

“I Never Dreamed I Would Be Doing This.”

Mental Health in a Time of Financial Tsunami

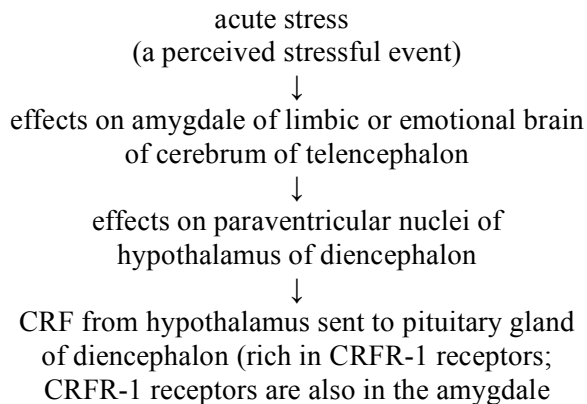
by

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Radio 07/21/2009

- Introduction
- Bible verses
 - Hebrews 13:5 – Let your conversation be without covetousness; and be content with such things as ye have: for he hath said, I will never leave thee, nor forsake thee.
 - Romans 8:35 – Who shall separate us from the love of Christ? shall tribulation, or distress, or persecution, or famine, or nakedness, or peril, or sword?
 - Philippians 4:19 – But my God shall supply all your need according to his riches in glory by Christ Jesus.
- Unparalleled misery for millions
 - How many of the following 17 effects have you had from the financial tsunami?
 - no shopping or decreased shopping
 - no restaurants or decreased restaurants
 - vacations curtailed
 - job losses
 - home losses
 - garage sales
 - marriage losses
 - family losses
 - loss of health care
 - loss of insurance
 - savings drained
 - loss of self-esteem
 - physical illness without ostensible cause
 - GNP (gross national product) shrinking
 - nearly all investments plummeting
 - retirement plans decimated
 - more families are visiting salvation army, good will, food pantries and using food stamps

- The economy, stress and mental health problems
 - decreased mental health with ubiquitous barrage of bad economic news
 - increased worry – realistic concern verses fretting
 - visits to mental health clinics have increased
 - MHMR inundated
 - increased anxiety the most common emotion
 - men especially have increased shame, and guilt
 - increased lethargy
 - increased rage
 - increased alcohol abuse
 - increased domestic violence
 - decreased ability to change their situation
 - increased anxiety with rigidity of thinking, difficulty in problem solving, difficulty in planning for the future
 - increased depression (blue, sad, melancholic feeling with increased negative thinking) the most dangerous
 - decreased seeking of help especially by the elderly who see no way out
 - increased suicidal thinking
 - calls to National Suicide Prevention Lifeline increased almost 40%
- You must keep swimming; you must go on for Christ.
- Philippians 4:13 – I can do all things through Christ which strengtheneth me.
- Suggestions
 - Pray – James 5:16
 - “Pray to God but row to shore.”
 - The local church
 - Intervention if necessary. Economic stress is not worth dying over.
 - Economic stress can produce emotional stress, which may eventually need medical help. The anatomy is as follows:



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pituitary gland releases ACTH
(adrenocorticotrophic hormone)



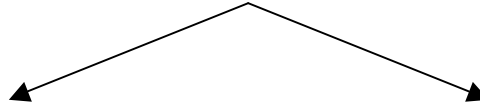
adrenal glands (cortex) release cortisol



body in part mobilized for fight or flight (the medulla
of the adrenal glands also releases epinephrine (adrenalin)
and norepinephrine for fight or flight)



chronic stress



acute stress



↑ 5HT, ↑ NE, ↑ D, but



chronic stress



↓ 5HT, ↓ NE, ↓ D

hippocampus damage (atrophy)

The hippocampus in part regulates the HPA (hypothalamus-pituitary-adrenal) axis. With hippocampus damage the HPA cannot be regulated. With hippocampus damage there are cognitive deficits, decision making deficits, memory deficits, and concentration deficits.

First, CRF-1 receptors affect raphe 5HT cells.

Chronic glucocorticoids ↓ RNA for tryptophane hydroxylase that synthesizes 5HT. Incidentally, a short SERT allele gene is also associated with increased glucocorticoids, increased depression, and decreased learning.

Second, chronic stress also increases glucocorticoids that affects the locus coeruleus that releases NE. The locus coeruleus (NE) of the midbrain just like the raphe nucleus (5HT) of the midbrain contains CRFR-1 receptors. The chronic stress, the chronic increase of glucocorticoids, the CRFR-1 receptor factors all eventually decrease NE which increases depression.

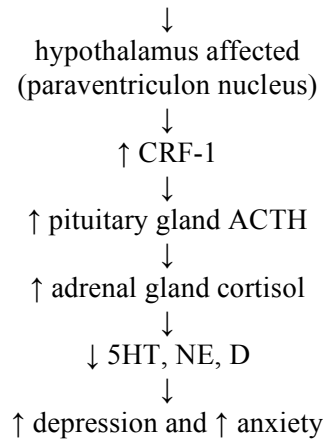
Third, chronic stress also eventually decreases dopamine. Acute stress increases dopamine release from the ventral tegmental area (VTA) of the midbrain to the nucleus accumbens and prefrontal cortex, but when stress becomes chronic and the situation is perceived as hopeless, the dopamine decreases and depression increases. Incidentally, increased glucocorticoids and CRFR-1 receptors play a role in the decreased dopamine.

Chronic stress decreases serotonin (can be a permanent decrease from permanent brain damage). SSRIs are used in treatment; GABA agonists (benzodiazepines) are also used; CRF antagonists may be used in the future. CRFR-1 receptors are found in the amygdale, dorsal raphe nucleus, locus coeruleus, and possibly in the VTA. Thus, CRF antagonists may be used in the future for depression and anxiety. In fact, benzodiazepines may work in part by decreasing cortisol. Incidentally, alcohol may have effects similar to stress with a disruption of the HPA axis; a CRF antagonist might help in alcoholism and alcohol withdrawal. Also, of interest is the fact that depressed patients that receive both an SSRI plus a hypnotic improve faster. In summary, CRFR-1 antagonists may be used in the future for depression, anxiety, substance abuse, and insomnia.

In summary:
chronic stress



amygdala affected



- Conclusion
- Bible verses
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