

Syllabus

"Specific Pain Management Psychotherapy"

Content and learning objectives of the continued/advanced vocational training of the "specific pain management psychotherapy"

1st Edition: 2010, Additions to the voluntary section made last in 2012

Publishers:

Deutsche Gesellschaft für Psychologische Schmerztherapie und –forschung (DGPSF) [German Association for Psychological Pain Therapy and Research]

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Introduction

Chronic pain is the result of a complex and multidimensional process simultaneously affecting somatic, psychological, and social aspects. All of these dimensions are considered integral to pain and not a consequence of nociception. The connections between these dimensions also do not link into an easy causal chain. Pain-dependent impairment, psychological distress, pain-related behavior, and the impact of nociception have been found to correlate only weakly. Chronification of pain means that pain experience and pain-related behavior expand to and intensify all levels described above.

Against this biopsychological backdrop, contemporary therapeutic approaches aim at capturing chronic pain with diagnostically multidimensional tools and target every individual level with the help of specific therapeutic measures. The goal of the treatment is not only to relieve pain but to decrease somatic, psychological, and social impairments of functioning.

Pain management is a young, innovative, and highly specialized discipline. Pain therapists work together with medical physicians and other participating professions, e.g. physical therapists, nurse practitioners, and employees of social services in order to create a care that is patient-centered.

The academy of the specific psychotherapy for pain of the German Association for Psychological Pain Therapy and Research (DGPSF) offers a continued/advanced vocational training in specific psychotherapy for pain at three locations in Germany: Bochum, Mainz, Nord.

The syllabus at hand contains the structure and regulations of the continued/advanced vocational training program, the course content required for the final exams, and the topics covered by the additional seminars.

This syllabus has been written as a guide for lecturers, examiners, and candidates alike. It also ensures standardization of the training program and ensures its continued improvement in quality and transparency.

Further publication on the continued/advanced vocational training

Hüppe M, Scharfenstein A, Fritsche G (2011) Fort- und Weiterbildung "Spezielle Schmerzpsychotherapie". In: Kröner-Herwig B, Frettlöh J, Klinger R, Nilges P (eds) Schmerzpsychotherapie (7th edition). Springer, Berlin, S 703-707

Study regulations

§ 1 preamble

1) Pain, an unpleasant sensual and emotional experience, can be the result of actual or potential tissue damage, or it can also be described by using the terms of such a damage. Even acute and chronic pain stemming from a verified tissue damage is based on psychological factors which, in turn, greatly influence pain-dependent lifestyles.

Many chronic pain conditions are also based on so-called neuroplastic learning processes; tissue damages herein are not considered the actual cause of pain sensation, or the damages are (no longer) present. Therefore, psychological pain therapy includes concepts and measures to reduce psychological causes and effects of pain sensation and also integrates specifically pain-tailored psychotherapeutic methods which counteract neuroplastically justified chronification processes.

Professional psychological treatment contains a canon of theories on disorders as well as methods for diagnostics and treatments which can also be applied to the treatment of patients suffering from pain (as long as the presence of a psychological impairment is clinically relevant as diagnosed in accordance with the international classification criteria). However, intense acute and chronic pain frequently leads to neural and psychological changes which ultimately increase the experience of pain and which can result in undesired (dysfunctional) psychosocial changes. In order to make greater use of the intrapsychological and interactional aspects of the predominantly physical symptoms, specific and interdisciplinary methods for pain diagnostics and treatment have been developed within the framework of psychological pain therapy. Its effectiveness has been confirmed by numerous controlled studies and it has thus established itself as a firm component in the care of patients with ample physical pain and pain presumably evoked by neuroplastic, behavioral, and psychodynamic aspects. By including the contributions made by

psychological research to specific pain psychotherapy, the specific pain psychotherapists are additionally qualified to work with patients suffering from pain and will further deepen their professional expertise on scientifically confirmed methods which prevent chronification processes.

In order to enhance the psychotherapeutic care of patients suffering from pain, the German Association for Psychological Pain Therapy and Research (orig.: Deutsche Gesellschaft für Psychologische Schmerztherapie und -forschung DGPSF), the German Association for the Study of Pain (orig.: Deutsche Gesellschaft zum Studium des Schmerzes DGSS), the German Pain Therapy Association (orig.: Deutsche Gesellschaft für Schmerztherapie e.V. DGS), and the German Migraine and Headache Society (orig.: Deutsche Migräne- und Kopfschmerzgesellschaft DMKG) have developed the guidelines for the continued/advanced vocational training described hereafter.

- 2) Just like any preventive measure, diagnostics and treatment of chronic pain conditions can only be addressed interdisciplinary. We strive for a close cooperation between all professions actively involved in pain management.
- 3) A prerequisite for the continued/advanced vocational training described herein is to hold an accredited degree as a clinical psychologist (in accordance with the German psychotherapy guidelines: PsychThG¹) or a comparable medical degree. The equivalence of international degrees will need to be assessed individually.
- 4) Only after completing the training as a clinical psychologist or medical specialist with the additional psychotherapeutic training it is possible to acquire the confirmation of the continued/advanced professional training in the psychology-based pain-therapy attested by the certificate "specific pain management"

"psychotherapy" in the guidelines at hand, the expertise and field of practice of this German special training (in the sense of a clinical psychologist) is implicated.

¹ Note by the translator: The German equivalent to the US-American clinical psychologist is a "psychological psychotherapist" (orig.: psychologische/r Psychotherapeut/in). This degree can only be obtained after extensive post-graduate training as described in the German "Psychotherapy Law" (orig.: Psychotherapeuten Gesetz PsychThG). Thus, when referring to terms such as "psychotherapist", "psychological treatment" or

psychotherapy" which is accredited by the relevant German pain associations (DGPSF/DGSS/DGS/DMKG).

§ 2 Study goals

- 1) The goal of the continued/advanced vocational training is to acquire the psychotherapeutic expertise in the application of psychology-based pain interventions. Requirements are: participation in a curriculum which has been approved by the board of examiners (§ 5), and completion of an elective period in a training institution likewise certified by the board of examiners.
- 2) The continued/advanced vocational training will provide the knowledge and skills necessary for using the scientifically-confirmed diagnostics and treatment methods in patients suffering from pain. This training also aims at enhancing the readiness and ability to communicate and cooperate with other expert groups (e.g. physicians, psychologists, physical therapists, social workers, etc.). The continued/advanced vocational training is to be open to different scientifically-confirmed clinical psychotherapies.

§ 3 Study structure

The continued/advanced vocational training of the specific pain management psychotherapy is comprised of the following:

1) Acquiring knowledge of the biopsychosocial foundation of pain, especially chronic pain, including nociception, information processing of pain, mechanisms of chronification, and pharmacotherapy amounting to 16 teaching hours, conceptualizing cases including anamnesis, diagnostics, classification and documentation, treatment planning and evaluation amounting to eight teaching hours,

developing psychological measures for intervention and prevention, especially educative, psychophysiological, cognitive, behavior-based, and emotion and conflict-based interventions amounting to 32 teaching hours,

acquiring knowledge on pain syndromes and specific treatment methods (including:

headaches, facial and back pain, cancer pain, visceral pain, rheumatic and neuropathic-related pain, somatoform disorders, and age-related pain syndromes) amounting to 24 teaching hours.

These skills are covered by the curriculum "specific pain management psychotherapy; continued/advanced vocational training", comprising a total of 80 teaching hours. A maximum of eight teaching hours per day, and 40 teaching hours per week can be considered. All participants must meet the requirements described in §1(3).

- 2) The elective clinical period in the care of patients suffering from pain: This period can be completed by working in or with an institution involved in the care of patients either suffering from chronic pain or from illnesses which are accompanied by or that result in pain. These institutions should already be employing a certified pain management clinical therapist. In the context of the continued/advanced vocational training, regular participation at interdisciplinary conference on pain is required.
- 3) Implementing and documenting clinical-psychological anamnesis, diagnostics, and the treatment of patients suffering from chronic pain under supervision.

§ 4 Study content

- 1) The following course content will be covered:
 - Interdisciplinary fundaments
 - Neuroanatomic, physiological, and chemical basics of pain and pain sensation
 - Cognitive, emotional, behavioral, and psychodynamic foundations of pain reactions, pain modulations, and their interaction
 - Functional aspects of pain sensation and behavior, pain expression and communication
 - Individual developmental processes that may promote the later presence of the pain deficit

- Etiological and functional influences of psychological and somatic comorbidities
- Social and intercultural foundations of pain and the possibly differing approach to handling pain
- Illness and physical experiences that may lead to chronic pain
- Basic knowledge of medical diagnostics and medical interventions of pain including pharmacotherapy of pain
- Basic knowledge of physical therapy and other body-concentrated techniques in pain conditions
- Measures of quality assurance

2) Psychological pain diagnostics:

Learning about techniques of self-observance of pain-related behavior and subjective experience, pain-anamnestic and biographical measures (structured interview), questionnaires assessing subjective beliefs of pain and illness, quantitative and qualitative methods for measuring pain, questionnaires and observation techniques to assess the extent of impairment caused by pain, measures assessing pain coping strategies, subjective well-being, psychophysiological data, and observations made by others (e.g. asking family members).

Diagnostics should be conducted in interdisciplinary discourse and in accordance with MASK (Multiaxial Pain Classification), ICD-10, DSM-IV and/or the operationalized psychodynamic diagnostics (OPD), and, with the help of differential diagnostic procedures, should take the importance of pain in the development of the patient into account.

3) Principles of treatment:

Interventions suitable for the continued/advanced vocational training have to be scientifically approved and need to aim at the following goals:

They need to increase the understanding of the biopsychosocial model of illnesses and, by educating the patient, should open them to the idea and motivate them to start the Specified Pain-Psychotherapy.

They need to contribute to the decrease of the pain-related physiological hyperactivity. Suitable measures are those using auto-suggestive and hetero-

suggestive methods (also with the help of technical instruments) and a combination thereof.

They need to influence the focus of attention. These include, for instance, exercises on focusing and defocusing pain, guided imagery exercises and hypnotherapeutic measures.

They need to lead to a change of pain and stress-related cognitions and behavioral patterns. These include, for instance, behavioral measures for pain immunization and cognitive restructuring, suggestive interventions, and interventions increasing self-efficacy and positive cognitions.

They need to foster emotional well-being and contribute to the implementation of positive pain coping strategies by the patient. This includes the emotional support in chronic pain, pain-increasing comorbidities (e.g. anxiety, depression) and cognitions (e.g. helplessness and hopelessness), and aid in coping with life-threatening and pain-entailing illnesses.

They need to aid in resolving pain-related problems resulting from external conditions such as conflicts in partnerships, work-overload, etc.

They need to foster healthy behavioral patterns, increase activities and enable a balance between activity and regeneration.

They need to contribute to resolving intrapsychological and possibly subconscious conflicts and the related anxieties and deficits in self-esteem and self-confidence.

4) Treatment methods:

These include approaches which:

- can cause a positive change of pain sensation and behavior partially caused or maintained by psychological factors (e.g. learning mechanisms, cognitive processes, conflict-producing experiences, somatization),
- encourage activities and support the patient in leading a fulfilled and active
 life despite the impairments
- motivate rehab and integrate a different body image in the self-concept of the patient
- teach skills and influence pain-enhancing actions in the social environment

- bearing in mind any risk factors for addiction, offer help in reducing painmedication intake and withdrawal treatment
- foster self-help and communication skills in the patient
- in conclusion: those measures significantly contributing to the reduction of pain by using a multimodal oriented treatment concept including interventions from medicine, physical therapy and other body-oriented and nurse practitioner techniques.

§ 5 Organization of the continued/advanced vocational training

1) The "examination committee for the specific pain management psychotherapy DGPSF/DGSS/DGS/DMKG" is responsible for the organization and implementation of the continued/advanced vocational training, the recognition of the curricula and pain-therapeutic institutions, the up-keep of a register during the course of the vocational training, and the invitation of examiners. This examination committee is implemented by the following pain associations:

Deutsche Gesellschaft für Psychologische Schmerztherapie und -forschung e. V. (DGPSF) [German Association for Psychological Pain Therapy and Research]

Deutsche Gesellschaft zum Studium des Schmerzes e. V. (DGSS) [German Association for the Study of Pain]

Deutsche Gesellschaft für Schmerztherapie e.V. (DGS) [German Pain Therapy Association]

Deutsche Migräne- und Kopfschmerzgesellschaft e. V. (DMKG) [German Migraine and Headache Association]

Each of the contributing associations can send one member and one representative to the examination committee with a total of one vote. They need to hold a certificate according with the guidelines at hand or a degree of equal qualification. The members and the representatives elect one chairperson as a fifth, voting member who implements the resolutions made by the commission. Resolutions made by the commission require a majority of the five votes that can also be collected in written form. Members and their representatives may hold their office for two years. The term of office of the chair ends by election of his/her successor.

In their resolutions and suggestions for change, the examination committee will make all efforts to follow the relevant guidelines by the responsible, without taking responsibility of complete compatibility.

2) The expertise necessary for the work of the pain-specialized clinical psychologist can only be conveyed by those institutions that offer: a qualified one-year curriculum of specific pain management psychotherapy, the continued/advanced vocational training which accord with these guidelines, and have undergone quality assessment by the examination committee. Recognition by the examination committee has to be applied for once a year and at least three months prior to the beginning of the first curricular event.

Close cooperation is to be established between institutions and pain therapeutic organizations or pain-centers, as well as a scientific institution (e.g. university) which is teaching and conducting research in the fields of clinical and medical psychology, psychosomatics, and psychotherapy.

The fee-based recognition of the curriculum is to be applied for at least three months in advance to the examination committee for specific pain management psychotherapy (DGPSF/DGSS/DGS/DMKG).

- 5) Switching between the curricula of the different institutions is possible upon approval of the examination committee.
- 6) Admittance to the continued/advanced vocational training requires authentication of the psychological or medical training for clinical psychology; cf. §1(3).
- 7) Necessary practical skills can only be acquired in those institutions involved in the care of patients suffering from chronic pain and accord with the guidelines at hand. These institutions need to be employing medical and psychological clinical therapists which have been approved by the associations granting the specific pain management psychotherapy certificate. Exceptions to the rule can be granted by the examination committee.

§ 6 Confirmation of completion

The continued/advanced vocational training in specific pain management psychotherapy will be certified once the following conditions have been met:

- 1) Authentication of a degree equivalent to a clinical psychologist in accordance with §1(3).
- 2) Verification of attendance of 80 hours of the courses which accord with the specific pain management psychotherapy guidelines and have been previously accredited by the examination committee.
- 3) Documentation of ten supervised clinical-psychological case studies in which pain makes up the focus of treatment. A maximum of three case studies can be substituted with the documentation of three group treatments. Three different pain disorders should be described by the 10 supervised case studies.
- 4) Verification of regular participation at an interdisciplinary pain conference over the course of at least two years with a mean frequency of 10 pain conferences per year, as well as a minimum half-year participation in or a two-year close cooperation with a pain-therapeutic institution.
- 5) Verification of a minimum of 25 hours of individual supervision of the clinical-psychological work with patients suffering from pain. In the case of group supervisions, only the time spent on the individual person will be considered. Supervisors need to be accredited as a clinical psychologist or medical psychotherapist, have pain-therapeutic experience, and be confirmed by the examination committee for "specific pain management psychotherapy DGPSF/DGSS/DMKG".
- 6) Verification of having met all payments of the evaluation and examination fees.

- 7) Participation in an examination colloquium which concentrates on the individual practical pain-therapeutic work and its scientific justification. If professional quality standards are not met, further requirements can be set for the applicant (e.g. corrections of case studies, handing in new case studies).
- 8) Once the graduation certificate "specific pain management psychotherapy" has been issued, the recipient will pledge to visit interdisciplinary pain conferences or colloquiums regularly with a mean of ten times per year, and will further deepen their training interdisciplinarily for at least 30 hours per year, and, in addition to their active participation in conferences, will further continue their practical-clinical work in the care of patients suffering from pain and will continuously employ standardized documentation.
- 9) The decision by the examination committee can be appealed against. This written objection can be entered in the course of four weeks upon delivery of the written decision. If no agreement is reached, the complainants will be referred to their relevant chambers.

§ 7 Going into effect and transitional agreements

- 1) The amendments of these guidelines enter into force on January 1st, 2006.
- 2) Those candidates whose continued/advanced vocational training is already in progress can complete their training until December 31st, 2006 under the previously valid guidelines.
- 3) Changes to these guidelines will be prepared by the "collective examination committee" and will be announced upon approval by the presidia of the associations involved.

Catalog of learning objectives

This syllabus of learning objectives describes the skills and competences (knowledge, acquirements, approaches) required for graduation and will offer an overview to the recommended literature on the respective subject.

Learning objectives are:

- 1. Theoretical knowledge (medical and psychological foundations, models, development, mechanisms of chronification, disorders, epidemiology, symptoms, diagnostics, and medical and psychological treatments)
- 2. Practical skills (employing diagnostic methods, discriminating the differential diagnostics of the treatment, implementing therapeutic interventions).

Part 1 of the catalog of learning objectives includes the course content required for the final examination.

Part 2 describes the additional, elective content of the specific pain management psychotherapy program.

Part 1: Mandatory course contents

	Psychological foundations (approx. 8 hours) (M. Hüppe & P. Nilges)		
1	Concept of chronic pain (Biopsychosocial model)	 Definition of pain according to the IASP: Specific features of pain: Affective and sensory components as elements of pain experience Acute pain vs. chronic pain: Differences of diagnostic strategies and psychological interventions Result and condition: Reliability and validity of medical diagnostics Consequences of an over or misdiagnoses for the illness-related behavior of the patient Analgesic placebo and nocebo effect: Development and maintenance of expectations and conditioning; context-dependence; the role of the endogenous opiate system; practical implications: how can the placebo effect be actively used in pain therapy? Pain matrix (parallel processing of cognitive, affective, and behavioral pain components in the CNS) Pain and psyche: Typical problems and conflicts in the relationship between patient and practitioner resulting from the "characteristic features" of chronic pain (helplessness, suspicion, pressure to succeed) Pain ratings (NRS, VAS) as critical "interface" between patient and practitioner 	
2	Chronification of pain: Process and diagnostics	 Psychological mechanisms and influential factors of pain chronification: Emotion, cognition, behavior Iatrogenic factors Conflicting goals Learning processes (classical and operant conditioning, observational learning) Diagnostics of chronification Grading concepts (e.g. von Korff) Staging concepts (e.g. MPSS; amplification model Risk factors (yellow flags) for pain chronification Post-surgical pain chronification (frequency of post-surgical pain) Change of psychological pain diagnostics: From "psychogenic" pain to F45.41 	

3	Epidemiology of chronic pain Efficacy of pain-therapy	 Patient values (cf. Frettlöh et al., 2009) Prevalence and incidence rates [sex differences] Pain and psychological disorders: population studies vs. clinical population Epidemiological studies Pain and quality of life (health survey) Success versus effectiveness/efficacy (separation of concepts) Parameters of efficacy/effectiveness and success Meta-analyses and their values (OR; NNT; ES;)
	Reader	 Selected meta-analyses Kröner-Herwig B (2011) Schmerz-eine Gegenstandsbestimmung. In: Kröner-Herwig B, Frettlöh J, Klinger R & Nilges P (eds) Schmerzpsychotherapie (7th
		 edition). Berlin, Springer Pfingsten M, Korb J, Hasenbring M (2011) Psychologische Modelle der Chronifizierung und Risikofaktoren. In: Kröner-Herwig B, Frettlöh J, Klinger R & Nilges P (eds) Schmerzpsychotherapie (7th edition). Berlin, Springer Senf, W, Gerlach G (2011) Psychodynamische Psychotherapie bei chronischen Schmerzen. In: Kröner-Herwig B, Frettlöh J, Klinger R & Nilges P (eds) Schmerzpsychotherapie (7th edition) Berlin, Springer Kröner-Herwig B (2011) Die Schmerzpersönlichkeit – eine Fiktion? In: Kröner-Herwig B, Frettlöh J, Klinger R & Nilges P (eds) Schmerzpsychotherapie (7th edition). Berlin, Springer
		 Mayer D (2004) Essential evidence-based medicine. Cambridge: Cambridge University Press (esp. chapter 31: Meta-analysis and systematic reviews)
		 Frettlöh J, Maier C, Gockel H, Zenz M, Hüppe M. (2009) Patientenkollektiv deutscher schmerztherapeutischer Einrichtungen. Der Schmerz 23: 576-591
		 Hüppe, M., Frettlöh, J., Gockel, H., Zenz, M. & Meier, C. (2011) Behandlungserfolg auch bei höherer Schmerzchronifizierung? Eine Auswertung des Mainzer Stadienmodells auf Basis der QUAST-Analysestichprobe. Der Schmerz, 25: 77-88

	Medical founda	tions and specific disorders (approx. 4 hours) (B. Nagel)
1	Anatomy, physiology, and pathophysiology of the pain nervous system	 Noxious stimuli, nociceptors, and nociception Afferent pain pathways (Aδ und C-fibers) Peripheral and central sensitization mechanisms Cortical restructuring and neuroplasticity Nociceptive vs. neuropathic pain
2	Foundations of medical- diagnostic measurements	 General medical anamnesis Specific medical pain anamnesis (e.g. quality, localization, intensity) Measurement instruments, rating scales Physical examinations (especially orthopedic and neurological) Essential laboratory parameters Possibilities and limitation of imaging (X-ray, CT, MRI, scintigraphy)
3	Specific disorders not introduced in an individual module	Pain in elderly, visceral pain: • Epidemiology • Symptomatology • Treatment strategies
	Reader	 Tewes U, Schedlowski M (2011) Neuroendokrinologie und Neuroimmunologie. In: Kröner-Herwig, B., Frettlöh, J., Klinger, R. & Nilges, P (eds) Schmerzpsychotherapie (7th edition). Berlin, Springer Zenz M, Jurna I (2001) Lehrbuch der Schmerztherapie. (2nd edition), Wissenschaftliche Vertragsgesellschaft mbH Stuttgart

	Medical pain treatment (approx. 4 hours) (S. Hesselbarth; D. Kindler)		
		Medicinal pain treatment	
1	Foundations of medicinal treatment	General rules concerning the use of analgesics and their risks	
2	Categorization and modes-of-action of the medications	 WHO - grade scheme Non-opioids Stage II opioids Stage III opioids Co-analgesics: Antidepressants, anticonvulsant drugs, muscle relaxants 	
3	Basics	 Indications for the implementation of different drugs and their combination Contraindications Side effects Therapy planning Therapy surveillance Guidelines of the Association of the Scientific Medical Societies in Germany (orig.: Arbeitsgemeinschaft der Wissenschaftlichen Medizinischen Fachgesellschaften AWMF) (LONTS) 	
4	Special risks of opioids	 Tolerance, physical, and psychological dependencies, addiction, misuse Opioid-induced hyperalgesia 	
5	Withdrawal	 Medical therapy Approach/special characteristics when using different active ingredients in drug-induced headache, opioid withdrawal, etc. Demarcation of outpatient and inpatient approaches 	
	Diagnostic and therapeutic local anesthesia		
1	Classification	 Knowing the most important forms of LA, e.g. infiltration, injection, nerve blockage, plexus anesthesia, spinal anesthetics procedures, sympathetic block, surface anesthesia, intrathecal anesthesia and medication 	
2	Basics	 Indications and contraindications Risks, possible complications, and side-effects Importance of LA in the multimodal treatment concept Planning, execution, and follow-up 	

	Furthe	r non-invasive medical pain treatments
1	Acupuncture	 Indications, contraindications Treatment concepts Importance in the multimodal treatment concept
2	Transcutaneous nerve stimulation	Mode-of-action Indications, contraindications Importance in the multimodal treatment concept
		Invasive pain treatment
1	SCS	 Mode-of-action Indications, contraindications Guidelines of the AWMF on epidural spinal cord stimulation Diener HC, Maier C (2009) Die Schmerztherapie – Interdisiplinäre Diagnose- und Behandlungsstrategien
		 (3rd edition). München, Urban & Fischer Verlag. Zenz M, Jurna I (2001) Lehrbuch der Schmerztherapie (2nd edition) Wissenschaftliche Vertragsgesellschaft mbH Stuttgart
		AWMF online. Leitlinie Langzeitanwendung von Opioiden bei nichtumorbedingten Schmerzen (LONTS) http://www.uni-duesseldorf.de/AWMF
		AWMF online. Leitlinie Epidurale Rückenmarkstimulation zur Therapie chronischer Schmerzen http://www.uni-duesseldorf.de/AWMF

	Interdisciplinarity (approx. 2 hours) (M. Pfingsten, K. Hafenbrack, R. Klinger)		
1	Definition and goals	 Differentiation from multidisciplinarity and from consulting Concept of the disorder/ biopsychosocial model Scientific evidence 	
2	Participating professions and their specialties	 Psychologists, physicians of different disciplines, physical and occupational therapists, nursing staff, social service employees 	
		 Levels of cooperation (diagnostics, therapy) in different pain disorders 	
3	Role/ task of pain psychotherapists in the interdisciplinary context	 Diagnostics and therapy in comorbid disorders Inclusion of psychological aspects of the patient's case into the interdisciplinary collaboration 	
		interdisciplinary thinking and action-related competences in the multimodal treatment approach	
4	Forms of collaboration	Different settings (outpatient, day-clinics, inpatient) and treatments (individual, group therapy)	
		Division of labor and mutual referencePossibilities and limitations	
5	Problems in collaboration	 Overlap of different professions Lack of willingness and competence Transgression of competences and responsibilities Differing definition or biopsychosocial understanding of disorder 	
6	Forms of organization	 Interdisciplinary team meetings Pain conferences with interdisciplinary case study presentations Clinic conferences 	
	Reader	 Kröner-Herwig B, Frettlöh J (2010) Behandlung chronischer Schmerzsyndrome: Plädoyer für einen mutliprofessioneller Therapieansatz. In: Kröner-Herwig, B., Frettlöh, J., Klinger, R. & Nilges, P (eds) Schmerzpsychotherapie (7th edition). Berlin, Springer 	

	Anamnestic and diagnostics (approx. 8 hours) (A. Diezemann, P. Nilges)		
1	Initial contact	Handling motivation deficitsFavorable forms of making contact	
2	Subjects in anamnesis	 Essential aspects of the specific pain anamnesis, e.g. disorder development, influence factors, models of the patients, impairments, existing pain coping repertoire, etc. Diagnostics of pain behavior, and experience of emotional, cognitive, behavioral, and physical elements Essential aspects of the general biographical anamnesis, behavioral observations, personality in connection with the pain 	
3	Diagnostics	 Knowledge of the most important pain-specific questionnaires (PDI, SF36, SF 12, FABQ, FESV, CPAQ, ADS, HADS, FF-STABS) Application of MASK P Application of "Photos of Daily Activities" (Phoda) for the exploration of the anxiety hierarchy Purpose, application, limitations of pain diaries 	
4	Diagnoses	 Knowledge of the diagnostic criteria and differentiation of the different pain-relevant F-Diagnoses (F 54, F 45.41, F 62.80, F 45.4) 	
	Reader	Nilges P, Diezemann A (2011) Schmerzanamnese. In: Kröner-Herwig, B., Frettlöh, J., Klinger, R. & Nilges, P (eds) Schmerzpsychotherapie (7th edition). Berlin, Springer	
		 Kröner-Herwig B & Lautenbacher S (2011) Schmerzmessung und klinische Schmerzdiagnostik. In: Kröner-Herwig, B., Frettlöh, J., Klinger, R. & Nilges, P (eds) Schmerzpsychotherapie (7th edition). Berlin, Springer 	
		Klinger R et al. (2000) Die Multiaxiale Schmerzklassifikation (MASK) Band 1: Psychosoziale Dimension – MASK-P. Hamburg, Deutscher Schmerzverlag	

	Methods of behavioral therapy (approx. 8 hours) (A. Diezemann, J. Frettlöh)		
1	Education	 Content of the education (biopsychosocial model, difference between acute and chronic pain, interdisciplinarity) Realistic goal-setting of pain therapy, pain coping mechanisms and influence factors, reinforcing and inhibitory mechanisms Mediation methods 	
2	Symptom vs. problem- oriented approaches	Difference between the approachesDifferential indicationSetting-related limitations	
3	Reducing fear avoidance Relaxation/	 Developing a disease model Planning and implementing expositions Strategies of conveying the model 	
4	Guided imagery	 Strategies of conveying the model Special characteristics when using relaxation techniques Implementation of different techniques after differential indication, disorder, e.g. autogenic training (AT), breathing techniques, progressive muscle relaxation (PMR), imagery for sensory deprivation, hand warming imagery, muscular relaxation and improvement of body perception, etc. Conveying imagery techniques for relaxation and mental pain distancing Handling problems when training at home 	
6	Biofeedback	 Communicating the goals of the modes-of-action Possibilities of application in different disorders Technical requirements 	
7	Balancing/ regulating rest and activities	 Approach to reducing dysfunctional perseverance Problems in establishing appropriate activities Creating quota plans to distribute mental stress Planning and filling times of rest 	
8	Behavior analysis	 Special aspects of pain psychotherapy when implementing the vertical and horizontal behavioral analysis Approach to establish alternative behavior in the patient 	
9	Acceptance	 Forming a pain and disorder acceptance Confronting self-perception Establishing realistic goals Establishing flexible behavior despite the pain Training mindfulness 	
10	Cognitive methods	 Communicating cognitive strategies to handle adverse emotions Fundamental stance towards illness and health (metacognition) Deflection strategies Limitations of cognitive methods 	
11	Operant aspects	Reinforcing operant factors	

	 Pain-incontinent behavior, e.g. quota plan Limitations of operant models Handling conflicting goals
Reader	 Basler HD, Kröner-Herwig B (eds) (1998) Psychologische Schmerztherapie bei Kopf- und Rückenschmerzen: Das Marburger Schmerzbewältigungsprogramm zur Gruppen- und Einzeltherapie (2nd updated edition). München, Quintessenz
	 Bruns T, Praun N. (2002) Biofeedback. Ein Handbuch für die therapeutische Praxis. Göttingen, Vandenhoeck & Ruprecht
	Dahl J, Wilson KG, Luciano C. (2005) Acceptance and Commitment Therapy for chronic Pain. Context Press
	 Fiedler P (1995) Verhaltenstherapie in Gruppen - Grundkonzepte und Perspektiven. Psychotherapeut, 40, 43-50.
	 Frettlöh J, Hermann C (2011) Kognitiv-behaviorale Therapie. In: Kröner-Herwig, B., Frettlöh, J., Klinger, R. & Nilges, P (eds) Schmerzpsychotherapie, (7th edition), Berlin, Springer Verlag.
	 Frettlöh J (1999) Einzel- und Gruppentherapie in der Behandlung chronischer Schmerzen – Gibt es Effektivitätsunterschiede? Zeitschrift für Klinische Psychologie, 28 (4), 256-266. Göttingen, Hogrefe
	Glier B (2002) Chronischen Schmerz bewältigen. Leben lernen 153, Stuttgart, Pfeiffer bei Klett-Cotta.
	 Lücking M & Martin A (2011) Entspannung, Imagination und Biofeedback. In: Kröner-Herwig, B., Frettlöh, J., Klinger, R. & Nilges, P (eds) Psychologische Schmerztherapie, (7th edition) Berlin, Springer Verlag.

Psychodynamic pain concepts and interventions (approx. 8 hours) (C. Derra)		
1	Basic concepts	 Concepts of the psychological development, especially emotional development Childhood strains and protective factors Secure and insecure attachment Defense mechanisms/ coping strategies Life events Transference/ countertransference
2	Psychodynamic explanations of the development of pain	Pain prone personality (G.C.Engel) Models of symptom development
3	Diagnostics	 Special features of the psychodynamic biographical anamnesis Importance of attachment behavior Diagnostics with the operationalized psychodynamic diagnostics (OPD) Experience of the disorder and requirements for the intervention Relationship Conflict Structure Syndrome level (ICD 10)
4	Psychodynamic therapy interventions for pain	 Indication, contraindication Principles of treatment, setting Necessary modifications in individual or group therapy settings Handling transference and countertransference Integration into an interdisciplinary treatment regime
	Reader	 Egle U, Hoffmann S, Lehmann K, Nix W (2003) Handbuch Chronischer Schmerz, Schattauer Stuttgart Arbeitskreis OPD (2004) Operationalisierte Psychodynamische Diagnostik – OPD Grundlagen und Manual, Huber Verlag, Bern Senf W, Gerlach G (2011) Psychodynamische Psychotherapie bei chronischen Schmerzen. In: Kröner-Herwig, B., Frettlöh, J., Klinger, R. & Nilges, P (eds) Schmerzpsychotherapie (7th edition). Berlin, Heidelberg, Springer

Acute and chronic back pain (approx. 8 hours) (M. Pfingsten, R. Klinger, K. Hafenbrack, B. Nagel)

<u> </u>	Medical foundations and treatment			
1	Epidemiology	Frequency		
		Health economic importance		
2	Anatomic foundations	 Structural composition of the spinal chord 		
	Biomechanics of the SC	 Nerval structures 		
		Ligaments, fasciae		
		 Global and local muscular systems 		
		 Posture, stabilization of the PC 		
		Core stability		
3	Diagnostics	Specific pain anamnesis		
		- Pain characteristics		
		- Stimulus, reinforcement		
		- Concomitant symptoms		
		Physical examination		
		- Orthopedic		
		- Manual diagnostics		
		- Neurological		
		 Warning signs for a serious illness 		
		(red flags)		
		 Significance of imaging methods 		
		 Additional diagnostic measures 		
		- Neurophysiology		
		- Laboratory tests		
		Interdisciplinary assessment		
4	Pathophysiology	Specific back pains		
	Differential diagnostics	e.g.: Spondylolisthesis, scoliosis		
		Osteoporosis, inflammations,		
		radicular pain (discogenic pain, osseous defect)		
		activated osteochondrosis, Spondylarthritis		
		spinal stenosis, extravertebral causes (pelvis, abdomen,		
		tumors)		
		Non-specific back pain		
		e.g. muscular imbalance, shortening,		
		diminution, false posture, tension,		
		coordination deficits, dysfunctional (core) stability		
		ligament insufficiency		
5	Treatment	• Education		
		Medicinal treatment		
		Physical interventions		
		Physical therapy/ training therapy		
		Manual therapy		
		Interventional approaches		
		Surgical therapy options		
		Multimodal therapy programs (functional restoration)		
		National guidelines back pain		
	Psychological treatment			

 Special characteristics of diagnostics in back pain Back pain characteristics in the clinical inte habitual features such as 'keep going') Patient characteristics (subgroups) Disease models/ risk factors Risk factors for chronification of back pain, psychosocial risk factors (yellow flags) and (note: recommendations of the European gacute and chronic non-specific back pain as national care-S3-guidelines for back pain from the importance of risk factors in surgical in (recommendations of the AWMF-S3 guidelines witreatment of acute perioperative and post 	especially their detection guidelines for s well as the rom 2010)
factors psychosocial risk factors (yellow flags) and (note: recommendations of the European gacute and chronic non-specific back pain as national care-S3-guidelines for back pain from the importance of risk factors in surgical in (recommendations of the AWMF-S3 guidelines).	their detection guidelines for s well as the rom 2010) nterventions
pain") • Models of the development and maintenan back pain, especially fear avoidance model model (evidence)	traumatic ace of chronic
3 Special therapeutic • Multimodal treatment (structure and process	ss quality)
approaches in back pain (evidence)	
Concept of functional restoration	
Approaches of cognitive behavioral therapy	
Forms of implementation (outpatient, day-	clinic,
inpatient)	a attiva ta la a al-
 Interdisciplinarity Role and tasks of the different professions pain diagnostics and treatment (esp. psych doctors, physical and sports therapists) Forms of mutual reference/ division of task Possibilities and limitations of cooperation 	nologists,
 Education Necessary back pain specific contents: Biopsychosocial model Disorder as process Necessary content of the medical lessons Fear/ avoidance concept Functional restoration concept (goal: Orie towards functioning Participants/ communication methods 	
 Basler HD, Kröner-Herwig B (eds) (1998) P Therapie bei Kopf- und Rückenschmerzen. Quintessenz Pfingsten M, Korb J, Hasenbring M (2011) Mechanismen der Chronifizierung. In: Krön Frettlöh, J., Klinger, R. & Nilges, P (eds) 	München, Psychologische
 Schmerzpsychotherapie, Kapitel Behandlun Springer Verlag Hildebrandt J, Pfingsten M et al. (2003) GR Manual. Conress-Verlag, Berlin. 1-183 Kröner-Herwig B (2000) Rückenschmerzen Hogrefe (Reihe: Fortschritte der Psychothe 	RIP – Das . Göttingen:

- Pfingsten M (2005) Multimodal Was ist das überhaupt?
 Man Med 43: 80-84
- Pfingsten M (2005) Die Behandlung von Rückenschmerzen als Angsttherapie. Psychotherapie im Dialog (PID) 6: 52-57
- Pfingsten M, Hildebrandt J (2011) Rückenschmerz. In: Kröner-Herwig, B., Frettlöh, J., Klinger, R. & Nilges, P. (eds). Schmerzpsychotherapie (7th edition), Berlin, Springer.
- AWMF online. Guidelines back pain http://www.uni-duesseldorf.de/AWMF

	Headache (approx. 8 hours) (G. Fritsche, J. Korb, B. Nagel) Medical foundations and treatment			
1	Epidemiology	Frequency of the most important forms of headache (esp. tension headaches, migraine)		
2	Classification of headaches	 Classification by the International Headache Society (IHS) Distinction between primary and secondary headache syndromes 		
3	Warning signals	Recognizing symptoms of serious neurological or oncological comorbidities		
4	Diagnostics	 Distinguishing between primary and secondary headaches IHS criteria of the most important types of headache: Tension headache Migraine Trigeminal autonomic types of headache Trigeminal neuralgia Atypical facial pain Headaches in craniomandibular dysfunction Medication-induced headaches Apparative Diagnostics: Measures and indications Triggers of headache (Oleson Model) Muscular-skeletal factors Vegetative factors Psychological, situational factors 		
5	Pathophysiology	 Migraine tension headache trigeminal autonomic forms of headache trigeminal neuralgia 		
6	Therapy	 Medicinal acute therapy of the most important forms of headache (esp. tension headache, migraine) Medicinal prophylaxis Non-pharmacological methods (e.g. physical therapy, cardio training, therapeutic regional anesthesia, acupuncture) 		
	Migraine			
1	Pathophysiology	Describing behavior and feelings psychologically in: Prodromal phase Aura phase Pain phase Postdromal phase Interictal		
2	Pathopsychology	 Defining core hypotheses on the following models: 		

		Migraine personality
		Diathesis-stress model
2	Tribuna	Migraine as a stimulus processing disorder
3	Trigger	Differentiating actual triggers from trigger-myths
4	Psychometric	Providing suitable instruments in the headache field Providing indications for headache displace.
	diagnostics/ psychological	Providing indications for headache diariesIntroducing exploration guides and strategies
	exploration	Thiroducing exploration guides and strategies
5	Evidence-based non-	Emphasizing the significance of current methods:
	medical treatment	Unimodal: PMR, BFB
		Activating interventions
		Multimodal: cognitive behavioral therapy
		 Alternative methods: acupuncture, homeopathy,
		diets, etc
		principles of treatment in children
6	Mechanism-based	Conveying basic modules of the "minimal-contact
	psychological	program" by the German Headache Consortium:
	treatment	Favorable and unfavorable lifestyles
		Analyzing and dealing with triggers Madificiant deficient as a superpose and a straight as
		Modifying deficient energy-management patternsReevaluating values and beliefs
		 Exploration of attitudes towards illness and
		health
	•	
	Med	dication overuse headache (MOH)
1	Clinic	Differentiating chronic headache from MOH
		Clinical differences of migraine and headache with regard
	B.I. I.I.	to tension-type (KST)
2	Pathopsychology	 Dysfunctional intake behavior Fear of anxiety attacks
		Fear of anxiety attacksFear of capacity-loss
3	Withdrawal	Bridging medication
)	vviciaravvai	Initiating prophylaxis
		Psychological support during the withdrawal process
		Withdrawal in outpatient vs. inpatient vs. day-clinic
		settings
4	Relapse	Relapse rate
		Relapse predictors
5	Abuse prevention/	Intake protocol
	post-withdrawal care	Restriction of pain and migraine drugs
		Relief of shame Identification of conditioned intoles helpevier
		Identification of conditioned intake behaviorClassification of risk situations
		 Classification of risk situations Management of risk situations
		- Management of HSK Situations
		Tension-type headache
1	Psychological models	Critical analysis of personality theories
	for tension-type	Theories of learning (pos./neg. reinforcement;
	headache	observational learning; lack of reinforcement of healthy

		behavior)
2	Diagnostic measures	 Hypothesis of muscle hyperstrain (orig.: Muskelmehrarbeitshypothese, Bischoff & Traue) Inhibited emotional expression (Traue) Body perception and awareness (Bischoff) Using the pain diary Identifying triggers Recognizing favorable/ unfavorable influential factors
3	Conveying the model/ education	Methods for communicating the specific headache models
4	Therapeutic interventions	 Cognitive techniques; reduction of dysfunctional cognitions, catastrophizing Body and stress awareness Stress coping strategies Social competences Problem solving training Using relaxation/ brief exercises Using biofeedback in headache Relapse prophylaxis
5	Headache treatment in children	Content and possibilities of a child-friendly introduction to treatment based on the training manuel "Stop the headaches"
	Reader	 Basler HD, Kröner-Herwig B (1998) Psychologische Therapie bei Kopf- und Rückenschmerzen (2nd edition). München, Quintessenz Bischof C, Traue H (2004) Kopfschmerzen. Göttingen, Hogrefe Bischoff C, Traue HC (2011) Kopfschmerz vom Spannungstyp. In: Kröner-Herwig, B., Frettlöh, J., Klinger, R. & Nilges, P (eds) Schmerzpsychotherapie (7th edition). Berlin, Springer Bischoff C, Zenz H, Traue HC (2003) Kopfschmerz. In: R.H. Adler, J.M. Herrmann, et al. (eds) Uexküll Psychosomatische Medizin (pp. 817-834). München, Urban & Fischer Denecke H, Kröner-Herwig B (2000) Kopfschmerztherapie mit Kindern und Jugendlichen; ein Trainingsprogramm. Göttingen, Hogrefe Fritsche G & May A (2011) Migräne. In: Kröner-Herwig, B., Frettlöh, J., Klinger, R. & Nilges, P (eds) Schmerzpsychotherapie (7th edition). Berlin, Springer Fritsche G (2011) Medikamenteninduzierter Kopfschmerz. In: Kröner-Herwig, B., Frettlöh, J., Klinger, R. & Nilges, P (eds) Schmerzpsychotherapie (7th edition). Berlin, Springer

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 Born to be wild oder doch gelernt? Neue
 verhaltensmedizinische Erkenntnisse zur Ätiopathogenese
 der Migräne ['Born to be wild or learned? New behavioral
 medicine findings in the etiopathogenesis of migraine].
 Verhaltenstherapie; 6: 210-22
- Göbel H (2003). Die Kopfschmerzen: Ursachen, Mechanismen, Diagnostik und Therapie in der Praxis., (2nd edition). Berlin, Springer
- The International Classification of Headache Disorders.
 2004) Cephalalgia: An International Journal of Headache,
 24:1

	Neuropathic pain Medical foundations and treatment (approx. 4 hours) (J. Frettlöh, D. Kindler & B. Nagel)		
1	Definition of terms and epidemiology	Differentiating neuropathic pain from nociceptive pain	
2	Typical disorders and their clinical symptoms	 Phantom pain CRPS Peripheral nerve damage Trigeminal neuralgia Polyneuropathy Pain after spinal cord injury 	
3	Diagnostics	 Electroneurographic methods QST Imaging: X-ray, 3-phase bone scan, MRI Multimodal Assessment 	
4	Pathophysiology	 Peripheral sensitization Central sensitization Sympathetic-afferent coupling Sympathetically maintained pain (SMP) 	
5	Therapy	 Therapy goals Pain reduction Rehabilitation of functioning Pharmacotherapy Physical therapy, occupational therapy (incl. mirror box, sensorimotor-perceptive training) Interventional measures (GLOA; Sympathetic block) Multimodal therapy 	
	Neuro	pathic pain – psychologic treatment (J. Frettlöh)	
1	Education	 Course content (education on the disorder, e.g. what we know about phantom pain, CRPS, Polyneuropathy) Introducing methods of mediation (educational videos, leaflets, case studies, etc.) 	
2	Stabilization	 Early integration of illness-related fears (disability, permanent physical impairments, daily handicaps) Relief-interventions for initially influencing anxiety and psychological stress 	
3	Acceptance	 Enhancing insight and acceptance (especially difficult in patients with phantom pain or CPRS) Confronting self-perception Establishing realistic goals Creating flexible behavior despite pain Training mindfulness 	
4	Self-perception	 Techniques to enhance self-perception with regard to physical and psychological stress limits Changing body image and body schema In CRPS: Understanding and overcoming the "neglect-like-symptom" 	

		 Analyzing and addressing "inner barriers" in physical reorientation
5	Guided imagery/ relaxation	 Special characteristics when applying relaxation techniques in neuropathic pain Learning specific, esp. imagery-based techniques for relaxation and mental pain distancing Handling problems when training at home
6	Fear avoidance	 Learning about the connection between pain and disuse of sick extremities Planning and implementing guided imagery techniques (imagined movement) to prepare for occupational and physical therapy
7	Regulating activities	 Procedure when forming suitable physical and social activities Creating quota plans to distribute mental stress Planning and filling times of rest Establishing social skills by including social support network (family and work)
8	Trigger-analysis	 Analysis of pain-enhancing factors in daily life Therapeutic approach when constructing alternative behavior options with the patient
9	Cognitive methods	 Learning about cognitive strategies for handling adverse emotions or adverse interactions General stance on illness and health (metacognition) Techniques on shifting focus of attention
10	Resocialization	 Progressive (re-)activation of physical, social, and vocational activities Where necessary, support in changing jobs or careers
11	Operant aspects	Identifying pain-maintaining factorsHandling conflicting goals
	Reader	 Maier C, Baron R, Frettlöh J et al. (2009) Neuropathischer Schmerz. In: Diener HC, Maier C (eds) Das Schmerztherapiebuch (3rd edition). München, Urban & Fischer Verlag
		 Frettlöh, J, Maier C, Schwarzer A (2011) Neuropathischer Schmerz unter besonderer Berücksichtigung von Phantomschmerzen und CRPS. In: Kröner-Herwig, B., Frettlöh, J., Klinger, R. & Nilges, P (eds) Schmerzpsychotherapie (7th edition). Berlin, Heidelberg, Springer
		 Bruehl S, Chung OY (2006) Psychological and behavioural aspects of complex regional pain syndrome management. The Clin J Pain 22: 430–437

	Fibromyalgia syndrome (FMS) — medical foundations and treatment (approx. 2 hours) (B. Nagel)		
1	Diagnostic criteria fibromyalgia syndrome	 American College of Rheumatology (ACR) Interdisciplinary S3 guidelines 2008 Wide spread pain (WSP) Tender points (ACR) Attendant symptoms Functional somatic syndrome 	
2	Frequency	Wide Spread Pain (WSP)Fibromyalgia syndrome (FMS)	
3	Differential diagnostics	Myofascial pain disordersRheumatological disorders	
4	Pathophysiology	 Dysfunction of central pain processing Hyporeactivity of the hypothalamic-pituitary-adrenal system Dysfunctional growth hormone system Changes of the dopaminergic and serotonergic systems Biopsychosocial model of the development of FMS 	
5	Treatment	 Education Activating kinesiatrics Physical interventions Physical therapy und training therapy including the enhancement of self-management Aerobic endurance training Fostering self-management Multimodal therapy programs Treading comorbid somatic und psychological disorders 	
	Rheumatism – Medi	cal and psychological foundations and treatment (approx. 2 hours) (S. Hesselbarth, I. Heidrich)	
1	Classification of disorders	 Learning about the most importing disorders and their subclassification Inflammatory rheumatic diseases, e.g. rheumatoid arthritis, ankylosing spondylitis, psoriatic arthritis Degenerative diseases, arthrosis Metabolic disorders associated with rheumatic problems such as gout and osteoporosis Other rheumatic diseases, e.g. fibromyalgia and polymyalgia rheumatica 	
2	Medical diagnostics	Anamnesis und clinical findings Imaging Findings from the laboratory	

3	Psychological diagnostics und evaluation	 Recommendations for rheumatic illnesses with regard to pain-related data Coping with the illness General physical well-being Physical impairments and psychosocial stressors
4	Levels of prevention	Overview of psychological levels of prevention (primary, secondary, tertiary) in rheumatic illnesses
5	Medical treatment	Medicinal Non-medicinal
6	Education	 Specific education of inflammatory rheumatic disorders Models of coping Psychoneuroimmunology
7	Psychological interventions in chronic polyarthritis	 Introduction, steps and implementation of a visualization training Cognitive framework Preparation: Creative Imagination Scale (Jungnitsch G, 2003) Conveying specific interventions fostering the immune system
8	Evaluation of the visualization training	 Effects on pain coping, pain intensity, subjective well- being, and blood sedimentation rate
9	Psychological interventions in Bechterew's disease	 Variation of PME in motion In-depth knowledge on the pain behavior with regard to specific body posture and limited mobility
	Reader	 Jungnitsch G (2003) Rheumatische Erkrankungen, Göttingen, Hogrefe Thieme K, Gracely RH (2011) Das Fibromyalgiesyndrom. In: Kröner-Herwig, B., Frettlöh, J., Klinger, R. & Nilges, P (eds) Schmerzpsychotherapie (7 edition). Berlin, Heidelberg, Springer AWMF online. Guidelines Fibromyalgia http://www.uni- duesseldorf.de/AWMF

	Cancer pain (approx. 4 hours) (A. Willweber-Strumpf, B. Nagel)		
	Me	dical foundations and treatment	
1	Prevalence and significance of tumor pain	In diagnosticsIn the course of the disease	
2	Types of pain in tumor diseases	 Pain: Tumor induced Tumor associated Therapy induced Tumor independent 	
3	Pain mechanisms in tumor pain	 Nociceptive pain Soft tissue pain Ischemia pain Bone and periosteal pain Visceral pain Neuropathic pain Peripheral (nerve, nerve plexus, nerve root) Central (spinal cord, brain) Sympathetic 	
4	Foundations of diagnostics	 Differential pain anamnesis Comprehensive physical examination Additional apparatus-based methods 	
5	Therapy methods	 Tumor reducing interventions Palliative chemotherapy Radiotherapy Surgery Systemic pharmacotherapy (WHO grade scale) Oral, rectal, transdermal Subcutaneous, intravenous	
6	Systemic pharmacotherapy	 General principles Oral, transdermal By the clock By the phase plan Individual Slow-releasing long-term medication PRN medication for breakthrough pain Adjuvant therapy Antidepressants Anticonvulsives Cortisone Anxiolytics Hypnotics Laxantives Antiemetics 	

7	Palliative care	Foundations	
8	Final phase	Treatment principles	
	Psychological foundations and treatment		
1	Foundation	 Prevalence of psychological symptoms Cultural and religious factors Interdisciplinary approach 	
2	Communication and counseling techniques	 Medical education/ information Conveying bad news Communication with relatives Communication in an interdisciplinary team 	
3	Coping with the disorder	Models, stagesDefense mechanismsCoping	
	Diagnostics	 Foundations: process of the disease, subjective experience and consequences; subjective well-being, current problems; social relationships; individual system of values, norms, and goals; resources, biography, personality Tumor specific measurement tools 	
4	Diagnostics of anxiety, depression/ sadness	 Psychological diagnostics Somatic, medical, medicinal influential factors Differentiating illness from normal stress response 	
5	Special characteristics of the psychological pain therapy	 Need for intervention Differentiating counseling – crisis intervention – psychotherapy Goals Compliance Cognitive dissonance Acceptance Quality of life Fatigue Changes in body image Sexuality Including family members 	
Reader		 Eggebrecht D & Falkenberg M (2011) Tumorschmerz. In: Kröner-Herwig, B., Frettlöh, J., Klinger, R. & Nilges, P (eds) Schmerzpsychotherapie (7th edition). Berlin, Springer Willweber-Strumpf A (2002) Grundlagen der symptomatischen Schmerztherapie - Psychotherapie. In: Zenz M, Donner B (eds) Schmerz bei Tumorerkrankungen. Wissenschaftliche 	
		Verlagsgesellschaft, Stuttgart	

	Drug dependence, drug withdrawal (A. Willweber-Strumpf) (approx. 2 hours)		
1	Foundations	 Epidemiology: General population, pain patients Pharmacology: Drugs showing greater potential for dependence or addiction 	
2	Diagnostics	 Harmful use, abuse, addiction according to ICD 10 and DSM IV Physical dependence, psychological dependence (addiction) Signs and indications of harmful or non-intended use 	
3	Risk factors	Patient-relatedIatrogenic	
4	Prevention	Therapy rules (also iatrogenic)Education	
5	Drug withdrawal	 Indication inpatient/ outpatient Medical approach Psychotherapeutic interventions Relapse prevention 	
Reader		Glier B & Lutz J (2011) Medikamentenmissbrauch, - abhängigkeit und –entzug. In: Kröner-Herwig B, Frettlöh J, Klinger R, Nilges P (eds) Schmerzpsychotherapie (7th edition). Berlin, Springer	
		 Jage J, Willweber-Strumpf A, Maier C (2005) Risikofaktoren für Missbrauch und Abhängigkeit bei der Opioidtherapie chronischer nicht-tumorbedingter Schmerzen. Schmerz 19: 434 – 440 	
		AWMF online. Leitlinie Sucht: Medikamentenabhängigkeit. http://www.uni-duesseldorf.de/AWMF/II/076-009.htm	

	Methods of physical therapy (approx. 2 hours) (A. Lehmann)		
1	Clinical findings	 Approach and methods Significance of stasis and biomechanics Examples of findings on cervical spine/ jaw and lumbar spine 	
2	Patient education	 Conveying the concept of treatment Explaining application possibilities of the exercises Clarifying modes-of-action Enhancing motivation 	
3	Treatment	 Communicating findings Planning therapy steps Setting goals of treatment, e.g. improving functioning, eliminating imbalances Explaining the content of treatment, e.g. stretching, mobilization techniques, strengthening exercises, etc. 	
4	Treatment techniques of physical therapy	 Clarifying different PT techniques, e.g. manual therapy, osteopathy, Brunkow, PNF, foot reflexology treatment 	
5	Interventions in physical therapy	ThermotherapyTENSKneipp	
6	Transferring content to everyday life	 Assistance in transferring content to work and private contexts Exercise program adapted to everyday life 	
	Reader	 Denner A (1997) Muskuläre Profile der Wirbelsäule. Berlin, Springer 	
		 Dittel R (1992) Schmerz-Physio-Therapie. Lehr- und Handbuch des Neuromedizinkonzept. Gustav Fischer Verlag 	
		 Gutenbrunner C, Weimann, G (2004) Krankengymnastische Methoden und Konzepte, Therapieprinzipien und Techniken systematisch dargestellt. Berlin, Springer 	
		 Hildebrandt J et al. (2003) Göttinger Rücken-Intensiv- Programm (GRIP). Congress Compact 	
		 Kaltenborn F (1992) Manuelle Untersuchung und Mobilisation. Olaf Norlis Bokhandel 	
		 Schöps P (2009) Physikalische und manuelle Therapie. In: Diener HC, Maier C (eds) Die Schmerztherapie – Interdisiplinäre Diagnose- und Behandlungsstrategien (3rd edition). München, Urban 	

& Fischer Verlag

Part 2: Voluntary course contents

		Dain and aging
		Pain and aging (H.D. Basler, S. Hesselbarth)
		(III.D. Busici, S. Hesselburtii)
1	General	Demographic structure, change of the age pyramid
2	Geriatrics and	Terminological distinction
	gerontology	Definition of the geriatric patient
		Special health and social risk of the geriatric patient
		Pain sensation in elderly
3	Epidemiology /	Physiological changes in elderly (metabolism, functioning of organs)
	comorbidity	of organs) • Age-specific comorbidities
		Cognitive impairments and dementia
		Age-specific illnesses connecting with chronic pain
		Frequency of chronic pain in the population and care
		facilities
4	Anamnesis and pain	Special characteristics of pain anamnesis in elderly (pre-
	diagnostics	existing conditions, diagnostics, medication, clinical
		findings)
		Underreporting of pain and acceptance of pain
		 Age-specific pain diagnostic measures (questionnaires, pain rating scales, pain interviews)
		Pain measurement in cognitive impairment and dementia
		Fear of falling (fear avoidance)
5	Therapy goals	Promoting autonomy and functioning
	173	Education and competence training
		 Pain control as prerequisite for a training on functional
		and social skills
6	Medication and	Multimedication and drug-drug interactions
	medical pain therapy	Difficulty of the WHO-Step I Analgesics in elderly Analgesic intoles as home (a.g. start law) Analgesic intoles as home (a.g. start law) Analgesic intoles as home (a.g. start law)
		 Age-specific intake schemas (e.g. start low – go slow) Fall prevention in psychotropic medication
		Special characteristics of local anesthesia, physical
		therapy and other pain-therapeutic measures
7	Psychotherapy	Special characteristics of psychological treatments in
	, , , ,	elderly (e.g. shortening duration of sessions, smaller
		training steps in operant interventions, frequent
		feedback)
		Special significance of training physical and psychological
		functioning
		Treating psychological comorbidities Cognitive behavioral and supportive therapy intervention
		 Cognitive behavioral and supportive therapy intervention at terminal state
		Success of psychological interventions in elderly
8.	Care	Training the care personnel in pain methods
		Caregivers (family members and professional staff) as co-
		therapists
9.	Interdisciplinarity	Cooperation between medicine, physical therapy and
		care-takers
	Day 1:	Coordinating the treatment Output Description: Output Des
	Reader	Basler HD (2010) Schmerztherapie im höheren Lebensalter, In Standlet al. (eds.) Schmerztherapie
		Lebensalter. In Standl et al. (eds) Schmerztherapie.

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	Emotion-based psychological interventions (H.C. Traue)		
1	Theories on emotion	 Theories on the connection between emotion and pain (somatization, biopsychosocial concept, emotional inhibition) Theories on positive emotions Psychodynamic concepts (narcissistic defense mechanisms, conversion, somatic expression of affect, trauma and dissociation, neurobiology of empathy and pain) 	
2	Education	 Concept of emotion Functional significance of emotions and maladaptive emotions Psychobiology of emotions General therapeutic goals of emotion-based interventions Emotional exercises integrated in psychoeducation 	
3	Behavioral observation, clinical ratings and psychometrics	 MASK P (emotion-based criteria) Behavioral observation on facial expression, postures and gestures Observation of muscular tension Questionnaires (e.g. on alexithymia, emotion regulation) 	
4	Emotion interventions	 Simple interventions, e.g. exercising basic emotions More complex interventions, e.g. identifying cognitions to inhibit emotions Approach of focused expressive psychotherapy 	
5	Transferring behavioral changes into daily settings	 Problem of transferring learned strategies into everyday life Enhancing motivation to actively use coping and behavior mechanisms of emotions Establishing social networks Preventing relapse in maladaptive emotional behavior 	
	Reader	 Görlitz G (1998) Körper und Gefühl in der Psychotherapie – Basisübungen, Pfeiffer, Reihe "Leben lernen" Band 120 und 121 	
		 Traue HC (1998) Emotion und Gesundheit, Heidelberg, Spektrum 	
		 Greenberg LS (2006) Emotion-focused therapy: A synopsis. Journal of Contemporary Psychotherapy, Vol. 36, 2: 87-93 	
		 Traue HC, Kessler H & Horn A B (2005) Emotion, Emotionsregulation und Gesundheit. In Schwarzer R (eds) Gesundheitspsychologie. Enzyklopädie der Psychologie. Göttingen, Hogrefe: 149-171 	

	Hypnosis in chronic pain (A. Pielsticker)		
1	Introduction	 Integrating hypnosis in the general therapeutic treatment concept Differentiation between clinical hypnosis and stage hypnosis Principles of trance induction Trance phenomena Discussion about necessity of trance intensification for pain control Physiology of hypnosis 	
2	Indication Contraindication Non-indication	 Areas of indication for acute and chronic pain Contraindications for hypnosis (psychosis, severe personality disorders, passive-receptive expectations) Non-indication (low susceptibility to hypnosis, no trusting rapport) 	
3	Diagnostics	 Hypnosis-specific diagnostics (susceptibility tests, relationship-based aspects) Impact of susceptibility to hypnosis on treatment success. 	
4	Effectiveness	 Meta-analyses on the effectiveness of hypnotic pain control (Montgomery et al. 2000, Bongartz et al. 2002) 	
5	Implementation	 Differentiating symptom and problem-oriented approaches Age regression as an example of a problem-oriented approach Techniques of hypnotic pain management/ overview of different techniques: dissociative technics (whole and partial body dissociation, glove anesthesia) associative techniques (visualizing the symptoms) symbolic techniques (personification of the symptoms) self-suggestion therapeutic histories and metaphors In-depth introduction and exercise of symptom-oriented techniques 	
Reader		 Bongartz W, Flammer E, Schwonke R (2002) Die Effektivität der Hypnose: Eine meta-analytische Studie. Psychotherapeut 47(2): 67-76 Montgomery GH, DuHamel KN, Redd WH (2000) A meta-analysis of hypnotically induced analgesia: How effective is hypnosis? Int J Clin Exp Hypn 48: 138-153 Peter B (2009) Phantomgliedschmerzen (2009) In: Revenstorf D & Peter B (eds) Hypnose in Psychotherapie, Psychosomatik und Medizin. Manual für die Praxis (2nd edition). Heidelberg, Springer 	

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- Scholz OB (2006) Hypnotherapie bei chronischen Schmerzerkrankungen. Bern, Huber
- Stenzel A (2009) Verschmerzt! 99 hypnotische Angebote bei chronischen Schmerzen. München, CIP-Medien

	Chronic pain in children and adolescents (T. Hechler, M. Dobe)		
1	Adaptation of the biopsychosocial model for children and adolescents	Triggering and maintaining conditions for chronic pain in children and young adults (significance of parental cognitions, emotions, behavior; significance of peers; significance of stage in development)	
2	Diagnostics	 child and family-friendly communication of the model Strategies for the conceptual steps of the first interview with the child and families concerned 	
		 Learning about the standard battery of multidimensional diagnostics in child chronic pain, incl. additional validated measures: 	
		 German Pain Questionnaire for Children and Adolescents [Deutscher Schmerzfragebogen für Kinder und Jugendliche] (Schroeder et al., 2010) 	
		 Measures to capture parental cognitions, emotions, and reactions (Hechler et al., 2011b; Hermann et al., 2008) 	
		 New measures to categorize degree of severity of child chronic pain (Wager et al, submitted) 	
3	Epidemiology	 Implementation of diagnostic measures Overview of the prevalence of child chronic pain Frequency of specific pain disorders Therapeutic health care infrastructure for different pain disorders 	
4	Multimodal pain- therapy	Effectiveness of multimodal pain-therapies in children and young adults (Hechler et al., 2009; Eccleston et al., 2003; Hechler et al., 2011a)	
		Special characteristics in multimodal pain-therapy in children and adolescents:	
		Outpatient and inpatient treatment concepts	
		 Specific treatment modules, e.g. expositions techniques 	
		 Child-friendly approaches and conveyance of the approaches of cognitive-behavioral therapy, guided imagery and mindfulness interventions 	
		 Parent-specific interventions, e.g. reduction of somatic fixation by the families, coping with burdens on the families, parents as co-therapists (Dobe & Zernikow, 2009) 	
		 Enhancing motivation in children, adolescents and their parents 	
		Developing a biopsychosocial model, the diagnostic	

	process and a treatment plan by using prepared case studies with the following pain diagnoses:
	Chronic headache (Seshia et al., 2010)
	Fibromyalgia (Michels et al., 2008)
	Recurrent stomach pain (Walker et al., 2010)
Reader	Dobe M & Zernikow B (2009) Rote Karte für den Schmerz: Wie Kinder und ihre Eltern aus dem Teufelskreislauf chronischer Schmerzen ausbrechen. Heidelberg, Carl-Auer-Systeme Verlag
	 Eccleston C, Malleson P, Clinch J, Connell H, & Sourbut C (2003) Chronic pain in adolescents: Evaluation of a programme of interdisciplinary cognitive behaviour therapy. Archives of Disease in Childhood, 88, 881-885
	 Hechler T, Dobe M, Kosfelder J, Damschen U, Hübner B, Blankenburg M et al. (2009) Effectiveness of a three-week multimodal inpatient pain treatment for adolescents suffering from chronic pain: Statistical and clinical significance. The Clinical Journal of Pain, 25, 156-166
	 Hechler T, Martin A, Blankenburg M, Schroeder S, Kosfelder J, Hölscher L et al. (2011a) Specialized multimodal outpatient treatment for children with chronic pain: Treatment pathways and long-term outcome. European Journal of Pain, in press
	 Hechler T, Vervoort T, Hamann M, Tietze A L, Vocks S, Goubert L et al. (2011b) Parental catastrophizing about their child's chronic pain: Are mothers and fathers different? European Journal of Pain, 15, 515.e1-515.e9
	 Hermann C, Hohmeister J, Hohmeister J, & Flor H (2008. Dimensions of pain-related parent behavior: Development and psychometric evaluation of a new measure for children and their parents. Pain, 137, 689-699
	 Michels H, Gerhold K, Häfner R, Häuser W, Illhardt A, Mönkemöller K et al. (2008) Fibromyalgiesyndrom bei Kindern und Jugendlichen. Der Schmerz, 22, 339-348
	Schroeder S, Hechler T, Denecke H, Müller-Busch M, Martin A, Menke A et al. (2010). Deutscher Schmerzfragebogen für Kinder, Jugendliche und deren Eltern (DSF-KJ) - Ein multimodaler Fragebogen zur Diagnostik und Therapie chronischer Schmerzen im Kindes- und Jugendalter. Der Schmerz, 24, 23-37

•	Seshia SS, Wang SJ, Bu-Arafeh I, Hershey AD,
	Guidetti V, Winner P et al. (2010) Chronic Daily
	Headache in Children and Adolescents: A Multi-
	Faceted Syndrome. The Canadian Journal of
	Neurological Sciences, 37, 769-778

 Walker LS, Gler-Crish CM, Rippel S & Bruehl S (2010) Functional abdominal pain in childhood and adolescence increases risk for chronic pain in adulthood. Pain, 150, 568-572

Informing and educating patients suffering from pain		
(Hans-Günter Nobis)		

1	Defining the subject matter and latest research developments	 Information-education-psychoeducation Scientific evidence Importance of the therapeutic context
2	Goals of education	 Focusing on central target areas Clarifying the diagnosis and treatment principles Conveying disorder-related information Conveying therapy-relevant information Supporting the patient in forming general skills in selfmanagement and coping strategies
3	Information modules Standardized manuals	Overview of the information modules Manual: Psychological therapy in headache and back pain Manual: Chronic headache and back pain Manual: Interactional group therapy for somatoform pain disorder Manual: Göttinger back-intensive program [Göttinger Rücken- Intensiv-Programm (GRIP)] Manual: Therapy manual for the surgical pain treatment • Judging content and methods of previously published therapy manuals with regard to their topicality and transfer possibilities • Guidelines call for a direct integration of aspects into the everyday work routine work (MBOR)
4	Information and education in the media	Judging the use of media – pros and cons of: • Print media • Internet / "e-mental-health" • Computer programs
5	Conveying information – a pedagogical challenge	Significance and usage of • Patient-practitioner-interaction • Choice of language register • Principles of learning and understanding • Recognizing information transmission as a pedagogical challenge
6	Explanation models	 Learning how to integrate "pedagogical" principles into own information modules Reflecting upon the impact of didactic, methodological and content-related aspects and the focused use of gestures, rhetoric, dynamization through speech tempo, examples, and (personal) involvement Making the explanation models on "biopsychosocial pain" and "pain chronification" easily accessible for the patient. Analyzing model cases of the "Bad Salzufler pain workshop"

		 with regard to "pedagogical" aspects Recognizing that understanding the "body-mind-soul connection" may be fail because of poor didactics Implementation strategies in individual and group settings
7	Information procurement	Literature search and evaluation
Reader		 Kröner-Herwig B, Frettlöh J, Klinger R & Nilges P (2011) Schmerzpsychotherapie (7th edition). Berlin, Springer Nobis HG et al. (2012) Schmerz – eine Herausforderung, Patientenratgeber. Berlin, Springer Medizin Nobis HG, Pielsticker A (2013) Information und Edukation des Patienten. In: Casser, Hasenbring et al. Rücken- und Nackenschmerz aus interdisziplinärer Sicht (1st edition). Berlin, Springer