

Chronic Pain Self-Management: Strategies for Living a Full Life



Sandra M. LeFort, RN, PhD

Professor

School of Nursing

Memorial University of Newfoundland

Disclosure

- **Pfizer Canada** (sponsored CPSMP training of Family Health Teams in Ontario; sponsored talk to primary care physicians, 2009)
- **Perdue Pharma** (sponsored committee work related to Health Canada requirements about tracking potential drug misuse and diversion)
- No conflict related to this presentation

Objectives

- To review key educational & social learning principles & strategies to promote self efficacy
- To illustrate these principles to self management using the CPSMP as an example
- To dialogue with workshop participants about how they might apply these principles with their clients

Prevalence

- The prevalence of chronic pain is huge
 - affects all ages from children to the aged
- An estimated 20-25% of adults over 18 suffer from chronic pain
 - That's over 6 million Canadians
- About 2/3 of them suffer moderate to severe pain

Boulanger et al. (2007) Chronic pain in Canada. PR&M, 12, 39-47.



Impact

- Deep distress
- Functional limitations
 - Depression
 - Sleep problems
 - Low self esteem
- Job change or job loss
- Change in social relationships
 - Effects on the family

Brevik et al. (2006); Boulanger et al. (2007)

Cost to society

- An estimated cost to society of \$50 B per year in Canada:
 - direct and indirect health care costs
 - lost productivity
 - disability costs
 - financial burden on the person and family



The problem of access

- In spite of high prevalence & impact, access to specialty multi-disciplinary pain services is limited by:
 - nature of the referral process
 - geographic location
 - cost and resource constraints
 - sheer size of the problem

What can we do at the primary care level as an adjunct to usual care?

Need for community-based programs

“an intervention that can be widely disseminated even if it is only moderately effective, may have greater impact on patient care than a more effective treatment approach that is more restricted in terms of numbers of patients that can be treated” (Turk, et al., 1993)

Stanford's ASMP

- One community-based approach was the ASMP from Stanford's Patient Education Research Centre:
 - **strong theoretical base (self-efficacy theory)**
 - **adherence to proven educational principles**
 - | **relevance**
 - | **reinforcement**
 - | **feedback**
 - | **individualization**
 - | **facilitation for skills acquisition**

Lorig, K., Holman, H. Arthritis self-management studies: a twelve-year review. Health Education Quarterly, 1993; 20; 17-28.

Similar to Turk & Holzman's findings about chronic pain Rxs

- Ingredients of successful psychosocial interventions for chronic pain:
 - Foster optimism & combat demoralization
 - Individualize treatment
 - Active patient participation & responsibility
 - Skills acquisition
 - Foster self-efficacy
 - Self-attribution of success

(Turk & Holman, 1986)

ASMP Outcomes in 4 RCTs (n=938)

- Significant improvements in:
 - knowledge (32%),
 - exercise and relaxation behaviors (80%)
 - pain (22%),
 - positive trends in depression (14%) , disability (6%)
 - improvements were maintained and reduced health care costs up to 4 years post-intervention
 - improvements linked to increased self-efficacy

Lorig, K., Holman, H. Arthritis self-management studies: a twelve-year review. Health Education Quarterly, 1993; 20; 17-28.

What is Self-Management?

- “The individual’s ability to manage the symptoms, treatment, physical and social consequences and lifestyle changes inherent in living with a chronic condition”.

- Barlow et al. Patient Educ. Couns. 2002: 48:177

What is Self-Management Education?

- Programs, based on adult learning principles, that provide patients/clients with the skills to live an active and meaningful life.
- The goal is to maintain a wellness focus in the foreground, even in the midst of a chronic condition, to improve quality of life (Lorig, 2003).

Why is self-management so important?

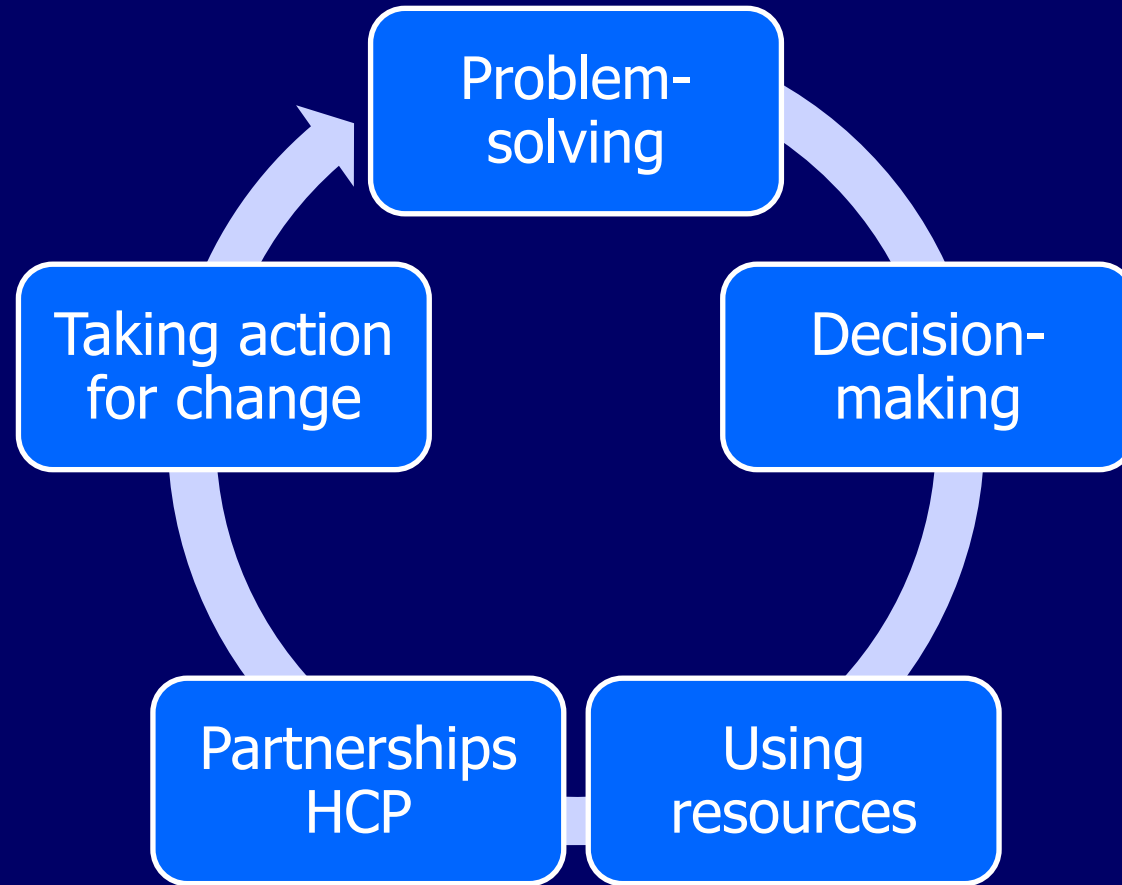
- Patient self-management is **inevitable**.
- Outcomes are better when patients are **actively involved, have skills to deal with the consequences of chronic conditions, and believe in their ability to do so (self-efficacy)**.
- The professional's role is to be in **partnership with the patient**.
 - Professionals are experts about diseases and treatments; patients are experts about their own lives.

Self-Management:

Underlying Principle & Tasks

- Active self managers are willing to learn about and take responsibility for daily management of their chronic condition and its consequences
- Tasks:
 - Take care of overall health
 - Carry out normal activities and roles in life
 - Manage emotional changes

Five Core Self-Management Skills



CPSMP description

- Standardized program
- Community-delivered
- 10-15 people per group
- 2.5 hrs /wk for 6 weeks
- Adapted from the ASMP & CPSMP
- Train-the-trainer model of dissemination
- Leaders – peers or HCP



CPSMP Program Content

TOPICS	WEEK					
	1	2	3	4	5	6
Self-help principles	✓					
Debunking myths	✓					
What is chronic pain?	✓					
Balancing rest/activity	✓			✓		
Exercise/ROM Dance	✓	✓	✓	✓	✓	✓
Pain management/ relaxation		✓	✓	✓	✓	✓
Depression			✓			
Nutrition				✓		
Evaluating non- traditional treatments					✓	
Problem-solving	✓	✓	✓	✓	✓	✓
Communication skills		✓			✓	
Medications						✓
Fatigue						✓
Feedback/contracting	✓	✓	✓	✓	✓	✓

PAIN SELF-MANAGEMENT TOOLBOX

Physical Activity/Exercise	Problem-Solving
Managing Fatigue	Using your Mind
Pacing & Planning	Healthy Eating
Relaxation & Better Breathing	Communication
Medications	Understanding Emotions
Working with Health Professionals	Finding Resources

Theory of self-efficacy

- Developed by Albert Bandura at Stanford
- *"The exercise of human agency through people's beliefs in their capabilities to produce desired effects by their actions"*
- not just knowing 'what to do', but belief in one's ability to organize and integrate cognitive/social/behavioral skills to achieve control over everyday circumstances

Self-efficacy enhancing strategies

- Skills Mastery - the opportunity to practice skills in a supportive environment
- Modelling - peers are role models for other - *"If they can do it, I can do it"*
- Reinterpretation of symptoms - cognitive reframing; examination of illness-related beliefs
- Social Persuasion - gentle support and encouragement from peers, family, friends, HC providers

Stanford's Process components

- Mini-lectures

- information sharing

- Self-reflection — sharing of feelings

- what chronic pain means to me, communication issues

- Quiz

- myths about chronic pain

- Brainstorming

- about benefits of exercise, symptoms of depression

Process (cont.)

- Setting weekly contracts/action plans
 - learning the process of setting short term goals
- Feedback
 - about how well they are doing (verbal & written)
- Group problem-solving
 - depression, solving problems that arise with the contract
- Telephone support mid-week

“Don’t mess with the process”: confidence-building strategies

- Making action plans
- Feedback - action planning, exercise diary and action plan forms
- Modeling - Program participants serve as models for each other
- Reinterpreting symptoms and changing beliefs - cognitive reframing
- Persuasion - by seeing others succeed in class, by encouragement to do a ‘bit’ more by leader

Chronic pain?



- Meaning of chronic pain
- Myths about chronic pain
- Distinguishing between acute pain and chronic pain

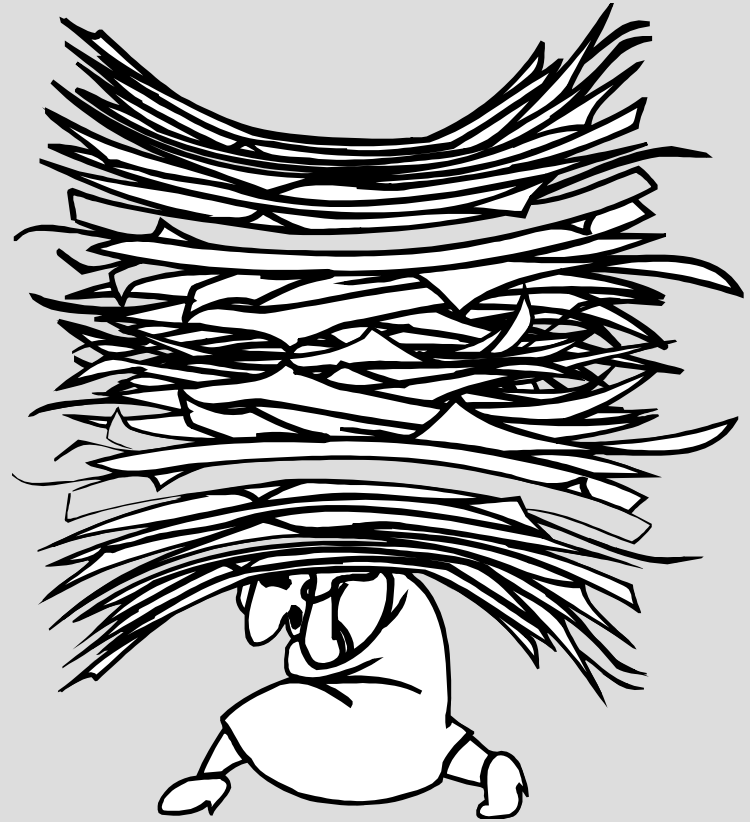
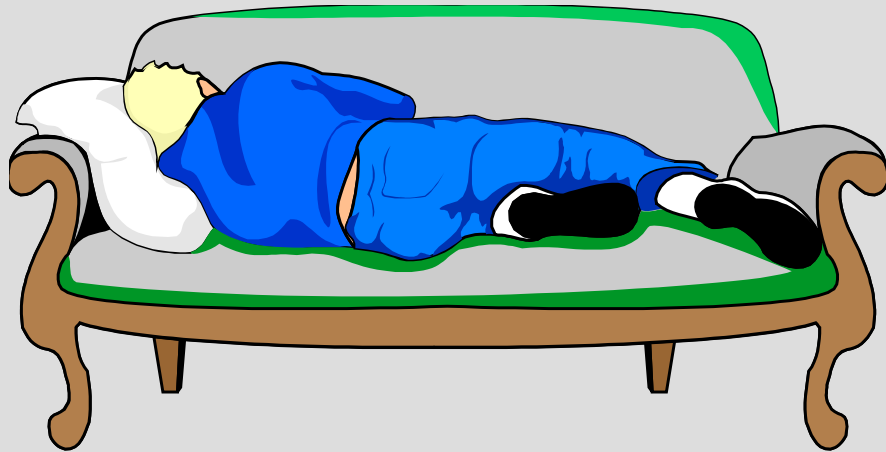
Acute Pain

- time-limited
- has survival value; warns of danger and harm
- associated with anxiety/fear which subsides once cause of the pain is known or pain goes away
- biological mechanism is fairly well understood
- **Rest is best; allows for healing to take place.**

Chronic Pain

- more than 3 - 6 months or past expected healing time
- has no survival value. No longer warns of immediate danger because healing has occurred
- chronic pain causes chronic stress - fatigue, anxiety, depression, helplessness, isolation, difficulty functioning, etc.
- **a program of activity balanced with rest is best**

Pacing - Balancing Activity and Rest



Pacing Tips



- Monitor daily activities to find out how long you can do an activity before you start of hurt
- Be TIME oriented, not pain oriented
- Plan several rest periods during the day and stick to your plan
- If you can't take a rest break, then change your activity or body position

More pacing tips...

- Rest BEFORE your pain gets worse
- Avoid rushing. Plan ahead. Think about the easiest way to do something...
 - Work smarter not harder
- Don't over-schedule activities. Work on developing realistic expectations of your self (*sometimes you have to say 'no'.*)



Exercise

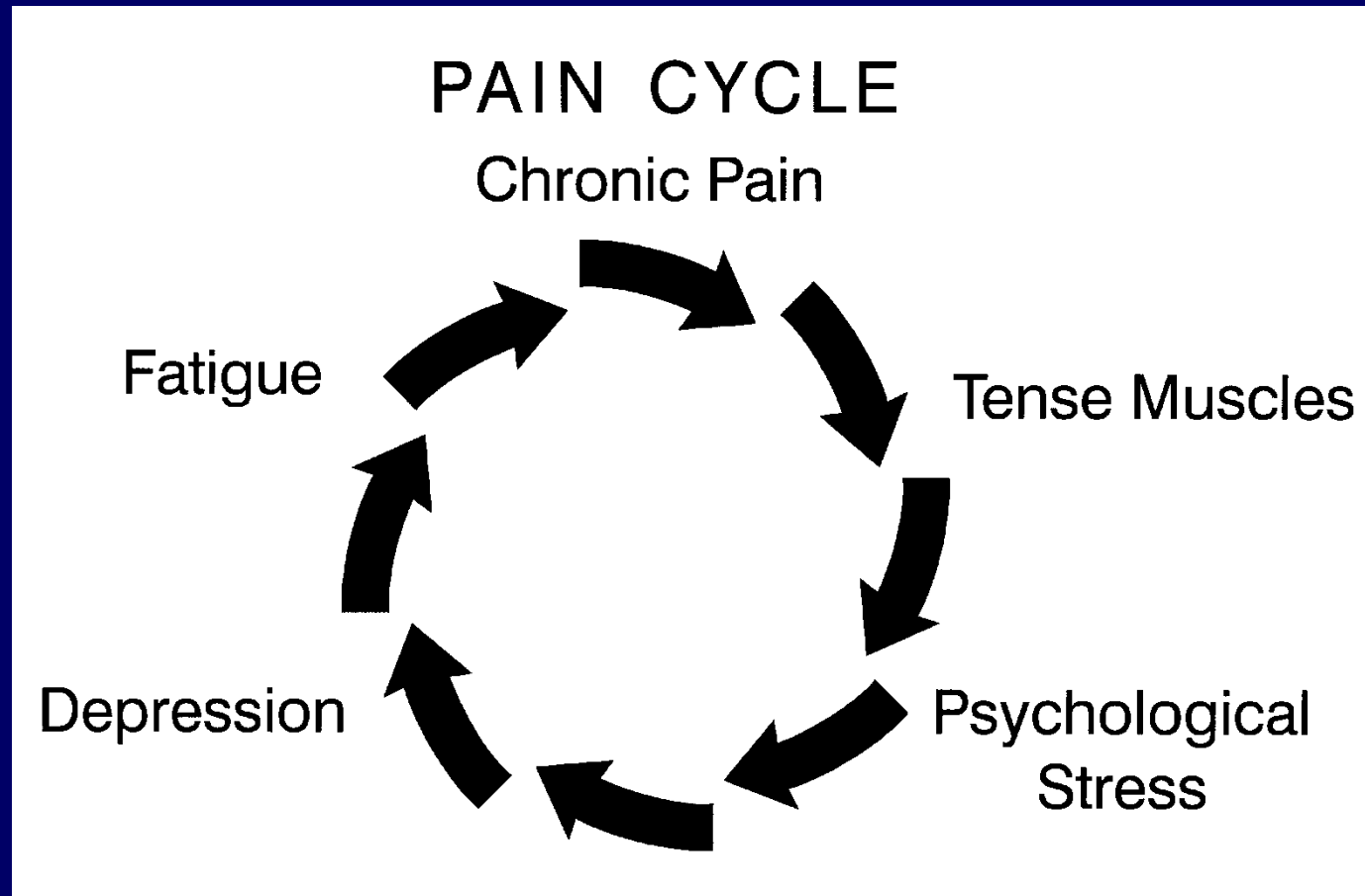


- Hurt versus harm
- Where to begin
- Parts of a fitness program
- Aerobic exercise
- Flexibility exercise - ROM Dance Program

Moving Easy Program

- Developed a flexibility and range of motion program for the CPSMP
- 25 moves that takes 12 minutes to do
- conducted in 4 of the 6 sessions

Introduction to Pain Management



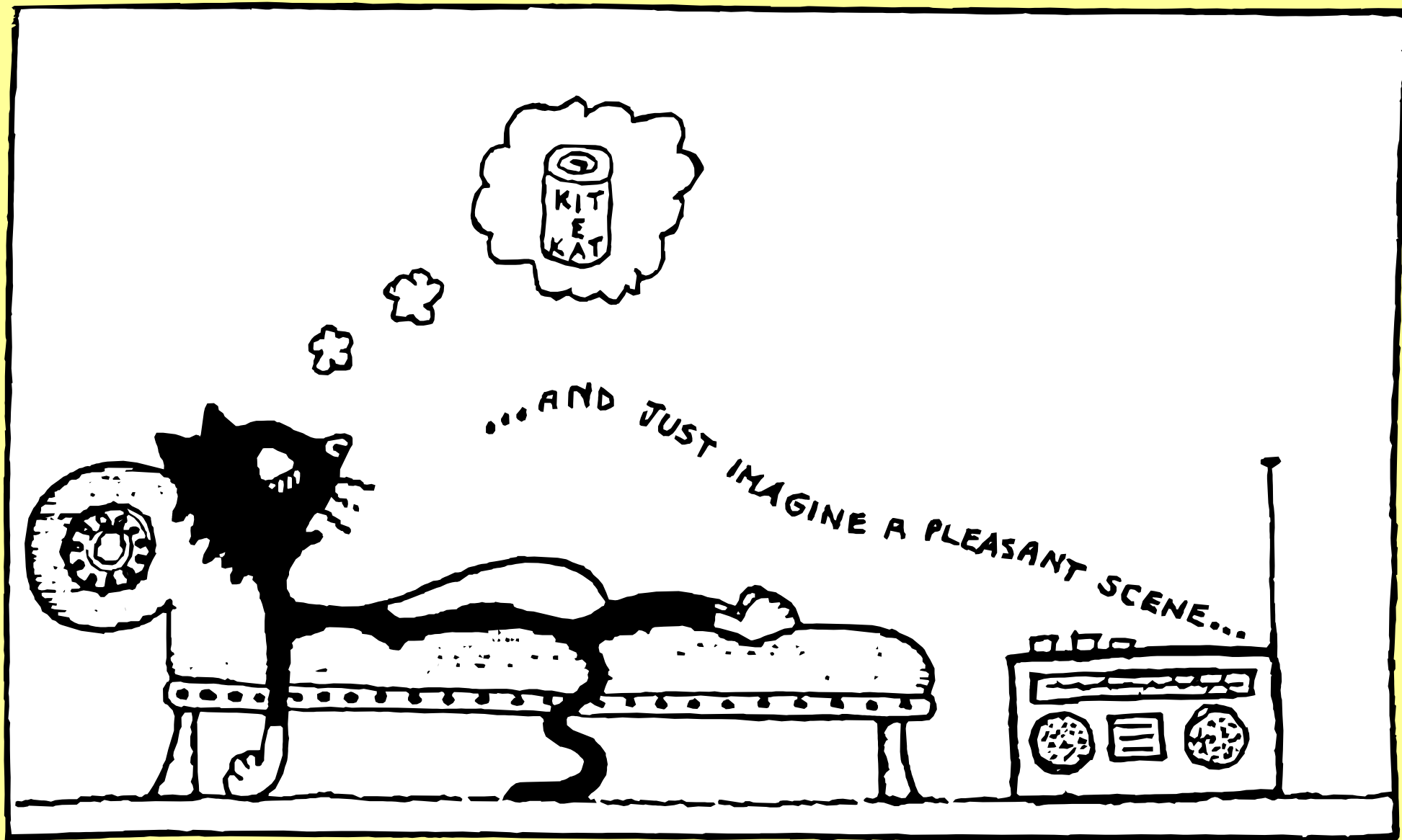
Using your Mind for Pain Management

■ Relaxation techniques

- Progressive muscle relaxation
- Guided imagery - A walk in the country
- Breathing and body awareness
- Visualization

■ Distraction techniques

■ Positive thinking



Depression

- Review the pain - depression cycle.
- Brainstorm signs/symptoms of depression
- Importance of getting help with depression
- Strategies to deal with the 'blues'

Discuss nutrition

- Importance of a good basic diet
- General principles of a good diet
- Hints for good eating
- Nutrition information from Health Canada
- Information about foods that may help or cause pain

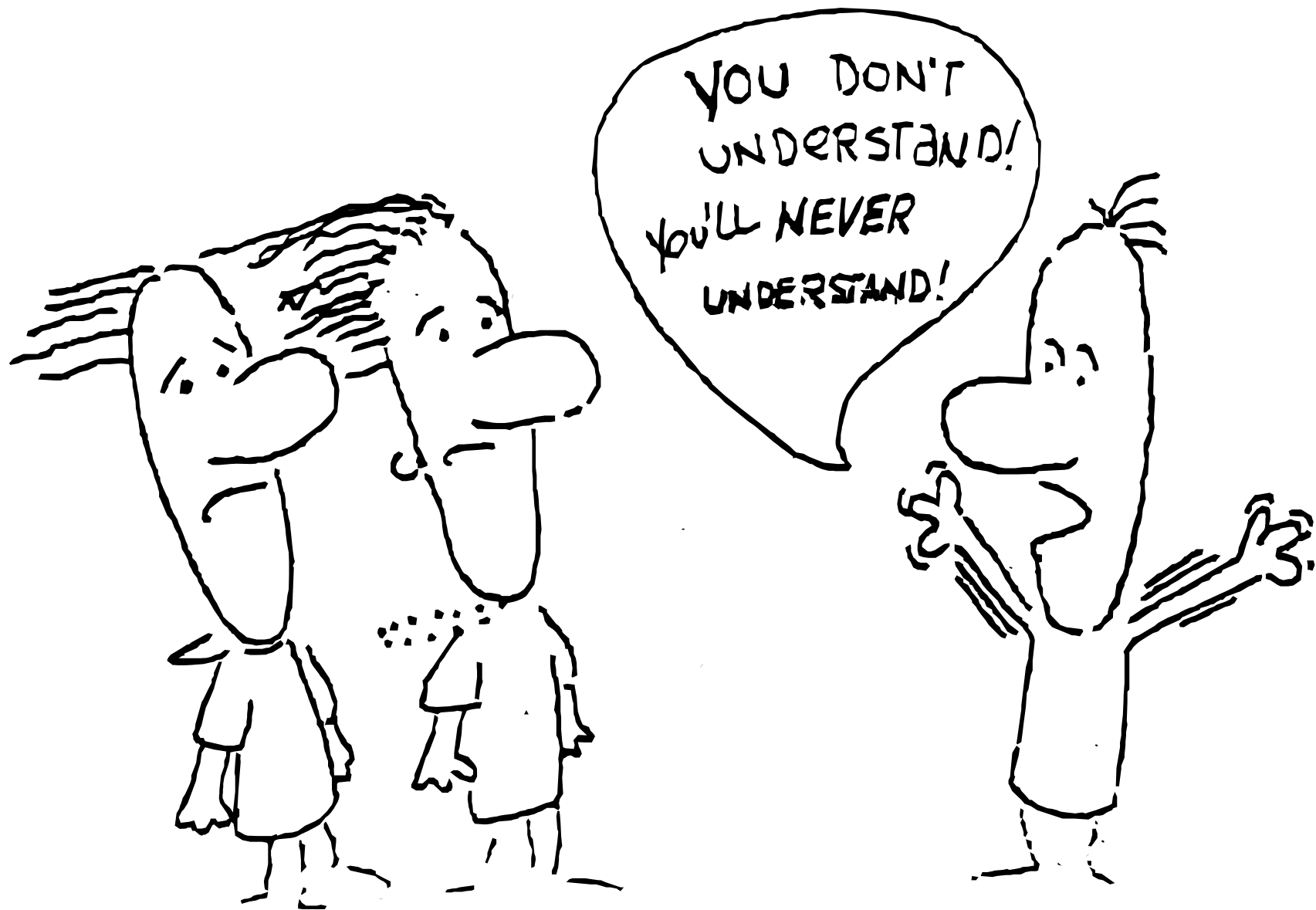
Fatigue



- Causes of fatigue with chronic pain
- Brainstorm ways to overcome fatigue
- Review of 'pacing' principles
- Improving sleep quality

Communication Skills

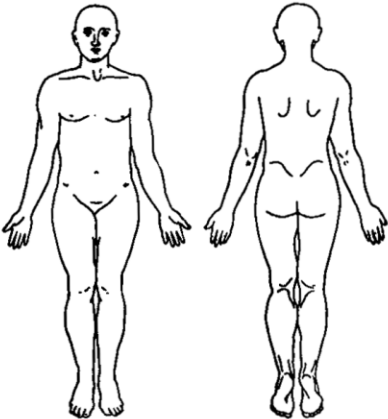
- Importance of good communication skills
- Family issues - “I” and “You” messages
- Communicating with health professionals
 - Ways to communicate about pain
 - | Describing pain with words - McGill Pain Questionnaire
 - | Describing Intensity of Pain using 0 - 5 or 0 - 10 scale
 - | Be a CAD (Come prepared, Ask Questions, Discuss problems)



McGill Pain Questionnaire

1 FLICKERING	11 TIRING
QUIVERING	EXHAUSTING
PULSING	12 SICKENING
THROBBING	SUFFOCATING
BEATING	13 FEARFUL
POUNDING	FRIGHTFUL
2 JUMPING	TERRIFYING
FLASHING	14 PUNISHING
SHOOTING	GRUELLING
3 PRICKING	CRUEL
BORING	VICIOUS
DRILLING	KILLING
STABBING	15 WRETCHED
LANCINATING	BLINDING
4 SHARP	16 ANNOYING
CUTTING	TROUBLESOME
LACERATING	MISERABLE
5 PINCHING	INTENSE
PRESSING	UNBEARABLE
GNAWING	17 SPREADING
CRAMPING	RADIATING
CRUSHING	PENETRATING
6 TUGGING	PIERCING
PULLING	18 TIGHT
WRENCHING	NUMB
7 HOT	DRAWING
BURNING	SQUEEZING
SCALDING	TEARING
SEARING	19 COOL
8 TINGLING	COLD
ITCHY	FREEZING
SMARTING	20 NAGGING
STINGING	NAUSEATING
9 DULL	AGONIZING
SORE	DREADFUL
HURTING	TORTURING
ACHING	
HEAVY	
10 TENDER	PPI
TAUT	0 NO PAIN
RASPING	1 MILD
SPLITTING	2 DISCOMFORTING
	3 DISTRESSING
	4 HORRIBLE
	5 EXCRUCIATING

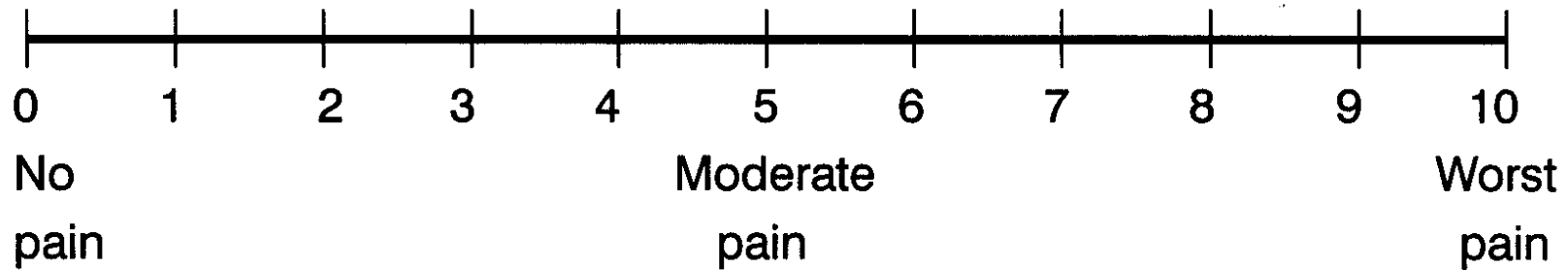
BRIEF	RHYTHMIC	CONTINUOUS
MOMENTARY	PERIODIC	STEADY
TRANSIENT	INTERMITTENT	CONSTANT



E = EXTERNAL
I = INTERNAL

COMMENTS:

Communicating about pain: Visual analogue scale



Evaluating non-traditional treatments

- Types of Proof - stories, common sense, scientific study
- Reputable institution or well-trained individual
- Reasonable cost
- Willing to go to the trouble/expense?
- Possible harms/dangers
- Claims made for a cure?

Medications

- Categories of pain medication for chronic pain are discussed
- Medication problems
- Self-monitoring
- How to talk with your doctor, pharmacist or health care provider about meds



Problem Solving Process

- Step 1: Identify the problem
- Step 2: List all ideas that might solve problem
- Step 3: Select one idea and try it
- Step 4: Assess the results
- Step 5: Problem not solved? Pick another idea
- Step 6: Utilize other resources
- Step 7: Accept that problem may not be able to be solved at this time.

Example of Problem solving

- Mary -- 48-year old, married home-maker with adult 3 children at home (26, 24, and 19)
 - | has had neck and upper back pain for 3 years following an MVA
 - | traditional role of homemaker is very important to her; cares for her 19-year-old paraplegic daughter with some home support help in the morning.
 - | Finding it hard to make 'traditional' meals that her family expects
- Problem-solving around the issue of 'meal preparation' by the group - what is the problem exactly? What are possible solutions? Try one and report back to the group.

Action Plans and Goal Setting

- Idea is to help people set achievable short-term goals that they work on each week.
- Guidelines for action plans
 - Identify something you want to do
 - Be realistic
 - Specific - what, when, how much or how many
 - Write it down
 - Check it daily
- Share action plan with the group and report on progress the following week

Example of Action Plans & Goal Setting

- Tom - 32-year old married man with one child (12 months old); partner is somewhat supportive.
 - Had chronic pain for 10 years which developed after an industrial accident; has 5 spinal fusions
 - was back at school doing an "IT" program but finding sitting difficult
 - wanted to increase his activity and to spend more time with his daughter; also felt badly about his wife having to carry the burden at home
-cont.

Contracting (cont.)

- Made a weekly contract to walk his daughter in her stroller before supper.
- Started with 10 minutes 3 times a week, ended up walking 40 minutes 4 -5 times a week over the 6-week program.

CPSMP Program Content

TOPICS	WEEK					
	1	2	3	4	5	6
Self-help principles	✓					
Debunking myths	✓					
What is chronic pain?	✓					
Balancing rest/activity	✓			✓		
Exercise/ROM Dance	✓	✓	✓	✓	✓	✓
Pain management/ relaxation		✓	✓	✓	✓	✓
Depression			✓			
Nutrition				✓		
Evaluating non- traditional treatments					✓	
Problem-solving	✓	✓	✓	✓	✓	✓
Communication skills		✓			✓	
Medications						✓
Fatigue						✓
Feedback/contracting	✓	✓	✓	✓	✓	✓

Results of 1st RCT (n=110)

- statistically reliable improvement in health status measures
- improvement in treatment group ranged from 9% to 47% with most in the modest range
- comparable results compared to studies of ASMP, and other chronic pain programs reported in the literature
- results supported self-efficacy theory (i.e., confidence building and increased problem solving lead to better outcomes)

Results of 2nd RCT (n=207)

- Statistically significant change:
 - **Mental Health Composite Score** of the SF-36 (includes vitality, social & emotional functioning, and mental health) ($p = .001$) and
 - **Resourcefulness & Self efficacy** ($p = .006$)
- Positive trends to improvement: **disability, psychosocial adjustment to illness & life satisfaction.**
- Results maintained at 12 months

Qualitative data: The meaning of chronic pain at start of CPSMP

■ Losses

- no energy
- concentration
- the person they used to be
- self-esteem
- independence
- control over their lives ('pain rules')
- financial security

■ “a silent cross to bear because you can't go around complaining all the time”

After 12 hr program (1st RCT)

- Having their voice heard
- Knowing they are not alone
- Sharing with others who understand
- Being a 'safe' environment
- Taking ownership of their pain





■ “Safe environment”

| “It has been extremely beneficial to share my doubts and fears in a “safe environment” and has helped me to feel a little less alone and overwhelmed”.

■ Taking ownership: “the ‘cure’ for my chronic pain will most likely be from myself”.

After a 12-hour education program (2nd RCT)

- Feeling validated - sharing with others who understand, feeling less isolated
- Learning new ways to manage (relaxation techniques, exercise, how to communicate about pain with doctors and family, understanding medications and new therapies)
- knowing how to set realistic goals and limits
- feeling in control

Roll out



- BC – Led by UVIC Centre on Aging, part of provincial pain strategy; Fraser Health; Interior Health
- Alberta – Capital Health and Chronic Disease Strategy
- Ontario – 7 Family Health Teams in SW Ontario; Central East LHINS (Scarborough to Peterborough > 10 agencies); pain clinics; Y-PEP program in Kingston
- NS – South Shore
- NL – to start with the NL Long Term Pain Support Group in St. John's

Future Opportunities & Challenges

- Just at the beginning of understanding the kind of educational models & approaches we need.
- The consumer movement is here to stay: “nothing about us without us”.
- What about the family? “If one of us has it, we all have it”.
- Need to be innovative in use of new technologies to improve access and tailoring of interventions
- More R&D...? ***A Canadian Centre for Primary Care Level Interventions for Chronic Pain?***

Acknowledgments

- Dr. Mary Ellen Jeans, past director, School of Nursing, McGill University, director general of NHRDP, etc.
- Supportive colleagues Dr. Judy Watt-Watson, Dr. Roman Jovey, and my collaborator Lisa Sulyok, RN
- Other research colleagues working in self-management Dr. Mike McGillion & Dr. Jen Stinson
- Dr. Kate Lorig, Stanford Patient Education Research Centre (<http://patienteducation.stanford.edu>)
- My husband John W. Doyle

