

Approach to Medically Unexplained Symptoms

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Rocky Mountain Conference
of General Internal Medicine
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Conflicts of Interest

- none

Medically Unexplained Symptoms

- Session participants shall:
 - be able to define MUS
 - know that MUS are common
 - have considered psychobiological framework
 - become aware of management strategies

- dr.schaeferville.com

Medically Unexplained Symptoms

- Physical symptoms that prompt the sufferer to seek health care but remain unexplained after an appropriate medical evaluation.
- Variable dimensions
 - time
 - severity
 - relationship to other conditions

- 42 year old female school board administrative assistant
 - **total body pain and numbness** x 5 years
 - occipitofrontal headache (CT negative)
 - chest pain (EST / echo negative)
 - abdominal pain (colonoscopy / endoscopy / CT negative)
 - flank pain and bloody in the urine
 - fatigue (every test normal)
 - poor concentration and dizziness (neurology consult → no disease)
 - missing work (form coming in the mail)
- PMH
 - cholecystectomy for abdo pain
 - had the carpet removed owing to VOS
 - recurrent urinary tract infections ROS: polypositive
- Meds
 - citalopram, amitriptyline, gabapentin, fentanyl disk, lorazepam
- Examination:
 - tender to palpation everywhere

Case

- What's your diagnosis / diagnoses?
 - Chronic Fatigue Syndrome
 - Fibromyalgia
 - Tension Headache
 - Irritable Bowel Syndrome
 - Multiple Chemical Sensitivity Syndrome
 - Interstitial Cystitis
 - Hematuria Loin-pain Syndrome
 - Other symptoms not described... Medically Unexplained
- What should you do now?



Hopefully,
uptodate.com
has
something...

Prevalence of MUS Factoids

- ~30% of visits to primary care are MUS

- 14 presentations → ½ prim care visits
 - 10-15% will ultimately find an organic cause

J Clin Psychiatry. 1998;59 Suppl 20:15-21

- MUS averaged 13.6 MD visits in prev year

Psychosomatic Med 2005;67:123-9

- 29% referrals to UK rheumatology

Rheumatology 2003;42:108

If only... 'an actual email this week'

- Dear Dr. Schaefer,
- This is great! I'm much relieved and grateful for your care. Thank you THANK YOU!
- XXXXXXXX

This is a problem!





This is a big problem!

Unhappiness is...

- Patients Feel Unheard
 - doctor centered approach
 - *69% of MD's interrupt at 18 sec into the interview*
 - MD patient congruence
 - *reassurance*
 - *longer the patient talks → more likely to prescribe*
 - *discomfort, disability, dissatisfaction, destitution*

Unhappiness is...

- Unresolved Diagnostics
- Ineffective Pharmacology
- No training in Psychotherapy
- 'Not my Department' Approach
- Primary Care Physician Shortages
- Feeling of '**Heart Sink**' for the internist...

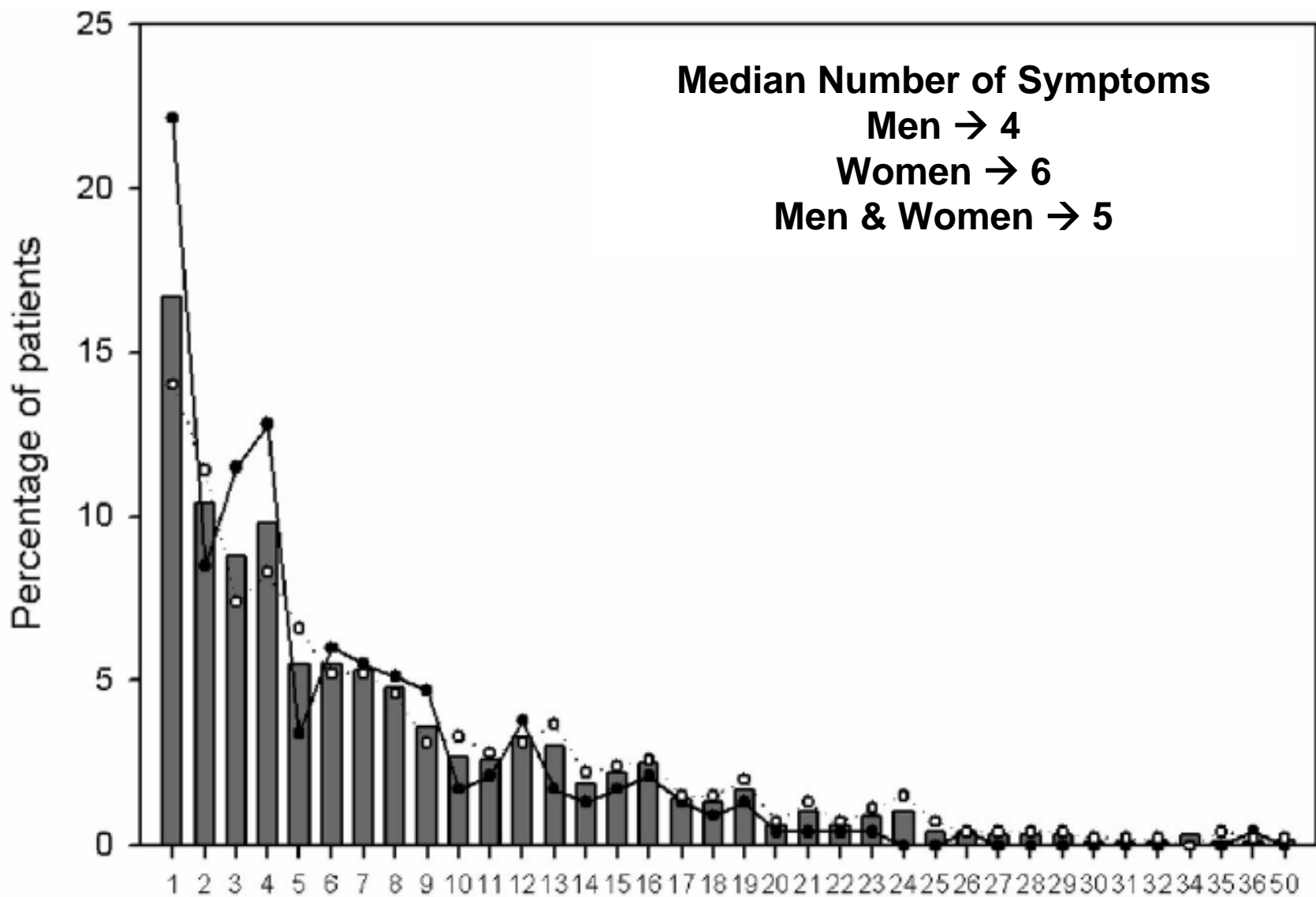


Body Distress Syndrome

Symptoms and Syndromes of Bodily Distress: An Exploratory Study of 978 Internal Medical, Neurological, and Primary Care Patients

PER FINK, DR. MED. SC, TOMAS TOFT, PHD, MORTEN STEEN HANSEN, PHD, EVA ØRNBØL, MSc, AND FREDE OLESEN, PROF

- Do functional symptoms cluster in a way that support multiple conditions?
 - Cross sectional survey of patients with functional symptoms
 - Screened 2,300 patients → 978 were judged functional



Patients complaining of at least one functional symptom only (n=693).

Figure 1. Number of functional symptoms (out of 76).

Chest Pain Group
GI Symptoms Group
Musculoskeletal Group

patients assigned to one group
were more likely to have symptoms
in the other groups

< 3% of patients had symptoms
confined to their predominant group

TABLE 3. Suggested Criteria for Bodily Distress Disorder

Yes	No
	≥ 3 Gastrointestinal (GI) symptoms ^a ≥ 3 Cardiopulmonary (CP) symptoms ^a ≥ 3 Musculoskeletal (MS) symptoms ^a ≥ 3 General Symptoms (GS) ^b ≥ 4 or more symptoms from any of above symptoms groups

Severe = 4 or more 'Yes'; Mild = 1 to 3 'Yes.'

^a See table 2.

^b Fatigue, headache, impaired memory, impaired concentration, dizziness.

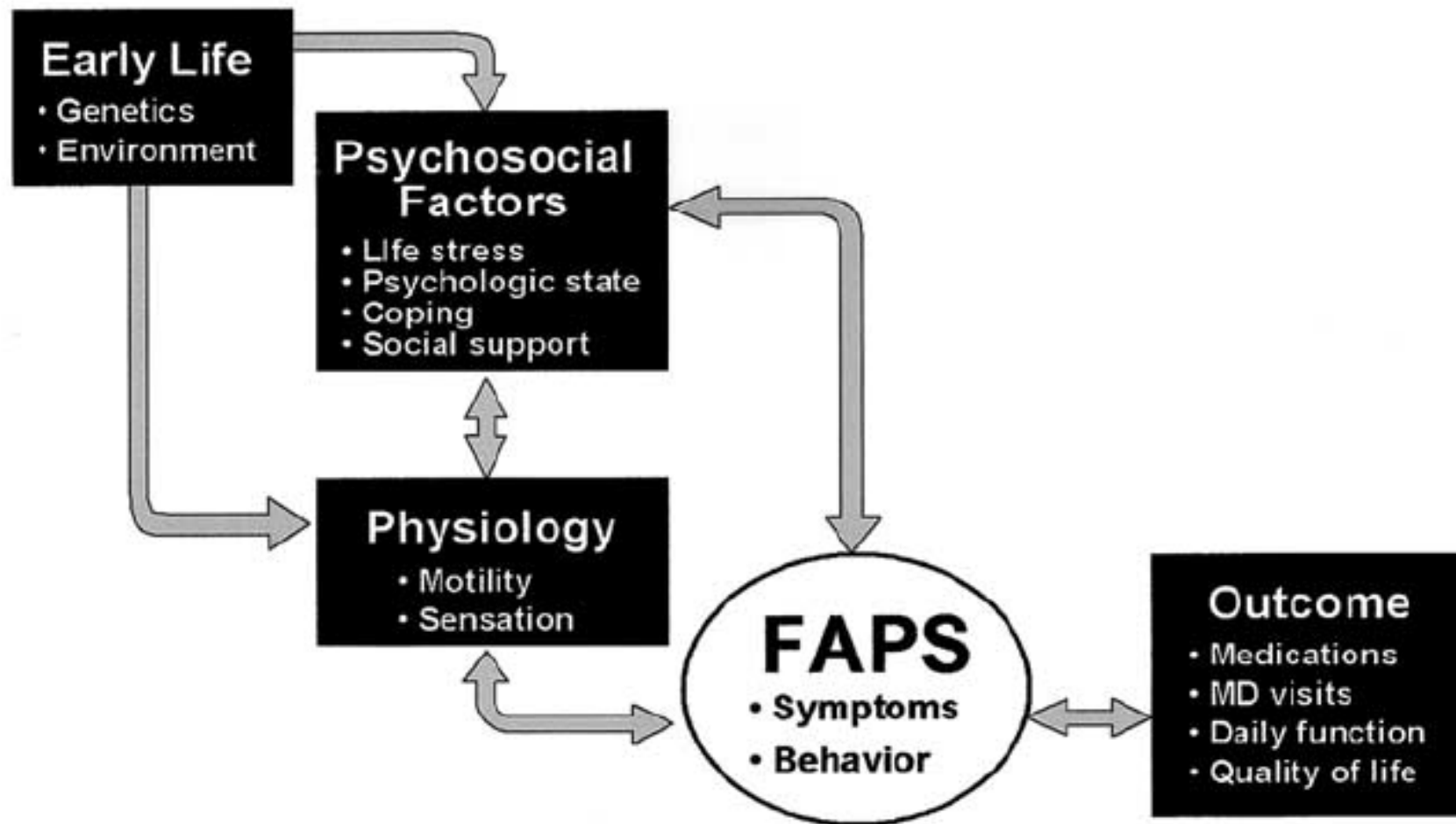
- associated with anxiety
- preoccupied with symptoms
- preoccupied with illness
- low threshold to request consultation
- difficult / impossible to reassure

Multiplicity of diagnostic labels is an artifact of medical specialization.

Psychobiological Framework

FAPS - Conceptual Model

CLINICAL GASTROENTEROLOGY AND HEPATOLOGY 2004;2:353-365



IBS - Ascending Visceral Pain Pathway

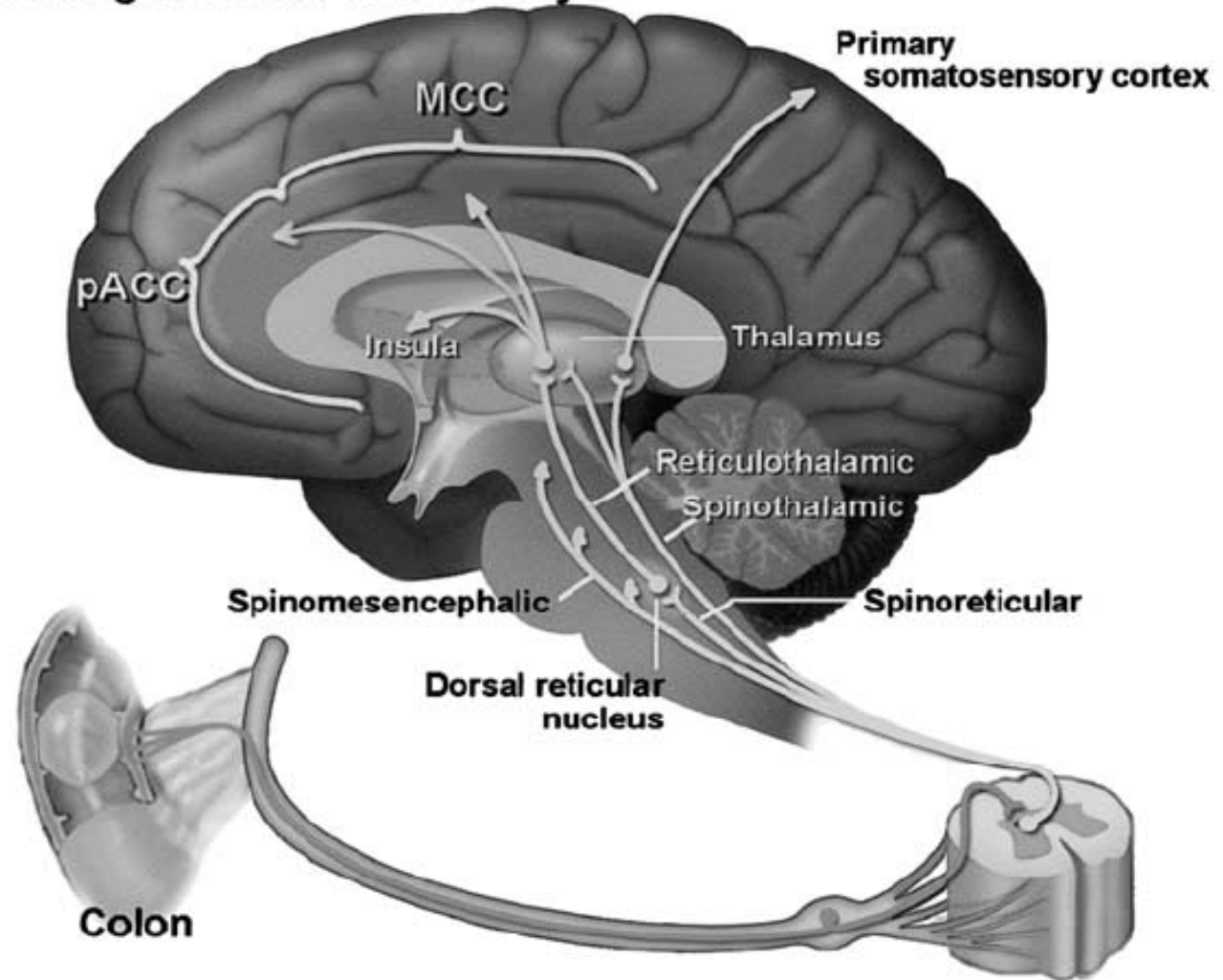


Figure 2. Neuroanatomic pathways mediating visceral pain sensation.

Descending Visceral Pain Pathway

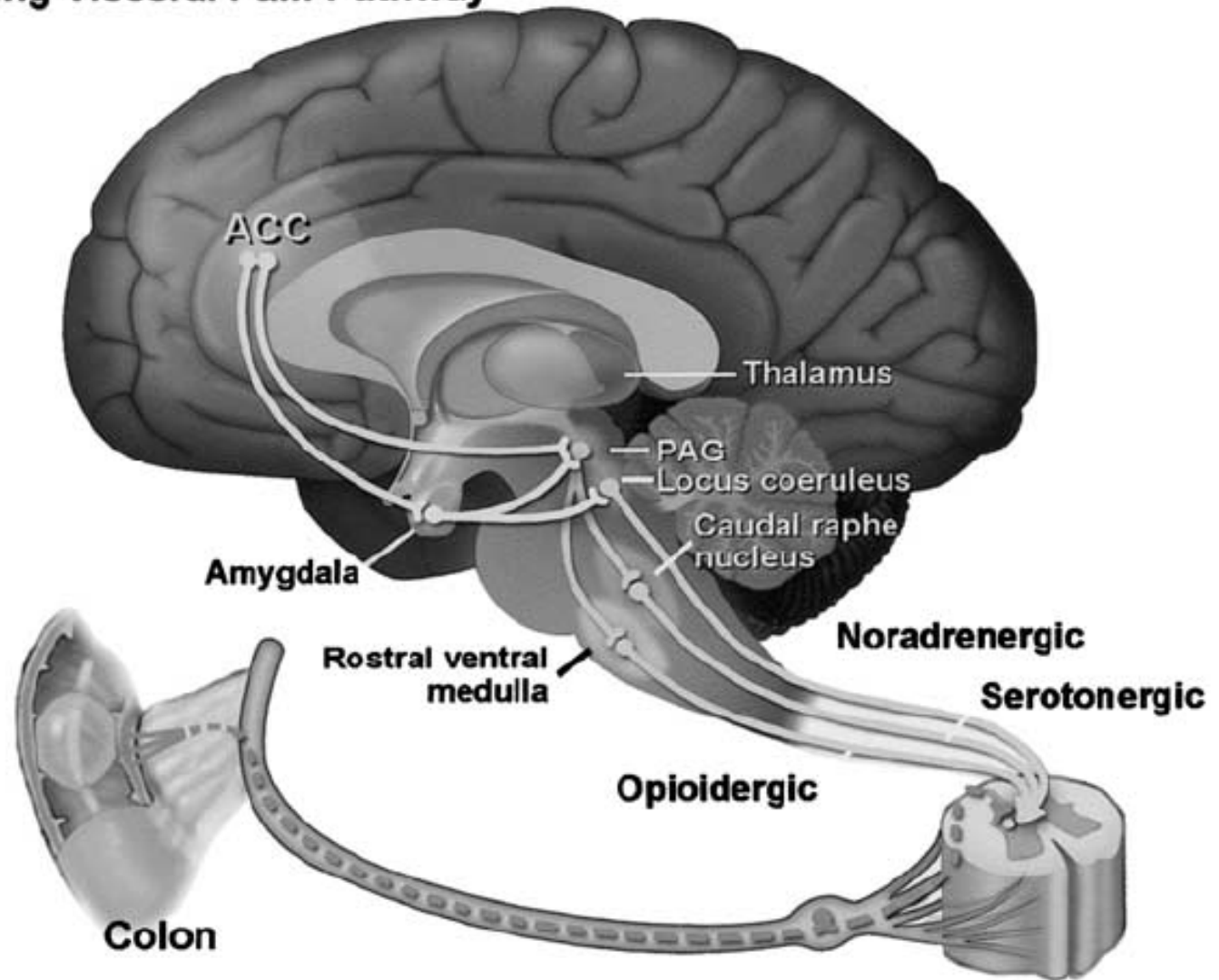


Figure 3. Descending inhibitory pathway for visceral pain.

Acute Stress Response

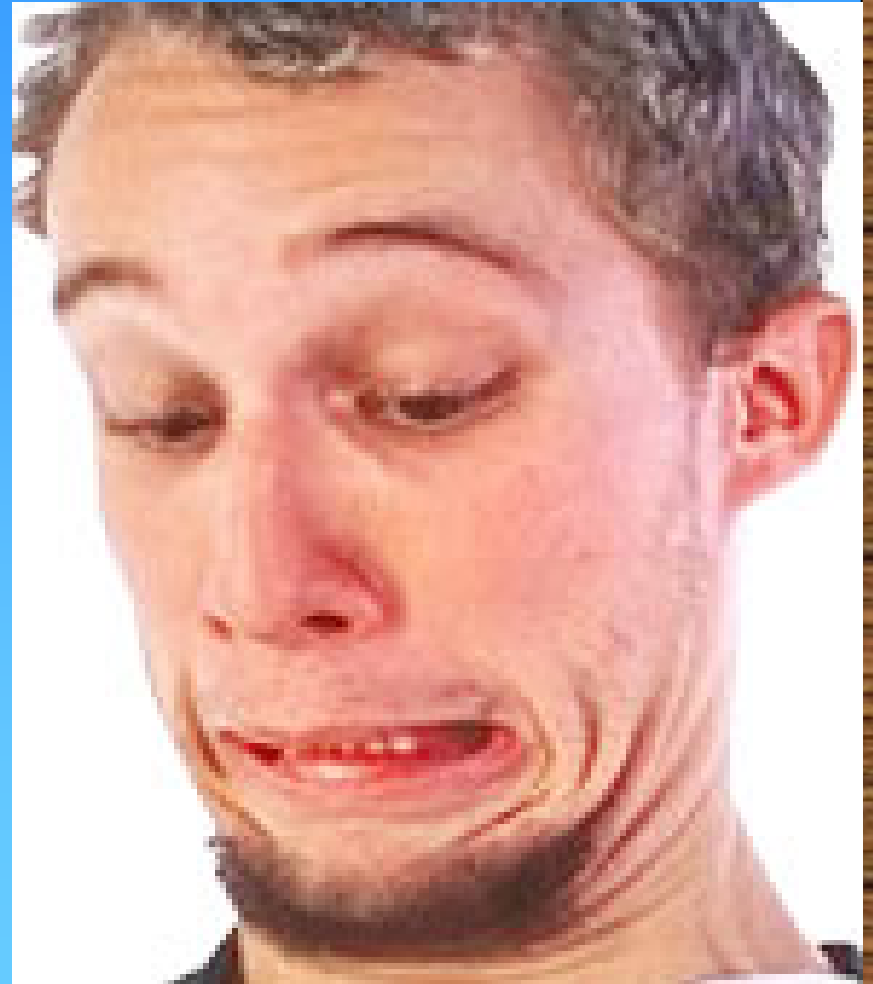
Fight, Fright, Flight, Frolic Response



Stimulus

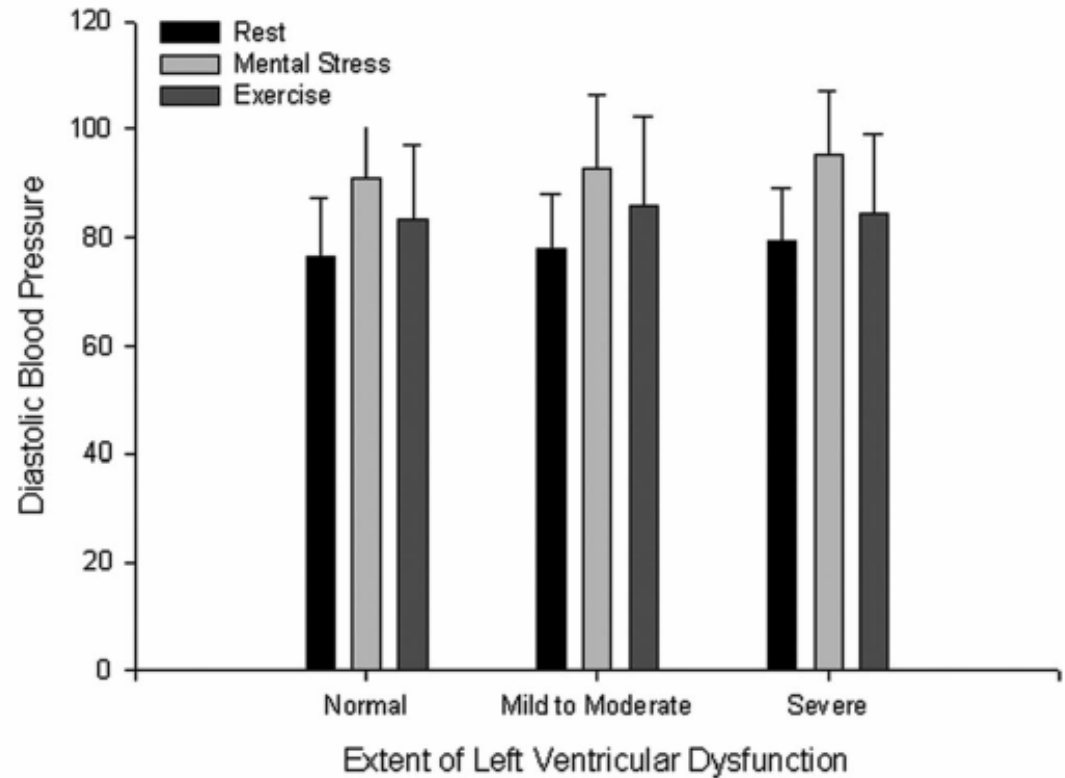


Reaction



Physiological Response

- Hormones
- Neurochemistry
- Immunochemistry
- Organ dysfunction



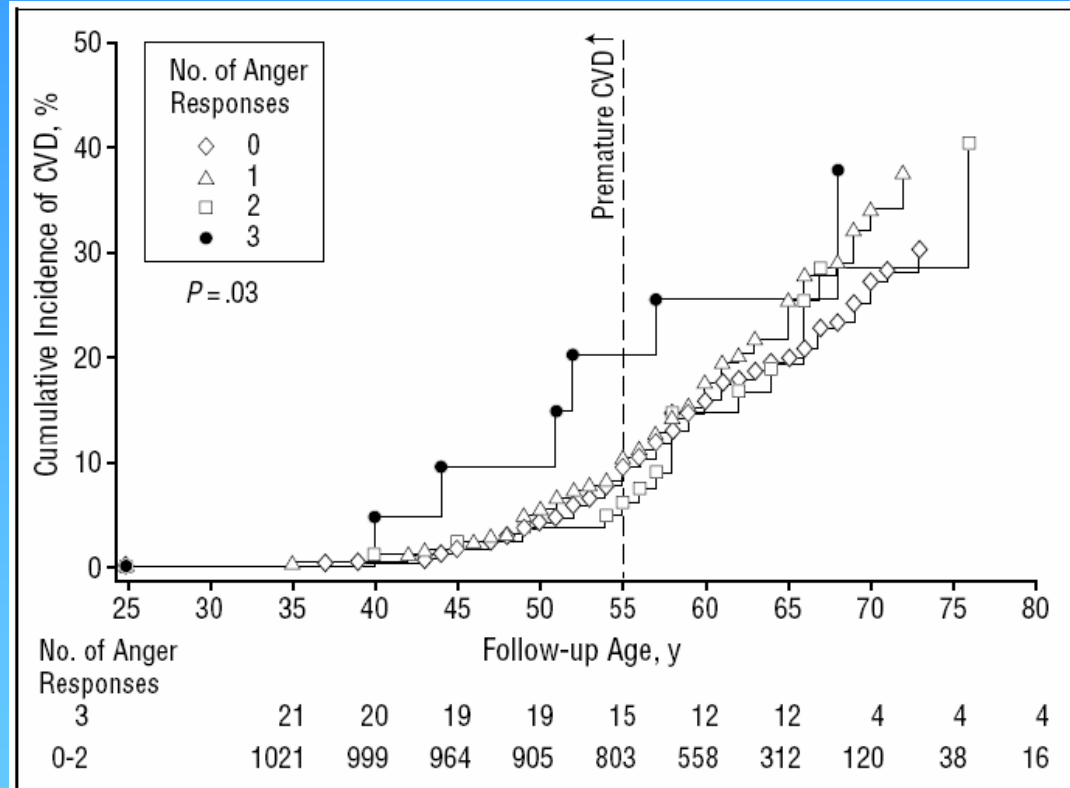
Mental Stress Hemodynamic Responses and Myocardial Ischemia: Does Left Ventricular Dysfunction Alter These Relationships?

SARI D. HOLMES, MS, DAVID S. KRANTZ, PhD, WILLEM J. KOP, PhD, ALBERT DEL NEGRO, MD, PAMELA KARASIK, MD, AND JOHN S. GOTTDIENER, MD, FACC

Psychosomatic Medicine 69:495-500 (2007)

Experience of the Physiological Response

Stomach Problems or Heartburn?

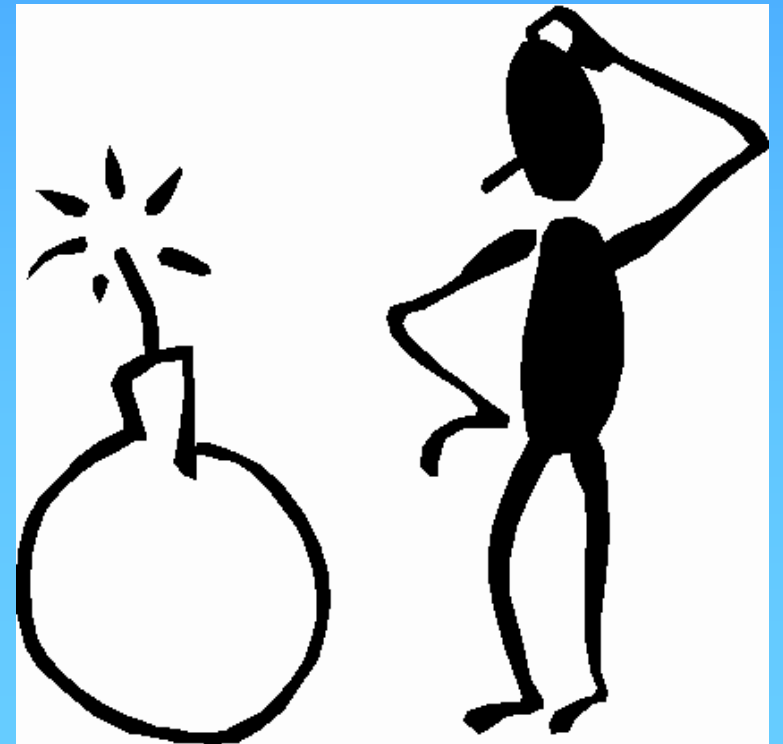


Anger in Young Men and Subsequent Premature Cardiovascular Disease

Arch Intern Med. 2002;162:901-906

Recipe for Stress

- Novelty
- Unpredictability
- Threat to ego
- Loss of control



Absolute Stress

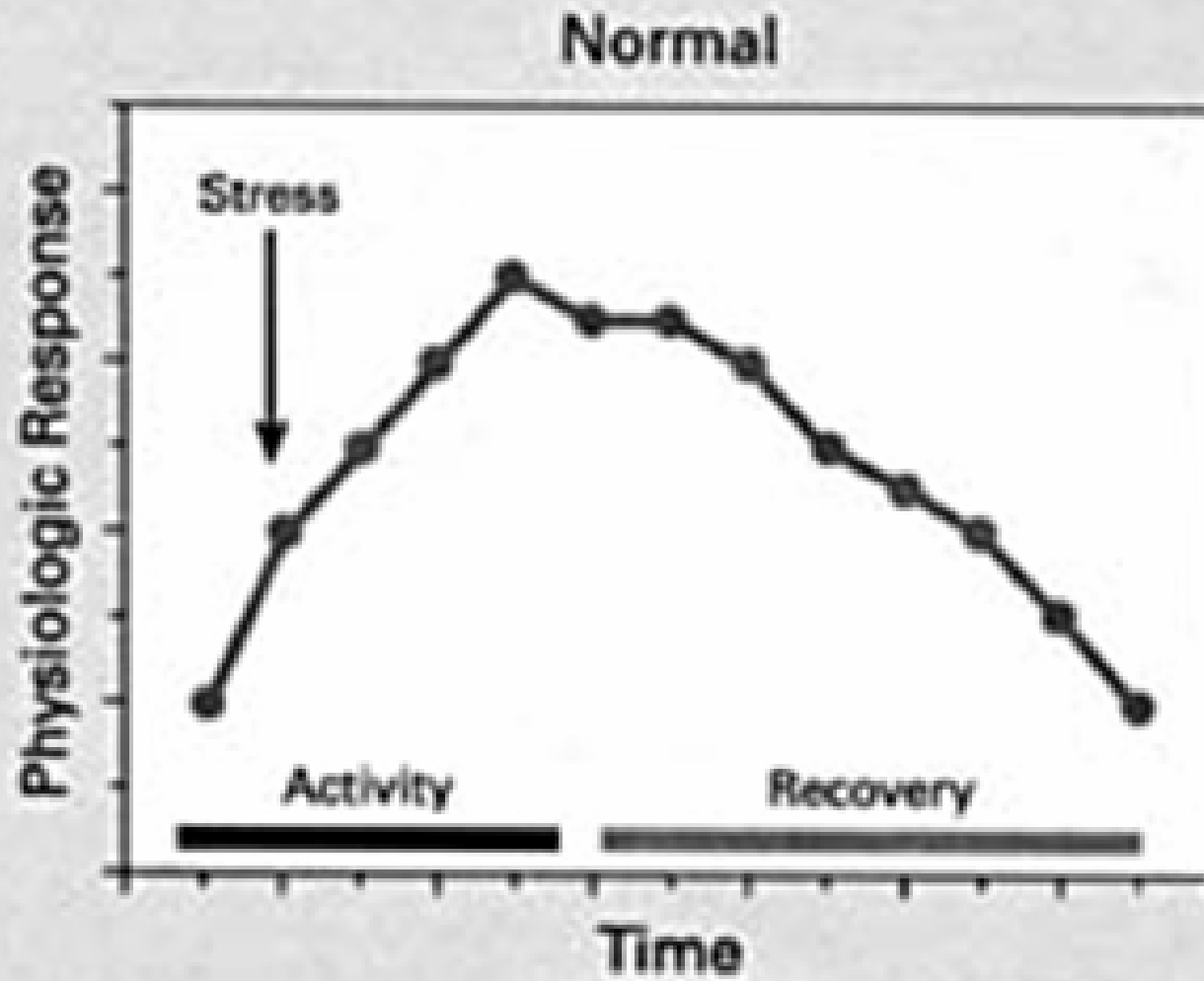


Relative Stress

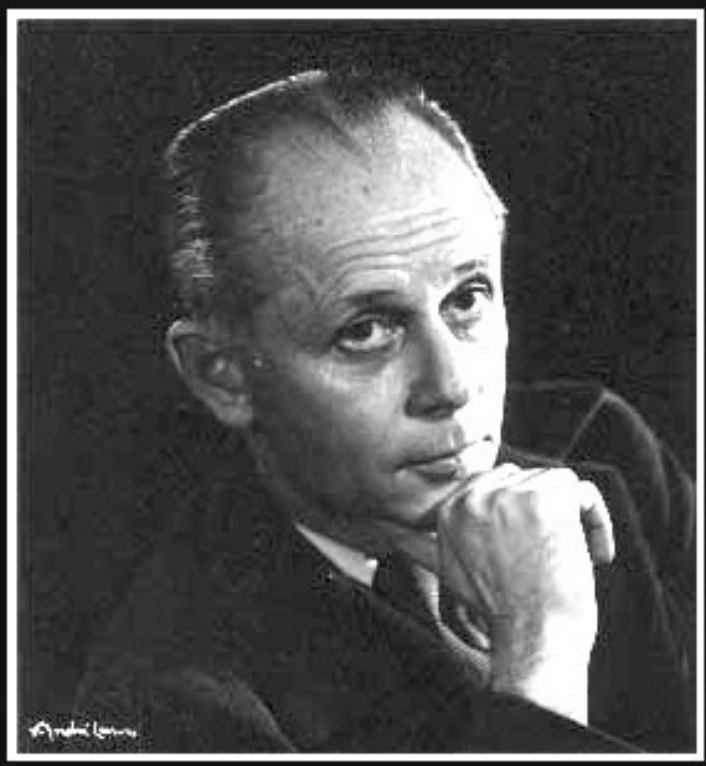
Interpretation of the world



We hope to adapt to our stressors.

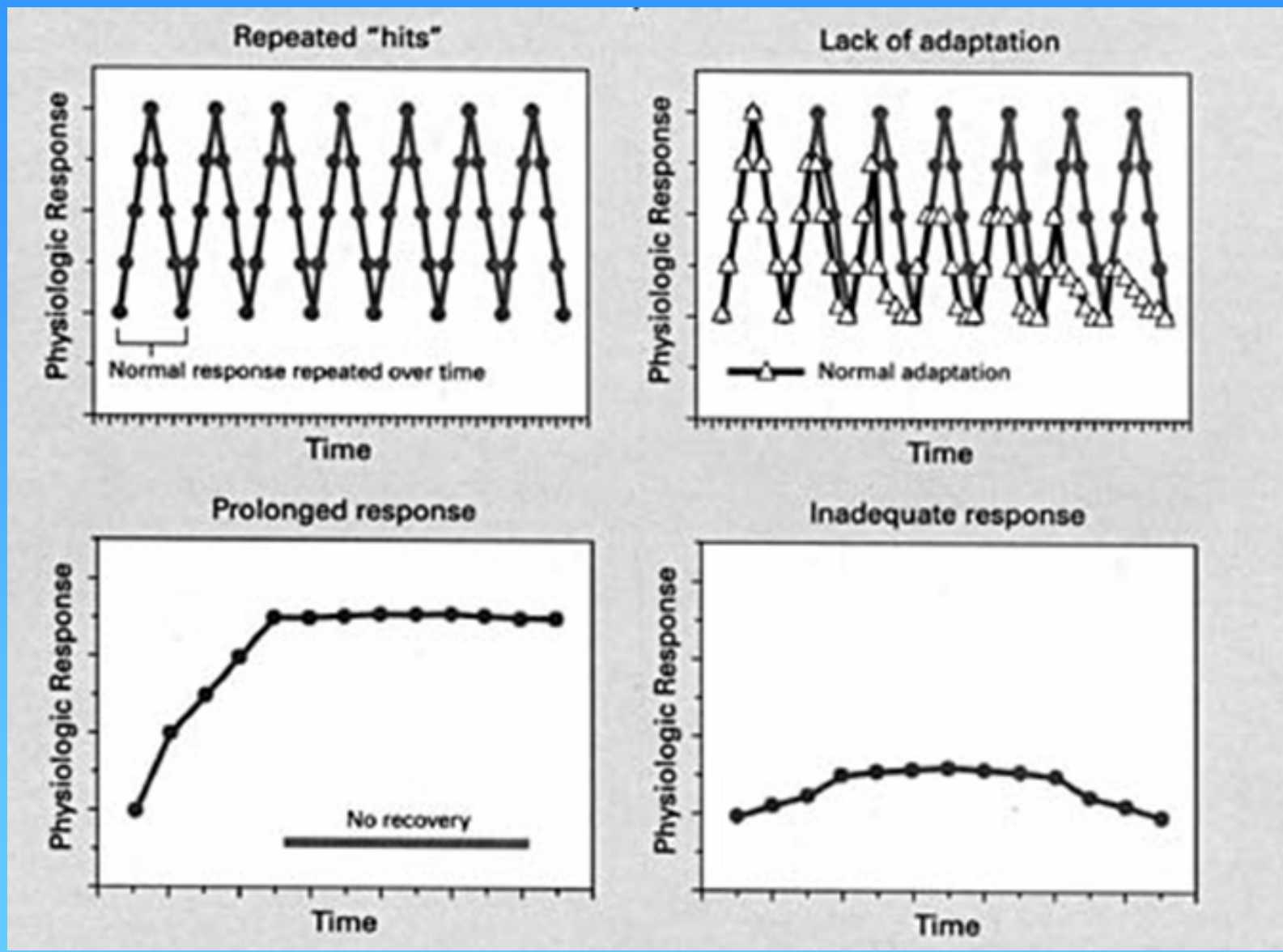


Hans Selye (1907-1982)



General Adaptation Response

- Alarm**
- Failure to adapt**
- Exhaustion**

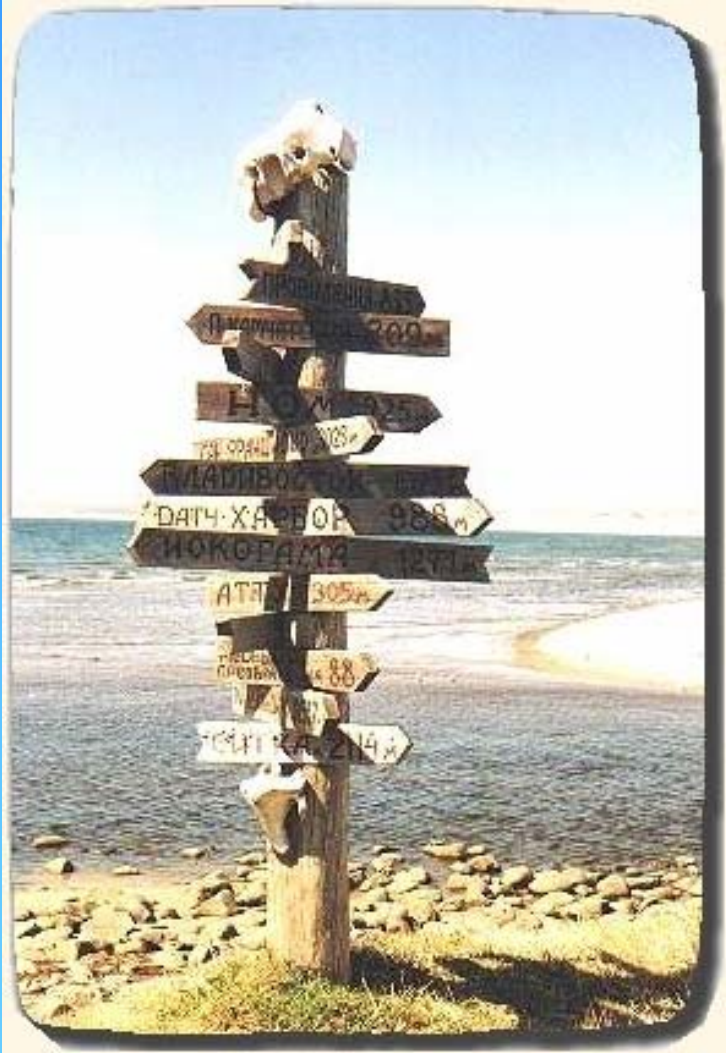


Allostatic Load

So now what?



Several Approaches...



- variability
 - evidence
 - setting
 - who should provide
 - psychobiological axis

The Approach...

- **Exclude bio-medical disease**
 - Adrenal Insufficiency (hyper K / hypo Na)
 - Hemochromatosis (ferritin screen)
 - Hypercalcemia (calcium)
 - Amyotrophic Lateral Sclerosis (twitches)
 - Multiple Sclerosis (neurological deficit)
 - Alcoholism (CAGE, MCV, GGT)
 - Temporal arteritis (ESR)
 - Subacute bacterial endocarditis
 - Sleep Apnea

Assess the impact of known conditions

- **Conditions Underestimated (e.g.)**
 - Chronic Cardiac Disease
 - Chronic Respiratory Disease
 - Chronic Sinusitis
 - Recurrent genital herpes
 - Diabetes mellitus
 - Obesity
 - Osteoarthritis
 - Medication Effect
 - Physical deconditioning

REVIEW

Medically unexplained physical symptoms in emergency medicine

D T Stephenson, J R Price

Emerg Med J 2006;**23**:595–600. doi: 10.1136/emj.2005.032854

Box 4 The reattribution approach

- 1) Feeling understood – engage the patient and gather information
- 2) Broadening the agenda – to include social and psychological factors
- 3) Making the link – between physical symptoms, psychological distress, and social problems

Primary Care Clinicians Treat Patients with Medically Unexplained Symptoms:

A Randomized Controlled Trial

J GEN INTERN MED 2006; 21:671-677.

*Robert C. Smith, MD, ScM,¹ Judith S. Lyles, PhD,¹ Joseph C. Gardiner, PhD,²
Corina Sirbu, PhD,² Annemarie Hodges, MA,¹ Clare Collins, RN, PhD,³
Francesca C. Dwamena, MD,¹ Catherine Lein, RN, FNP,³ C. William Given, PhD,⁴
Barbara Given, PhD,³ John Goddeeris, PhD⁵*

- RCT: n = 200
- OR → 1.92 (95%CI 1.08 – 3.4)
- NNT to improve @ 12 months = 6.4

Smith's Treatment Model

Cognitive – Behavioural Model

- Establish an information base & motivate
- Obtain patient commitment
 - be clear about risk of somatic intervention
 - stop addicting medications & alcohol
 - start lifestyle interventions
- Negotiate a specific plan
 - follow-up
 - lifestyle

Key Components

Table 2. Achieving Patient Understanding of the Following

1. Ominous conditions have not been found
2. Surgery, further testing, and consultation not necessary
3. Problem is somatic and real
4. Their somatic diagnosis and its mechanism
5. Stress, depression, and anxiety key part of illness — and medications help
6. They are not a “psych case”
7. Narcotics and tranquilizers aggravate the problem
8. Cure is not likely — but improvement is possible

Interpersonal Therapy

Scott Stuart

- Somatization
 - distress owing to physical symptoms
 - maladaptive illness behaviour
 - the distress and behaviour impairs function
- Attachment Style
 - insecure attachment & failure of reassurance
 - seeking health care is a coping mechanism
- IPT
 - communication analysis
 - interpersonal incidents
 - role playing

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CLINIC FOR MIND/BODY MEDICINE

Obtaining a Referral

Referrals are made to the Clinic for Mind/Body Medicine by Primary Care Physicians within the Calgary Health Region.

Patients referred to the Clinic should meet the following criteria:

- Be at least 18 years of age, medically stable, with access to a Primary Care Physician
- Have a chronic symptom/illness for at least 6 months for which a thorough diagnostic medical workup has been completed
- Be aware that all mood altering analgesic and psychotropic medications will be reduced, if not eliminated
- Be willing to take an active role in symptom/illness management and wellness attainment from an integrated mind/body framework
- Not be involved in litigation or receiving long term disability as a result of their symptoms/condition



Rockyview General Hospital



Clinic Staff

- Psychology
 - Don Bakal, PhD
 - Jennifer Garinger, PhD
- Psychiatry
 - Patrick Coll, MB FRCPC
- Internal Medicine
 - Jeffrey Schaefer, MSc MD FRCPC
- Medical Psychiatric Nurse
 - Malynne Steiert, RN

Medical Hypotheses (2006) 67, 1443–1447



medical
hypotheses

<http://intl.elsevierhealth.com/journals/mehy>

An experiential mind–body approach to the management of medically unexplained symptoms

D. Bakal *, M. Steiert, P. Coll, J. Schaefer

Clinic for Mind-Body Medicine, Calgary Health Region and Department of Medicine, University of Calgary, Rockyview General Hospital, 7007 – 14th Street S.W., Calgary, Alta., Canada T2V 1P9

Received 9 May 2006; accepted 16 May 2006

CMBM Approach

- Assumptions
 - symptoms are psycho-biological (real)
 - uncovering a psychological trauma is insufficient
 - psychotropic medications are counterproductive
 - cognitive reassurance will fail
 - patients alienate their physicians

CMBM Approach

- Link body sensation to emotional state
 - effortless breathing
 - visualization
 - meditative awareness
 - biofeedback training
 - “self-regulation through bodily self-knowledge”

Somatic Awareness

- Heart Math
- Guided Imagery
- Mindfulness Meditation

- CMBM → Outcomes
 - 60% meaningful improvement
 - not curative (relapses)
 - smokers, disability, litigation → 0% effective

Summary

- MUS
 - common in the population
 - ‘Bodily Distress Syndrome’ unifies
 - different approaches
 - Cognitive Behavioural Therapy
 - Interpersonal Therapy
 - Somatic Awareness

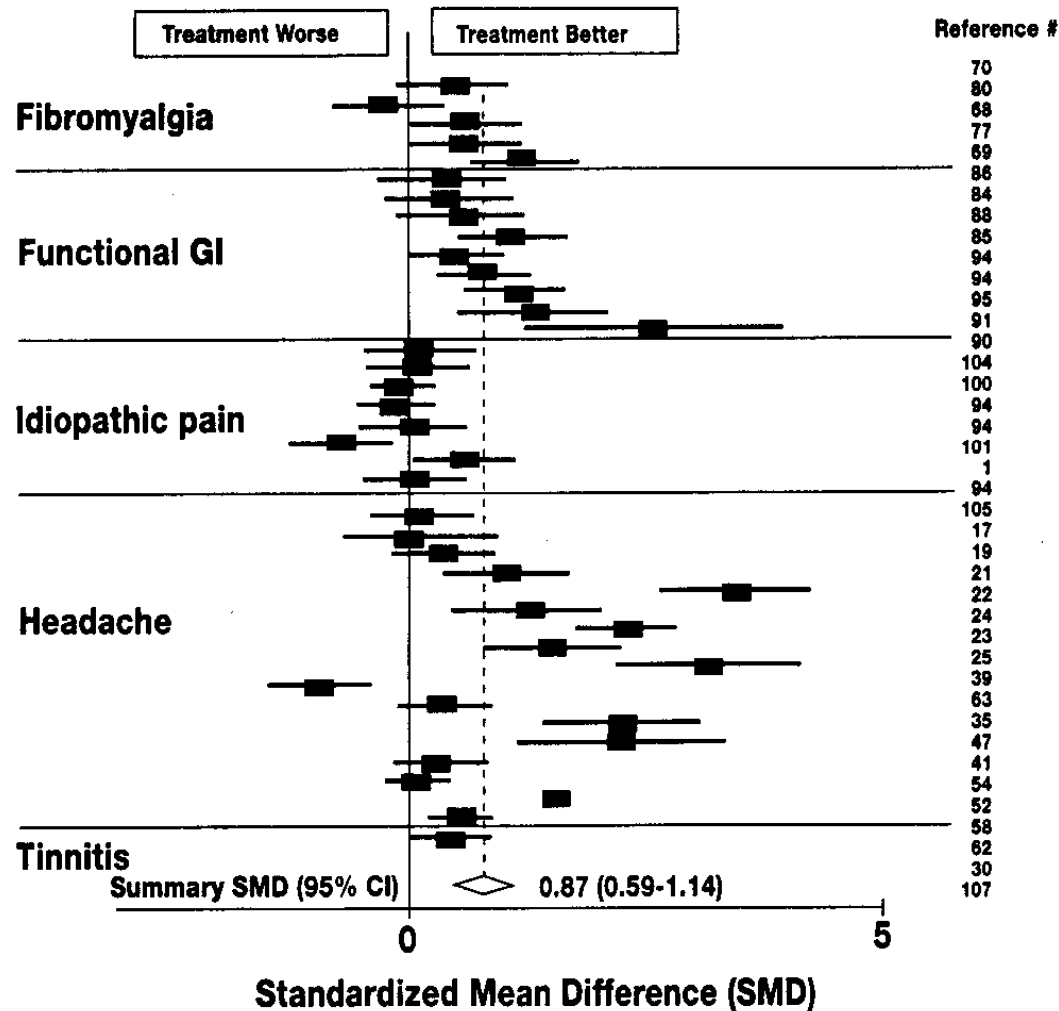




- Fatigue in an older population
 - 98% of 199 residents (mean age 88 yr) had symptoms of fatigue.
 - (Am Geriatr Soc - 2000 Apr; 48(4): 426-30)

FIGURE 2

A forest plot with summary standardized mean difference on continuous outcomes in placebo-controlled trials.



GI denotes gastrointestinal disorders.

Antidepressant therapy
for unexplained
symptoms and
symptom syndromes.
J Fam Prac
1999;48:980-90