Stress and coping in dentists

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Learning outcomes

- At the end of this session you'll have some understanding on:
- What is meant by stress, distress and eustress
- Some of the key sources of stress and symptoms of distress in dentists
- Some of the main models of stress
- Some coping tips you could adopt

Stress as a source and stress as an effect

Common sources

- Time pressures
- The physical nature of the work
- Patient needs and patient behaviour
- Maintaining clinical excellence
- Demands of the regulatory body
- Staff management and issues
- Financial demands

Common stress effects

- Burn-out [ee, dp, pa]
- Other psychological signs – concentration lapses, irritability, feelings of dissatisfaction, low achievement, low happiness
- Increased risk of developing a stress-related illness
- Chronic stress becomes an incubation period for more debilitating and life-threatening illnesses…
- Physical illness
- Increased use of poor coping strategies…

Have you Recently...

1. been able to concentrate on whatever you're doing?	Better than usual	Same as usual	Less than usual	Much less than usual
2. lost much sleep over worry?	Not at all	No more than usual	Rather more than usual	Much more than usual
3. felt that you are playing a useful part in things?	More so than usual	Same as usual	Less useful than usual	Much less useful
4. felt capable of making decisions about things?	More so than usual	Same as usual	Less so than usual	Much less capable
5. felt constantly under strain?	Not at all	No more than usual	Rather more than usual	Much more than usual
6. felt you couldn't overcome your difficulties?	Not at all	No more than usual	Rather more than usual	Much more than usual
7. been able to enjoy your normal day-to-day activities?	More so than usual	Same as usual	Less so than usual	Much less than usual
8. been able to face up to your problems?	More so than usual	Same as usual	Less able than usual	Much less able
9. been feeling unhappy and depressed?	Not at all	No more than usual	Rather more than usual	Much more than usual
10. been losing confidence in yourself?	Not at all	No more than usual	Rather more than usual	Much more than usual
11. been thinking of yourself as a worthless person?	Not at all	No more than usual	Rather more than usual	Much more than usual
12. been feeling reasonably happy,	More so than usual	About same as usual	Less so than usual	Much less than usual

Understanding the biology of stress (The Response Model)

- Stress – a definition
- For Cannon (1932) and Seyle (1974)

  'stress is the non-specific response of the body to any demand made upon it'

  (Seyle,1974, p.27)
- It is a factor that disrupts 'homeostasis', inducing a physiologically aroused state.

- This state is also called the fight-flight response
- It involves the activity of neurons and hormones and is also termed the HPA axis

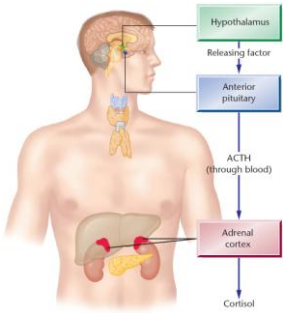
Hypothalamus

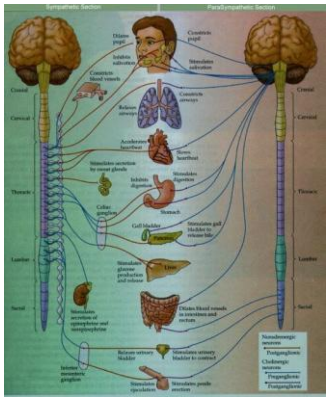
Pituitary gland

Adrenal gland

Note, the body communicates using neurons and hormones.

The Pituitary-adrenal system – the HPA story





The fight-flight response: Stage 1

- The eyes perceive the stressor, at lightning speed neurological signals [SNS] lead to an instant response
- ATP is an enzyme in muscles that breaks [phosphate] molecules to produce oxygen. It also breaks down the Glycogen in muscles to produce glucose [lactic acid is a by-product]
- This all happens before the lungs have been able to take in increased oxygen and before the heart has had time to pump that O2 via the red blood cells to the muscles

The fight-flight response: Stage 2
The sympathomedullary pathway

The hypothalamus is connected along neuron pathways to the Adrenal Medulla – the centre of the Adrenal glands. This is called the sympathomedullary pathway.

Adrenaline and nora-adrenaline are released to maintain the biological changes initiated by the SNS signals sent from the hypothalamus to initiate the fight-flight response.

The fight-flight response: Stage 3
The pituitary-adrenal system

- The pituitary-adrenal system refers to the release of a stress hormone [ACTH] from the Pituitary gland. This passes through the blood stream and when detected by the Adrenal cortext, cortisol is released. This is a powerful immune-suppressant.
- This stress reaction can lead to a range of stress-related illnesses…hypertension, coronary heart disease, strokes, Diabetes etc

Stress-related illnesses and the immune system

Kiecolt-Glaser et al (1984)

Method - They took blood samples from 75 student Volunteers:

1. One month before examinations (baseline/control).
2. On the first day of their exams (intervention/stress reading).

- They also completed a questionnaire to assess their psychiatric state, their level of loneliness and number of life events.
- Results - on the day of their finals, they had significantly fewer natural killer cells

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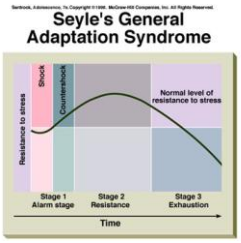
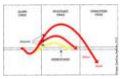
- Those who reported feeling lonely; and/or had experienced several life events; and/or felt depressed were most at risk





- Sweeney (1995) took biopsies/made small injuries in the upper arms of age-matched volunteers. Half were the sole carer of an elderly relative, half had a support network that helped.
- Results – those with no support took 25% longer to heal.

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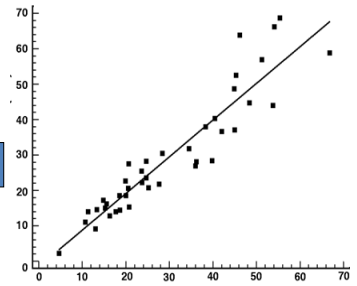
Stress in everyday life

- Later research has looked at the stimuli 'out there' that trigger this biological reaction

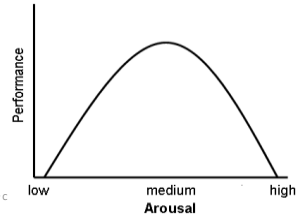
  This includes Holmes and Rahe's 'life events' and stress-related illness research

A strong correlation estimating the concordance rate in life events and stress-related illness



- And this research explores not just life events but the more frequent daily stressors called 'hassles'. Such stressors may also be construed as a level of stress that helps us achieve, called an 'uplift'

Yerkes-Dodson curve, (1908)



HASSLE 0 = NA 1 = Somewhat 2= Quite a bit 3= A great deal		UPLIFT 0 = NA 1 = Somewhat 2= Quite a bit 3= A great deal
	1. Your patients	
	2. Time pressures	
	3. Clinical demands	
	4. Your dental nurse	
	5. Reception staff	
	6. Dental colleagues	
	7. Financial matters	
	8. Demands of the regulatory body	
	9. Amount of free time	
	10. Family	

Marmot's is one of many studies that supports the JDC model:

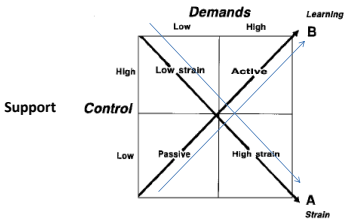


Figure 1. The Job-Demand-Control model (adapted from Karasek, 1979).

- On a scale from 1-10, where 1 is 'not at all' true and 10 is 'very' true, score yourself on the following statements:
- 1. I often anticipate what others are going to say and often interrupt
- 2. I am very competitive
- 3. I am often very impatient while waiting
- 4. I want my good work to be recognised by others
- 5. I hide my feelings
- 6. I have few interests outside work

Two American researchers on a coronary prevention project, Drs Friedman and Rosenman, have identified two personality types which they have labelled □Type A□ and □Type B□. Their research has shown that Type A personalities suffer significantly more coronary heart disease than Type B personalities.

The Type A personality has what Friedman and Rosenman called □hurry sickness□.

A typical Type A personality:

- always seems busy and runs his or her life by the clock;
- speaks quickly and loudly;
- walks quickly;
- eats rapidly;
- is□impatient and irritable;
- tries to do more than one thing at a time;
- feels guilty when relaxing□
- is competitive and plays to win;
- schedules too many activities into a day;
- and is intolerant of failure.

Not surprisingly, Type B individuals are the complete opposite.

A typical Type B:

- can stay patient and calm;
- has no inner anger nor hostility;
- cooperates with others;
- can relax without feeling guilty;
- plays for fun, not to win;
- is flexible and easy going□
- and works without agitation.

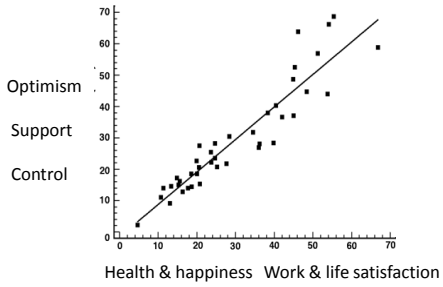
In general, Type A men have higher blood fat levels than Type B□ and are six times more likely to have a heart attack. Similar health traits are found in Type A women. Type A business or professional women are around seven times more likely to suffer from coronary heart problems than Type B women who do not work.

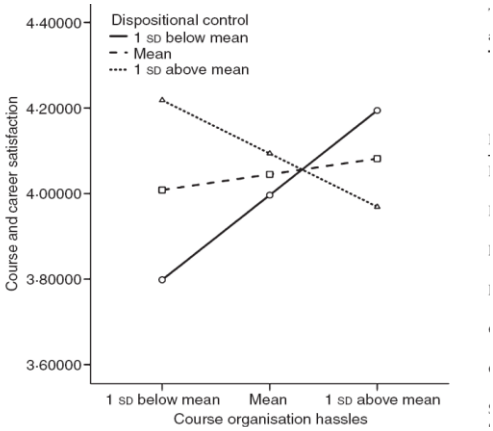
Values in Action [VIA] (Peterson & Seligman, 2004)				
1. Look on the bright side.				
Strongly agree	Agree	Neither	Disagree	S Disagree
2. Can find the positive in what seems negative to others.				
Strongly agree	Agree	Neither	Disagree	S Disagree
3. Remain hopeful despite challenges.				
Strongly agree	Agree	Neither	Disagree	S Disagree
4. Will succeed with the goals I set for myself.				
Strongly agree	Agree	Neither	Disagree	S Disagree
5. Think about what is good in my life when I feel down.				
Strongly agree	Agree	Neither	Disagree	S Disagree
6. Expect the worst.				
Strongly agree	Agree	Neither	Disagree	S Disagree
7. Have no plan for my life five years from now.				
Strongly agree	Agree	Neither	Disagree	S Disagree
8. Am not confident that my way of doing things will work out for the best.				
Strongly agree	Agree	Neither	Disagree	S Disagree

- Scores are out of /40. The higher the score the more optimistic one is.

- Now estimate your work satisfaction on a scale from 1 [very dissatisfied] -10 [v satisfied]
- Now estimate your life satisfaction on a scale from 1 [very dissatisfied] -10 [v satisfied]

Coping





- Optimism also helps you deal with illness. Rosenhan and Friedman (1974) carried out the seminal research into Type A personality and CHD.
- They found that attempts to change the personality Type from A to B did not reduce the risk of a second heart attack.

- Buchanan and Seligman analysed the transcripts from the interviews with these patients and coded the responses into optimistic or pessimistic statements.
- Of those who went on to have a second heart attack 15/16 were pessimistic while 5/16 were optimistic.
- And this was after controlling for/partialing out the influence from the usual risk factors

Getting into the head of an optimist…

- Personality tendencies help you explain and interpret the demands you face.
- Optimists are better at arriving at 'do-able' interpretations

Strategies to become more optimistic

- Catastrophising fantasy – look back at an experience that has been distressing or a challenge and consider all the things that didn't but could have gone wrong…
- Active Disputing – Pessimists and Perfectionists are often highly self-critical. Active Disputing involves the practice of challenging your own self-criticisms as readily as you would defend a friend falsely accused…

Jane and Jack were together six years. Jack recently ended their relationship. Jane never saw it coming. He acts now in a very distant way and is already seeing someone else. Jane is in a state of deep anxiety.

1. Jot down two or three catastrophising fantasies that Jane could adopt that might help her...

i.e. Think of scenarios where it could have turned out far worse than it did...

2. How else could Jane frame what has happened in such a way that it might help her cope?

- Seligman's formula:
- If failure is likely to be catastrophic don't use optimism as a strategy; if failure will not be catastrophic then do!

- Take control - The pressure of running a practice is huge because it is a small business with all the hassle of staff management, regulation etc., so, I'd say know the law and regulations inside out so you know exactly what your responsibilities are.
- Take control - Try to limit causes of stress by good practice protocols especially around time management to avoid constantly running behind. Make sure your ancillary staff are really well trained so that they help and not hinder.
- Reverse Type A - Build in time for admin tasks so you are not trying to do paperwork between appointments.
- Control & support - Have regular practice meetings to touch base with everyone to identify issues before they start causing huge problems as stress in your team ultimately causes stress for you.

- Try to be aware of your own stress levels and plan regular breaks to recharge. The running on empty burn-out scenario helps no-one. It's easier to put up with stress when you know there's some imminent down-time.
- I always knew when I needed a long weekend when I'd start imagining how it would feel to 'punch' the whiny patient who'd landed in 40 mins late but who I couldn't tell to 'take a running jump' because he had toothache!
- Support - Keep in touch with colleagues as they will have the same moans (makes you feel less unique and it's necessary to realise that everyone feels stressed so that you don't feel like you're a failure because you're stressed). Sounds trite but much dental work is a repetitive activity you do for money so if it has become your whole life it will being to take its toll on your health.
- Keep work and social life separate and definitely have a decompressing hobby- all work and no play etc but personally I always avoided alcohol during the working week!