# Yoga for Depression

JANIS CARTER & GERARD BYRNE

Department of Psychiatry

University of Queensland

janiscarter@onaustralia.com.au
g.byrne@psychiatry.uq.edu.au

# Background

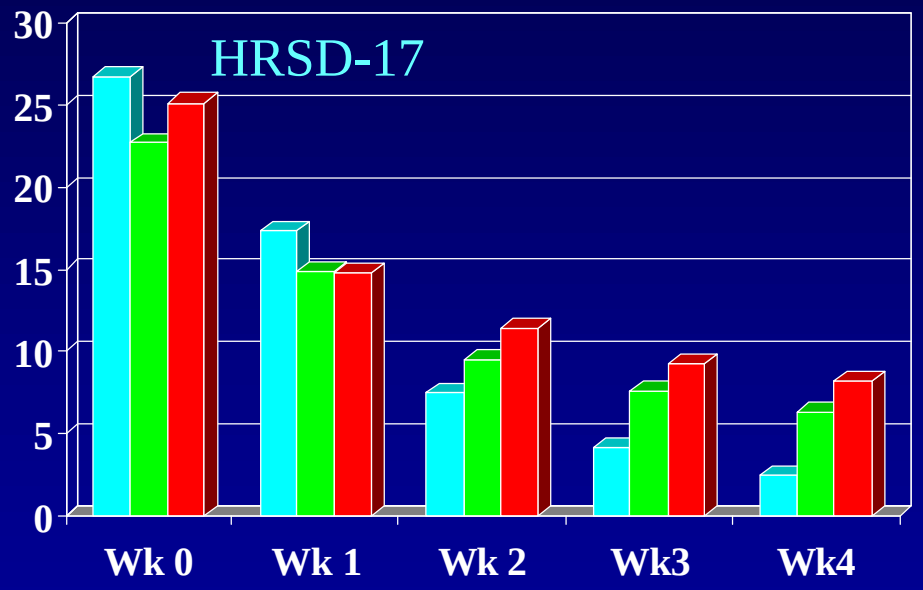
- Increasing interest in complementary treatments for depression
- Increasing interest in augmentation of pharmacological treatments with non-pharmacological ones
- High levels of interest in Yoga
- Little evidence of the value of Yoga in mental disorders

# RCT: Yoga vs ECT vs Imipramine

- Sudarshan Kriya Yoga (SKY)
  - Daily 45 minute sessions once daily for six weeks (breathing based)
- ECT
  - Modified bilateral ECT three times weekly until HDRS <7 on two consecutive assessments
- Imipramine
  - 150mg nocte (no titration)

Janakiramaiah et al., *Journal of Affective Disorders*, 57: 255-259, 2000

# RCT: Yoga vs ECT vs Imipramine




N = 45

DSM-IV MDD

Baseline HDRS 24.8

Janakiramaiah et al., *Journal of Affective Disorders*, 57: 255-259, 2000

# Caveats

- Open labelled study
- No placebo group
- Cultural issues (Bangalore)

# Yoga Augmentation

## Feasibility Study

- N = 8 males war veterans (mainly Vietnam)
- Mean age: 60.25 years (range: 53 – 84)
- PTSD + MDD (*DSM-IV*)
- All on an SSRI (mainly sertraline)
- Open label augmentation with Yoga
- Baseline self-rated CES-D score: 37 ± 12.39
- Baseline clinician-rated HDRS score: 29.9 ± 7.5

# Yoga Intervention

- Group Yoga – men only
- Subjects in good physical health
- Conducted by an accredited Yoga instructor
- Classes conducted once a week for an hour
- Yoga postures derived from instructions of B.K.S. Iyengar – claimed to be specific for depression

Upavista Konasana

Ardha Chandrasana

Ustrasana

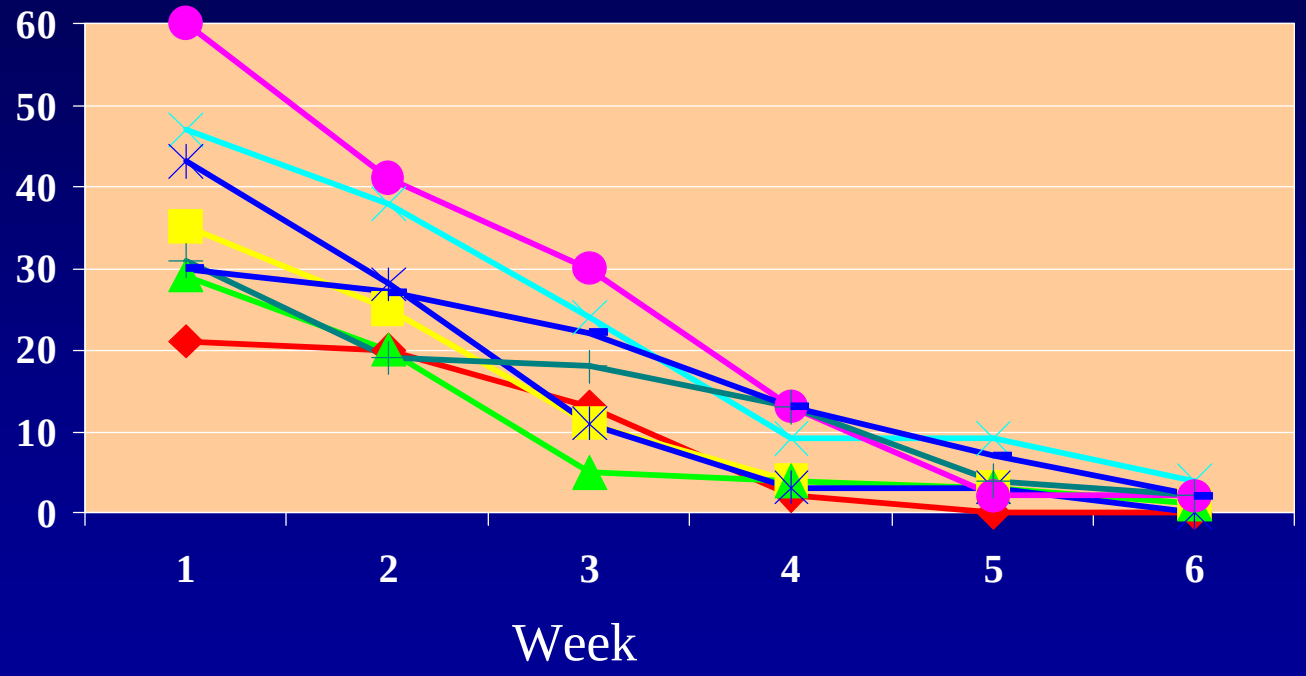
Baddhakonasana

Viparita Dandasana

Salamba Sarvangasana

# Yoga Augmentation

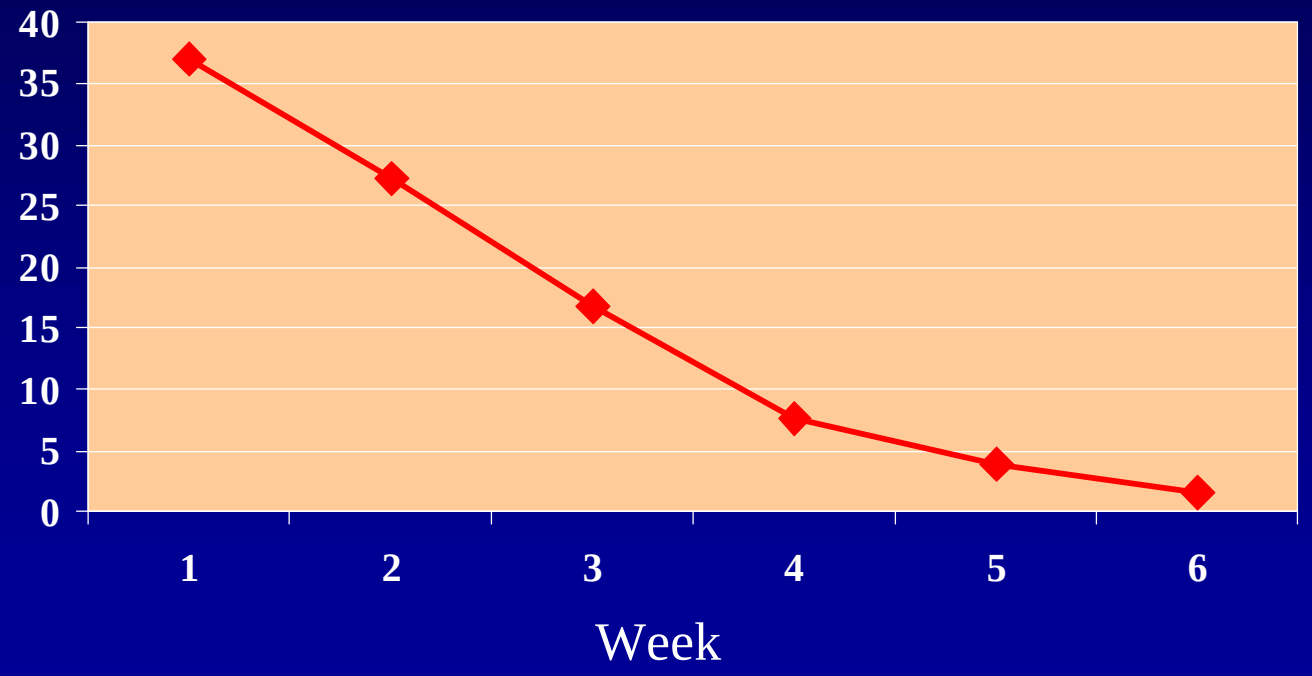
## Individual CES-D* Scores over 6 weeks




*CES-D: Center for Epidemiologic Studies Depression Scale
20 items, maximum score 60, > 22 = significant depression

# Yoga Augmentation

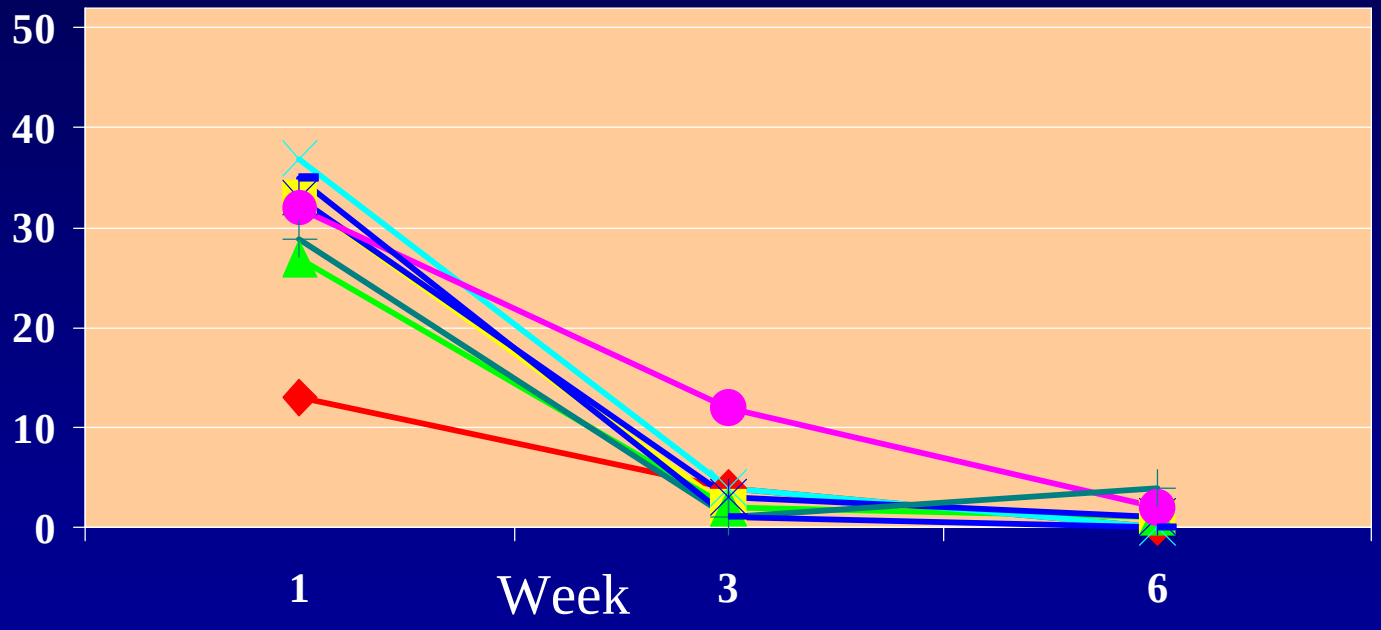
## Mean Self-Rated CES-D Score




Baseline mid-October 2002

# Yoga Augmentation

## Individual HDRS-17* Scores over 6 weeks

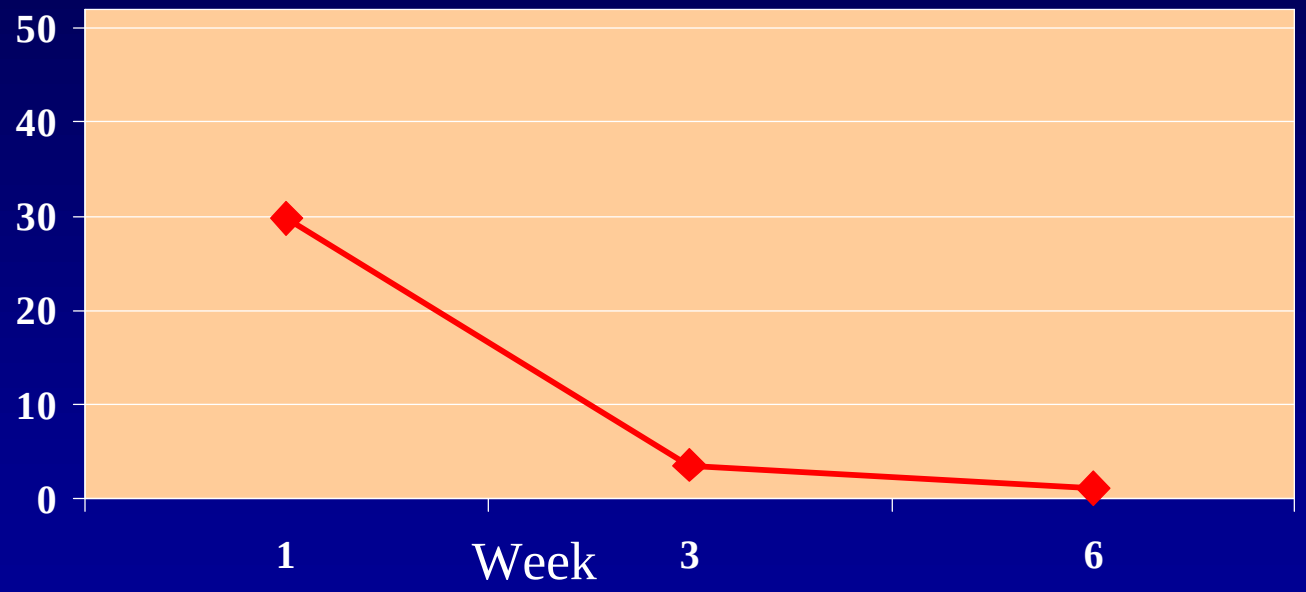



*HDRS-17: Hamilton Depression Rating Scale

17-item version; Maximum score 52

# Yoga Augmentation

## Individual HDRS-17* Scores over 6 weeks

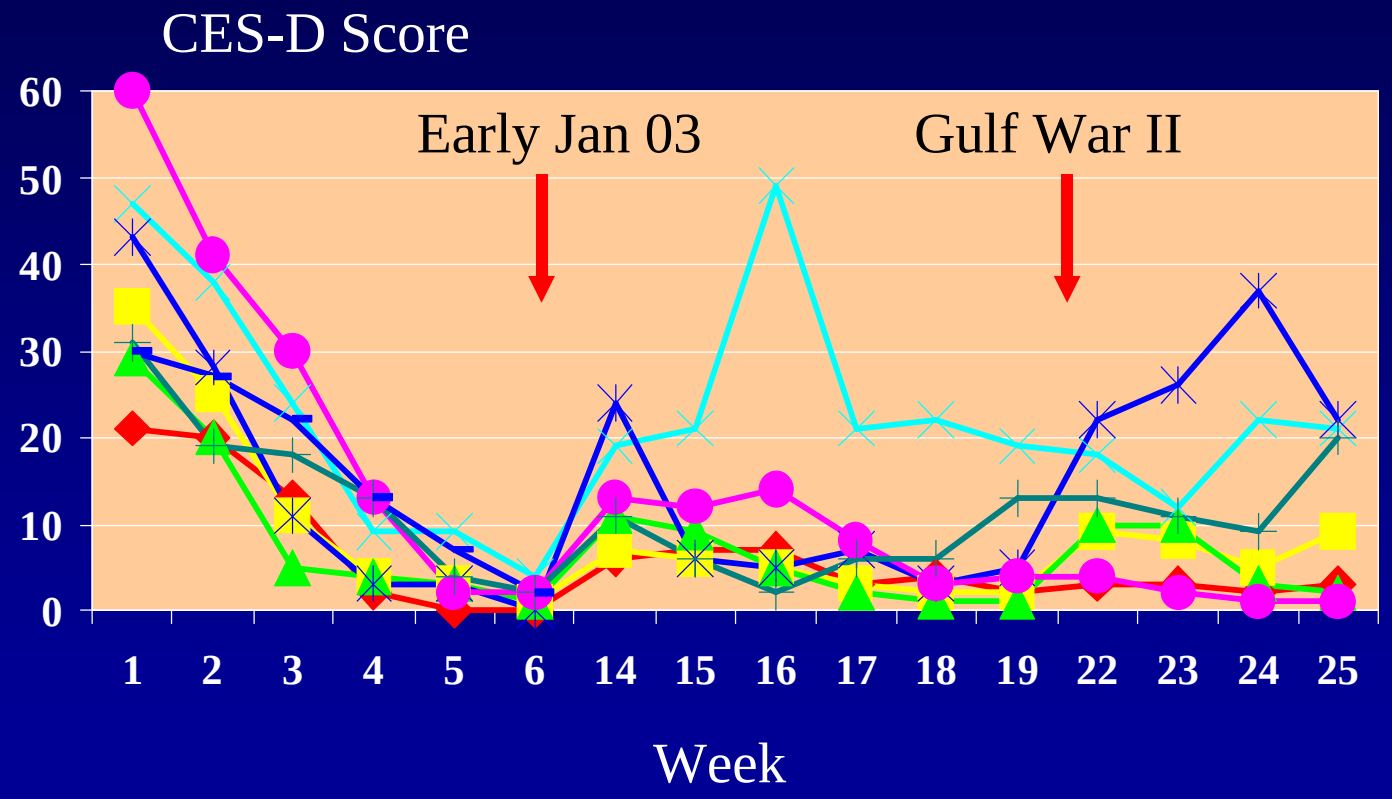



*HDRS-17: Hamilton Depression Rating Scale

17-item version; Maximum score 52

# Longer Term Outcome

## Continued Yoga Augmentation




Baseline mid-October 2002

# Putative Mechanisms

Diversion & distraction

Self-efficacy

Mastery

Social interaction

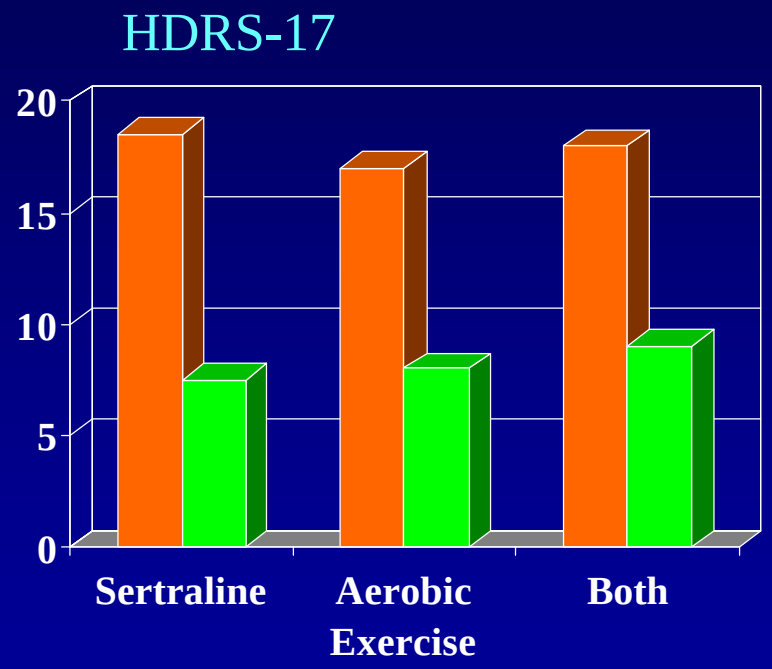
Aerobic fitness

Monoamines

Endorphins

Thermogenesis

# RCT: Sertraline vs Aerobic Exercise vs Both




N = 156
DSM-IV MDD
Age: 57

$F(2,152) = 0.61$, $p = 0.55$

Blumenthal et al., *Arch Intern Med* 159: 2349-2356, 1999

# Future Plans

- Six-Week Randomized Controlled Trial
- Veterans with PTSD + MDD
- Yoga Augmentation of standard psychiatric treatment (antidepressant + counselling)
- Control condition