

Chronic Fatigue Syndrome: Thoughts on Measurement

Dedra Buchwald, M.D.

University of Washington

DB-24
4

“Fatigue (and pain) is the Central
Africa of medicine: an unexplored
territory into which few men
(or women) enter.”

George Beard, 1869

DB-24
5

Issues in Measuring Fatigue

- Acute or chronic
- Anticipatory, sense of effort, or change in behavior
- Result of both physical and mental tasks
- Influenced by physical (e.g., length of a run and psychological factors (e.g., how rewarding it will be)
- Must be distinguished from sleepiness or drowsiness

DB-24
6

Components of Fatigue

- Behavior - decline in performance
- Perception - may not be proportional to effort
- Mechanism - peripheral or central
- Context - influence of noise, family, stressors

DB-24
7

Measuring Fatigue: Behavior

<i>Domain</i>	<i>Self-report</i>	<i>Objective</i>
● Physical impairment	Sallis	VO ₂ max
● Mental impairment	Mini-mental status	Halstead-Reitan
● Quality of life	Short Form 12 or 36	Physical capacity testing
● Disability		Unemployment, Reduced Income

DB-24
8

Measuring Fatigue: Perception and Mechanisms

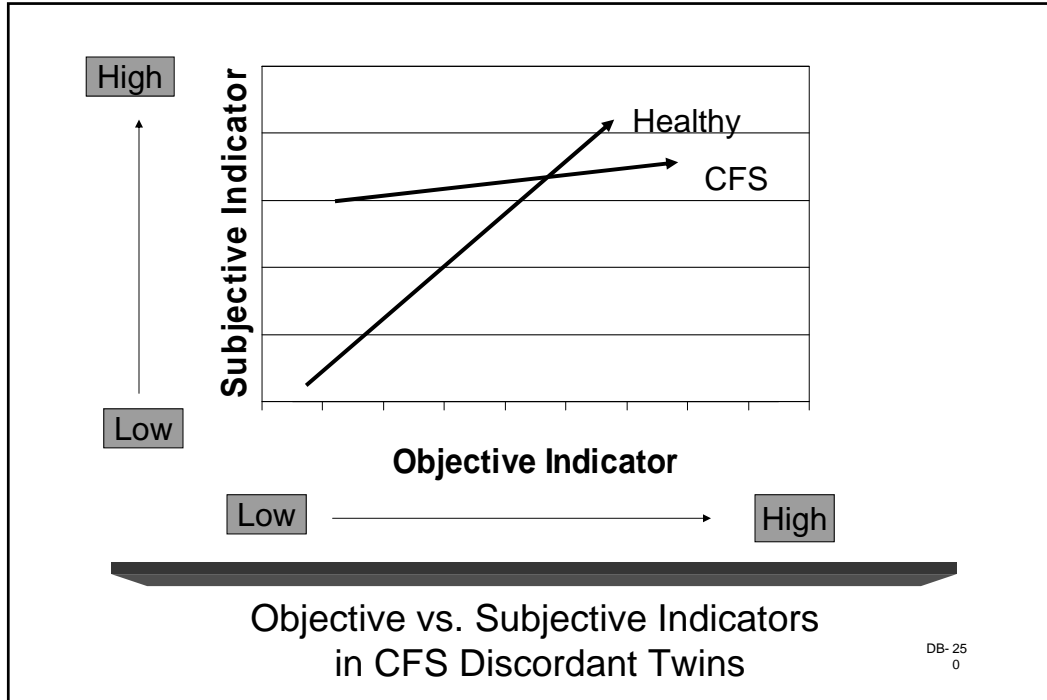
Perception: many instruments exist

- Some confound fatigue with pain or behavior
- Some measure only single dimension of fatigue

Mechanisms:

- Physical: hormone tests, sleep studies, cytokines
- Mental: questionnaires on coping, mood, beliefs

DB-24
9



Measuring Fatigue: Context

- Personal - reports from self or family members
- Social - life events interview
- Occupational - vocational evaluation
- Physical - noise level or temperature
- Cultural – cross-cultural or “culture of illness” studies

Definitions of Impact/Severity

Distinguish functional status, impairment, disability

- Functional status: subjective measure of health status
- Impairment: physical or cognitive limitation that alters lifestyle
- Disability: a state in which impairment precludes specific functioning, e.g., performance of occupation. A person may be disabled in one area but not others.

DB-25
2

Measures: Functional Status and Health-related Quality of Life

- Functional status measures (Short Form-36)
 - Measures health status
 - Generic or disease-specific
- Quality of life instruments
 - Puts value or utility on aspects of life, e.g., trade perfect health for longevity

DB-25
3