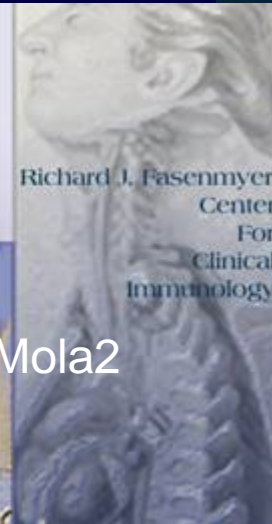




*The Center  
for Vasculitis  
Care  
and  
Research*

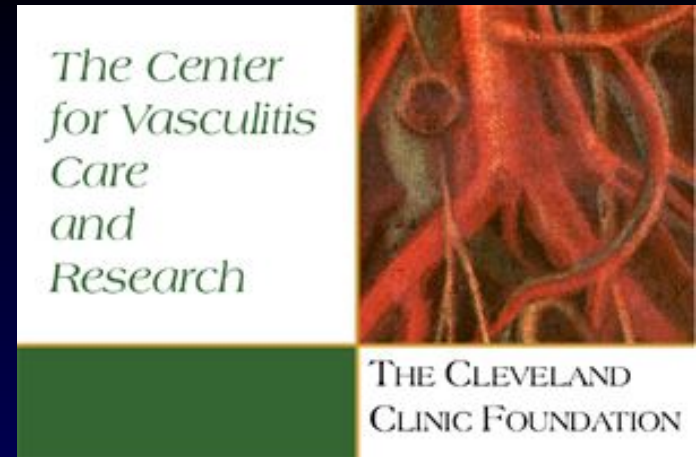
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Richard J. Fasnmyer  
Center  
For  
Clinical  
Immunology

Emilio Martin Mola2



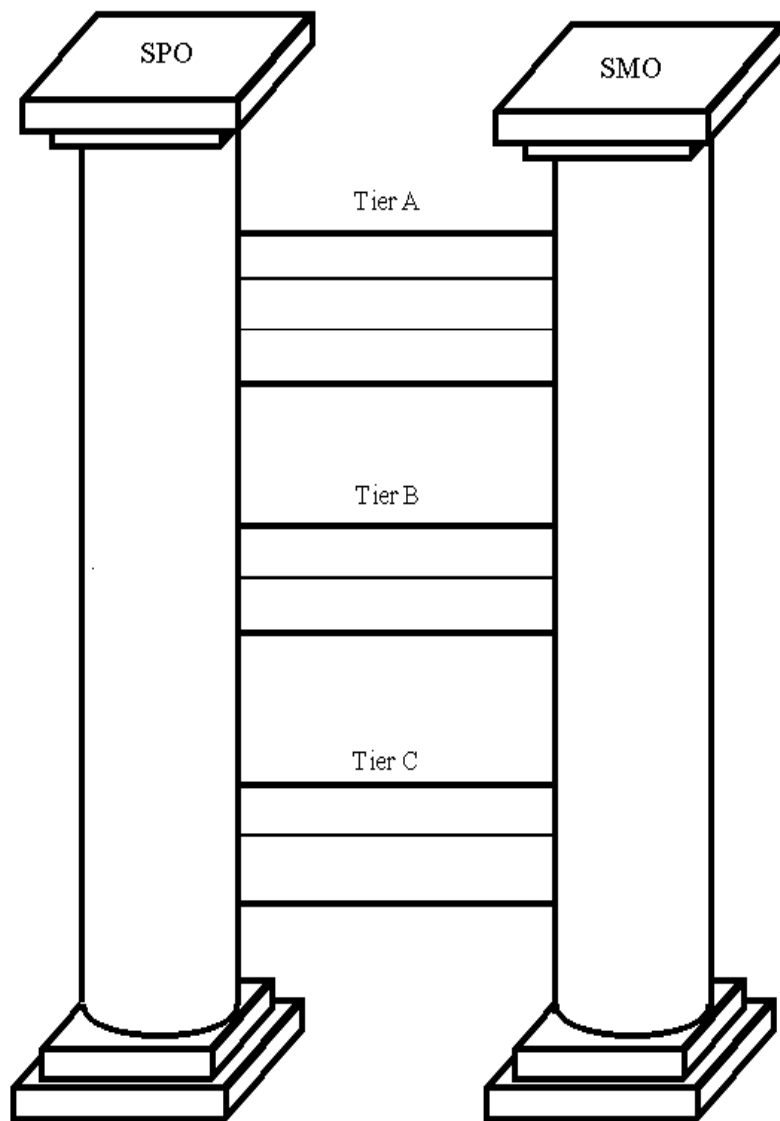


# **Empathy Resilience and Mindfulness in Osteopathic Medicine**

**Leonard H Calabrese D.O.  
Department Rheumatic and  
Immunologic Diseases  
Cleveland Clinic**

- What is Empathy
- Can we measure it, build it or only lose it?
- What is Mindfulness?
- How we think and how mindfulness reduces errors and improves caring
- What is burn out ?
- Osteopathic “issues and opportunities”

**TECHNOPHILIA**



**PHILANTHROPIA**

# HYPOTHESIS

- Empathy Resiliency and Mindfulness lead to:
- Better Care
- Better Caring

# DEFINITIONS

# Empathy in the Context of Patient Care

- Empathy is predominantly a cognitive attribute which involves an understanding of experiences, concerns, and perspective of the patient, combined with a capacity *to* communicate this understanding, and an intention to help.”
- Hojat, et al., 2002, *Am J Psychiatry*, 159, 1563-1569.
- Hojat, 2007, *Empathy in Patient Care*, p. 80.
- Hojat, et al., 2009, *Academic Medicine*, 84, 1182-1191.

# Suffering

Unpleasant experience reflecting  
perceptions of helplessness and  
fear of the future



# Compassion

# Healing

To be whole again in relationship  
to the body, the culture and  
significant others

Can we cure without healing?

Can we heal without curing?



# Historical aspects of Medical Humanism

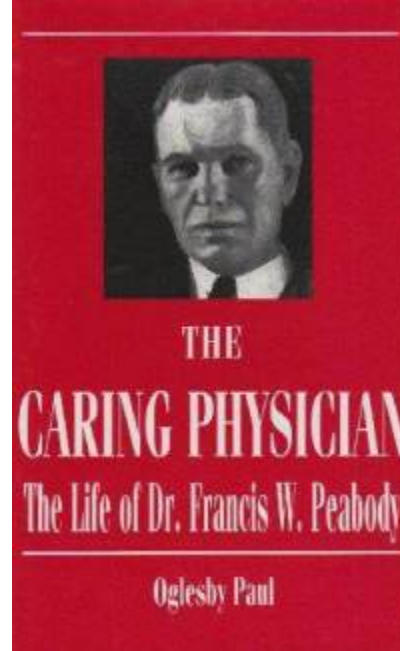
- Maimonides 1135-1204:
- “May I never see in the patient anything but a fellow creature in pain. May I never consider him merely a vessel of the disease...”



The good physician treats the disease;  
the great physician treats the patient  
who has the disease.

– William Osler

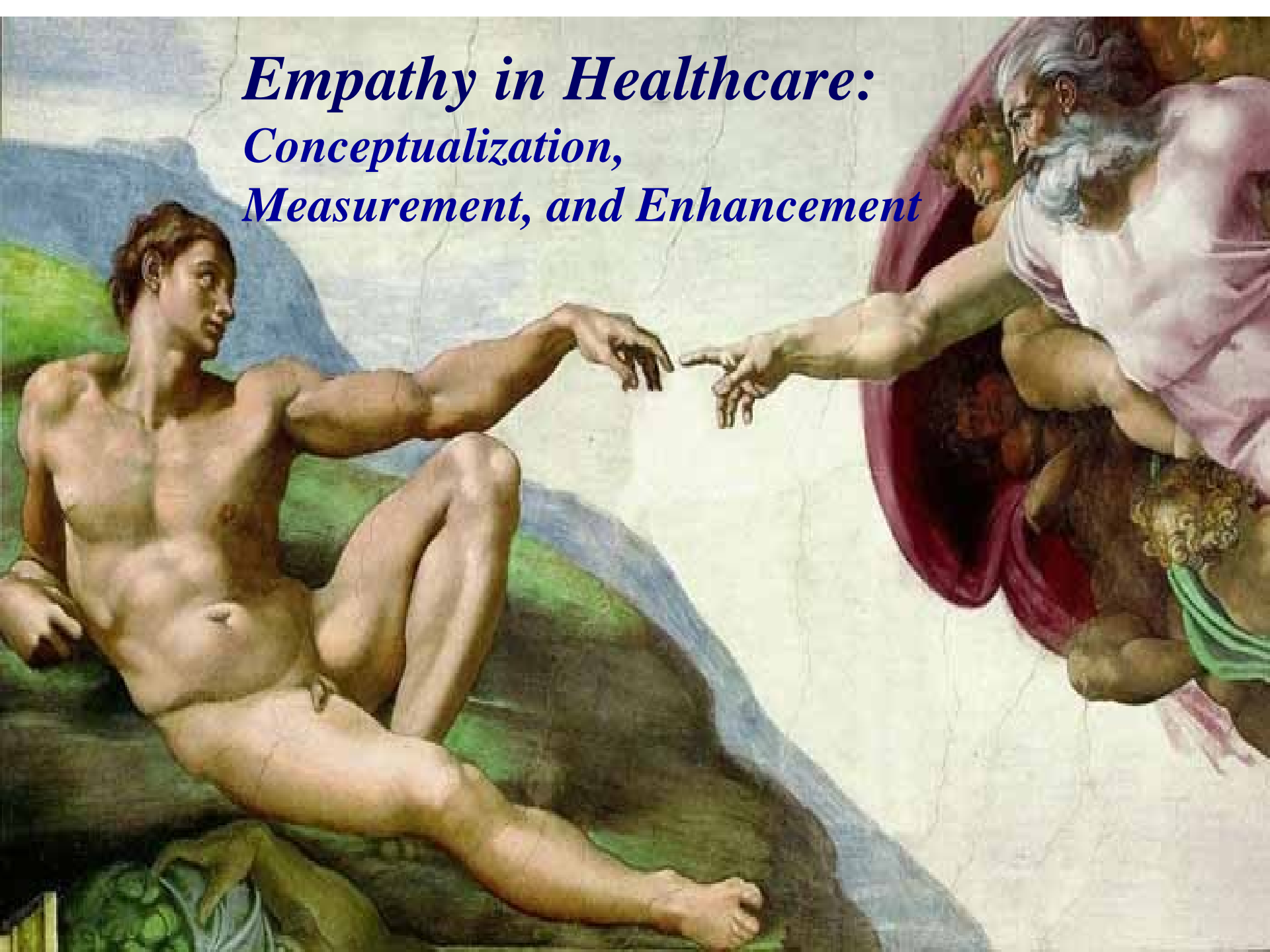
1849-1919



- The treatment of a disease may be entirely impersonal but...The care of the patient must be completely personal
- The secret of patient care is to care for the patient

Francis Peabody

***Empathy in Healthcare:  
Conceptualization,  
Measurement, and Enhancement***



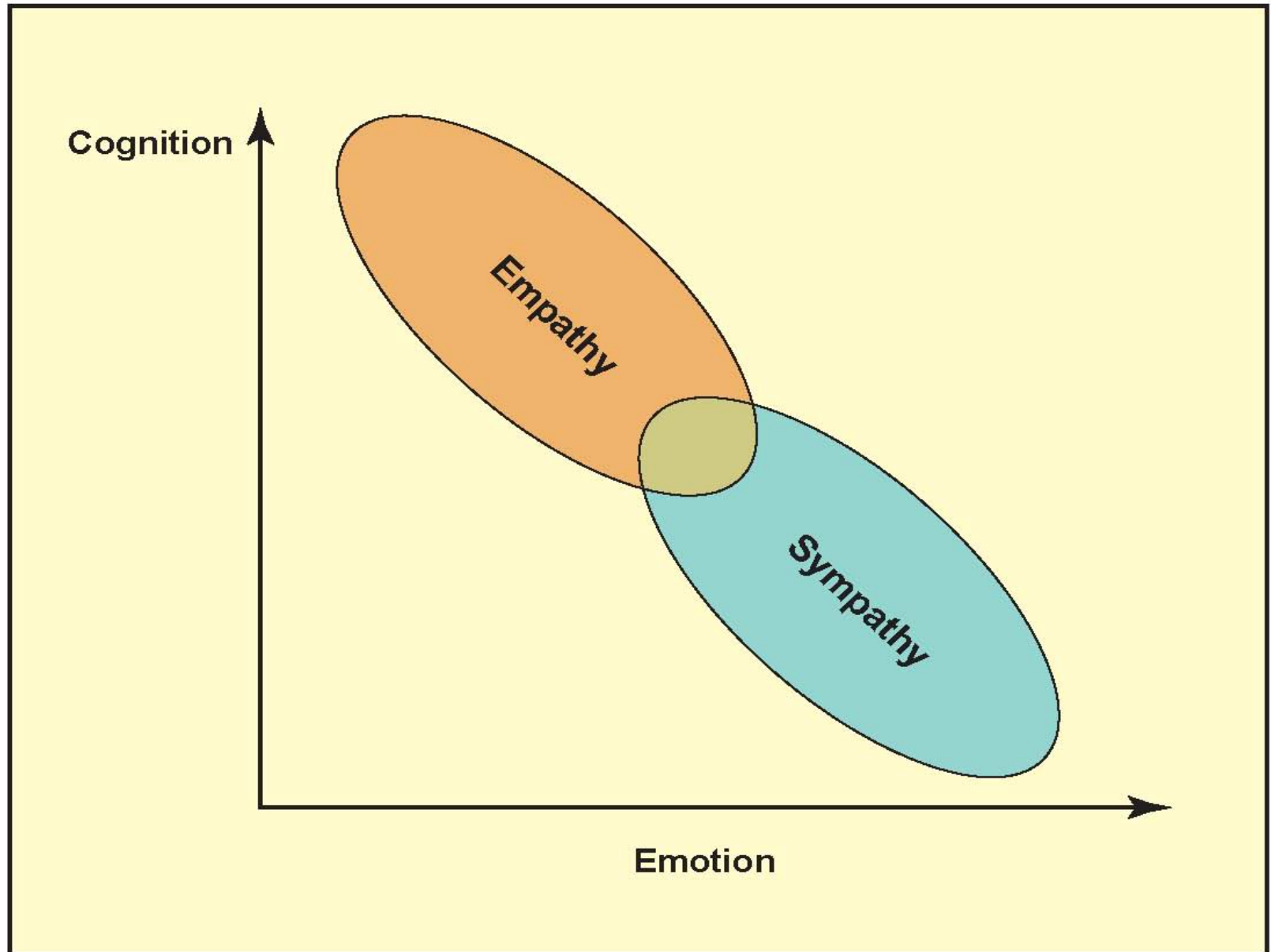


# Szalia's Advice to Physicians

“It is good to be able to put yourself into someone else's shoes, but you have to remember that you don't wear them.”

(Szalia, 1976, *Psychiatry*, 39, 142-152)

**Figure 1.1: Empathy and Sympathy as Related to Cognition and Emotion**



# Empathy

## One way or two way?

“ a cognitive attribute which involves an understanding of the inner experiences and perspectives of the patient combined with a capability to communicate this understanding to the patient” crossing the divide...

# EMPATHY Research



# Measurement of physician empathy

## *The Jefferson Scale of Physician Empathy*

*(JSPE) (S-Version & HP-Version)*

Contains 20 Likert-type items (7-point scale).

Data support its *validity* (construct, criterion-related, convergent, and discriminant), and *reliability* (coefficient alpha and test-retest).

Measures 3 factors:

1. *Perspective taking.*
2. *Compassionate care.*
3. *Standing in patient's shoes.*

(Hojat, et al., 2001, *Educ & Psych Measurement*, 61, 349-365,  
Hojat, et al., 2002, *Am J Psychiatry*, 159, 1563-1569)

[Patient Educ Couns.](#) 2011 Dec;85(3):390-7. doi: 10.1016/j.pec.2011.01.009. Epub 2011 Feb 5.

**Perception of empathy in the therapeutic encounter: effects on the common cold.**

[Rakel D](#), [Barrett B](#), [Zhang Z](#), [Hoeft T](#), [Chewning B](#), [Marchand L](#), [Scheder J](#).

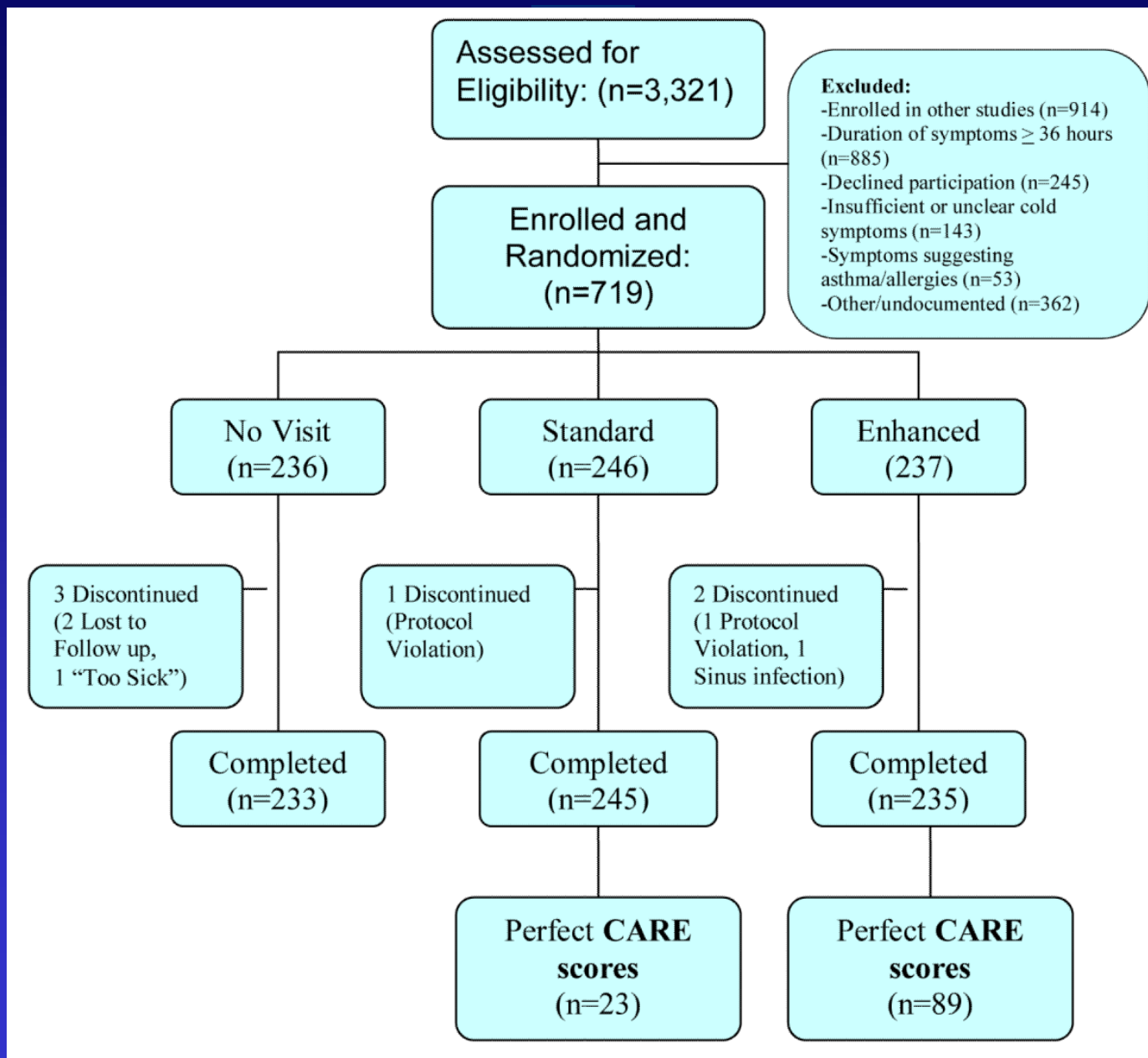
**Abstract**

**OBJECTIVE:**

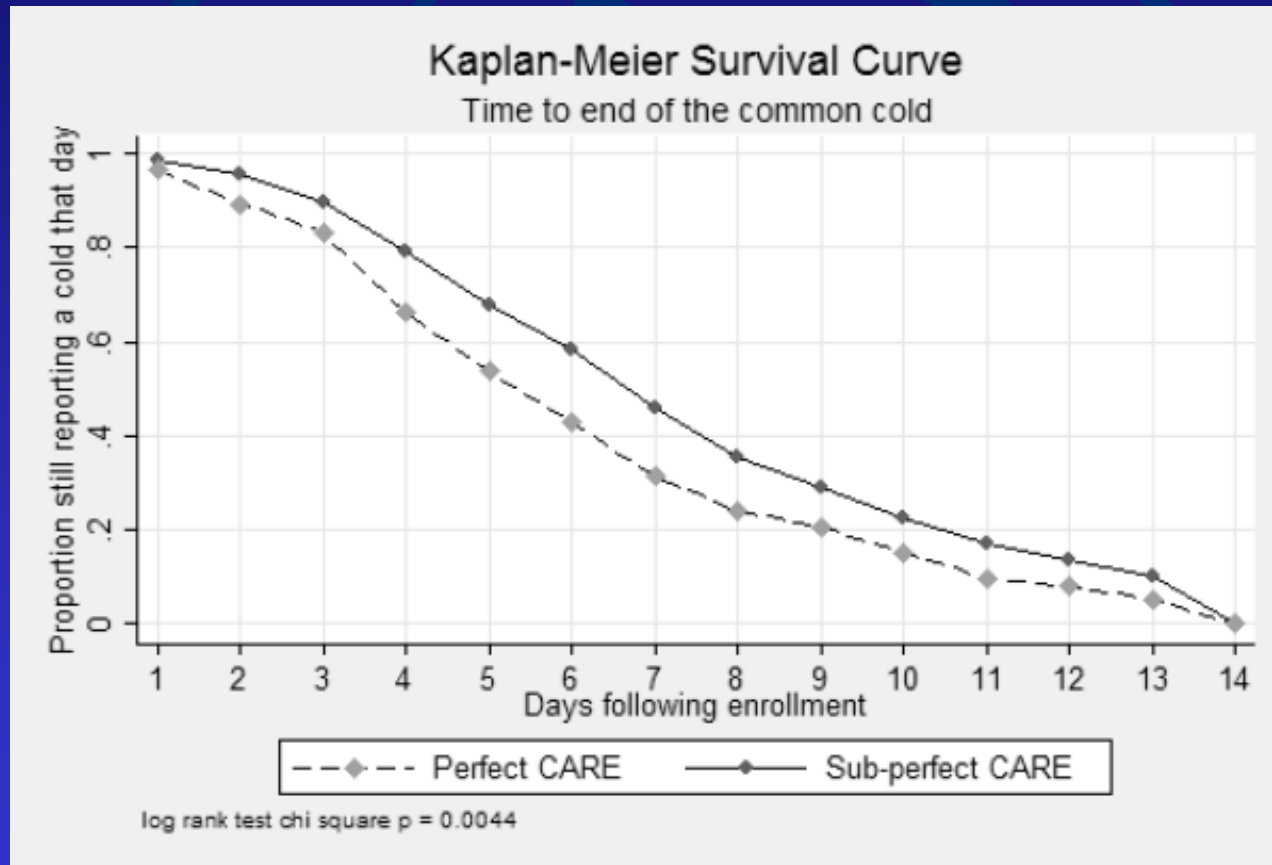
To evaluate the effects of patient-practitioner interaction on the severity and duration of the common cold.

**METHODS:**

We conducted a randomized controlled trial of 719 patients with new cold onset. Participants were randomized to three groups: no patient-practitioner interaction, "standard" interaction or an "enhanced" interaction. Cold severity was assessed twice daily. Patients randomized to practitioner visits used the Consultation and Relational Empathy (CARE) measure to rate clinician empathy. Interleukin-8 (IL-8) and neutrophil counts were obtained from nasal wash at baseline and 48 h later.

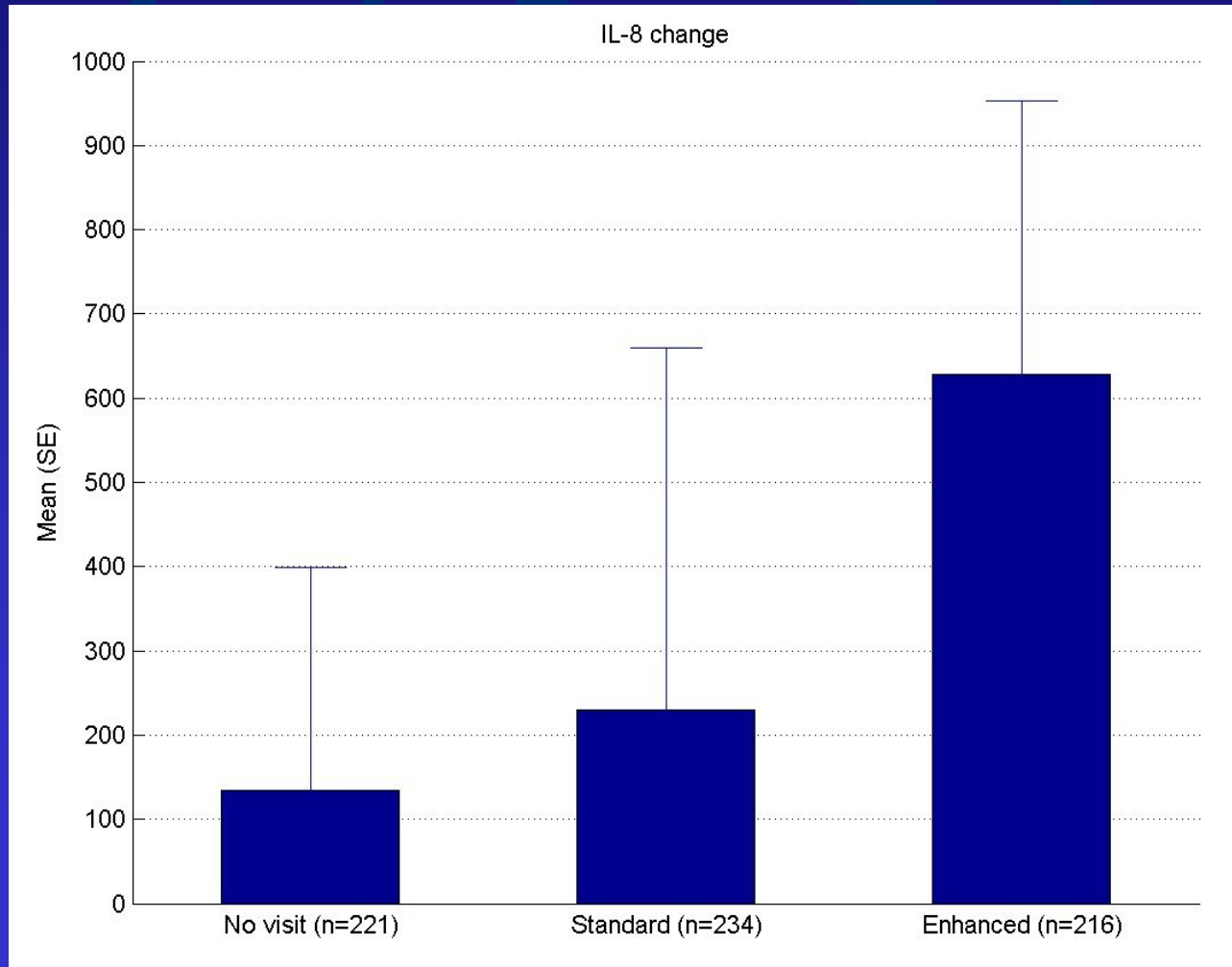


# Effect on symptoms





# IL8 in treatment groups



# Selected Highlights of Research Findings

## *Empathy and Academic Performance*

- Empathy scores are significantly correlated with global ratings of clinical competence in medical school.
- Empathy scores are not correlated with performance on objective examination of knowledge in both basic and clinical sciences.

Hojat, et al., 2002, *Med Educ*, 36, 522-527.

## *Physician empathy and gender:*

**Women in medical school, nursing school, dental school, and in medical practice tend to obtain higher empathy scores than men.**

Hojat, et al., 2001, *Educ & Psych Measurement*, 61, 349-365.

Hojat, et al., 2002, *Med Educ*, 36, 522-527.

Hojat, et al., 2002, *Am J Psychiatry*, 159, 1563-1569.

Hojat, et al., 2002, *Acad Med.*, 77, s58-s60.

Ward, et al, 2009, *J Nursing Measurement*, 17, 73-88.

Sherman & Cramer, 2005, *J Dental Educ*, 69, 338-344.

## *Physician empathy and specialty:*

Physicians in “people-oriented” specialties (e.g., psychiatry, family medicine, internal medicine, pediatrics, obstetrics and gynecology, emergency medicine, and medical subspecialties) obtained higher empathy scores than their counterparts in “technology/procedure-oriented” specialties (e.g., anesthesiology, pathology, radiology, surgery and surgical subspecialties).

Hojat, et al., 2001, *Acad Med*, 76, 669.

Hojat, et al., 2002, *Acad Med*, 77, s58-s60.

Hojat, et al., 2002, *Am J Psychiatry*, 159, 1563-1569.

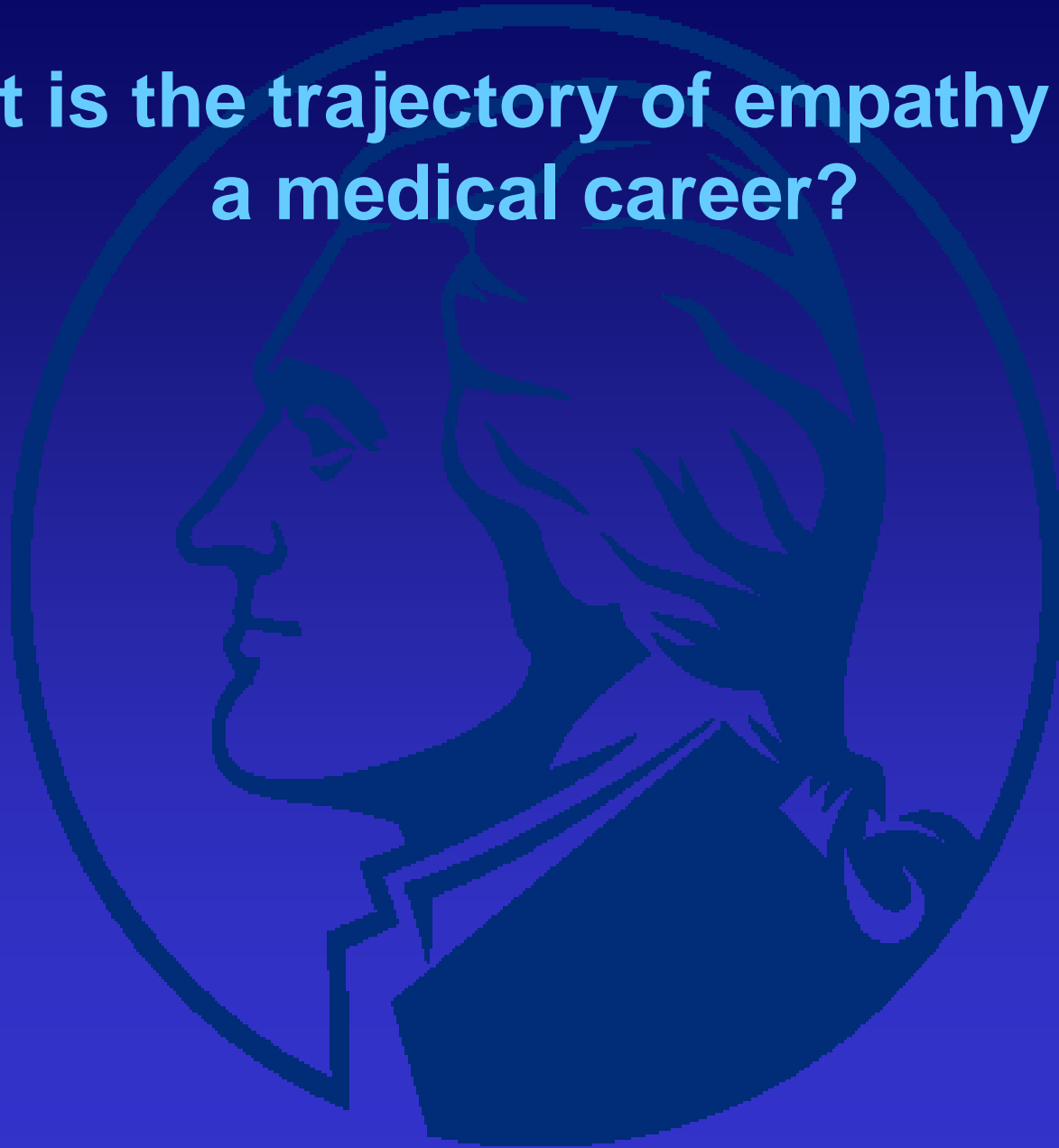
# Condition 4: Physician Empathy and Patient Outcomes

## Two key studies in the U.S. and Italy

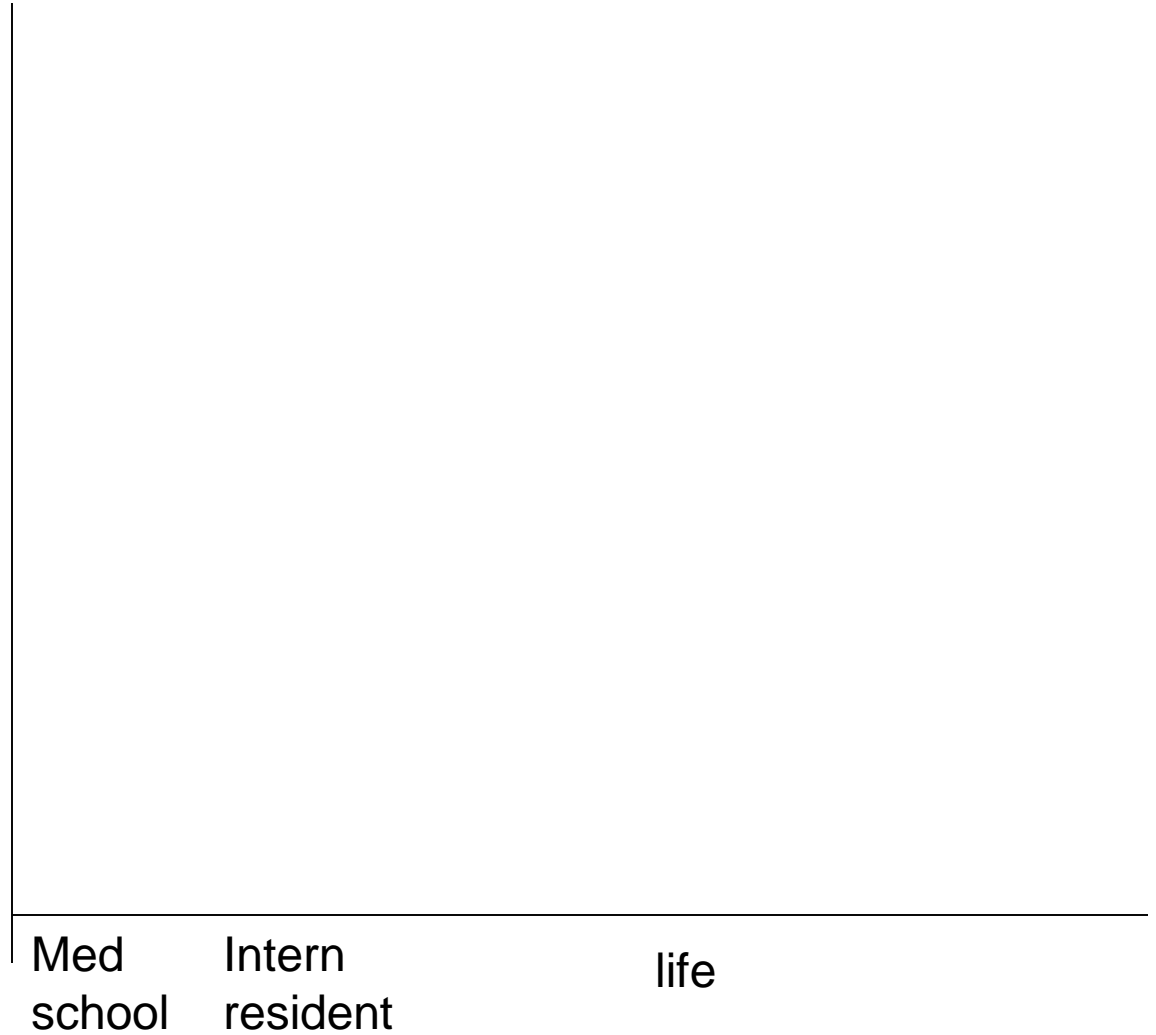
Hojat, M., Louis, D.Z., Markham, F.W., Wender, R., Rabinowitz, C., Gonnella, J.S. (2011). Physician empathy and clinical outcomes in diabetic patients. *Academic Medicine*, 86, 359-364.

Del Canale, S., Louis, D.Z., Maio, V., Wang, X., Rossi, G., Hojat, M., Gonnella, J.S. (2012). Physicians' empathy and Disease complications: An empirical study of primary care physicians and their diabetic patients in Parma, Italy. *Academic Medicine*, 87, 1243-1249.

**What is the trajectory of empathy over  
a medical career?**



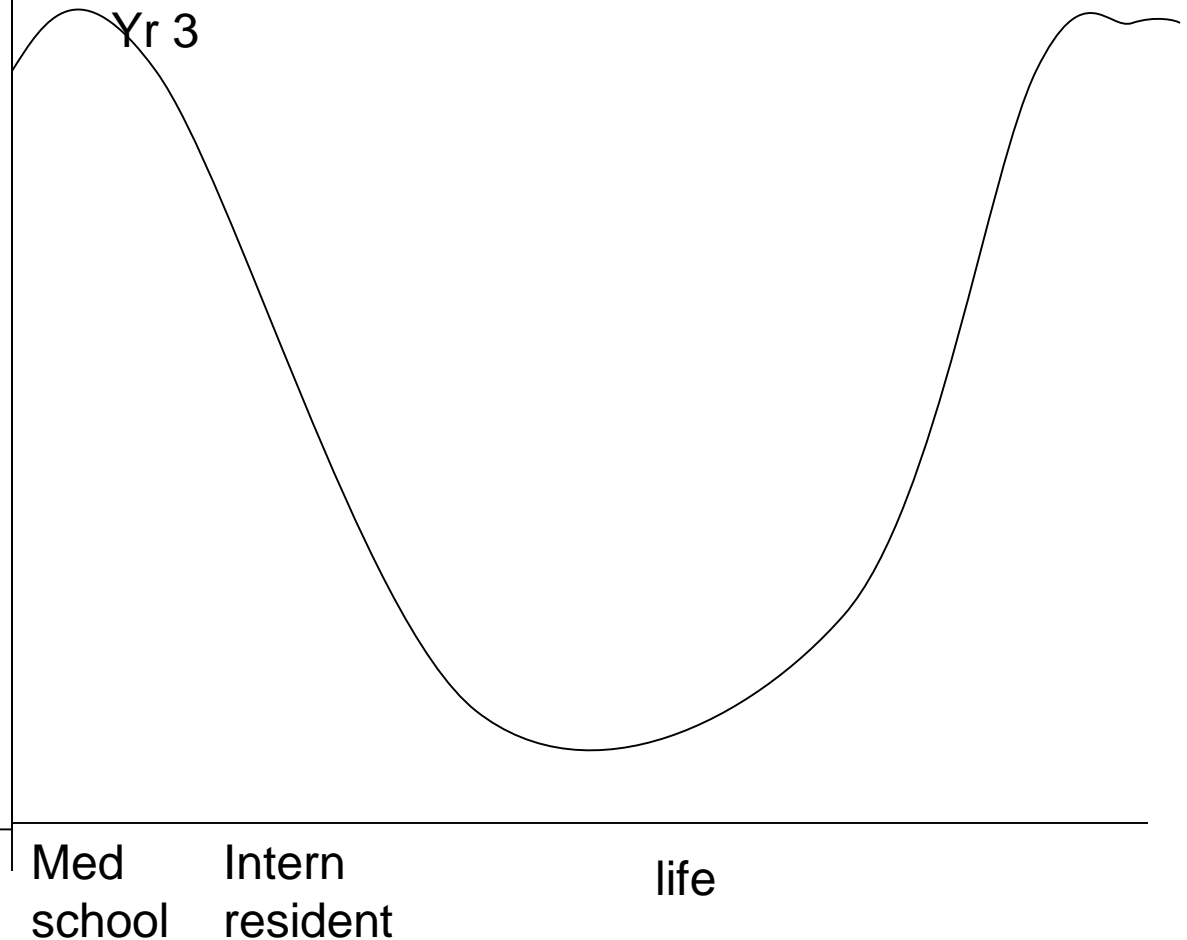
# The empathy timeline



# The empathy timeline

- Timeline for empathy in training and career

Hojatt et al The Devil is in the Third Yr. Acad Med inn press







Nothing is a faster teacher Kubler Ross

The devil in the third year: A longitudinal study of erosion of empathy. Hojatt et al Acad Med in press

- To study medical student empathy during 4 years of school
- 456 students at Jefferson Medical College 2002;2004 using the JES at orientation and yearly x 4
- No change over 2 years but a significant decline occurred at the end of the third year and persisted

# REASONS for lost Empathy

- Lack of role models (HIDDEN CURRICULUM)
- High volume of work
- Time pressure
- Patient and environmental factors
- The ipatient versus the real patient (Verghese NEJM Dec 2008)
- Harassment , sleep deprivation etc

The devil in the third year: A longitudinal study of erosion of empathy. Hojatt et al Acad Med 2009

- EMPATHY
  - Females > males
  - People oriented > technical specialties
  - Similar patterns but blunted
- 27% of the students did not lose empathy!!!!!!!!!!!!!!

Is empathy the same or different  
in DO medical students or DO  
practioners?

## Correlates and Changes in Empathy and Attitudes Toward Interprofessional Collaboration in Osteopathic Medical Students

Leonard H. Calabrese, DO; Joseph A. Bianco, PhD; Douglas Mann, PhD; David Massello, BA; and Mohammadreza Hojat, PhD

From the Department of Rheumatic and Immunological Diseases at Case Western Reserve University in Cleveland, Ohio, and the Lerner Research Institute at the Cleveland Clinic in Ohio (Dr Calabrese); the Department of Social Medicine at the Ohio University Heritage College of Osteopathic Medicine in Athens (Drs Bianco and Mann); the Foundation for Osteopathic Research and Continuous Education in Highland Park, Illinois (Mr Massello); and the Center for Research in Medical Education and Health Care and

**Context:** Many studies have reported a decline in empathy as allopathic medical students progress through medical school. Data are needed to compare the pattern of changes in empathy in osteopathic and allopathic medical students. Also, it is important to investigate the associations between measures of empathy and attitudes toward interprofessional collaboration, which are among major elements of professionalism in medicine.

**Objectives:** (1) To investigate correlations between empathy and interprofessional collaboration in osteopathic medical students; (2) to examine differences in empathy and interprofessional collaboration scores by sex, class year, and specialty interest; and (3) to compare empathy scores by class year between osteopathic and allopathic medical students.

**Design:** Correlational and comparative study.

**Conclusion:** The decline in empathy that is often reported among allopathic medical students was not observed. The present study can serve as a step toward further longitudinal research on the development of empathy and attitudes toward teamwork among osteopathic medical students.

*J Am Osteopath Assoc.* 2013;113(12):898-907  
doi:10.7556/jaoa.2013.088

# Empathy Erosion in Osteopathic Medical Education?

- largely unknown compared to allopathic medical education
- Cross-sectional studies using JSE suggest no empathy erosion among osteopathic students (Kimmelman et al., 2011; Calabrese et al., 2013)
- Longitudinal studies: few, with mixed findings

# Research Instruments

1. **Jefferson Scale of Empathy (20 items).**
2. **Jefferson Scale of Attitudes Toward Physician-Nurse Collaboration (15 items) .**
3. **Integrative Care Attitude Scale (10 items).**
4. **A survey on osteopathic experiences prior to medical school.**



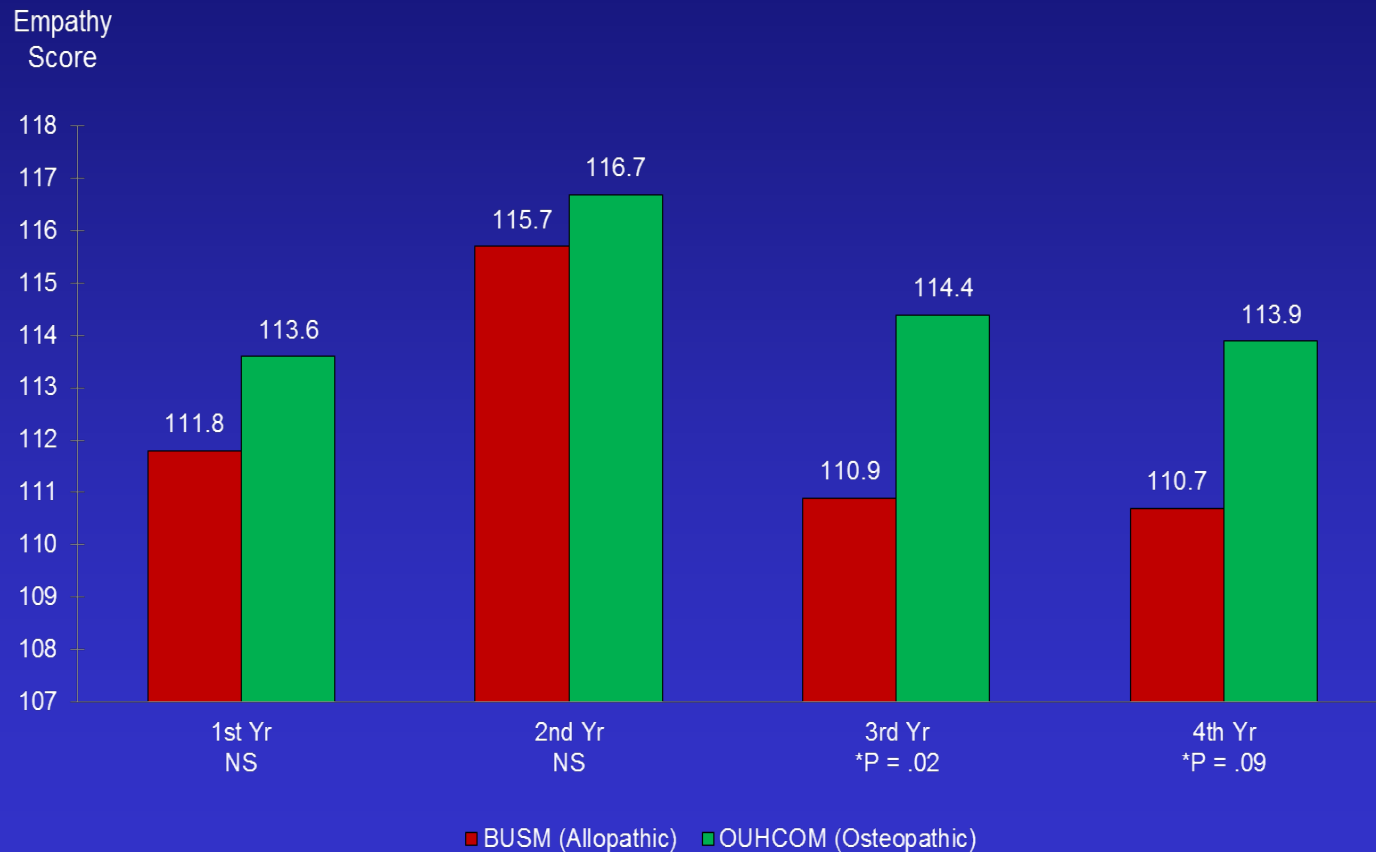
## Study Participants by Year of Medical School in 2011-2012 Academic Year

	<b>n</b>	<b>% women</b>
Year 1	109	47%
Year 2	94	57%
Year 3	101	56%
Year 4	69	51%
Total	373	53%

# **Osteopathic-Related Experiences Prior to Medical School**

- **98% volunteered for medical or community services.**
- **93% had observed patient care rendered by osteopathic physicians.**
- **53% of students or their family members received medical care from a D.O.**
- **12% had a D.O. in their family.**
- **12% had received OMT.**

# Mean Scores of the Jefferson Scale of Empathy in Allopathic and Osteopathic Medical Schools (Cross-Sectional Studies)



# Burnout among physicians

- Emotional exhaustion
  - Emotionally overextended and exhausted by work
- Depersonalization
  - Negative, cynical attitude, treating patients as objects
- Sense of low personal accomplishment
  - Feelings of incompetence, inefficiency and inadequacy

# Prevalence

- 25% - 60% of practicing physicians
- 76% of internal medicine residents
- 45% of 3<sup>rd</sup> year students
- 11.2% of medical students report suicidal ideation

# Causes of burnout

- Overwork
- Sleep deprivation
- Low control/high responsibility
- Inadequate support
- Lack of self-awareness
- Imbalance between personal and professional life

# How do we stop Burnout?

# Association of an Educational Program in Mindful Communication With Burnout, Empathy, and Attitudes Among Primary Care Physicians

Michael S. Krasner, MD

Ronald M. Epstein, MD

Howard Beckman, MD

Anthony L. Suchman, MD, MA

Benjamin Chapman, PhD

Christopher J. Mooney, MA

Timothy E. Quill, MD

**P** RIMARY CARE PHYSICIANS REPORT alarming levels of professional and personal distress. Up to 60% of practicing physicians report symptoms of *burnout*,<sup>1-4</sup> defined as emotional exhaustion, depersonalization (treating patients as objects), and low sense of accomplishment. Physician burnout has been linked to poorer quality of care, including patient dissatisfaction, increased medical errors, and lawsuits and decreased ability to express empathy.<sup>2,5-7</sup> Substance abuse, automobile accidents, stress-related health problems, and marital and family discord are among the personal consequences reported.<sup>4,8-10</sup> Burnout can occur early in the medical educational process. Nearly half of all third-year medical students report burnout<sup>2,11</sup> and there are strong associations between medical student burnout and suicidal ideation.<sup>12</sup>

**Context** Primary care physicians report high levels of distress, which is linked to burnout, attrition, and poorer quality of care. Programs to reduce burnout before it results in impairment are rare; data on these programs are scarce.

**Objective** To determine whether an intensive educational program in mindfulness, communication, and self-awareness is associated with improvement in primary care physicians' well-being, psychological distress, burnout, and capacity for relating to patients.

**Design, Setting, and Participants** Before-and-after study of 70 primary care physicians in Rochester, New York, in a continuing medical education (CME) course in 2007-2008. The course included mindfulness meditation, self-awareness exercises, narratives about meaningful clinical experiences, appreciative interviews, didactic material, and discussion. An 8-week intensive phase (2.5 h/wk, 7-hour retreat) was followed by a 10-month maintenance phase (2.5 h/mo).

**Main Outcome Measures** Mindfulness (2 subscales), burnout (3 subscales), empathy (3 subscales), psychosocial orientation, personality (5 factors), and mood (6 subscales) measured at baseline and at 2, 12, and 15 months.

**Results** Over the course of the program and follow-up, participants demonstrated improvements in mindfulness (raw score, 45.2 to 54.1; raw score change [ $\Delta$ ], 8.9; 95% confidence interval [CI], 7.0 to 10.8); burnout (emotional exhaustion, 26.8 to 20.0;  $\Delta=-6.8$ ; 95% CI, -4.8 to -8.8; depersonalization, 8.4 to 5.9;  $\Delta=-2.5$ ; 95% CI, -1.4 to -3.6; and personal accomplishment, 40.2 to 42.6;  $\Delta=2.4$ ; 95% CI, 1.2 to 3.6); empathy (116.6 to 121.2;  $\Delta=4.6$ ; 95% CI, 2.2 to 7.0); physician belief scale (76.7 to 72.6;  $\Delta=-4.1$ ; 95% CI, -1.8 to -6.4); total mood disturbance (33.2 to 16.1;  $\Delta=-17.1$ ; 95% CI, -11 to -23.2), and personality (conscientiousness, 6.5 to 6.8;  $\Delta=0.3$ ; 95% CI, 0.1 to 0.5 and emotional stability, 6.1 to 6.6;  $\Delta=0.5$ ; 95% CI, 0.3 to 0.7). Improvements in mindfulness were correlated with improvements in total mood disturbance ( $r=-0.39$ ,  $P<.001$ ), perspective taking subscale of physician empathy ( $r=0.31$ ,  $P<.001$ ), burnout (emotional exhaustion and personal accomplishment subscales,  $r=-0.32$  and 0.33, respectively;  $P<.001$ ), and personality factors (conscientiousness and emotional stability,  $r=0.29$  and 0.25, respectively;  $P<.001$ ).

**Conclusions** Participation in a mindful communication program was associated with short-term and sustained improvements in well-being and attitudes associated with patient-centered care. Because before-and-after designs limit inferences about intervention effects, these findings warrant randomized trials involving a variety of practicing physicians.

JAMA. 2009;302(12):1284-1293

www.jama.com

- Mindfulness
- Meditation
- Self-awareness exercises
- Narrative writing
- Appreciative Inquiry



# Mindfulness Formal

amednews.com

AMERICAN MEDICAL NEWS

PROFESSION

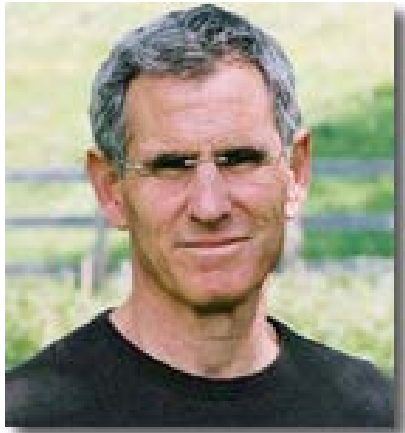


Illustration by Andrew DeGraff / [www.andrewdegraff.com](http://www.andrewdegraff.com)

**Using mindfulness to soothe physician stress**

# Mindfulness based stress reduction

## MBSR



**Standardized 8 week course**

**Incorporates aspects of meditation & yoga**

**Aims to enhance awareness of body & mind**

**Attention to sensation, thought, emotions**

**2.5 hours in class each week**


**45 minutes daily practice**

**Pioneered by Jon Kabat-Zinn PhD  
Center for Mindfulness in Medicine, Health Care  
University of Massachusetts Medical School**

# STRESS FREE NOW FOR HEALERS- To BE RELEASED SUMMER 2015

## Getting Started, Welcome Page & Video

Cleveland Clinic Wellness  
Click for a Healthier You!




### Stress Free Now FOR HEALERS

#### Welcome to Stress Free Now for Healers

Before you begin the program, please take a moment to familiarize yourself with what's to come by listening to or reading the program introduction below.

Program Introduction




Now that you know what Stress Free Now for Healers is all about, take a minute to think about how you will incorporate this program into your life. When will you read the daily emails and topics? When will you explore the strategies and relaxation practice? To increase your success, plan in advance.

As you complete each lesson and move on to the next, you will be asked to answer a brief set of questions. This is your weekly progress assessment. Your results will help you track how the program is affecting your perceived stress each week. You will complete the first progress assessment at the end of Lesson 1.

Next, before you begin Lesson 1, you will answer a longer assessment, the Stress Profile. Your results—your stress score—will provide you with important information on how chronic stress may be affecting your health and quality of life. This profile will provide you with specific information on your perceived stress and overall well-being over the past month. To access the Stress Profile, you must log in to the program.

Login Now

### Welcome Video



Welcome to Stress Free Now for Healers. And congratulations on taking the first step in better managing and reducing stress in your life.

If you're like me, and are involved in the direct care of patients, you know that medicine is a stressful environment. We are always under a time crunch, we often have patients with special needs, and on top of all that, we are trying to balance our professional and personal life in a way that works.

Stress Free Now for Healers was designed in partnership with doctors and nurses here at the Cleveland Clinic, to support healers in lowering our stress and helping us to become truly present, for our

# SUGGESTIONS FOR CULTIVATING EMPATHY IN PHYSICIANS

1. Get together/Tell stories
2. Start a support/personal awareness group
3. Faculty development and modeling
4. Begin early in training
5. Use literature and the arts as a way in
6. Practice the skills involved –  
differentiate empathy from sympathy





# EMPATHY

Osteopathic physicians (DOs) use today's technology, but also their ears to listen carefully, their eyes to see their patients as whole people, and their hands to diagnose and treat injury and illness. Learn more about DOs at [www.osteopathic.org/about](http://www.osteopathic.org/about) during National Osteopathic Medicine Week.



A CHART  
DOESN'T  
EMPATHIZE.

I DO.

Before reading a chart or lab report, a DO sees a human being. Doctors of Osteopathic Medicine practice their distinct philosophy in every medical specialty. A DO first considers the person within the patient.

**DOCTORS OF  
OSTEOPATHIC  
MEDICINE**

Learn more at [DoctorsThatDO.org](http://DoctorsThatDO.org)



I DO.

Before you talk to a doctor, choose one trained to listen. Doctors of Osteopathic Medicine practice their distinct philosophy in every medical specialty. A DO is trained to first consider the person within the patient.

**DOCTORS OF  
OSTEOPATHIC  
MEDICINE**

Learn more at [DoctorsThatDO.org](http://DoctorsThatDO.org)

# Osteopathic Opportunities

- Understand the power of touch
- Explore 'habits' of successful osteopathic healers
- Incorporate techniques of empathy enhancement in DO education (undergraduate, graduate and post-graduate)
- Expand research in empathy, mindfulness, resilience and burn out in osteopathic institutions