

10 - Psychological aspects of healthcare across the lifespan

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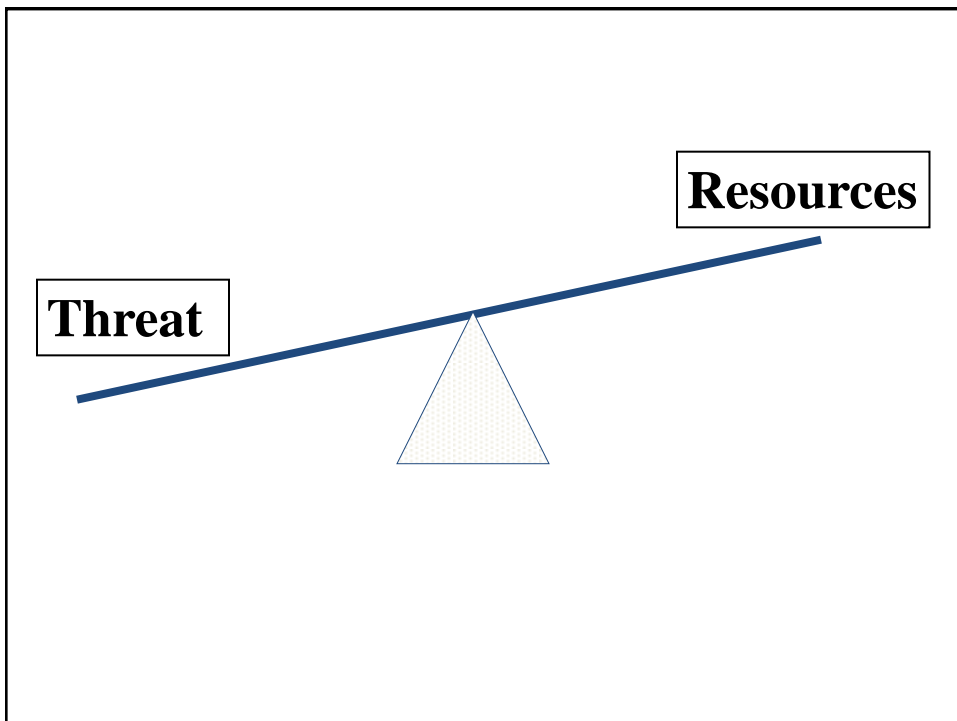
Learning objectives

- Describe with reference to Lazarus & Folkman's Transactional definition of stress why some medical and surgical procedures are stressful.
- Identify strategies to prepare patients for treatment
- Describe the two different types of information which can be provided and their relative efficacy in reducing distress.
- Describe the effect of perceived control on patient distress
- Define and give examples of problem-focussed and emotion-focussed coping strategies.
- Discuss the importance of identify individual differences in preferred coping style and the importance of matching preparation to patient preferred coping style.
- Describe the specific considerations for helping children cope with treatment.
- Give examples of effective strategies to help children cope with treatment

Transactional definition of stress

- Stress is a condition that results when the person / environment transactions lead the individual to perceive a discrepancy between the demands of the situation and the coping resources available.

Lazarus & Folkman 1984



Why is patient distress a bad thing?

1. Moral/ethical responsibility to minimize suffering if possible.
2. If treatment is distressing there is a greater chance of patients avoiding or not complying.
3. Distress during treatment related to longer term psychological morbidity.
4. Distress during treatment related to wide variety of treatment outcomes.

Can we do anything to make the experience any less stressful?

Problem vs Emotion Focussed coping

- Problem Focussed coping – Efforts directed at changing the environment in some way or changing one's own actions or attitudes
- Emotion focussed coping- Efforts designed to manage the stress-related emotional physical responses in order to maintain one's own morale and allow one to function.

Lazarus & Folkman (1984)

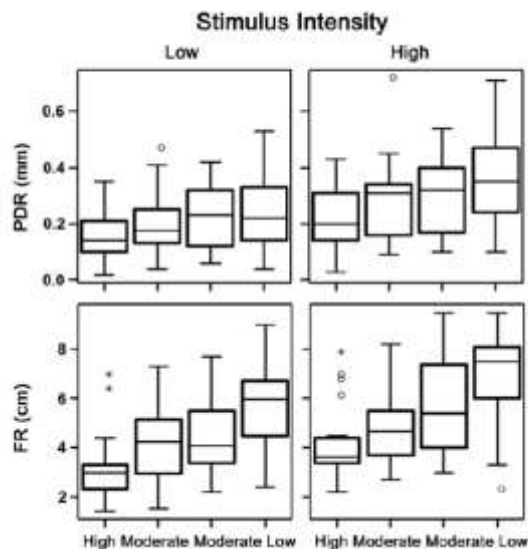
1. Increasing predictability

Oka et al (2010)

- 25 female volunteers
- Given electric shocks to fingertip
- Given high and low shocks in either a predictable or unpredictable sequence (same overall number and severity of shocks)
- Fear and pain ratings
- Physiological measurements including pupil diameter recording.

Oka et al (2010)

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Egbert (1964)

- Randomly allocated 97 patients to receive preparation for surgery or normal care.
- Prepared group reported less pain, used less analgesic medication and their post-operative stay in hospital was an average of 2.7 days shorter.

Procedural vs sensory information

- Procedural information – Information about the procedures to be undertaken
- Sensory information – Information about the sensations that may be experienced.

Johnson (1973)

- Participants (male undergraduates) were given either sensory or procedural information before undergoing an ischemic pain task.
- Results showed that the participants given sensory information reported significantly less distress during the procedure.

Preparation for surgery

Johnson et al (1978)

- Patients about to undergo a cholecystectomy were randomly assigned to one of three preparation groups:
 1. Sensory information
 2. Procedural information
 3. Routine preparation

Results

- Both procedural and sensory information led to lower levels of helplessness but only sensory information led to reduced fear.

Length of hospitalization:

- General information – 6.7 days
- Procedural information – 4.7 days
- Sensory information – 3.3 days (Statistically significant)

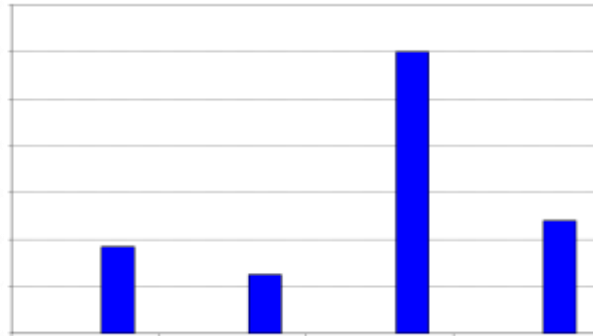
Dual process hypothesis

- Proposes that procedural and sensory information work in different ways.
- Procedural information works by allowing patients to match ongoing events with their expectations in a non-emotional manner.
- Sensory information works by “mapping” a non-threatening interpretation on to these expectations.

(Suls & Wan 1989)

Meta-analysis of type of information and self reported pain (Suls & Wan 1989)

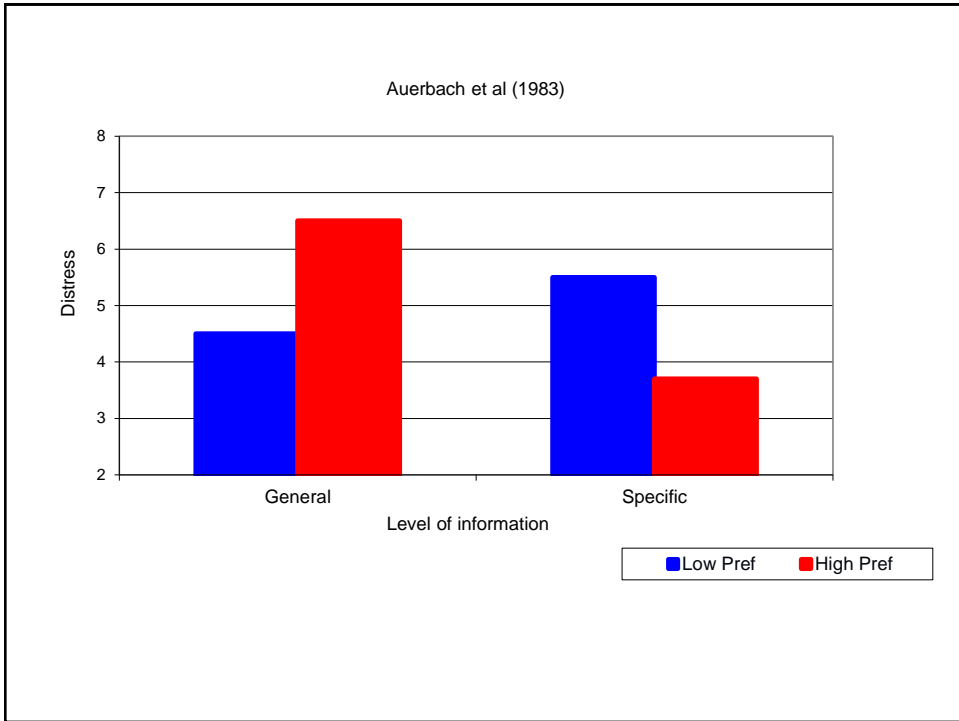
Procedural info < Sensory info < Combination



How much information is enough?

Auerbach (1983)

- 40 patients undergoing dental extraction surgery were either given general or detailed information in a pre-operative preparation.
- Kranz Health Opinion Survey administered (assesses desire for information).
- Distress during procedure measured.



2. Increasing control

Nursing Home Study

Langer & Rodin (1976)

Floor 1

- In a meeting, emphasized to Ps that they could make choices and had responsibility:
- Could rearrange furniture in rooms.
- Could decide what to do in their free times.
- Choice of movies.
- Offered choice of plant which they looked after themselves.

Floor 2

- Similar meeting—emphasized to Ps how staff wanted them to be happy.
- Told that staff will ensure rooms are pleasant.
- Given a timetable of activities.
- Movie night, but no choice.
- Given a plant but nurses watered and cared for it.

Nursing Home Study: Results

- On behavioural measures floor 1 residents (enhanced control group) showed **greater engagement** in activities.
- Self report and nurse's ratings showed Floor 1 residents had **better general well being**.
- 18 Months later – Floor 1 residents were still rated as being **more psychologically and physically healthy** than Floor 2 residents.

Increasing control during treatment

Thrash et al (1982)

- Patients undergoing dental treatment given a advice to signal discomfort (Buttons connected to green, yellow and red lights)

Three conditions:

1. Patients told that dentist can see lights and will stop treatment.
2. Patients thought dentist could see lights but in fact they were not connected.
3. Patients simply asked to monitor their discomfort.

Thrash et al (1982)

- Results showed that actual control group reported less pain and used red light less than other groups.

3. Coping strategies

Problem vs Emotion Focussed coping

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Lazarus & Folkman (1984)

Emotion vs Problem Focussed coping

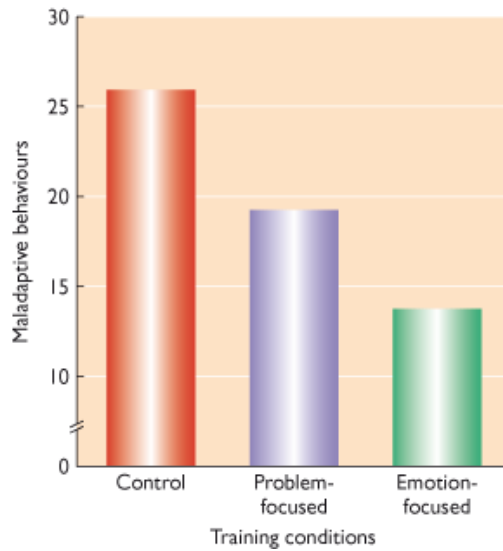
- Many studies have found that use of emotion focussed coping strategies associated with poorer adjustment and greater levels of depression e.g. Holahan & Moos (1990)
- However, need to beware of circular reasoning.
- Optimal coping strategy depends on the situation and individual coping style.

Coping strategies in an uncontrollable situation

(Strentz & Auerbach 1988)

- Airline employees participated in an FBI training programme to train them to cope with hostage situations. Employees were randomly assigned to training in:
 1. Problem focussed coping strategies
 2. Emotional focussed strategies
 3. Control condition
- Some weeks later they were unexpectedly kidnapped by FBI agents posing as terrorists and held captive for 4 days.

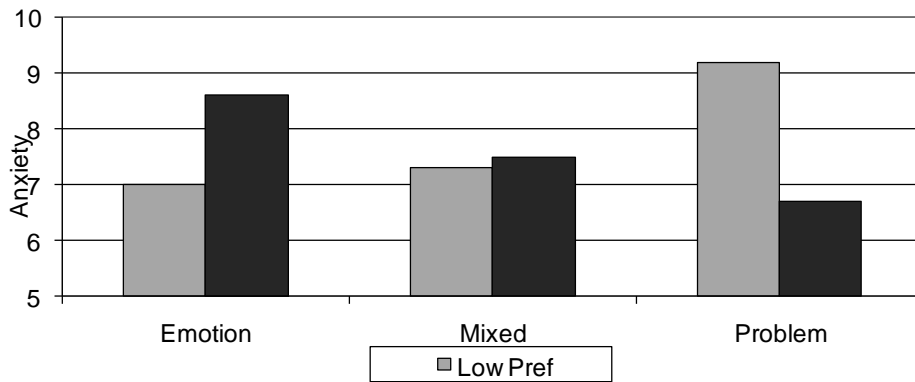
Results



Martelli et al (1987)

- 46 patients awaiting pre-prosthetic oral surgery
- Administered the Krantz Health Opinion Survey
- Given a 20 minute preparation either emotion focussed or problem focussed or no preparation

Emotion vs Problem Focussed Coping Martelli et al (1987)



Effect of social support

Kulik and Mahler (1989)

- Male patients undergoing coronary bypass surgery allocated to share a room with either a pre-operative or post-operative patient.
- Patients who shared with recovering patients left hospital on average 1.4 days earlier.

Helping children to cope with treatment

Presence of parent in treatment

- Frank et al (1995) found children's distress during a routine immunization was correlated with the amount of distress shown by parents but not to subjective anxiety.
- Marzo et al (2003) assessed behaviour of children during dental treatment. Half children had parent present, half did not. 89% of children with the parent out were "fully cooperative" compared to 63% of the group with the parent in.
- Venham (1979)

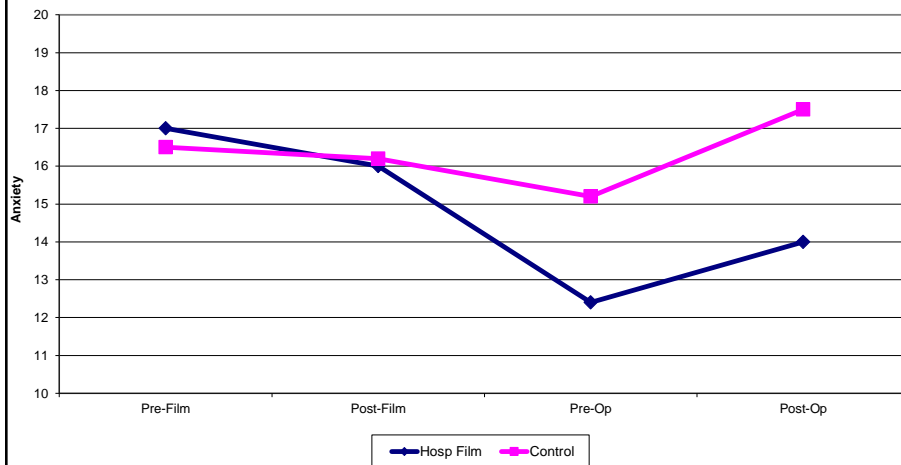
Weinstein et al (2003)

- 101 children aged 7-9 years watched either
 1. A 2 minute video explaining what an injection feels like and showing the child a hand signal as a stop mechanismor
 2. A 2 minute video about Disneyland
- Results: The experimental group, but not the control group, showed a significant reduction in distress.

Modelling intervention for children undergoing surgery Melamed & Siegal (1975)

- Children aged 4-12 years old undergoing operations e.g. tonsillectomy.
- Half of children shown a film "Ethan has an operation" depicting child in hospital. The other half watched a control film.
- Observer rating of verbal and non-verbal anxiety behaviour measured.

Melamed & Siegal (1975)



Preparing children for treatment

- Peterson (1980) Found a puppet show preparation was as effective as a filmed preparation.
- Melamed et al (1984) Found that children with previous experience, particularly younger children were more anxious after watching a modelling film compared to a control film.

Combined approach

- 1) Tell:** Using simple language and a matter-of-fact style, the child is told what is going to happen before each procedure.
- 2) Show:** The procedure is demonstrated using an inanimate object, a member of staff or the dentist him or her self.
- 3) Do:** The procedure does not begin until the child understands what will be done.