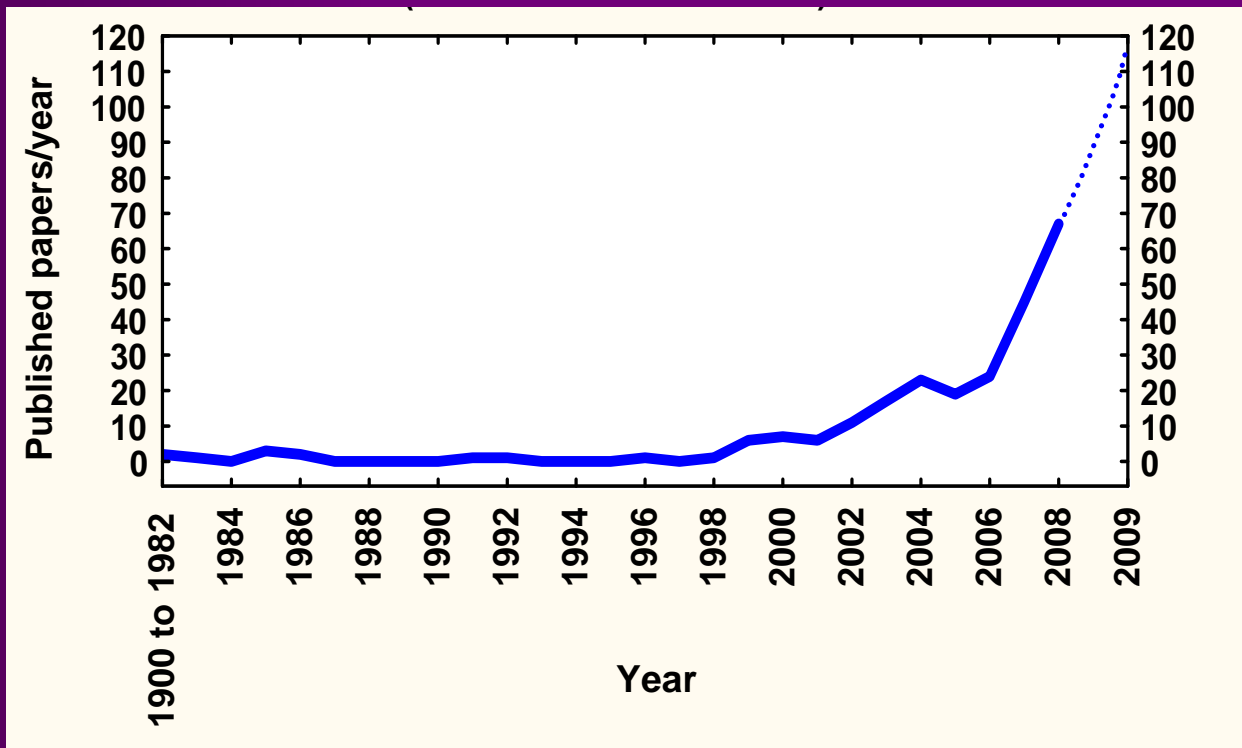


# **Cancer-Related Applications of Mindfulness-Based Intervention (MBI)**

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# No. of "mindfulness" papers per year published in research journals (MEDLINE & Web of Science)



# Major Outcomes of Applications

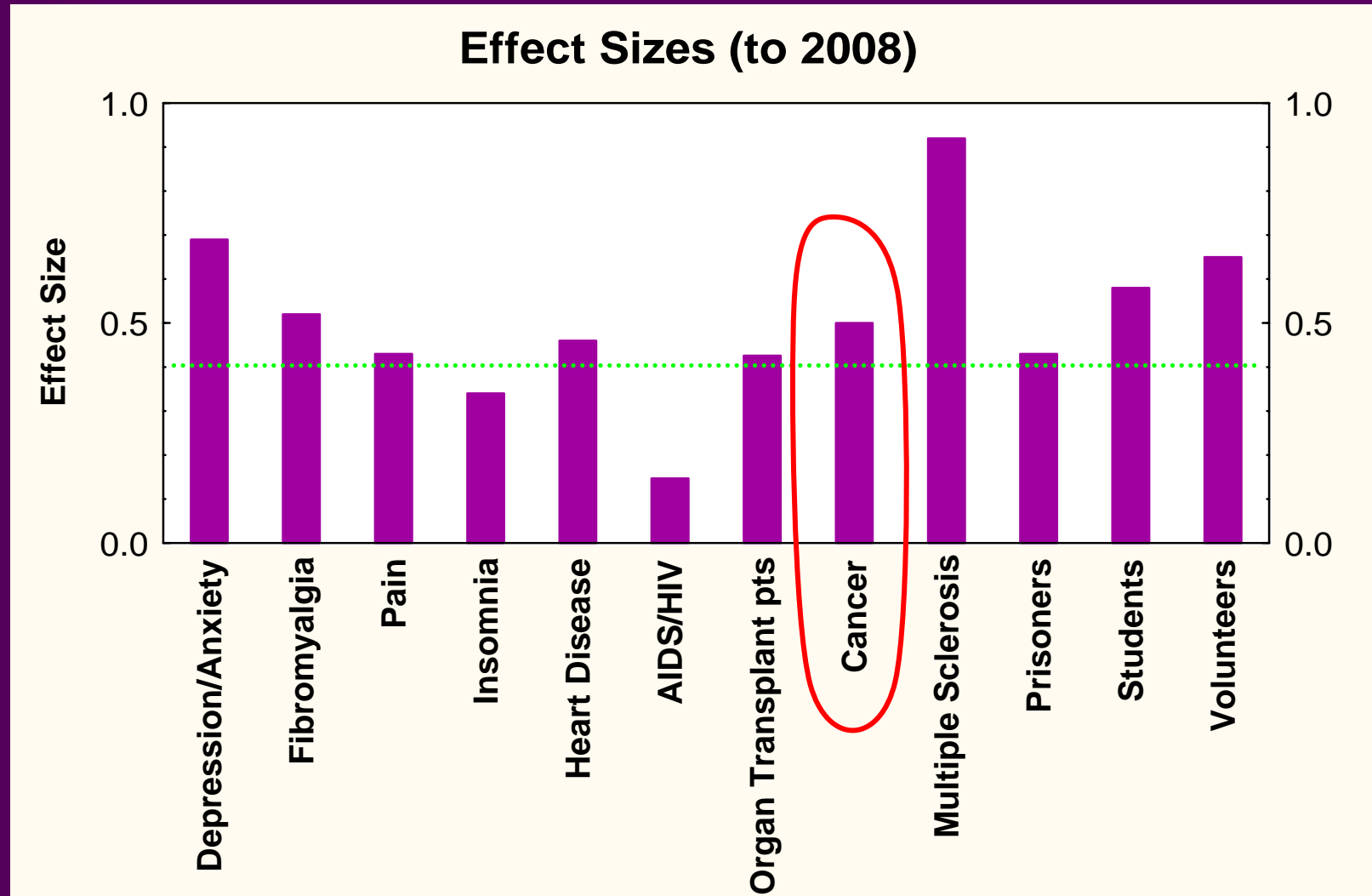
Generic impact of mindfulness-based intervention:

- Alter attitudes toward self, illness and existence
- Improve quality of life
- Lessen depression and anxiety
- Increase empathy and self compassion
- Increase ability to cope with life's vagaries (e.g. stress)
- Enable healthcare professionals to refine their skills, to deepen their connection and understanding with and of their patients

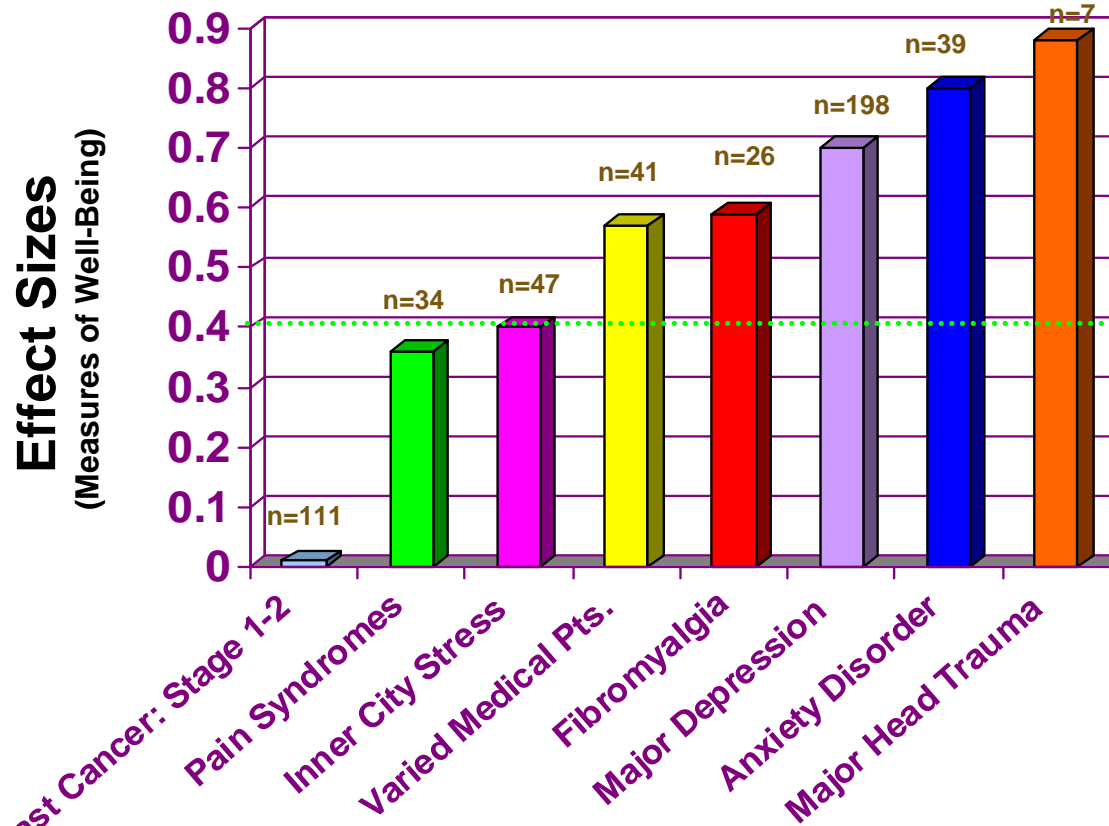
**NOT AIMED AT INFLUENCING DISEASE PROCESS!!**

# Short-term clinical benefits upon well-being of MBSR

(Effect size = standardized measure of improvement)



# Long-Term Follow-up Studies (1-3 year follow-ups)



# **Coming to Terms with `Mindfulness`**

## **A VERY Brief Background and Description**

**Mindfulness is the process of intentional moment-to-moment awareness of ongoing perceptible experience--without conceptualizing the mental content, AND attempting openness, kindness, patience to whatever arises.**

# Major Elements of MBIs

- **Based on 2500-year-old Buddhist meditation practices and sophisticated, descriptive phenomenological system of subjective experience**
- **Nonesoteric, nonreligious, entirely empirical**
  - **BUT derives from very different paradigm of psychology and theory of knowledge**
  - **Based on practical experience not concepts**
- **Method to investigate perceptible mental processes**
  - **Analogous to behavioral biologist observing the behavior of a newly discovered species**
- **Sounds easy, even trivial, but is not!!**

# The MBI Course :Major components

- 8 x 2.5 hour group (10-15 pts) sessions over 8-10 weeks
- Individual pre- and post-intervention interviews (1 h)
- led by a trained teacher/instructor (personal practitioner)
- Patient practice in mindfulness meditation skills
- Mindful awareness during everyday life
  - eating, mood changes, stressful circumstances, social interactions, etc.
- Discussion of mindfulness re. stress and coping
- Daily homework assignments (30-60 min/day)
- All day session held on 6<sup>th</sup> week
- SKILL BASED



# 11 Studies of Mindfulness-based Intervention for Cancer Patients

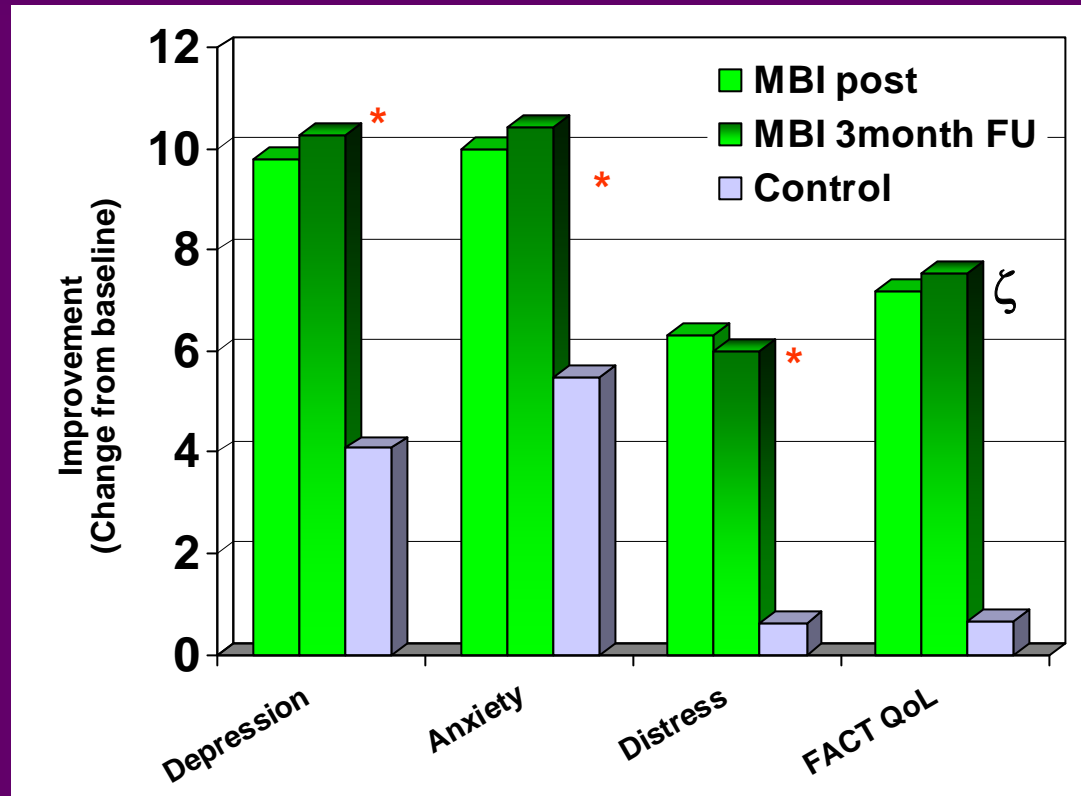
**Table 3.** Computed mean effect sizes for mental and physical health measures

Type of study	<i>k</i>	<i>N</i>	<i>d</i>	95% CI	<i>p</i>
<i>A. Mental health measures</i>					
RCT	4	339	0.44	0.23–0.65	<.0001
Observational	4	192	0.5	0.39–0.62	<0.0001
Overall	7	531	0.48	0.38–0.59	<0.0001
<i>B. Physical health measures</i>					
RCT	3	340	0.17	–0.07–0.40	—
Observational	5	176	0.18	0.07–0.29	<0.0009
Overall	8	516	0.18	0.08–0.28	<0.0001

*k*, number of studies; *N*, number of patients; *d*, effect size; RCT, randomized, controlled studies.

(Adapted from Ledesman & Kumano, *Psycho-Oncology*, 2008)

## Significant improvements on all measures (Effect sizes = .89, .59, .50 & .30, respectively)



\* $p < .002$

ζ  $p = .01$

# **A few important questions**

- **Given that aims of cancer therapy are (should be?) more than survival, is there anything else around that shows similar efficacy for QoL and wellbeing?**
- **Is improving wellbeing not sufficient as aim, or do we have to show physiological effects to be taken seriously?**
- **Who should be teaching MBI to cancer patients?**
- **How can current health insurance payment structure be made to cover MBI?**