## **Spectrum of Pain Relief Options:**

Self-initiated or	Treatment Targets	Professional-initiated or	
"Low-tech" Approaches	(& common medications)	"High-tech" Approaches	
Immediate Area of Pain:			
Massage, rubbing	Medications:	Physical Therapy (modalities)	
Moist heat	NSAIDs / Coxib	Electric stimulation (TENS)	
Application ice	Treat cause (e.g. headache)	Specialize massage techniques	
Positioning	Capsaicin or menthol cream	Trigger Point Injections	
Braces, orthotics, compression	Local Anesthetics	Low level Laser therapy	
Remove source, cause of pain		Surgery	
Region of Pain & Spinal level			
Reduce local irritation	Medications:	Nerve Blocks (sensory, autonomic)	
Contra-lateral stimulation	Opioids,	Cryotherapy, Radiofrequency	
Proximal/distal stimulation	Anticonvulsant (gabapentin)	Prolotherapy (sugar injected in tendons)	
	Antidepressants	Peripheral Nerve Stimulation	
	NMDA antagonist	Spinal Cord Stimulation	
	Muscle relaxers (tizanidine)	Epidural / spinal analgesia	
	,	Physical manipulation, traction	
Whole Body			
Diet, nutritional supplements	Whole Body	Acupuncture, Acupressure	
Exercise, pacing activities		Work Hardening	
Herbal or Aroma Therapy,		Functional Restoration	
Breathing techniques		Multidisciplinary Rehabilitation	
Yoga, Tai Chi			
Brain or Mind-Body Focused			
Relaxation, imagery, hypnosis	Medications	Biofeedback training	
Knowledge about condition	Opioids,	Counseling	
Music, distraction	Anticonvulsants	Electroconvulsive therapy	
Journal writing	Antidepressants	Deep-Brain Stimulation	
Change thinking, attitudes	Other co analgesics	Cognitive-Behavioral Therapy	
Reduce fear, anxiety, stress			
Reduce sadness, helplessness			
Spiritual or Energy-Focused			
Prayer, meditation	Spiritual of Energy-1 ocuseu	Spiritual Healing	
Self-reflection, re: life / pain		Magnetic Therapy	
Meaningful rituals		Homeopathic remedies	
Energy work (e.g. TT, reiki)		- F	
	Casial Interaction forward		
Improved communication	Social Interaction-focused	Family therapy	
•		Functional restoration	
Volunteering Problem solving		Vocational training	
Problem solving		Psychosocial Counseling	
Support groups Pet Therapy		1 Sychosocial Counselling	
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## Potential Pain Amplifiers and Dampeners by Developmental Stage

Age Group	Potential Amplifiers	Potential Dampeners
Neonate	Vulnerable to cold stress Pain as a stressor Reflexive tensing to sudden stimuli Immature pain inhibiting system	Sucking reflex (sucrose pacifier) Fetal position (swaddle) Kangaroo care Music, heartbeat sounds
Infant	Muscle tension to escape pain / restraint Separation / stranger anxiety (>6 months) Environmental extremes	Familiar voices, music Parental interaction Cuddle, rocking
Toddler and preschooler	Fear of injury, bleeding, losing control Sadness, anxiety and/or anger Shame/guilt pain considered a punishment Cognitive distortion "magical thinking" Intense, prolonged stress Sensitization from pain earlier in life	Distraction (toys, books, pictures). Imagery ("blow away pain" with bubbles or magic, blanket / glove removes pain) Cuddlinging, rocking Parental interaction Reframe misconceptions, magically Listen to concerns, provide reassurance & understanding to allay fears
School-age child	Fear of injury, losing control/independence Sadness, anxiety and/or anger Embarassed when exposed/naked Cognitive distortion (e.g. overgeneralization) Intense, prolonged stress Regression to an earlier stage of development Sensitization from pain earlier in life	Distraction (count, jokes, stories, music) Imagery (pleasant or guided), use volume dial (or switch) to lower pain Interaction with friends / family Reframe with rational explanations Information & behavioral rehearsal; what to expect and how it will look and feel
Adolescent	Fear of injury, losing control/independence Sadness, anxiety and/or anger Embarassed when exposed/naked Cognitive distortion, variety of types Intense, prolonged stress; ineffective coping Sensitization from pain earlier in life	Educate about disorder/procedure & pain Provide for privacy/modesty needs Involve in decision-making Distraction (music, games, TV, hobbies) Imagery (pleasant or guided), relaxation Interaction with friends > family Reframe with rational explanations
Adult	Fear losing control/independence/identity Sadness, anxiety and/or anger Cognitive distortion, variety of types Intense, prolonged stress; ineffective coping Sensitization from pain earlier in life Social isolation, role interruption/conflict Concern about what others think Fear underlying meaning of pain Spiritual distress, loss of connections	Reduce misconceptions & distortions Active involvement in control of pain Allay fears and anxiety when possible Educate about disorder/procedure & pain Involve in decision-making Distraction (music, games, TV, hobbies) Imagery (pleasant or guided), relaxation Interaction with friends & family Coping skills training Promote spiritual/meaningful connections
Elder	See adult amplifiers Declining mental capacity Heighteded sensitization from unrelieved pain Multiple comorbid conditions Fatigue, insomnia/sleep disturbances Grief over multiple losses	See adult dampeners Story-telling, life review Optimize independence Altruistic endeavors

## Gain Control Model of Pain

## <u>Dampeners</u>

Amplifiers

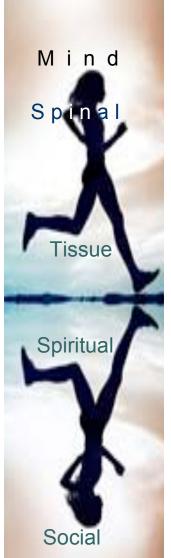
Emotionally stable, loved Self efficacy, optimistic Acceptance, realistic appraisal Mental Distraction Pain & stress coping

> Rubbing Endorphin release (e.g. laughing, crying)

Tissue repair, healing Tissue stimulation Optimal nutrition, O<sub>2</sub> Position support (brace)

Strong faith
Essence unchanged
Sense of purpose
Sense of connection
Energy flow balanced

Socially engaged Meaningful, pleasurable activities pursued Effective communication Work, volunteering



Emotional distress High or prolonged stress Unhelpful thoughts

Local irritation
Nerve "memory"
Nerve inflammation

Ongoing tissue damage Inflammation/infection Hypoxia Muscle tension/spasm

Spiritual distress
Lost connections
Dire meaning
Suffering
Energy imbalance

Socially isolated Relationship/role conflict Over-dependency Dysfunctional coping