-point NRS: numeric rating scale)* *Movement patterns – Standardized Mensendieck test* *Pain-related fear of physical movement and activity – Tampa scale for Kinesiophobia* *Health-related quality of life – Eq5D-5L Questionnaire* *Anxiety and depression – Hopkins Symptom checklist-25* *Somatic and psychological health – Subjective Health Complaints questionnaire* *Urinary and/or anal incontinence and/or obstructed defecation – validated questionnaires* *Sexual function – questionnaire* *Pain intensity during intercourse - NRS: numeric rating scale*
Comments *Risk of bias*	*The lack of blinding of the data collectors and patients is a limitation, and there might be a selection bias because one-third of the eligible women declined to participate. Reasons for not attending were economic concerns, and practical or emotional challenges of staying away from home.*

Author	*Ronzi*
Year	*2017*
Country	*France*
Ref #	*[58]*
Study design	*Randomized controlled trial*
Setting	*Multidisciplinary clinic, rehabilitation center or private physiotherapist*
Recruitment	*Not stated.*
Population	*Adults with chronic low back pain*
Inclusion criteria	*18 to 55 years. Non-specific chronic LBP for at least 3 months. At least 1 months sick leave during preceding year and/or 3 months sick leave during preceding 2 years. In contract of work*
Follow up	*12 months.*
Intervention 1	*Functional Restoration Program (FRP). 5 wks, 6 hrs/day, 5 days/wk. Group based sessions, 6-8 patients/group.* *Described as multidisciplinary and probably contains same elements as FRP in MS-group, but also group exercises of individually adjusted intensity supervised by a physiotherapist.* *Wk 1: stretching, flexibility and cardio respiratory training. Wk 2: muscular strengthening exercises. W 3-5: increased muscular strengthening exercises.*
Participants (n)	*49*
Drop-outs (n)	*Not stated.*
Intervention 2	*Mixed Strategy (MS). 5 wks: 1) AIP: 1 hr/sessions 3 days/week plus 50-minute home exercises to be performed 2 times/wk. 2) FRP: 6 hr group sessions 1day/wk. Mixed delivery, both group and individual delivery.* *1) AIP as in the AIP-group. 2) FRP: Assessment and discussion of pain perceptions and beliefs w rehab physician, advice on physical acitivity and diet, and relaxation exercises in group w a physiotherapist, offer of individual meeting w a psychologist.*
Participants (n)	*56*
Drop-outs (n)	*Not stated.*
Intervention 3	*Ambulatory Individual Physiotherapy (AIP). 5 wks: 1 hr/sessions 3 days/week plus 50-minute home exercises to be performed 2 times/wk. Individual delivery.* *Individual rehab w a physiotherapist. Active exercises supervised by the physiotherapist during sessions and home execrcies consisting of stretching, jogging swimming or other activities.*
Participants (n)	*54*
Drop-outs (n)	*Not stated.*
Comparison	
Participants (n)	

Drop-outs (n)	
Outcomes	*Number of days sick leave during 12 months* *Pain intensity (VAS)* *Daily activity Dallas-subscale* *Work and leisure Dallas-subscale* *Anxiety/depression Dallas-subscale* *Social interaction Dallas-subscale* *Fear-Avoidance Beliefs Questionnaire (FABQ) total score* *Hospital Anxiety and Depression scale (HAD)* *SF-36 Physical Components Summary* *SF-36 Mental Components Summary*
Comments	*OBS! Den mest intensiva interventionen, FRP, är så illa beskriven att uppgift om multidiscilpinaritet och innehåll utöver fysiska övningar saknas. I beskrivs även i #356 och #7029 - hämta info därifrån. Also reports data on FFD (Finger-Floor-Distance), Sorensen and Ito tests.*
Risk of bias	*Authors have stated no conflicts of interest. This work was supported by the Institute of Public Health Research (IReSP), a scientific of interest group of the French National Institute of Health and Medical Research (INSERM) [grant number: 2008-A00900-55]*

Smeets 2006

Author	*Smeets*
Year	*2006*
Country	*The Netherlands*
Ref #	*[29]*
Study design	*Randomized controlled trial*
Setting	*Three outdoor rehabilitation centers.*
Recruitment	*Enrollment April 2002 to December 2004*
Population	*Adults with low back pain for more than 3 months*
Inclusion criteria	*Age 18 to 65 years with non-specfific low back pain with or without radiation to leg for more than 3 months. ROland Disability Questionnaire score >3. Ability to walk at least 100 m.*
Follow up	*Post treatment. 6 and 12 months after ET.*
Intervention 1	*Active Physical Treatment (APT). 10 wks. Cirka 1 hr 45 minute long sessions 3 times/wk. Individually guided training.* *Aerobic training and dynamic strengthening exercises. 1) Aerobic exercises: Half an hour on bicycle at 65 to 80% of heart rate (HR) max. During training the patient judged percieved exertion and the training was adjutsed accordingly. At 2 and 4 wks the intensity was increased and a sprint 3 times/minute added. Partients stretched trunk and leg muscles after each aearobic work out. 2)*

	Dynamic static exercises: 15 to 18 repetitions until muscular fatigue occurred. Gradual increase in the number of exercises over the treatment period. Partients stretched trunk and leg muscles after each work out.
Participants (n)	*54*
Drop-outs (n)	*Not stated*
Intervention 2	*Cognitive-Behavioral Treatment (CBT). 10 wks. Mixed deliviery: individually and in group. 1) Graded activity: 2 introductory group meetings followed by 18 individual sessions. In total 11 1/2 hrs. 2) Problem solving therapy: 10, 1 1/2 hr long sessions in groups of max 4.* *Operant behavioural graded activity (GA) and problem sovling therapy (PST). 1) GA: Time contingent increase of three for the patient important acitivities. Home assignments performing the activities were registered in a diary. During sessions the patient also performed selected activities, but more importantly, evaluated activites registered in the diary together w the therapist who reinforced progress towards set goals. Patients partner was invited to attend session 1 and a secind session in wk 4. 2) PST: In 3 initial sessions therapists discussed the rationale of training and and skills of positive problem orientation. Session 4 to 10 focused on problem definition, decision making, implementation and evaluation. Main focus was training skills for everyday life.*
Participants (n)	*60*
Drop-outs (n)	*Not stated.*
Intervention 3	*Combined Treatment (CT). 10 wks. APT and CBT as in the APT and CBT-groups.* *Active physical treatment (APT), and CBT administered as in the APT and CBT-groups. With exception of graded activity which started later, in wk 3. (participants still received the same number of session, but over shorter period of time).*
Participants (n)	*62*
Drop-outs (n)	*Not stated.*
Comparison	*Waiting List (WL). 10 wks.* *Patients were requested to the outpatient rehabilitation centers.*
Participants (n)	*51*
Drop-outs (n)	*Not stated.*
Outcomes	*Roland disability questionnaire (RDQ)* *Three individual main complaints regarding activities (VAS)* *Self-percieved improvement of disability (Likert scale)* *Current pain (VAS)* *Pain rating index (PRI-T) total score* *Depression – Beck Depression Inventory (BDI)*
Comments *Risk of bias*	*Authors have stated no conflicts of interest. This study is supported by Zorgonderzoek Nederland/Medische Wetenschappen (ZonMw) grant number 014-32-007 and the Rehabilitation Centre Blixembosch.*

Roche 2007

Author	*Roche*
Year	*2007*
Country	*France*
Ref #	*[57]*
Study design	*Randomized controlled trial*
Setting	*Two rehabilitation centers and private ambulatory physiotherapy facilities.*
Recruitment	*Not stated.*
Population	*CLBP diagnosis.*
Inclusion criteria	*Not stated.*
Follow up	*Beginning (t0) and end of treatment (t5). 12 months after treatment.*
Intervention 1	*Functional Restoration Program (FRP). 5 wks. Six hours of treatment, 5 days/wk over the period. Administered in groups of 5 to 8 patients.* *1) Exercises in group supervised by the fysiotherapist. Intensity fo the exercises was adjusted to the patient's indivdual capacity and revised each wk. 1) Wk 1: Muscuaklr warm up and stretching techniques. 2) Wk 2: Initial muscular strengthening exercises. 3) Wk 3: Increased muscular strengthening and endurance exercises. Weight lifting and coordination exercises. 4) Wk 4 and 5: Progressing increase of exercise intensity. Work simulations in occupational therapy sessions. 2) Patients met with the physician once a week. They were referred to a psychologist in the frst week and for follow up visits as requested. The were given dietary advice at the clinic.*
Participants (n)	*68*
Drop-outs (n)	*Not stated*
Intervention 2	*Active Individual Therapy (AIT). 5 wks. One hour sessions 3 times/wk and home assignments for an additional 2 hours/wk. Individual treatment.* *Individual sessions with the physiotherapist: first 2 weeks: flexibility training and pain management, stretching, and proprioception exercises. Patients continued these exercises during the third and fourth weeks and started muscular strengthening. The last week focused on functional exercises and endurance training. The program included 50 minutes of individual home exercises 2 days a week (these could include stretching, jogging, and swimming).*
Participants (n)	*64*
Drop-outs (n)	*Not stated.*
Comparison	
Participants (n)	
Drop-outs (n)	
Outcomes	*Redcution in number of sick-leave days*

	Pain intensity (VAS) *Daily activity – Dallas Pain Questionnaire (DPQ)* *Work and leisure – Dallas Pain Questionnaire (DPQ)* *Anxiety and depression – Dallas Pain Questionnaire (DPQ)* *Social interaction – Dallas Pain Questionnaire (DPQ)*
Comments *Risk of bias*	*Primary outcome measure in long-term FU not mentioned in original article.* *Authors have stated no conflicts of interest. Supported by the Union Régionale des Caisses d'Assurance Maladie des Pays de Loire.*

Monticone 2013

Author *Year* *Country* *Ref #*	*Monticone* *2013* *Italy* *[54]*
Study design *Setting* *Recruitment* *Population* *Inclusion criteria* *Follow up*	*Randomized controlled trial* *The Operative Unit of Physical Medicine and Rehabilitation of the Salvatore Maugeri Foundation's Scientific Institute in Lissone a highly specialized rehabilitation centre that treats >1000 patients with CLBP every year.* *Enrollment January to December 2008* *Adults with low back pain for more than 3 months* *Above 18 years, nonspecific low back pain for more than 3 months.* *After 5 weeks (t2), 12 months after t2 (t3) and 24 months after t2 (t4)*
Intervention 1	*Multidisciplinary program based on CBT (CBT plus exercise). 5 wks instruction phase followed by 12 months reinforcement phase. 1) CBT: Individual delivery. 1 hr sessions once a wk for 5 wks plus 1 hr sessions once month for 12 months. 2) Exercise: Individually adjusted program delivered in group. 1 hr sessions twice a wk for 5 wks plus telephone reminders to continue exercise for 12 months.* *1) CBT: Delivered by the psychologist. Aim: to modify fear of movement and negative feelings. Topics covered: Instruction in the fear-avoidance model and to control pain through self-management. Control of frightening thoughts. Transferring attention from fear of movement to increased activity through graded exposure. Promotion of coping through communication, motivation and sharing goals for everyday life. Reinforcement of self-management over the 12 months. 2) Exercise: Multimodal motor program consisting of active and passive mobilizations of the spine, and exercises aimed at stretching and strengthening muscles, and improving postural control. Ergonomic advice was provided by means of a booklet to* *facilitate modification of daily living activities. Family doctor, relatives/significant others were asked to support patient compliance.*

Participants (n)	*45*
Drop-outs (n)	*Not stated*
Intervention 2 *Participants (n)* *Drop-outs (n)*	
Comparison	*Exercise - 5 wks instruction phase followed by 12 months reinforcement phase. 1 hr sessions twice a wk for 5 wks plus telephone reminders to continue exercise for 12 months.* *Exercise as delivered in the multidisciplinary program. As for that group: Family doctor, relatives/significant others were asked to support patient compliance.*
Participants (n)	*45*
Drop-outs (n)	*Not stated*
Outcomes	*Roland-Morris Disability Questionnaire (RMDQ)* *Pain – NRS* *SF-36 Physical Functioning* *SF-36 Physical Role* *SF-36 Bodily Pain* *SF-36 General Health* *SF-36 Vitality* *SF-36 Social Functioning* *SF-36 Emotional Role* *SF-36 Mental Health*
Comments	*Also reports on Tampa Scale for Kinesiophobia.*
Risk of bias	*Authors have stated no conflicts of interest.*

Kaapa 2006

Author	*Kääpä*
Year	*2006*
Country	*Finland*
Ref #	*[61]*
Study design	*Randomized controlled trial*
Setting	*Patients were recruited from two occupational healthcare centers. Interventions were carried out in a rehabilitation center.*
Recruitment	*Patients were included in the trial between November 1996 and January 1999*
Population	*Adults with LBP with or without sciatica.*
Inclusion criteria	*22- to 57-year-old employed patients in various health and social service professions. LBP with or without sciatica during the preceding year. Positive attitude of the superiors to rehabilitation during working hours.*

Follow up	*at ET, 6, 12, 24 months fr ET*
Intervention 1	*Multidisciplinary rehabilitation program (MR). 8 wks. Ca 70 hrs (intensive period of 6 hrs/day over 5 days followed by 5 wks semi-intensive period of 4 hr sesssions twice a wk. Delivered in groups of 6 to 8 patients.* *Three manin components: 1. Cognitive behavioural stress management methods (rational emotive psychotherapy) over 10 hrs. 2. Back school, based on Swedish back school principles. Education on a) basic anatomy, b) prognosis and importance of physcial activity, c) medial findings were exmplained in individual sessions, d) ergonomics, e) prescription of medications if needed, f) visit at wokrplace - vidoetaps of work places discussed in group sessions. 3) Physical exercise program baed on individual needs and perfomred in group (general fitness, muscle stegnthening, correctipon of mobility, functional exercise and relaxation).*
Participants (n)	*64*
Drop-outs (n)	*5*
Intervention 2 *Participants (n)* *Drop-outs (n)*	
Comparison	*Individual pshysiotherapy (IP). 6 to 8 wks. 1 hr sessions over the period. Individual delivery.* *Treatment based on the physiotherapeutic examination and the baseline physical tests. Each session included 30- to 40-minute passive pain treatment (combinations of massage, spine traction, manual mobilization of the spine, and TNS/therapeutic ultrasound) and 15- to 20-minute light active exercise (muscle stretching,* *spine mobilization, and deep trunk muscle exercises). Advise given to progressively increase daily activities. General physical training, such as swimming and ordinary or Nordic walking, was recommended. Home exercise program given.*
Participants (n)	*66*
Drop-outs (n)	*5*
Outcomes	*Low back pain intensity* *Sciatic pain intensity* *Oswestry Disability Index* *Subjective working capacity* *Beliefs of working capacity after 2 years* *General well-being* *Depression index (DEPS)* *Days on sick leave due to back pain last 12 months*
Comments	*In the baseline characteristics table are those patients that were excluded from the analysis at end of treatment not included (n=5 per group), i.e 59 and 61 patients per group are included in the characteristics table.* *Har inte tagit med utfallsmåttet healthcare consumption during pas 12 months i tabelleringen.*

Risk of bias	*Authors have stated no conflicts of interest*

Monticone 2017

Author	*Monticone*
Year	*2017*
Country	*Italy*
Ref #	*[53]*
Study design	*Randomized controlled trial*
Setting	*Specialized rehabilitation centre*
Recruitment	*Inclusion January 2010 to December 2013*
Population	*Adults with non-specific chronic neck pain (more than 3 months)*
Inclusion criteria	*Non-specific chronic neck pain (more than 3 months). Over 18 years.*
Follow up	*ET. 12 month FU*
Intervention 1	*Multidisciplinary group. 1) Physiotherapy: One 60-minute session/wk plus home assignments. 2) CBT: One 60-minute session/wk.* *1) Physical activity: Ten hour-long group sessions of execercises led by a pyhsiotherapist plus assignments of home exercises. Contehn as in exercise group. 2) Ergonomic advice. 3) Group based CBT supervised by a psychologist. Aim: to modify fear of movement and maladaptive illness behaviour. "Subjects were assisted in* *transferring their attention from kinesiophobia to increasing their level of activity by means of graded exposure to exercises and the situations they previously identified as dangerous".*
Participants (n)	*85*
Drop-outs (n)	*Not stated.*
Intervention 2	
Participants (n)	
Drop-outs (n)	
Comparison	*General exercise group. 10 wks. One 60-minute session/wk plus home assignments.* *1) Ten hour-long group sessions of execercises led by a pyhsiotherapist plus assignments of home exercises. "General physiotherapy* *included exercises for muscle strengthening, regional stretching and spinal mobilization". 2) Ergonomic advice.*
Participants (n)	*85*
Drop-outs (n)	*Not stated.*
Outcomes	*Neck Disability Index* *Pain Catastrophizing Scale (PCS)* *Pain – NRS*

	SF-36 Physical Functioning *SF-36 Physical Role* *SF-36 Bodily Pain* *SF-36 General Health* *SF-36 Vitality* *SF-36 Social Functioning* *SF-36 Emotional Role* *SF-36 Mental Health*
Comments	*Det ska finnas ett on-line appendix med närmare beskrivning av interventionerna/AC. Also reports on Tampa Scale for Kinesiophobia.*
Risk of bias	*Authors have stated no conflicts of interest.*

Nicholas 2013

Author	*Nicholas*
Year	*2013*
Country	*Australia*
Ref #	*[70]*
Study design	*Randomized controlled trial*
Setting	*The Pain Management and Research Centre, Royal North Shore Hospital, Sydney*
Recruitment	*Recruitment in June 2006 to June 2009*
Population	*Elderly with persisting noncancer pain*
Inclusion criteria	*65 years or older. Persisting noncancer pain for more than 6 months. Score of 22 or greater in the Rowland Dementia Assessment Scale.*
Follow up	*Post treatment. 1 month FU (does not state clearly but since treatment is 4 weeks it is probably 1 month after ET). 6 and 12 months FU*
Intervention 1	*Pain self-management program (PSM). 4 wks. Eight 2-hr long session twice weekly over the period. Intervention was based on cognitive behavioural pain management skills. Patients were given a book on pain self management and chapters covering the topic for the day were referred to in sessions. The psychologist planned psychological sessions and the physiotherapist exercise sessions. Both therapsist attended all sessions. Psychological topics covered: setting functional goals, activity pacing, arousal reduction, dealing with flare-ups, and structured problem solving. Physical exercises included stretching, aerobic, and strengthening. Functional tasks included repetitions of step-ups and walking. All participants were encouraged to perform the exercises and skills during the treatment sessions, as well as at home between sessions. Self monitoring of home assignments were followed up and attempts to apply new skills reinforced.*
Participants (n)	*49*

Drop-outs (n)	*Not stated*
Intervention 2 *Participants (n)* *Drop-outs (n)*	
Comparison	*Exercise-Attention Control (EAC). 4 wks. Eight 2-hr long session twice weekly over the period. 1) The exercise component of the sessions was the same as for the PSM (see description of that intervention) group, with practice in each session. However, no encouragement was given for home practice and no home exercise charts were provided. 2) Instead of instruction in pain self-management strategies, (as in the PSM-group) this group was offered open discussions about their pain and its impact on their lives. The clinical psychologist offered participants the opportunity to discuss their experiences of living with chronic pain, but was reflective rather than directive in approach.* *53* *Not stated*
Participants (n) *Drop-outs (n)*	
Outcomes	*Roland & Morris Disability Questionnaire-Modified (mRMDQ)* *Depression Anxiety Stress Scale(DASS-21) – depression subscale* *Pain intensity (NRS)* *Pain-related distress (NRS)*
Comments *Risk of bias*	*RoB of the comparison EA vs PSM, not WL.* *Authors have stated no conflicts of interest. This study was supported by a Grant from the Australian Health Ministers Advisory Council (Grant: AHMAC PDR 2005/08).*

Turner-Stokes 2003

Author	*Turner-Stokes*
Year	*2003*
Country	*UK*
Ref #	*[62]*
Study design	*Randomized controlled trial*
Setting	*Acute hospital outpatient setting in north London.*
Recruitment	*Not stated.*
Population	*Adults with pain for more than 6 months*
Inclusion criteria	*18 years or older. Had experienced pain in any part of the body for more than 6 months and were still actively seeking help. Failed conventional treatment. No major changes in medication anticipated for next 6 months.*
Follow up	*Post treatment. 3, 6 and 12 months. Does not state if this is from baseline or ET*

Intervention 1	*Group based multi disciplinary CBT-program. 8 wks. Delivered in group sessions (8 to 10 patients/group) for a full afternoon once a week over the period.* *The COPE (Changing Outlook of Pain Experience) pain management program. Patients were taught relaxation and the use of cognitive coping strategies.* *They were encouraged to exercise—building up activity with a series of achievable goals—and to pace their daily activities at home. Patients were also given homework tasks to work on between sessions and in addition written handouts summarizing the skills taught each week. By the end of the program, the homework tasks were collected into a full booklet for future reference.*
Participants (n)	*73*
Drop-outs (n)	*Not stated.*
Intervention 2	
Participants (n)	
Drop-outs (n)	
Comparison	*Individual CBT. 8 wks. Delivered individually in one-hour sessions every other wk over the period. Participants allocated to the individual program received the same information as those in the group based program." They were also given the same home work tasks and written handouts that were collected in a booklet.*
Participants (n)	*53*
Drop-outs (n)	*Not stated.*
Outcomes	*WHYMPI pain interference subscale* *WHYMPI control over pain subscale* *Depression – Beck Depression Inventory (BDI)* *State anxiety – STAI* *WHYMPI general activities subscale* *WHYMPI pain severity subscale*
Comments	*I think I have recorded the right N in the outcomes*
Risk of bias	*Authors have stated no conflicts of interest. Supported by The Medical Research Council and the Luff Foundation.*

Lera 2009

Author	*Lera*
Year	*2009*
Country	*Spain*
Ref #	*[50]*
Study design	*Randomized controlled trial*
Setting	
Recruitment	*Female volunteers were recruited from the Fibromyalgia Unit of the Hospital Sant Joan de Déu in Manresa, Barcelona*

Population	*Women with fibromyalgia*
Inclusion criteria	*Female patients diagnosed with FM according to American College of Rheumatology criteria, made or ratified by the same rheumatologist in all cases, and not being involved in litigation against the government for disability pensions*
Follow up	*At end of treatment and after 6 months*
Intervention 1	*Basic MT program combined with CBT* *14 MT group sessions, 1 h per week over 4 months* *15 CBT group sessions, 90 min per week, before each MT session (except for the first one)*
Participants (n)	*43*
Drop-outs (n)	*8*
Intervention 2	
Participants (n)	
Drop-outs (n)	
Comparison	*Basic MT program* *14 MT group sessions, 1 h per week over 4 months*
Participants (n)	*40*
Drop-outs (n)	*9*
Outcomes	*Functional capability – Fibromyalgia Impact Questionnaire (FIQ)* *Health status – 36-item Short Form Health Survey (SF-36)* *Mental health – Symptom Checklist-90 – Revised (SCL-90-R)*
Comments	
Risk of bias	

Castel 2012

Author	*Castel*
Year	*2012*
Country	*Spain*
Ref #	*[49]*
Study design	*Randomized controlled trial*
Setting	*Not stated*
Recruitment	*Not stated*
Population	*FM diagnosis (ACR-90)*

Inclusion criteria	*18-65 years or older*
Follow up	*End of treatment (week 14), 3, and 6 months post treatment*
Intervention 1	*Multicompetent CBT* *14 sessions, 12 in group and 2 individual*
Participants (n)	*34*
Drop-outs (n)	*Completed post-treatment: 31/34* *Completed 3 month follow up: 32/34* *Completed 6 month follow up: 26/34*
Intervention 2 *Participants (n)* *Drop-outs (n)*	
Comparison	*Waitlist control*
Participants (n)	*30*
Drop-outs (n)	*Completed post-treatment: 29/34* *Completed 3 month follow up: 23/34* *Completed 6 month follow up: 22/34*
Outcomes	*FIQ - total score,* *NRS – intensity,* *Coping Strategies Questionnaire (CSQ) Subscale: Pain catastrophizing,* ***MOS - Sleep Scale Subscales: 1) Quantity of sleep 2) Sleep problems,***
Comments *Risk of bias*	

Saral 2016

Author	*Saral*
Year	*2016*
Country	*Turkey*
Ref #	*[63]*
Study design	*Randomized controlled trial*
Setting	*University hospital*
Recruitment	*Referral*
Population	*Women with fibromyalgia*
Inclusion criteria	*Women aged 25-60 years, diagnosed with FM according to the 1990 ACR diagnostic criteria followed up for at least six months after FM diagnosis, pain intensity of at least 5 on 10 cm VAS with 1-cm*

	segments from 0 to 10, despite existing treatment and presence of at least 5 years of primary school education
Follow up	*End of trial and after 6 months*
Intervention 1	*Long-term interdisciplinary treatment* *10 sessions (3h once weekly for 10 weeks) of CBT together with exercise training and other fibromyalgia related educational programs (two full days)*
Participants (n)	*22*
Drop-outs (n)	*1*
Intervention 2	*Short-term interdisciplinary treatment* *Two full days of educational, exercise, and CBT programs*
Participants (n)	*22*
Drop-outs (n)	*3*
Comparison	*TAU*
Participants (n)	*22*
Drop-outs (n)	*3*
Outcomes	*VAS (pain, fatigue, and sleep)* *Fibromyalgia Impact Questionnaire* *Beck Depression Inventory* *SF-36* *Tender point numbers* *Pressure algometry*
Comments *Risk of bias*	*No blinding was performed.*

Lemstra 2005

Author	*Lemstra*
Year	*2005*
Country	*Canada*
Ref #	*[68]*
Study design	*Randomized controlled trial*
Setting	*Interventon performed at a nonclinical environment (a local YMCA)*
Recruitment	*Patients referred from family physicians*
Population	*Patients with fibromyalgia*
Inclusion criteria	*Patients 18 years of age or older referred from physician for fibromyalgia with chronic (6 months) widespread pain in at least 3 quadrants of the body and at least 11 tender points out of 18 when a pressure of approximately 4 kg was applied*

Follow up	*Post treatment and 15 months after end of treatment*
Intervention 1	*Multidisciplinary rehabilitation over 6 weeks:* • *Individual intake investigation and 23 therapeutic sessions therafter delivered in group* • *Rheumatologist obtained a detailed history, discussed treatment goals, performed a biomechanical evaluation, and educated patients on barriers to exercise* • *18 exercise sessions: aerobic and strength exercises* • *A session (lecture) on relaxation training and another session (lecture) on behavioural modification and stress managemant by the psychologist* • *A lecture on fibromyalgia and active management approaches (rheumatologist)* • *A session on dietary goals by a dietician* • *Individual massage sessions*
Participants (n)	*43*
Drop-outs (n)	*35/43 completed study*
Intervention 2 *Participants (n)* *Drop-outs (n)*	
Comparison *Participants (n)* *Drop-outs (n)*	*36* *36/36 completed study*
Outcomes	*Health status – 5-point scale* *Average pain – VAS* *Pain impact on everyday life – Pain Disability Index* *Depression – Beck Depression Inventory II* *Days in pain* *Hours without pain relief* *Prescription and nonprescription drug usage* *Work status*
Comments *Risk of bias*	

Monticone 2016

Author	*Monticone*
Year	*2016*
Country	*Italy*
Ref #	*[52]*
Study design	*Randomized controlled trial*
Setting	*The Operative Unit of Physical Medicine and Rehabilitation of Salvatore Maugeri Foundation's Scientific Institute in Lissone*
Recruitment	*-*
Population	*Adults with CLBP more than 3 months*
Inclusion criteria	*Non-specific CLBP more than 3 months. Above 18 years*

Follow up	*At discharge. 6 and 12 months*
Intervention 1	*Multidisciplinary program based on CBT (CBT plus exercise) - experimental group. 5 wks. Individually planned treatment program, but delivery in groups of 5. 1) Exercise program: 1-hr sessions twice weekly. 2) CBT: 1hr sessions once weekly.* *1) Exercise program: Individually planned based on examination. A) basic exercises to improve spinal mobilty and muscle awareness, B) increased speed an complexity of movement patterns, C) task oriented exercises, D) exercises to recover coordination, balance and walking abilities as well as other functional demands of daily living. 2) Group based CBT supervised by psyhologist: aimed at modifying fear of movement beliefs and illness behaviours. Topics: explanation of the fear-avoidance model, instruction to view pain as self-manageable. Fear-avoidance behaviours were revealed, shared and debated in group to identify solutions. Techniques to factilitate coping w pain taught. Fear-avoidance beliefs ideintified in CBT were used to choose task oriented exercises for the exercise program. 3) 2) Ergonomic advice provided in a booklet to facilitate modification of daily living activities. Family doctor, relatives/significant others were asked to support patient compliance. Patients alos filled out a diary ckecked by the physiotherapist each wk.*
Participants (n)	*75*
Drop-outs (n)	*Not stated*
Intervention 2	
Participants (n)	
Drop-outs (n)	
Comparison	*Exercise - control group. 5 wks. Individually planned exercise program, but delivery in groups of 5 in 1-hr sessions twice weekly.* *1) Exercise program was standard care at the treatment center and included included exercises for passive spinal mobilization (including passive mobilization to improve lumbar range of motion), strengthening (involving abdominal and back muscles), muscle segmentary stretching (including lower limb and back muscles) and postural control (involving exercises aimed at developing motor control of the spine and pelvis). 2) Ergonomic advice provided in a booklet to facilitate modification of daily living activities. Patients also filled out a diary ckecked by the physiotherapist each wk.*
Participants (n)	*75*
Drop-outs (n)	*Not stated*
Outcomes	*Oswestry Disability Index (ODI)* *Pain Catastrophizing Scale (PCS)* *Pain – NRS* *SF-36 Physical Functioning* *SF-36 Physical Role* *Bodily Pain* *SF-36 General Health*

	SF-36 Vitality *SF-36 Social Functioning* *SF-36 Emotional Role* *SF-36 Mental Health*
Comments *Risk of bias*	*Authors have stated no conflicts of interest.*

Dobscha 2009

Author *Year* *Country* *Ref #*	*Dobscha* *2009* *USA* *[69]*
Study design *Setting* *Recruitment* *Population* *Inclusion criteria* *Follow up*	*Cluster randomized controlled trial* *5 primary care clinics, all associated to the same Veterans Affairs Medical Center* *-* *Musculoskeletal pain diagnosis of at least 12 wks duration* *Musculoskeletal pain diagnosis (back, arthritic, or neck or joint pain) of at least 12 wks duration. Moderate to severe pain intensity and pain interference (>4 on the Chronic Paing Grade - CPG). 6 or more on the RMDQ score.* *3, 6 and 12 months.*
Intervention 1 *Participants (n)* *Drop-outs (n)*	*Collaborative care for chronic pain in primary care. Individual length based on treatment recommendations, contact, support and reviewed recommendations over 12 months. 1) Information and invitation to assessment visit at care manager (sepcialty clinic) sent to patient. Assessment of pain condition and function (including identification of fear avoidance beliefs, treatment barriers and psychology and development of individual goals). 2) Review of assessment by care manager and internist who also communicated indvidualised treatment recommendations to the primary care clinician. 3) All patients were encouraged to attend 4-session workshop led by the internist or a PT. Patients w more need of treatment were in addition recommended stepped care organised by the pain clinic. 5) The care manager contacted patients by telephone every 2 months over a 12-month period to screen for symptoms, to assess goals and to provide continued support. 6) The care manager and internist re-reviewed cases for additional treatment recommendations that were communicated to the primary care clinician.* *377* *190*
Intervention 2 *Participants (n)*	

Drop-outs (n)	
Comparison	*TAU. Ongoing.* *Access to all ancillary services including physical, occupational, and recreational therapy; and collocated mental health services*
Participants (n)	*465*
Drop-outs (n)	*251*
Outcomes	*Pain intensity (Chronic Pain Grade questionnaire - CPG)* *Functional status (Roland Morris Disability Questionnaire - RMDQ)* *Depression (PHQ-9)* *Pain (Chronic Pain Grade questionnaire - CPG) - pain interference* *Quality of life (EQ-5D)* *Pain (Patient-rated Global Impression of change - PGI)*
Comments	*SEACAP. 1) Tabellerade utfall: även resultat för change from baseline över 12 månader finns rapporterade. 2) Andra utfall: även resultat för behandlingseffektivitet, nöjdhet med behandlingen och läkemedelsbruk under studietiden finns rapporterade men har inte tabellerats.*
Risk of bias	*Funded by the Department of Veterans Affairs, USA. Authors have not reported any conflicts of interest.*

Amris 2014

Author	*Amris*
Year	*2014*
Country	*Denmark*
Ref #	*[60]*
Study design	*Randomized controlled trial*
Setting	
Recruitment	*Patients were recruited form the outpatient clinic if the Department of Rheumatology, Fredriksberg Hospital*
Population	*Patients with chronic widespread pain*
Inclusion criteria	*Patients over 18 years of age, with CWP diagnosed according to the American College of Rheumatology (ACR) 1990 definition of widespread pain (ie, reporting a pain axially and in a minimum of 3 body quadrants)*
Follow up	*6 months*
Intervention 1	*Multicomponent treatment course* *2-week, group-based* *Daily time schedule between 3 and 5 hours; in total 35 hours*

Participants (n) *Drop-outs (n)*	*96* *12*
Intervention 2 *Participants (n)* *Drop-outs (n)*	
Comparison *Participants (n)* *Drop-outs (n)*	*No treatment, but would be offered the same 2-week multicomponent treatment course at the end of the waiting list plus an additional 16-week treatment course of either individualized physiotherapy or occupational therapy* *95* *9*
Outcomes	*Assessment of Motor and Process Skills (AMPS)* *SF-36 Mental Composite Score (MCS)*
Comments *Risk of bias*	 *The study was investigarot initated, and none of the named authors has any financial or other relationship that might lead to a conflict of interest with the content of this study*

Heutink 2012

Author *Year* *Country* *Ref #*	*Heutink* *2012* *The Netherlands* *[55]*
Study design *Setting* *Recruitment* *Population* *Inclusion criteria* *Follow up*	*Cluster randomized controlled trial* *Multicenter study performed at 4 clinical rehabilitation centers.* *Not stated.* *Adults w neuropathic pain after spinal cord injury for at least six months* *Adults (18 yrs or more) w neuropathic pain after spinal cord injury. At least six months duration of current pain and at least 1 yr after discharge from first inpatient rehabiltition after the spinal cord injury. Current pain intensity of >40 on the 0-100 Chronic Pain Grade.* *3 (t2 - post intervention) and 6 months (t3). 9 (t4) and 15 (t5) months in long term follow up publication (#2044).*
Intervention 1	*Multidisciplinary CBT for coping w chronic neuropathic pain after spinal cord injury. 10 wks. Weekly 3-hr long sessions - and a final come back session 3 wks later (at 13 wks).* *At the first session, participants received a course book* *containing information on all*

	sessions, reading texts, and homework assignments. The buddy (partner, family member, or a good friend of the participant) was asked to attend 2 sessions and to help w assignments. Content of the sessions: 1) BPS-model and goal setting, 2and 3) Buddioes were invited. Activating event–Belief–Consequence (ABC) model. Education by the physiatrist. 4) Sports workshop and evaluation w the ABC-model. 5) Assertiveness and communication about pain. Relaxation exercises, evaluation of goals. 6) Education in pain, mood an stress. Workshop: relaxation exercises. 7) Sports workshop. Evaluation w BSP and ABC-models. 8) Buddies invited: Social aspects, partner family and friends issues. Relaxation exercises. 9) Sports workshop. Evaluation w ABC-model. Relaxation exercises. 10) Summary and rehearsal. Evaluation of goals. Application in daily life. 11) Follow up: Summary and evaluation of intervention.
Participants (n)	*31*
Drop-outs (n)	*Not stated.*
Intervention 2	
Participants (n)	
Drop-outs (n)	
Comparison	*Wait list.*
Participants (n)	*30*
Drop-outs (n)	*Not stated.*
Outcomes	*Pain intensity (Chronic Pain Grade questionnaire - CPG)* *Pain related disability (Chronic Pain Grade questionnaire - CPG)* *Anxiety (Anxiety and Depression Scale - HADS)* *Participation in activities (UAL - Dutch adaption of CHART)* *Quality of life (Life Satisfaction Questionnaire - LiSat-9)* *Depression (HADS)*
Comments	*CONECSI-trial (COping with NEuro-pathiC Spinal cord Injury pain). 9 (t4) och 15 (t5) månaders FU finns i #2044 och är tabellerade här. Observera att n för t4 och t5 skiljer sig med färre deltagare, för t4 och t5 ser det ut som att enbart deltagare med värden tagits med i tabellen. N är därför lägre vid dessa mätpunkter. Kontrollgrupp saknas vid t4 och t5. Tabellering: Jag har tabellerat deskriptiva data. I artiklarna finns även resultat efter modellering i en random effectsmodell rapporterade - för t1-t3 med en time*group effekt.*
Risk of bias	*The authors have declared that they have no competing interests.*

Perez-Aranda 2019

Author	*Perez-Aranda*
Year	*2019*
Country	*Spain*
Ref #	*[51]*
Study design	*Randomized controlled trial*

Setting	*Rheumatology clinic*
Recruitment	*From a rheumatology clinic*
Population	*Patients 18-65 years of age who currently have fibromyalgia (ACR)*
Inclusion criteria	*Able to understand Spanish language and provided informed consent to participate*
Follow up	*2 months (end of treatment) and 12 months (10 months after end of treatment)*
Intervention 1	*Mindfulness-based stress reduction (MBSR) + TAU* *Treatment period: 8 wks. Two-hour long sessions, 1 per week plus a half day (6 h) long retreat* *Delivered in group (ca 15 patients/group)*
Participants (n)	*75*
Drop-outs (n)	*Follow up at end of treatment: 68/75* *Follow up at 2 months post treatment: 44/75*
Intervention 2	
Participants (n)	
Drop-outs (n)	
Comparison	*TAU (wait list)* *No active treatment*
Participants (n)	*75*
Drop-outs (n)	*Follow up at end of treatment: 68/75* *Follow up at 2 months post treatment: 43/75*
Outcomes	*FIQ-R - total score (100)* *EQ-5D-5L and EQ-VAS,* *Hospital Anxiety and Depression Score (HADS) Subscale: Depression* *Perceived Stress Scale (PSS 10) Total score* *Pain Catastrophising Scale (PCS) Total score* *Multidimensional Inventory of Subjective Cognitive Impairment (MISCI)* *PGI-C Förändring* ***PSI-C Item: function***
Comments	
Risk of bias	

Tavafian 2011

Author	*Tavafian*
Year	*2011*
Country	*Iran*
Ref #	*[65]*
Study design	*Randomized controlled trial*

Setting	*The Rheumatology Research Center of Tehran University of Medical*
Recruitment	*Enrollment from July 2008 to February 2009*
Population	*Adults with chronic low back pain*
Inclusion criteria	*≥ 18 years. C LBP for more than 90 days.*
Follow up	*3, 6, 12, 24 and 30 months*
Intervention 1	*Multidisciplinary rehabilitation program and medication as prescribedA multidimensional and interdisciplinary educational. 1 wk. Five 2-hr sessions over the wk followed by monthly booster sessions and telephone counseling. Delivered in group.* *A) MRM based on a biopsychosoical model. Session 1: Sessions 1 and 2) The physiotherapist explained the anatomy and physiology of the spine, lifestyle factors that moderate CLBP, and preventive back injury techniques. Eduation on posture and strengthening and relaxation exercises. Instructions for specific continued exercises. Session 3) Rheumatologist explained physiology of CLBP. Session 4) Psychologist facilitated understanding of stress, coping, perception of control and management of emotions. Session 5) Educator aimed to moderate beliefs, thinking patterns and behavior. Later the educator used motivational counselling in the monthly telephone follow ups. B) Medication as prescribed (analgesics, nonsteroidal anti-inflammatory drugs, muscle relaxants, and antidepressant drugs) as needed.*
Participants (n)	*97*
Drop-outs (n)	*Not stated.*
Intervention 2	
Participants (n)	
Drop-outs (n)	
Comparison	*Medication as prescribed (control)* *Medication as prescribed (analgesics, nonsteroidal anti-inflammatory drugs, muscle relaxants, and antidepressant drugs) as needed.*
Participants (n)	*100*
Drop-outs (n)	*Not stated.*
Outcomes	*SF-36 Physical Functioning* *SF-36 Physical Role* *SF-36 Bodily Pain* *SF-36 General Health* *SF-36 Vitality* *SF-36 Social Functioning* *SF-36 Emotional Role* *SF-36 Mental Health* *Quebec Disability Scale (QDS)* *Roland-Morris Disability Questionnaire (RDQ)*

Comments	*Data in 24 month FU paper is reported as mean difference and confidence intervals. Instead I put the results on 18 and 24 months from the paper on 30 months in our table. Baseline values for SF-36 Role emotional is rapported as 380.04, which is probably wrong since the range of SF-36 is 0-100.*
Risk of bias	*This study was funded by research deputy of Tehran University of Medical Sciences, Tehran, Iran. The authors declare no conflict of interest.*

Tavafian 2007

Author	*Tavafian*
Year	*2007*
Country	*Iran*
Ref #	*[64]*
Study design	*Not stated.*
Setting	*The Rheumatology Research Center of Tehran University of Medical*
Recruitment	*-*
Population	*Women with chronic low back pain.*
Inclusion criteria	*Women 18 years and older. Chronic low back pain (90 days or more).*
Follow up	*3, 6 and 12 months*
Intervention 1	*Back School Program. 4 days. Five sessions given over the period. Mix of individual and group based treatment.* *A multidimensional and interdisciplinary educational* *regime designed to assess each patient's physical condition,* *personal characteristics, lifestyle and subsequent ability to cope". The educator assessed the patient's knowledge and beliefs on health and motivated healthier behavior. The psychologist evaluated psycholgical issues and facilitated a focus on coping skills, anger management and relaxation in group. The rheumatologist obtained health histories and held back school classes (in anatomy, physiology and life style factors of back pain). The phsycial therapist instructed in lumbar stabilisation, body mechanics and prevention techniques. And also gave classes in stretching, strengthening and relaxation techniques for the back, abdomen and thighs. The patient was consiered an active meber of the treatment team and tghe prorgam adjusted according to individual needs. Patinets were also given the same medication regime as the clinci group.*
Participants (n)	*50*
Drop-outs (n)	*Not stated.*
Intervention 2	
Participants (n)	
Drop-outs (n)	
Comparison	*”Clinic group”.*

	Medication only (acetaminophen, NSAID, and chlordiazepoxide).
Participants (n)	*52*
Drop-outs (n)	*Not stated.*
Outcomes	*SF-36 Physical Components Summary* *SF-36 Mental Components Summary* *SF-36 Physical Functioning* *SF-36 Physical Role* *SF-36 Bodily Pain* *SF-36 General Health* *SF-36 Mental Health* *SF-36 Emotional Role* *SF-36 Vitality* *SF-36 Social Functioning*
Comments	
Risk of bias	*Authors have stated no conflicts of interest*

Angeles 2013

Author	*Angeles*
Year	*2013*
Country	*Canada*
Ref #	*[67]*
Study design	*Randomized controlled study*
Setting	*the McMaster Family Health Team (MFHT) in Hamilton, Ontario*
Recruitment	*Enrollment occurred between December 2009 and March 2010.*
Population	*Adults with musculosceletal or neuropathic pain at least 6 months.*
Inclusion criteria	*Patients of the MFHT, 18 years or older, musculosceletal or neuropathic pain at least 6 months.*
Follow up	*EI: baseline (T1), postintervention (T2), 6 months postintervention (T3). DI: baseline (T1), preintervention (T2), postintervention, 6 months postintervention*
Intervention 1	*Interprofessional pain management (early intervention). 8 wks. 2 hr-sessions once/wk. Delivered in group.* *Group sessions included the following: education regarding the nature of chronic pain, pacing and goal setting, and medication management; practice in mindfulness relaxation techniques; cognitive reflection on beliefs, impulses and obsessional thoughts about pain; and practice of physical activation techniques (modified fitness and practice of modified postures or positions for various activities of daily living, including self-care and housekeeping tasks). The facilitators followed an implementation manual regarding how to conduct the sessions.*

Participants (n)	*29*
Drop-outs (n)	*Not stated*
Intervention 2	
Participants (n)	
Drop-outs (n)	
Comparison	*Delayed intervention (control). Wait list.*
Participants (n)	*34*
Drop-outs (n)	*Not stated*
Outcomes	*SF-35 Physical Role* *SF-36 Physical Functioning* *SF-36 Bodily Pain* *SF-36 General Health* *SF-36 Physical Components Summary* *SF-36 Emotional Role* *SF-36 Vitality* *SF-36 Mental Health* *SF-36 Social Functioning* *SF-36 Mental Components Summary*
Comments *Risk of bias*	*Also reports health care utilization data, but only aggregate preintervention data.* *This project was supported by the Alternative Funding Program, Ontario Ministry of Health & Long-Term Care. The sponsor had no role in study design, collection, analysis or interpretation of the data.*

Wong 2011

Author	*Wong*
Year	*2011*
Country	*Hong Kong*
Ref #	[66]
Study design	*Randomized controlled trial*
Setting	*Not stated.*
Recruitment	*Patients were recruited from primary care, geriatric and pain clinics in the community and in hospitals.*
Population	*Adults w moderate to severe chronic pain.*
Inclusion criteria	*Adults (18-65 yrs) w moderate to severe (>4 on the 0-11 Numerical Rating Scale) chronic pain of >3 months duration. Agreement to abstain from any therapy changes during studyperiod, except for the study interventions.*
Follow up	*8 wks (post intervention), and 3 and 6 months after the intervention.*

Intervention 1	*Mindfulness-based Stress Reduction (MBSR). 8 wks. 8 weekly group sessions, 2 1/2 hours in length. Group treatment.* *Three primary elements: 1) Theoretical material, 2) Experiential practice of meditation and yoga, in group sessions and at home, 3) group activities that focused on removing impediments to effective practice*
Participants (n)	*51*
Drop-outs (n)	*Not stated.*
Intervention 2 *Participants (n)* *Drop-outs (n)*	
Comparison	*Multidisciplinary Pain Intervention (MPI). 8 wks. 8 weekly group sessions, 2 1/2 hours in length. Group treatment.* *Considered as an active control condition. All sessions were led by the coordinator and consisted of instructional lectures based on a popular self-help book: "Managing Pain Before It Manages You" .* *For example: 1) a physiotherapist gave instructions on exercises, 2) a dietician gave dietary advice, 3) participants were given a classical music CD and were instructed to listen to it daily.*
Participants (n)	*49*
Drop-outs (n)	*Not stated.*
Outcomes	*Pain intensity (NRS)* *Pain related distress (NRS)* *Quality of life (SF-12) - physical component* *Quality of life (SF-12) - mental component* *Anxiety (STAI) - state anxiety* *Anxiety (STAI) - trait anxiety* *Depression (CES-D)* *Days of sick leave*
Comments	*1) OBS! Det är kontrollinterventionen som uppfyller våra krav, inte MBSR. Kontrollinterventionen är sparsamt beskriven - kan vi verkligen ta med den här studien? 2) Tabellering: Jag har tabellerat siffror för change from baseline och tillhörande SE, även mean och SD för respektive tidpunkt finns angiven. 3) N för de olika utfallen varierar (saknas svar på enkäter?), och anges inte per grupp, jag har därför inte tabellerat N - det behöver hanteras senare. 4) Utfallsmått: utfallsmått som inte tabellerats: sick leva (rapporterat f endast ca 50% och på ett svårtolkat sätt - svårt att förstå tidsramen) och Profile of Mood States (POMS).*
Risk of bias	*Not stated.*

Brendbekken 2016

Author	*Brendbekken*
Year	*2016*
Country	*Norway*

Ref #	*[59]*
Study design	*Randomized controlled trial*
Setting	*Specialist physical medicine and rehabilitation outpatient clinic*
Recruitment	*Not stated.*
Population	*Adults on >50% sick leave due to musculoskeletal pain*
Inclusion criteria	*Adults (20-60 yrs), on >50% sick leave (of less than 12 months) due to musculoskeletal pain. Employed full or parttime (at least 50% employment).*
Follow up	*3 (?) and 12 months. 24 months return-to-work only*
Intervention 1	*Multidisciplinary intervention with ISIVET. 4 sessions over 12 months. Sessions 1 at baseline: 3.5 hrs, session 2 at 2 wks: 1 hr, session 3 at 3 months: 1 hr and session 4 at 12 months: 15 minutes. 1) Baseline Treatment Session: Structured interdisciplinary interviews with a visual educational tool (ISIVET). A social worker, a physician and a physiotherapist consulted the patient successively. The consultations contained interviews that covered social situation, past and present physical and mental health, coping and fear avoidance and concluded with a diagnosis according to ICD-10. The physiotherapist assessed musculoskelatal problems. All assessments were documented in ISIVET, a tool for shared visualization of health status and to work through a plan for rehabilitation. 2) Follow up session at 2 wks: the patient and the physiotherapist met for about 1 h to evaluate the rehabilitation plan and work through the ISIVET once more. 3) Follow up at 3 months: the patient met with the whole team for about 1 h to sum up the situation and evaluate the interventions so far. The ISIVET was worked through and the rehab plan adjusted accordingly. 4) Follow-up at 12 months: the physiotherapist contacted the patient by phone to score the two figures in the ISIVET a last time. This was a brief contact that lasted about 15 min.*
Participants (n)	*141*
Drop-outs (n)	*Not stated.*
Intervention 2	
Participants (n)	
Drop-outs (n)	
Comparison	*Brief intervention. 2 wks. Baseline session 2.5 hrs and follow-up session second wk for 1 hr. Brief intervention comprised two sessions: at baseline separate consultations w the physician and the physiotherapist and at follow up w the physiotherapist. The basic principle is the non-injury model, emphasizing the lack of any objective signs of injury and the non-directive communication. The goal is to reduce fear and concern through a thorough medical examination with explanations of each step and education about a physiological model on musculoskeletal pain. Any somatic findings are explained. The patient is informed about the good prognosis and the importance of staying active.*
Participants (n)	*143*
Drop-outs (n)	*Not stated.*

Outcomes	*Anxiety (Anxiety and Depression Scale - HADS)* *Depression (HADS)* *Hopkins Symptom Checklist (HSCL) somatization* *Hopkins Symptom Checklist (HSCL) anxiety* *Hopkins Symptom Checklist (HSCL) depression* *Norfunk all items* *Subjective health complaints (SHC) total score*
Comments	*Also reports 7 subscales of Norfunk and 4 subscales of SHC.*
Risk of bias	*Authors have declared that they have no conflicts of interest.*

Lambeek 2010

Author	*Lambeek*
Year	*2010*
Country	*Netherlands*
Ref #	*[56]*
Study design	*Randomized controlled trial*
Setting	*10 physiotherapy practices, one occupational health service, one occupational therapy practice and out patient clinics at five hospitals*
Recruitment	*Not stated.*
Population	*Adults w low back pain of more than 12 wks duration*
Inclusion criteria	*Adults (18 to 65 yrs) w low back pain of more than 12 wks duration. Employed or self-employed in a permanent and salaried position >8 hours/wk, but presently absent or partially absent from work.*
Follow up	*Questionnaires administered at 3, 6, 9 and 12 months. Data on sick leave collected every month (diary), after 12 months from the database of the occupational health services.*
Intervention 1	*Integrated care. Individual but max 3 months. Activity 1) integrated care wk 1-12. Activity 2) Work place intervention wk 3-12. Activity 3) graded activity: wk 2- return to work or 26 sessions within 3 months.* *The team, in agreement w the patient, set a proposed date for full returrn to work. Content of intervention: Activity 1) Integrated care management by clinical occupational physician: Forming of treatment plan, monitoring of treatment, communication w other health care professionals. Activity 2) Workplace intervention: Observation of patient's work place and registration of obstacles for return to work. Discussion of solutions (patient, supervisor and OT). Activity 3) Graded activity: Individual graded exercise program.*
Participants (n)	*66*
Drop-outs (n)	*Not stated*
Intervention 2	

Participants (n) *Drop-outs (n)*	
Comparison *Participants (n)* *Drop-outs (n)*	*Usual care. Ongoing.* *Patients allocated to the usual care group received the usual treatment from their medical specialist, occupational physician, general practitioner, and/or allied health professionals.* *68.* *Not stated.*
Outcomes	*Duration of sick leave after baseline* *Return to work (hazard ratio for probability of event in intervention group)* *Days of sick leave at 12 months* *Functional status – improvement (Roland disability questionnaire)* *Pain – improvement (VAS)*
Comments *Risk of bias*	 *Authors have declared no conflict of interest.*

Multimodal and interdisciplinary treatments compared to other multimodal and interdisciplinary treatments

Karp 2018

Author *Year* *Country* *Ref #*	*Karp* *2018* *USA* [71]
Study design *Setting* *Recruitment* *Population* *Inclusion criteria*	*Randomized controlled trial* *Not stated.* *Not stated.* *Age ≥60 years. ≥80 on the Modified Mini-Mental State Exam. Primary Care Evaluation of Mental Disorders diagnosis of depression. Patient Health Questionnaire-9 ≥10. Low back pain more days than not of at leaste moderate severity for at least the last 3 months. Failure to maintain sustained response to any physician-prescribed treatment for CLBP. (Non-responder in phase 1.)* *Age ≥60 years. ≥80 on the Modified Mini-Mental State Exam. Primary Care Evaluation of Mental Disorders diagnosis of depression. Patient Health Questionnaire-9 ≥10. Low back pain more days than not of at leaste moderate severity for at least the last 3 months. Failure to maintain sustained response to any physician-prescribed treatment for CLBP. (Non-responder in phase 1.)*

Follow up	*3, 6, 9 and 12 months. Or randomisation (6 weeks), 12, 16 and 20 weeks. Very unclear to me.*
Intervention 1	*High dose venlafaxine and Problem Solving Therapy (VEN/PST-DP). 10 wks according to abstract but 20 wks according flow chart? 1) venlafaxine: unclear if patients continued high dose VEN during follow up. 2) PST: no information on n sessions, intensity and whether PST was delivered indivdually or in group is given.* *1) Venlafaxine: max 300 mg/day or highest possible tolerated dose. 2) Problem Solving Therapy for depression and pain (PST-DP): A) the problem-solving style of patients is assessed with the Social Problem Solving Inventory* *(SPSI). Information about how patients approach problemsolving are used for case conceptualization – as in short term CBT. B) consistent implementation of a stepwise approach to managing problems related to pain and depression and with behavioral activation (including pleasant event scheduling).*
Participants (n)	*68*
Drop-outs (n)	*Not stated*
Intervention 2	*High dose venlafaxine and supportive management (VEN/SM). 10 wks according to abstract but 20 wks according flow chart? 1) venlafaxine: unclear if patients continued high dose VEN during follow up. 2) MS: no information on n sessions, intensity and whether PST was delivered indivdually or in group is given.* *1) Venlafaxine: max 300 mg/day or highest possible tolerated dose. 2) Manual based supportive management ("to operationalize the nonspecific and frequently beneficial clinician-patient interactions that occur in "pharmacotherapy-only" conditions"). The primary interactions included reassurance to take medication despite mild but anxiety-provoking side effects, conveying a sense of hope and optimism, education about how venlafaxine may help both mood and pain, simple advice on how patients may help themselves (e.g., avoid stressful situations), and encouragement of ventilation of feelings of depression and frustration.*
Participants (n)	*71*
Drop-outs (n)	*Not stated.*
Outcomes	*Roland-Morris Disability Questionnaire (RMDQ)* *Short Physical Performance Battery (SPPB)* *PHQ-9* *Pain intensity (NRS)*
Comments	*I am very unsure about the data reported in the study. Phase 1: all subjects received venlafaxine of 150 mg/day. Non-responders randomized to phase 2. Also reports responder rates. Data onb PHQ-9 scores on the 12-month FU across treatment arms are presented in supplementary figure S3 using box plots. With respect to the NRS for pain and RMDQ measures of pain and functional disability, neither of the two scores differed across the treatment arms over the follow-up period (12 months).*
Risk of bias	*Dr. Karp has received invesligator-initiated medication supplies from Pfizer for this trial. No financial support was provided by any pharmaceutical trial for this trial. Dr. Karphas received medication supplies from Indivior for another National Institutes of Health-funded invesligator-initiated study. Dr. Reynolds has received medication supplies from Bristol Meyers Squibb, Forrest Labs, Lily, and Pfizer*

	for Na-tional Institutes of Health-sponsored work. None of the other authors has potential conflicts of interest to report. Supported by the National Institute of Aging (grant AG033575). The authors thank Pfizer for provision of medication supplies for the trial.

Saral 2016

Author	*Saral*
Year	*2016*
Country	*Turkey*
Ref #	*[63]*
Study design	*Randomized controlled trial*
Setting	*University hospital*
Recruitment	*Referral*
Population	*Women with fibromyalgia*
Inclusion criteria	*Women aged 25-60 years, diagnosed with FM according to the 1990 ACR diagnostic criteria followed up for at least six months after FM diagnosis, pain intensity of at least 5 on 10 cm VAS with 1-cm segments from 0 to 10, despite existing treatment and presence of at least 5 years of primary school education*
Follow up	*End of trial and after 6 months*
Intervention 1	*Long-term interdisciplinary treatment* *10 sessions (3h once weekly for 10 weeks) of CBT together with exercise training and other fibromyalgia related educational programs (two full days)*
Participants (n)	*22*
Drop-outs (n)	*1*
Intervention 2	*Short-term interdisciplinary treatment* *Two full days of educational, exercise, and CBT programs*
Participants (n)	*22*
Drop-outs (n)	*3*
Comparison	*TAU*
Participants (n)	*22*
Drop-outs (n)	*3*
Outcomes	*VAS (pain, fatigue, and sleep)* *Fibromyalgia Impact Questionnaire* *Beck Depression Inventory* *SF-36* *Tender point numbers* *Pressure algometry*

Comments	
Risk of bias	*No blinding was performed.*

Ronzi 2017

Author	*Ronzi*
Year	*2017*
Country	*France*
Ref #	*[58]*
Study design	*Randomized controlled trial*
Setting	*Multidisciplinary clinic, rehabilitation center or private physiotherapist*
Recruitment	*Not stated.*
Population	*Adults with chronic low back pain*
Inclusion criteria	*18 to 55 years. Non-specific chronic LBP for at least 3 months. At least 1 months sick leave during preceding year and/or 3 months sick leave during preceding 2 years. In contract of work*
Follow up	*12 months.*
Intervention 1	*Functional Restoration Program (FRP). 5 wks, 6 hrs/day, 5 days/wk. Group based sessions, 6-8 patients/group.* *Described as multidisciplinary and probably contains same elements as FRP in MS-group, but also group exercises of individually adjusted intensity supervised by a physiotherapist.* *Wk 1: stretching, flexibility and cardio respiratory training. Wk 2: muscular strengthening exercises. W 3-5: increased muscular strengthening exercises.*
Participants (n)	*49*
Drop-outs (n)	*Not stated.*
Intervention 2	*Mixed Strategy (MS). 5 wks: 1) AIP: 1 hr/sessions 3 days/week plus 50-minute home exercises to be performed 2 times/wk. 2) FRP: 6 hr group sessions 1day/wk. Mixed delivery, both group and individual delivery.* *1) AIP as in the AIP-group. 2) FRP: Assessment and discussion of pain perceptions and beliefs w rehab physician, advice on physical acitivity and diet, and relaxation exercises in group w a physiotherapist, offer of individual meeting w a psychologist.*
Participants (n)	*56*
Drop-outs (n)	*Not stated.*
Intervention 3	*Ambulatory Individual Physiotherapy (AIP). 5 wks: 1 hr/sessions 3 days/week plus 50-minute home exercises to be performed 2 times/wk. Individual delivery.* *Individual rehab w a physiotherapist. Active exercises supervised by the physiotherapist during sessions and home execrcies consisting of stretching, jogging swimming or other activities.*

Participants (n)	*54*
Drop-outs (n)	*Not stated.*
Outcomes	*Number of days sick leave during 12 months* *Pain intensity (VAS)* *Daily activity Dallas-subscale* *Work and leisure Dallas-subscale* *Anxiety/depression Dallas-subscale* *Social interaction Dallas-subscale* *Fear-Avoidance Beliefs Questionnaire (FABQ) total score* *Hospital Anxiety and Depression scale (HAD)* *SF-36 Physical Components Summary* *SF-36 Mental Components Summary*
Comments	*OBS! Den mest intensiva interventionen, FRP, är så illa beskriven att uppgift om multidiscilpinaritet och innehåll utöver fysiska övningar saknas. I beskrivs även i #356 och #7029 - hämta info därifrån.* *Also reports data on FFD (Finger-Floor-Distance), Sorensen and Ito tests.*
Risk of bias	*Authors have stated no conflicts of interest. This work was supported by the Institute of Public Health Research (IReSP), a scientific of interest group of the French National Institute of Health and Medical Research (INSERM) [grant number: 2008-A00900-55]*

Smeets 2006

Author	*Smeets*
Year	*2006*
Country	*The Netherlands*
Ref #	*[29]*
Study design	*Randomized controlled trial*
Setting	*Three outdoor rehabilitation centers.*
Recruitment	*Enrollment April 2002 to December 2004*
Population	*Adults with low back pain for more than 3 months*
Inclusion criteria	*Age 18 to 65 years with non-specfific low back pain with or without radiation to leg for more than 3 months. ROland Disability Questionnaire score >3. Ability to walk at least 100 m.*
Follow up	*Post treatment. 6 and 12 months after ET.*
Intervention 1	*Active Physical Treatment (APT). 10 wks. Cirka 1 hr 45 minute long sessions 3 times/wk. Individually guided training.* *Aerobic training and dynamic strengthening exercises. 1) Aerobic exercises: Half an hour on bicycle at 65 to 80% of heart rate (HR) max. During training the patient judged percieved exertion and the training was adjutsed accordingly. At 2 and 4 wks the intensity was increased and a sprint 3*

	times/minute added. Partients stretched trunk and leg muscles after each aearobic work out. 2) Dynamic static exercises: 15 to 18 repetitions until muscular fatigue occurred. Gradual increase in the number of exercises over the treatment period. Partients stretched trunk and leg muscles after each work out.
Participants (n)	*54*
Drop-outs (n)	*Not stated*
Intervention 2	*Cognitive-Behavioral Treatment (CBT). 10 wks. Mixed deliviery: individually and in group. 1) Graded activity: 2 introductory group meetings followed by 18 individual sessions. In total 11 1/2 hrs. 2) Problem solving therapy: 10, 1 1/2 hr long sessions in groups of max 4.* *Operant behavioural graded activity (GA) and problem sovling therapy (PST). 1) GA: Time contingent increase of three for the patient important acitivities. Home assignments performing the activities were registered in a diary. During sessions the patient also performed selected activities, but more importantly, evaluated activites registered in the diary together w the therapist who reinforced progress towards set goals. Patients partner was invited to attend session 1 and a secind session in wk 4. 2) PST: In 3 initial sessions therapists discussed the rationale of training and and skills of positive problem orientation. Session 4 to 10 focused on problem definition, decision making, implementation and evaluation. Main focus was training skills for everyday life.*
Participants (n)	*60*
Drop-outs (n)	*Not stated.*
Intervention 3	*Combined Treatment (CT). 10 wks. APT and CBT as in the APT and CBT-groups.* *Active physical treatment (APT), and CBT administered as in the APT and CBT-groups. With exception of graded activity which started later, in wk 3. (participants still received the same number of session, but over shorter period of time).*
Participants (n)	*62*
Drop-outs (n)	*Not stated.*
Comparison	*Waiting List (WL). 10 wks.* *Patients were requested to the outpatient rehabilitation centers.*
Participants (n)	*51*
Drop-outs (n)	*Not stated.*
Outcomes	*Roland disability questionnaire (RDQ)* *Three individual main complaints regarding activities (VAS)* *Self-percieved improvement of disability (Likert scale)* *Current pain (VAS)* *Pain rating index (PRI-T) total score* *Depression – Beck Depression Inventory (BDI)*
Comments *Risk of bias*	*Authors have stated no conflicts of interest. This study is supported by Zorgonderzoek Nederland/Medische Wetenschappen (ZonMw) grant number 014-32-007 and the Rehabilitation Centre Blixembosch.*

Schmidt 2018

Author	*Schmidt*
Year	*2018*
Country	*Denmark*
Ref #	*[72]*
Study design	*Randomized controlled trial*
Setting	*A rheumatology rehabilitation centre in Denmark*
Recruitment	*Not stated.*
Population	*Adults with chronic low back pain*
Inclusion criteria	*Adults aged 18 years or older*
Follow up	*Six-month follow-up*
Intervention 1	*An integrated programme: a pre-admission day, two weeks at home, two weeks inpatient followed by home-based activities, plus two 2-day inpatient booster sessions*
Participants (n)	*82*
Drop-outs (n)	*Not stated*
Intervention 2	*An existing programme: four-week inpatient*
Participants (n)	*83*
Drop-outs (n)	*Not stated*
Outcomes	*Leg pain* *Disability - ODI: Oswestry Disability Index* *Back pain intensity - NRS: Numerical Rating Scale* *Pain Self-efficacy - PSEQ: Pain Self-Efficacy Questionnaire* *Quality of life - EQ-5D 5L: EuroQol-5 Domain 5-level* *Depression - MDI: Major Depression Inventory*
Comments	
Risk of bias	*The logistics of implementing the integrated programme in daily clinical practice was a challenge. This could potentially have caused bias in favour of the existing programme.*

Calner 2017

Author	*Calner*
Year	*2017*
Country	*Sweden*
Ref #	*[73]*
Study design	*Randomized controlled trial*

Setting	*17 healthcare centers certified for MMR and online*
Recruitment	*Recruitment October 2011 and June 2014*
Population	*Adults with persistent musculoskeletal pain and/or a generalized pain condition with a duration of at least 3 months*
Inclusion criteria	*18-63 years. Persistent musculoskeletal pain from the back, neck and shoulders, and/or a generalized pain condition with a duration of at least 3 months. ÖMPSQ score ≥ 90. Work ability of at least 25 %.*
Follow up	*4 and 12 months*
Intervention 1	*MMR plus Web-BCAP (MMR-web). 1) MMR: Variable in duration and intensity. Minimum 6 wks, and 2-3 sessions /wk. Face to face. 2) BCAP: Access provided 24 h a day, 7 days a week, for 16 weeks. Remote delivery (web-based). Individual tretament.* *1) MMR based on CBT-approach initiated by team conference to set up individual goals and plan: A) The physiotherapist was responsible for physical activities such as aerobic, mobility or strength exercises or body awareness therapy and TENS or manual therapy. B) Ergonomics, activity planning, and functional training were provided by occupational therapists. C) A health care professional trained in cognitive behaviour principles conducted* *the counselling therapy. D) The physician ensured pharmacological adaptions, medical certificates and referrals. 2) Web-BCAP (Behaviour Change Activity Program): The web programme consisted of eight modules: (A) pain, (B) activity, (C) behaviour,* *(D) stress and thoughts, (E) sleep and negative thoughts, (F) communication and self-esteem, (G)solutions, and (H) maintenance and progress. Each module contained information, assignments, and* *exercises. Assignments and data from a well-being test were* *saved as summaries that the participants could review to monitor their progress.*
Participants (n)	*60*
Drop-outs (n)	*Not stated.*
Intervention 2	*MMR. Variable in duration and intensity. Minimum 6 wks, and 2-3 sessions /wk. Face to face. Individual treatment.* *MMR delivered as in the MMR-web group.*
Participants (n)	*49*
Drop-outs (n)	*Not stated.*
Outcomes	*Work ability index (WAI)* *Work ability index (WAI) score* *Pain 7 days (VAS)* *Pain Disability Index (PDI)* *Arthritis Self-Efficacy Scale (ASES) pain subscale* *Arthritis Self-Efficacy Scale (ASES) other symptoms* *General Self-Efficacy Scale (GSE)*

	Pain (VAS) 7 days mean *Pain (VAS) 7 days minimum* *Pain (VAS) 7 days maximum*
Comments	*It is likely that n in all results are 55 (MMR-Web) and 44 (MMR) but it is not stated in all results tables. For these I use missing data tag.*
Risk of bias	*Authors have stated no conflicts of interest. This article is included in a research project entitled Effects of a web Behaviour Change Program for Activity (Web-BCPA) for persistent pain in primary health care, being a joint project between Luleå University of Technology and Region Norrbotten, Sweden. The project is part of the national research project REHSAM (REHabilitering och SAMord-ning) in Sweden, and is financed by REHSAM. The REHSAM project is a cooperation between the Swedish Social Insurance Agency, the Ministry of Health and Social Affairs, the Swedish Association of Local Authorities and Regions, and the Vårdal Foundation.*

Gustavsson 2018

Author	*Gustavsson*
Year	*2018*
Country	*Sweden*
Ref #	*[74]*
Study design	*Randomized controlled trial*
Setting	*Six primary health care centres*
Recruitment	*MMR: Type of treatment, frequency of visits and duration of contact was left to the judgment of the professionals and patients, in order to reflect the variability within the service. ALAR; 10 1-hour treatment sessions over a 10 week period.*
Population	*Adults with musculoskeletal pain for ≥ 3 months*
Inclusion criteria	*Musculoskeletal pain (from back, neck or widespread) for ≥ 3 months. 18-63 years.*
Follow up	*9 weeks. 1 year. Patient records were checked after 20 weeks.*
Intervention 1	*ALAR (activity and life-role targeting rehabilitation program) and MMR. 1) MMR: Duration and intensity according to individual needs. 2) ALAR: 10 wks. 1-hr sessions once a wk plus homework assigments. Individual treatment.* *1) MMR: inter-professional and multidisciplinary. MMR started with team-based sessions for assessment and a mutually agreed rehabilitation plan. Psychological treatment modalities in accordance with Swedish national guidelines. Other treatment modalities were chosen based on individual needs and acceptance. 2) ALAR: Treatment components in ALAR were: A) Screening of psychosocial and behavioural barriers, B) Self-monitoring of activity level and content in an an activity log, C) Establishing activity goals. D) Activity scheduling and gradually increasing activity*

	involvement, E) Establishing and maintaining daily activity routines. F) Overcoming barriers and G) Evaluation of progress. The therapists identified barriers and risk factors. Patients performed activities in sessions and home assignments and recorded them in a workbook each day. Therapists provided feedback on patients' reports.
Participants (n)	*34*
Drop-outs (n)	*Not stated.*
Intervention 2	*MMR. Duration and intensity according to individual needs. Individualt treatment. Physiotherapists, occupational therapists, physicians and counsellors. Therapists worked as teams.*
Participants (n)	*31*
Drop-outs (n)	*Not stated.*
Outcomes	*Entirely achieved goals during rehabilitation* *Partially achieved goals during rehabilitation* *Did not achieve goals during rehabilitation* *Sick-leave decreased from pre-treatment* *Sick-leave was unchanged from pre-treatment* *Sick-leave increased from pre-treatment*
Comments	*In outcome "achieved goals" data from 6 (40%) and 5 (29.4%) patients are missing, in addition to the 19 (56%) and 14 (45%) already missing for which results are not reported at all. So total results are based on 9 and 12 patients and 73 and 61% have no data for this outcome. Also reports baseline characteristics on patients with complete outcome data only. Median days of sick-leave during preceding 3 months is 84 in ALAR+MMR and 8.5 in MMR. IQR is 0-90 in both groups.*
Risk of bias	*Authors have stated no conflicts of interest. This work was supported by Center for Clinical Research Dalarna (CKFUU-259691/2012); REHSAM (99368-2009/RS14) and the Regional Research Council in Uppsala-Örebro (RFR-232751/2011).*

VanderMaas 2015

Author	*VanderMaas*
Year	*2015*
Country	*the Netherlands*
Ref #	*[75]*
Study design	*Cluster randomized controlled trial*
Setting	*patients referred to an outpatient centre for pain rehabilitation*
Recruitment	*Recruitment from November 2007 through March 2010*
Population	*Patients with chronic musculoskeletal pain*
Inclusion criteria	*Patients with chronic musculoskeletal pain referred for pain rehabilitation treatment. Had to experience limitations in several life areas (e.g. social, cognitive, mobility, household, work, etc.)*

Follow up	*12 weeks from baseline (end of treatment) 3, 6 and 12 months from end of treatment*
Intervention 1	*TAU and group psychomotor therapy (PMT) 3 months (3 days/wk for a total of 94 hrs). Two follow-up sessions after 3 and 6 months. 2) PMT: 10 sessions, 1.5 hr each over the treatment period. Multidisciplinary and and multimodal group treatment package including physiotherapeutics (relaxation, graded aerobic activity, sports), psychology (rational emotive therapy), occupational therapy, education on chronic pain, sport in the swimming pool, and partner education. At follow up sessions goals were evaluated and discussed in group. 2) Psychomotor therapy is an experiential based therapy in which behaviours, feelings and thoughts are explored using movement and body-oriented techniques and verbal reflection. PMT here was explicitly directed to the three factors, body awareness, catastrophizing and self-efficacy. Patients performed exercises to identify negative thought and body sensations and to learn to use that awareness to act on it accordingly.*
Participants (n)	*49*
Drop-outs (n)	*Not stated.*
Intervention 2	*TAU (control) 3 months (3 days/wk for a total of 94 hrs). Group treatment.* *TAU as in the TAU and PMT group.*
Participants (n)	*45*
Drop-outs (n)	*Not stated.*
Outcomes	*Pain Disability Index (PDI)* *RAND-36 physical component* *RAND-36 mental component* *BDI (Beck Depression Inventory)* *Body awareness (BA)* *Pain Self-efficacy Questionnaire (PSEQ)* *Pain Catastrophizing Scale (PCS)*
Comments	*Trial registration number leder inte till någon vettig sida på nätet.* *Rapporterar medelvärden och SD i en graf (Figur 2). SD-värdena anges inte med siffror utan bara i grafen. Dessa kan kanske fås ut med ett grafprogram senare. Tolkar det som att antalet patienter per tidpunkt för medelvärdena i figur 2 är det antal som var kvar vid respektive tidpunkt, men jag är inte säker så det behöver kontrolleras en gång till. De har även gjort en linear mixed model där jag antar att alla deltagare ingår och för detta har de angett regression coefficient för de olika tidpunkterna (tabell 2 och 3).*
Risk of bias	*Authors have stated no conflicts of interest*

Andersen 2021

Author	*Andersen*
Year	*2021*
Country	*Australia, Denmark*
Ref #	*[76]*

Study design	*Randomized controlled trial*
Setting	*Denmark: specialized rehabilitation hospital, Australia: private psychology and physiotherapy practice*
Recruitment	*Advertisments, clinical practices and post adverts to patients from the Danish National Health Registry with neck trauma*
Population	*Adults with chronic WAD*
Inclusion criteria	*WAD grade II ≥30% on NDI in adults between 18 and 70 between 3 months and 5 years and comorbid PTSD as according to DSM-5*
Follow up	*Six- and twelve-month follow-up*
Intervention 1	*TF-CBT and exercise*
Participants (n)	*53*
Drop-outs (n)	*Not stated*
Intervention 2	*ST and exercise*
Participants (n)	*50*
Drop-outs (n)	*Not stated*
Outcomes	*Primary: NDI* *Secondary:* *Average neck pain intensity over 24 hours (11-point Numerical Rating Scale)* *Self-rated posttraumatic stress symptoms (PTSD Checklist for DSM-5)* *Diagnostic presence of PTSD (Clinician-Administered PTSD Scale for DSM-5)* *Symptoms of depression, anxiety and stress (DASS-21)* *Health status (SF-12)* *Patient-specific disability (Patient-Specific Functional Scale)* *Pain catastrophizing (Pain Catastrophizing Scale)* *Self-efficacy (Pain Self-Efficacy Questionnaire)* *Fear of reinjury (Tampa Scale for Kinesiophobia)* *Self-rated global impression of recovery (11-point scale)*
Comments	
Risk of bias	*Not stated.*

Verra 2018

Author	*Verra*
Year	*2018*
Country	*Switzerland*
Ref #	*[77]*

Study design	*Randomized controlled trial*
Setting	*Rehabilitation clinic. Patients were participants in an interdisciplinary pain program.*
Recruitment	*Recruitment between March 2009 and September 2013. Last measurement October 2014.*
Population	*Chronic back pain for at least 6 months*
Inclusion criteria	*Participants had chronic non-specific back pain and the diagnosis was established by a rheumatologist. Pain for at least 6 months.*
Follow up	*1, 3 and 12 months fr BL*
Intervention 1	*Standard rehab plus sub group specific rehabilitation (classified according to MPI). 4 wks. 1) Standard rehab: On average 4 daily sessions over the period. Group based. 2) Subgroup rehab: 4 half hr sessions phyiotherapy and 2 1 1/2 hr session CBT/wk.* *1) Classification of the pain condition according to the Multidimensional Pain Inventory (MPI) Classification System. 2) Standard rehabilitation (cardiovascular training, relaxation therapy, pain coping group, information and education about pathophysiology and management of pain, occupational therapy, outdoor activities and qigong/tai chi exercises. Ambulatory care 4 wks after discharge. 3) Subgroup rehab: combination of individual physiotherapy (graded activity) and individual psychotherapy (CBT or systemic therapy) with three alternative focuses A) Dysfunctional subgroup: to learn that it is safe to move. Restoration of function was encouraged. B) Subgroup adaptive coper: Activity pacing to moderate overactivity. C) Subgroup interpersonally distressed: Systemic therapy (with patient and if possible partner or spouse) focused on encouragement of well behaviors and reduction of negative responses.*
Participants (n)	*107*
Drop-outs (n)	*30*
Intervention 2	*Standard rehabilitation. 4 wks. 1) On average 4 daily sessions over the period. Group based. 2) Individual phsyiotherapy and counsselling. Treatment sessions and intensity not given.* *Similar elements as in the comparison group. Difference: therapy was general for all, not tailored according to specific subgroups as in the other group: 1) Standard rehabilitation (cardiovascular training, relaxation therapy, pain coping group, information and education about pathophysiology and management of pain, occupational therapy, outdoor activities and qigong/tai chi exercises. Ambulatory care 4 wks after discharge. 2 A) individual physiotherapy sessions with or without training devices w focus on improvement of muscle strength, endurance and stretching of selected muscle groups. 2 B) Indivual conselling base on CBT.*
Participants (n)	*32*
Drop-outs (n)	*9*
Outcomes	*Oswestry Disability Index (ODI)* *Smärta (NRS)* *Back Performance Scale (BPS)* *5-Minutes Walk Distance (5-MWD)*

	HADS – anxiety *HADS – depression* *Pain Catastrophizing Scale (PCS)* *Coping strategies Questionnaire (CSQ) control pain* *Coping strategies Questionnaires (CSQ) decrease pain* *Global perceived effect on daily functioning – improved*
Comments	*Osäker på hur stort avhoppet var efter 1 månad från analysen. I interventionsgruppen var det 7 som inte fick behandling och 17 som inte fullföljde och i kontrollgruppen var det 5 som inte fick behandling och 1 som inte fullföljde. Hittar dock inte information om hur många som fyllde i formulär efter 1 månad. Har i tabellen utgått ifrån att de som inte fick behandling och inte fullföljde är avhopp vid 1 månad.* *Antal patienter i analyserna anges vara det totala antalet som inkluderades så jag har antagit att resultaten som redovisas är data där saknade data hanterats med multiple imputation.*
Risk of bias	*Authors have stated no conflicts of interest*

Olason 2018

Author	*Olason*
Year	*2018*
Country	*Iceland*
Ref #	*[78]*
Study design	*Randomized controlled trial*
Setting	*The chronic pain clinic at Reykjalundur Rehabilitation Center*
Recruitment	*Not stated.*
Population	*Patients with at least moderate levels of anxiety or depression*
Inclusion criteria	*Patients meeting criteria for CBT treatment (i.e., who met the predetermined cutoff scores on the measures indicating at least moderate levels of anxiety or depression)*
Follow up	*ET. 1 and 3 years after treatment*
Intervention 1	*Interdisciplinary rehabilitation program plus CBT. 6 wks. Rehab-program was delivered face-face in group. CBT was individual and delivered in twelve 45-minute sessions over the 6 wks.* *1) Standard interdisciplinary rehabilitation program for pain management: the program consisted of physical endurance and fitness training, occupational therapy, education with stress management, and relaxation exercises. Patients also attended pain school classes. 2) CBT for pscyhological distress. Manual based based. Treatment included: (A) education about depression and anxiety, (B) identification of relationships among thoughts, moods, physiology, and behavior, and (C) identification and challenging of maladaptive thought patterns and behaviors.*

Participants (n)	*40*
Drop-outs (n)	*Not stated.*
Intervention 2	*Interdisciplinary rehabilitation program - no CBT. 6 wks. Delivery if the rehab program as in the CBT-group, minus CBT.* *Standard interdisciplinary rehabilitation program for pain management - delivered as in the CBT-group.*
Participants (n)	*40*
Drop-outs (n)	*Not stated*
Outcomes	*Pain intensity (NRS)* *Fear-Avoidance Beliefs Questionnaire (FABQ) total score* *Beck Anxiety Inventory (BAI)* *Beck Depression Inventory-II (BDI-II)* *SF-36 Social Functioning*
Comments	*Note that patients in "comparison group" are those that did not qualify for CBT. OBS! Innehåller en tredje okontrollerad jämförelsegrupp som inte ska ingå i analys/utvärdering. Se RoB.*
Risk of bias	*Authors have stated no conflicts of interest. The study was funded by The Icelandic Research Center (RANNÍS).*

Mena 2011

Author	*Meng*
Year	*2011*
Country	*Germany*
Ref #	*[79]*
Study design	*Randomized controlled trial*
Setting	*Inpatient orthopedic rehabilitation clinic*
Recruitment	*Recruitment November 2007 to May 2008*
Population	*Chronic low back pain*
Inclusion criteria	*Primary diagnosis of chronic low back pain (ICD-10-GM: M51, M53, M54)*
Follow up	*At discharge. 6 and 12 months*
Intervention 1	*New back school (experimental intervention). Treatment duration: 3 wks. Seven interactive an 55-minute long sessions delivered in closed groups of 15 or less.* *Manual based interdisciplinary program. Five sessions led by the pyshiotherapist, 1 by the orhopedist and 1 by the psychologist. Sessions consisted of short lectures, group discussion, small group work, practice, and individual work. Contents covered were basic knowledge of back pain (epidemiology, risk factors, development, disordersand therapy) with regard to physical, psychological (fear-*

	avoidance-endurance model, coping behavior), and social aspects. Sessions also included spinerelated exercises (muscle training and active stabilization) and techniques to promote physical activity (eg, motivation, self-regulation). The pprgram was based on a biopsychosocial model.
Participants (n)	*197*
Drop-outs (n)	*Not stated*
Intervention 2	*TAU (traditional back school - control). 3 wks. Four 55-minute long physiotherapy sessions delivered in closed groups of 15 or less. In addition 2 lectures held in large open groups of ca 60 patients. program as it had been practiced in the hospital for years. Four sessions were led by a physiotherapist training and review of correct back posture, movements and back exercises. In addition patients attended 2 lectures on knowledge about pain and coping given by an orthopedist and a psychologist respectively.*
Participants (n)	*185*
Drop-outs (n)	*Not stated*
Outcomes	*Back posture habits* *Back exercises* *Physical activity* *Action-oriented coping* *Cognitive restructuring* *Subjective coping competence* *Mental distraction* *Counter activities* *Relaxation*
Comments	*Excludes patient with no data at t1 or only data at t1. Only analyse completers and because of that data on pretreatment differs between the analysis for 6 months and the analysis for 12 months. In time point "pretreatment 6 months" data on pretreatment mean and SD come from table 2. In time point "pretreatment 12 months" data on pretreatment mean and SD come from table 3. Not clear what scales have been used to measure different constructs.*
Risk of bias	*The project was funded by the Deutsche Rentenversicherung Bund (German Statutory Pension Insurance Scheme), Berlin, Germany.*