Use of Schema Therapy Techniques with Chronic Pain Patients

Dr Melanie Babooram
Clinical Psychologist
Sydney Pain Management Centre
Definition of Pain

The International Association for the Study of Pain (IASP) defines pain as:

‘An unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage’

Pain is always subjective. Each individual learns the application of the word through experiences related to injury in early life.

When tissues heal (after 3-6 months) pain stops (acute pain)
What is Chronic Pain?

‘Any pain that persists beyond the expected healing period of 3 months’ (IASP 1994, 2003)

Related to (permanent) changes in the CNS. No cure

‘Chronic pain is not the result of any progressive disease, nor does it have any identifiable pathology’ (Flor & Turk, 2011).
Study of Chronic Pain

• The issue is that chronic pain has only been recognised in the last 50 years or so.

• Clinical medicine has seen pain as a sign of disease or injury. Therefore goal is to eliminate the cause and find a cure (Flor and Turk, 2011)

• A lot of clients come in with this expectation
Prevalence of chronic pain

• Brevik et al (2006) estimates that 19% of European population has chronic pain

• 20% - 30% of Americans (Nahin et al, (2015)., Ehde, Dilworth & Turner, 2014)

• Mansfield et al (2016) estimate 10-15% worldwide
Prevalence of chronic pain – Australian statistics

- Blyth et al (2001) – 20%

- Harrison et al (2017) – 32.4% (mostly attributed to osteoarthritis and low back pain)
Central Sensitisation

- Dominant model for understanding chronic pain

Physiological

‘Chronic pain states cause (permanent) neuroplastic changes in the central nervous system causing neurons to be more sensitised and more likely to activate central pain memories in the absence of peripheral input’ (Flor and Turk, 2011)
Central Sensitisation

Psychosocial

‘Psychosocial characteristics such as inappropriate beliefs about pain, depression and catastrophisation all add to this sensitivity’ (Roussel et al, 2013)

 Increased cortisol, adrenaline also magnifies pain
Central Sensitisation

**Behavioural / Movement**
Fear avoidance (decrease in activity due to fear of pain) also adds to stress on the nervous system (Roussel et al, 2013)

No production of endorphines
Biopsychosocial Model

• The most efficacious treatments for chronic pain focus on it’s physiological, subjective and behavioural components.
• Interdisciplinary approach is the gold standard
• Interdisciplinary approach = one or more of physiotherapy, pain medicine, patient education and ergonomic training (Scasinghi et al, 2008)
• In house is better than individual (Scasinghi et al, 2008)
CBT and Chronic Pain

- Of all the psychological treatments, CBT is indicated to be the gold standard (Ehde et al, 2014., Morely et al, 1999., Turner et al, 2007, IASP (2012), Knoerl, Smith & Weisberg, 2016)

- Shown to reduce pain, distress, pain interference, and depression (Ehde et al, 2014., Knoerl et al, 2016)

CBT and Chronic Pain

- CBT premises:
  - Client comply with treatment
  - Is motivated to reduce symptoms
  - Build skills
  - Use homework to solve problems
  - Use empirical analysis and logical discourse to solve problems
  - Access cognitions and emotions
  - Gets along with their therapist

(Young, Klosko & Wishaar, 2003)
Limitations of CBT
(Knoerl et al, 2016., Ehde et al 2014)

- No set protocol

- In Knoerl et al’s (2016) review, only 43% of trials show reduction pain intensity

- Patients with trauma / PTSD / Traumatic brain injury often understudied

- CBT is not as efficacious with low income and low literacy clients due to non compliance.
Limitations of CBT (our experience)

- Characteristics of our clients
- Generally do not understand or comply with home-based tasks
- Generally, few can identify thoughts or emotions
- Not willing to, or accept, that they can change. Rigid and cure focused.
- Don’t initially form a collaborative relationship with me!
- Generally do not have particular psychological goals for treatment
Universal Core Emotional Needs (Rafaeli, Bernstein & Young, 2010)

- Safety
- Stability
- Nurturance
- Acceptance
- Autonomy
- Competence
- Identity
- Freedom to express needs and feelings
- Spontaneity
- Play
- Self Control
- Realistic Limits
Limitations of CBT

• These are all reasons why Schema therapy was invented in the first place! (Young, Klosko, Wishaar, 2003).

• Schema Therapy mostly used / associated with personality disorders.
Personality Disorders and Chronic Pain

- Fishbain et al (1986) – 58.4% of chronic pain sample satisfied criteria for DSM III personality disorders – including Dependent, Passive Aggressive, and Histrionic. Over 50% had depression and anxiety

- Weisberg (2007) – 31-59% of sample satisfied criteria for personality traits / features. Anxiety and depression
Personality Disorders and Chronic Pain

- Conrad et al (2005) - 41% of sample satisfied criteria for at least 1 personality disorder, anxiety and depression.
- Used Temperament and Character Inventory (TCI) (Cloninger et al.) which relates temperament to biochemical processes (i.e. that temperament is based on neurochemical transmitters which affects personality)
- Chronic pain patients high on Harm Avoidance and low on Self Directedness traits
Personality Disorders and Chronic Pain

* Most notably, Borderline Personality Disorders and traits also appear in chronic pain patients (Monti et al, 1998., McWilliams et al, 2013 and Sansone et al, 2001)
Childhood trauma and chronic pain

- Schofferman et al (1993) – correlation between multiple childhood traumas and chronic lower back pain. Suggest that childhood trauma may predispose a person to chronic low back pain?
- Goldberg, Pachas and Keith (1999). All pain groups had a history of childhood abuse, alcohol and drug dependence
- Definition of childhood trauma included emotional neglect, abandonment and unavailable caregiver – not just physical abuse
Childhood trauma and chronic pain points of interest (Gustin et al, 2015)

- How someone copes with adversity is related to their personality (maladaptive coping styles)
- Changes in brain anatomy (such as central sensitisation) are often associated with changes in personality
- Chronic pain traits may be just as worthwhile exploring as chronic pain states
- ‘Therapies addressing personality disorder traits may be more helpful than only focusing on pain relieving and sensory goals’.
Schema Therapy and Chronic Pain?

- Saariaho et al - Finland
  (2009) - Internal factor structure of Finnish version of YSQ was high as applied to chronic pain patients.

(2012) – Early maladaptive schemas predicted chronic depression in chronic pain patients. Particular schemas were those in the Disconnection / Rejection domain (ED, Ab, M/A, SI, DS) and Impaired Autonomy and Performance (Fa, Em, DI, VH)
Also – Sb, EI, IS
Schema Therapy and Chronic Pain

- Saariaho et al (Cont’d)

  (2015) – Depression and alexithymia in chronic pain patients associated with early maladaptive schemas, increased pain disability and pain intensity

(2011) – Early emotional trauma (rather than physical) in chronic pain patients is associated with early maladaptive schemas and decreased ability to perform independently, catastrophic beliefs and pessimism.
In practice – ‘Allan’

- Reason for presenting:
  1) Difficult case and not ‘perfect’, but typical for pain clients
  2) Emotional Inhibition / Emotional deprivation
  3) Incomplete treatment
  4) Was treatment successful?
‘Allan’

- 42 year old man

- Hong Kong Chinese background, came to Australia with family

- Presented with pain in his right chest / lung from a rare genetic, connective tissue condition causing spontaneous pneumothorax

- 2014 – drain on right lung to stop air leaks. Experimental procedure. Did not work. Allodynic scar from this. Mismanaged?
- 2016 – drain on right lung.

- Persistent pain in chest area triggered by deep breathing and movement
‘Allan’

- **Reason for referral**

  Doctor – Had to reduce work hours because of pain (overdoing), and Allan was distressed because of this. He had anxiety about pain.

  Physiotherapist – Physically, he was better. He had better gait, better sleep and full range of movement. He adhered to all physio exercises. But he was unable to perceive positive effects and therefore was unable to build on it. Couldn’t perceive his gains.

  Allan – ‘I need to manage my time better’
‘Allan’

- Work = SES volunteer for 10 years. Some paid work, mostly unpaid. He taught classes, assessor of trainees, investigated incidents, drove vehicles, takes charge of internal control. Often called upon.
- On committee for his strata board / handyman. Followed up on all complaints
- Homeless shelter / soup kitchens
- ‘Money from family business’ – didn’t say what.
- Query Subjugation Schema.....
‘Allan’

- **Presentation in session**
  - Very shy and softly spoken
  - Unsure why he was referred to a psychologist
  - Unable to identify thoughts or feelings
  - Distractible
  - No conviction in his answers
  - Minimal eye contact
  - Uncomfortable focusing on himself
  - Passive, obedient and compliant
‘Allan’

- **Family and Relationship History**
  - He was ‘carer’ for elderly parents. Obligation.
  - Older brother had his own family and a young child
  - Father = ‘socially awkward’
  - Mother = ‘mistrusting of everyone’
  - No romantic relationships because ‘I’m ok with being alone’
  - Query Emotional Deprivation and Emotional Inhibition Schema
‘Allan’ – Schema Formulation

- Psychoeducation on the central sensatisation model, with emphasis on the effect of unpleasant emotions on the pain cycle.

- Psychoeducation into ‘the way that we deal with pain and emotions is learnt’ - schemas.

- Psychoeducation about coping modes avoidance / surrender / overcompensation

- Very passive, disinterested, compliant.
‘Allan’ – Emotions and link to childhood

- Only emotion reported – ‘confusion about human nature’
- Verbal Schema track exercise

<table>
<thead>
<tr>
<th>Adult triggering situation</th>
<th>FEELING</th>
<th>Corresponding child situation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
‘Allan’ – Emotions and link to childhood

- In his childhood, not encouraged to develop autonomy in thoughts and feelings

- (Under-developed Self)
‘Allan’ – Autobiographical Timeline

- Schema Track exercise opened up discussion for the origin of the schema.
- Discussed his father’s background
- Discussed an early trauma aged 7 with his mother and nanny
- Board work – autobiographical timeline linking with with avoidant / surrender / overcompensation responses.
‘Allan’ – Affect bridge / Imagery

• Couldn’t move backwards from current pain image (his first hospitalisation for the drain)
• Difficult to do and couldn’t name feelings during the exercise. Had affect change.
• Afterwards, reported ‘shock’ and ‘regret’
• Acknowledged he should have picked a different memory (second hospitalisation) because ‘a part of me is always there’. 
‘Allan’ – Use of therapeutic relationship

- More expressive, talkative and tearful as time went on
- Used therapeutic relationship to tell him how I felt about that and how I could meet his needs better
- Role played both roles
- ‘I do know I come across that way’
- Still face experiment
‘Allan’ - Outcome

- MHCP was up
- Yet to return to sessions
- More emotive and communicative as time went on.
- Agreed to cut back on taking on heaps of jobs
- I could have been more specific about goals
- Didn’t feel like it did much
‘Allan’ – Very recent follow up

- Father had died in September last year
- More open about his father and describing the troubled relationship with him
- ‘Was composed, but had tears in his eyes’
- Showed pride in SES work
- ‘I have to make changes in my life’
- Doctor described him as ‘More self aware’
- Overall progress
In practice – ‘Sally’

Reasons for presenting:
1) First use of schema therapy in pain management
2) Clear cut trauma from the beginning
3) Power of imagery rescripting / reparenting
4) Importance of knowledgeable interdisciplinary team
‘Sally’

- 50 year old lady, presenting for headaches and migraines since an MVA in 1983. She had a whiplash injury.
- Experienced 1-3 migraines a week
- Responded to pain with frustration, anxiety and fear.
- She also used to cope by going to sleep and spending days in bed. Medication. Avoiding work.
- She said that her fear triggered off feelings of loneliness, which led to comfort eating.
‘Sally’

- Divorced for 13 years, no children.
- Single
- At the time of assessment, she was working and felt bullied by her manager.
- Felt she couldn’t leave her job.
- At assessment – tearful and highly anxious, but well spoken.
‘Sally’

- Reason for referral – by our physiotherapist.

‘During an examination I said or did something (I don’t know what) that caused Sally to shut down, close off and get angry. She said she didn’t want me to touch her. She said that I’d reminded her of her father. She said she’d never spoken to a psychologist about her family issues’.

Because of this – booked her in to me straight away (in house)
‘Sally’

- Family and Relationship history
  - Turbulent upbringing. Described her father as ‘authoritarian, narcissistic, his way or the highway’
  - Mother had died 30 years ago. Did not get on with her only sister due to mistrust.
  - General mistrust of others, ‘They’ll hurt me’.
  - ‘Quick to cut people out of my life’
‘Sally’

- **Family and Relationship history (Cont’d)**
  - Married for 20 years to a man she described as ‘narcissistic and controlling’. His family also ‘nasty’.
  - Manager at work ‘reminds me of my dad’.
  - Father died 2 years ago – sadness / grief ‘I should have been a better daughter.’

- **Schema Hypotheses**
  - Mistrust / Abuse
  - Subjugation
‘Sally’ - Schema Techniques

Childhood Experiences – Family or Other children – Unmet Needs

Lifelong themes, Thoughts, Beliefs

Unpleasant Emotions

Coping Styles

Avoidance
Surrender
Counterattack
Sally Schema Formulation

1) ‘I need to be seen and not heard’
   ‘It’s Dad’s way or the highway’
   ‘People will hurt me if I get too close’.

2) Recognises that she generally copes with adversity by avoidance and surrender.

Session after formulation, she reported that she did not go to sleep despite having 6 headaches in 8 days – continued on with work and other activities.

Began reading Reinventing Your Life.
‘Sally’ – Schema Techniques

- Sally began saying she was sick of ‘being seen and not heard’ at work.
- Wanted to be more assertive at work.
- Role play with her being the healthy side
Schema Flashcard

- Right now I feel (emotions)
- Because (trigger situation)
- However, I know that this is probably my (relevant schema) schemas,
  Which I learned through (origin)
- These schemas lead me to exaggerate the degree to which (schema distortions)
- Even though I believe (negative thinking)
- The reality is likely that (healthy view)
- The evidence in my life supporting my healthy view includes (specific life examples)
- Therefore, even though I feel like (negative behaviour)
- I could instead (alternative healthy behaviour)
‘Sally’ – Schema Flashcard

The reality is likely that.....
- ‘What would your healthy adult say to the child to make her feel better?’ (I am important, I am worthy, I do have a voice)

I could instead....
- Emphasis on letting (safe) people into her life and reconnecting with others
- Being more assertive (Doing things my way)
‘Sally’ – Schema Techniques

<table>
<thead>
<tr>
<th>Adult triggering situation</th>
<th>FEELING</th>
<th>Corresponding child situation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
‘Sally’ – Imagery rescripting and reparenting

- Nerve block was perceived as not working.

- Increased feelings of loneliness as Christmas approaching.

- Affect bridge – Current pain memory led to memory of being 7 years old and lonely.

- Rescript – Validate, bringing in other figures, fun activity

- No rebooking after this.
One month later.....

• Feedback from physiotherapist - ‘It’s like she flipped a switch’ (In a good way!)

Physically
- Perceived nerve block as working
- Self reported 50% better than last nerve block
- Moving head during conversations
- ‘Headaches almost gone now’ - blocks every 6 months, now every 9 months
- Decreased reported pain intensity
One month later...

- **Behaviourally**
  - Stopped sleeping and spending days in bed because of pain
  - Willing to take medication only when needed
  - More social and taking care of friends’ kids
  - Quit old job. Now in new job at a bank, in charge of others
  - Sold old apartment and downsized to a new apartment for her needs
One month (+) later.....

- **Emotionally**
  - Impresses as someone who ‘perceives her pain in a different light’
  - More empowered
  - ‘I can do it’.
Concluding statements

- The argument for using schema with pain comes from my own lived experience.
- Literature is starting to support personality trait-based treatment approaches to pain, in addition to state based approaches.
- Schema therapy can work with chronic pain, even if modified somewhat.
- Importance of having a team who knows what you do, supports what you do and validates what you do.
Acknowledgement and thank you

Team at SPMC:
- Dr Vahid Mohabbati (Pain and Palliative Care Specialist)
- Dr David Gronow (Pain Specialist)
- Ronda Smith (Physiotherapist)
- Rhiannon Lindsey (Physiotherapist)
- Lawrence Roux (Clinical Psychologist)
- Sonya Grady (Practice Manager)
References


References


References


International Association for the Study of Pain (IASP) website.
References


References


References


References


Woolf, C.J. (2014). What to call the amplification of nociceptive signals in the central nervous system that contribute to widespread pain? Pain, 155 1911-1912