# Compassionomics: The Scientific Evidence That Caring Makes a Difference

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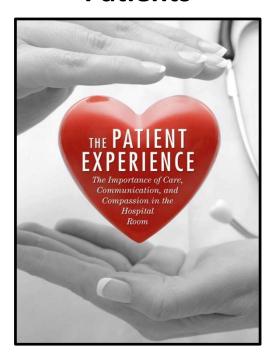






# **Executive Summary**

#### **Patients**



#### **Patient Care**



# Those Who Care For Patients









### **Disclosures**

I have no relationships with commercial interests

I donate my book proceeds to the Cooper Foundation

I receive payments for speaking engagements

I have no "magical thinking"

I am (very much) a work in progress







# How We Got Here

















Then Now

# Does compassion really matter?







## **Definitions**

Compassion is an emotional *response* to another's pain or suffering involving an authentic desire to *help*.

**Empathy + Action = Compassion** 









Our sample consists of two unique groups of men recruited in the 1930's and 1940's:

#### 1. Harvard Cohort - Grant Study

The participants for this study were chosen when they were around 19 years old. It is a group of 268 Caucasian men from the Harvard classes of 1939-1944.

#### 2. Boston Cohort - Glueck Study

456 Caucasian men from the neighborhoods of Boston were selected at ages between 11-16 by Harvard Law School professors Sheldon and Eleanor Glueck.









## **Physiological**

Patient self-care

Clinical Effects

Quality of care

**Psychological** 







#### Empathy is related to clinical competence in medical care

Jessica Ogle<sup>1</sup>, John A Bushnell<sup>2</sup> & Peter Caputi<sup>1</sup>

### Association of Perceived Medical Errors With Resident Distress and Empathy

A Prospective Longitudinal Study

Colin P. West, MD, PhD Mashele M. Huschka, BS

Paul J. Novotny, MS

Jeff A. Sloan, PhD Joseph C. Kolars, MD

Thomas M. Habermann, MD

Tait D. Shanafelt, MD

**JAMA** 

# Quality of Care

#### Burnout and Medical Errors Among American Surgeons

Tait D. Shanafelt, MD,\* Charles M. Balch, MD,†‡ Gerald Bechamps, MD,†§ Tom Russell, MD,†
Lotte Dyrbye, MD,\* Daniel Satele, BA,\* Paul Collicott, MD,† Paul J. Novotny, MS,\* Jeff Sloan, PhD,\*
and Julie Freischlag, MD†‡

Burnout and Self-Reported Patient Care in an Internal Medicine Residency Program

Tait D. Shanafelt, MD; Katharine A. Bradley, MD, MPH; Joyce E. Wipf, MD; and Anthony L. Back, MD







### Impact of physician empathy on migraine disability and migraineur compliance

Hatim S. Attar, Srinath Chandramani

#### Physicians' Empathy and Clinical Outcomes for Diabetic Patients

Mohammadreza Hojat, PhD, Daniel Z. Louis, MS, Fred W. Markham, MD, Richard Wender, MD, Carol Rabinowitz, and Joseph S. Gonnella, MD

Physician-Patient Relationship and Medication Compliance: A Primary Care Investigation

Ngaire Kerse, PbD, MBCbB¹ Stephen Buetow, PbD¹ Arch G. Mainous III, PbD² Gregory Young¹ Gredor Coster, MSc, MBCbB¹

Bruce Arroll, PhD, MBChB'

### Is the Quality of the Patient-Provider Relationship Associated with Better Adherence and Health Outcomes for Patients with HIV?

Mary Catherine Beach, MD, MPH,  $^{1,2,3,4}$  Jeanne Keruly, MS, CNRP, Richard D. Moore, MD, MHS $^{1,5}$ 

# Patient Self-care

### Physician Communication and Patient Adherence to Treatment

A Meta-Analysis

Kelly B. Haskard Zolnierek, PhD,\* and M. Robin DiMatteo, PhD†

Clinician empathy is associated with differences in patient-clinician communication behaviors and higher medication self-efficacy in HIV care

Tabor E. Flickinger<sup>a,\*</sup>, Somnath Saha<sup>b,c</sup>, Debra Roter<sup>d</sup>, P.Todd Korthuis<sup>c</sup>, Victoria Sharp<sup>e</sup>, Jonathan Cohn<sup>f</sup>, Susan Eggly<sup>f</sup>, Richard D. Moore<sup>d</sup>, Mary Catherine Beach<sup>d</sup>

#### The Relationship Between Physician Empathy and Disease Complications: An Empirical Study of Primary Care Physicians and Their Diabetic Patients in Parma, Italy

Stefano Del Canale, MD, PhD, Daniel Z. Louis, MS, Vittorio Maio, PharmD, MS, MSPH, Xiaohong Wang, MS, Giuseppina Rossi, MD, Mohammadreza Hojat, PhD, and Joseph S. Gonnella, MD







#### REDUCTION OF POSTOPERATIVE PAIN BY ENCOURAGEMENT AND INSTRUCTION OF PATIENTS\*

A Study of Doctor-Patient Rapport

LAWRENCE D. EGBERT, M.D.,† GEORGE E. BATTIT, M.D.,‡ CLAUDE E. WELCH, M.D.,\$
AND MARSHALL K. BARTLETT, M.D.¶

Enhanced Therapeutic Alliance Modulates Pain Intensity and Muscle Pain Sensitivity in Patients With Chronic Low Back Pain: An Experimental Controlled Study

Jorge Fuentes, Susan Armijo-Olivo, Martha Funabashi, Maxi Miciak, Bruce Dick, Sharon Warren, Saifee Rashiq, David J. Magee, Douglas P. Gross

# Physiological

**Effects** 

#### Practitioner Empathy and the Duration of the Common Cold

David P. Rakel, MD; Theresa J. Hoeft, PhD; Bruce P. Barrett, MD, PhD; Betty A. Chewning, PhD; Benjamin M. Craig, PhD; Min Niu, MS

Physical Therapists' Nonverbal Communication Predicts Geriatric Patients' Health Outcomes

Nalini Ambady and Jasook Koo Harvard University Robert Rosenthal University of California, Riverside

Patient-centered interviewing is associated with decreased responses to painful stimuli: An initial fMRI study

Issidoros Sarinopoulos <sup>a,\*</sup>, Ashley M. Hesson <sup>b</sup>, Chelsea Gordon <sup>a</sup>, Seungcheol A. Lee <sup>c</sup>, Lu Wang <sup>c</sup>, Francesca Dwamena <sup>b</sup>. Robert C. Smith <sup>b</sup>

# The Value of the Preoperative Visit by an Anesthetist

A Study of Doctor-Patient Rapport

Lawrence D. Egbert, MD, George E. Battit, MD, Herman Turndorf, MD, and Henry K. Beecher, MD, Boston

The Effects of Psychological Intervention on Recovery From Surgery and Heart Attacks:

An Analysis of the Literature

EMILY MUMFORD, PhD, HERBERT J. SCHLESINGER, PhD, AND GENE V. GLASS, PhD

#### Empathy Predicts an Experimental Pain Reduction During Touch

Pavel Goldstein,\*<sup>,†</sup> Simone G. Shamay-Tsoory,\* Shahar Yellinek,\* and Irit Weissman-Fogel<sup>‡</sup>







#### Therapeutic Empathy and Recovery From Depression in Cognitive— Behavioral Therapy: A Structural Equation Model

David D. Burns University of Pennsylvania School of Medicine and Presbyterian Medical Center of Philadelphia Susan Nolen-Hoeksema Stanford University The relationship between staff empathy and depressive symptoms in nursing home residents

N. HOLLINGER-SAMSON1 & J. L. PEARSON2

# Psychological

Psychiatrist effects in the psychopharmacological treatment of depression

Kevin M. McKay\*, Zac E. Imel, Bruce E. Wampold

**Effects** 

Improving Physicians' Interviewing Skills and Reducing Patients' Emotional Distress

A Randomized Clinical Trial

Debra L. Roter, DrPH; Judith A. Hall, PhD; David E. Kern, MD, MPH; L. Randol Barker, MD, ScM; Karan A. Cole. ScD: Robert P. Roca, MD

Aspects of Patient and Clinician Language Predict Adherence to Antidepressant Medication

Jessica E. Kaplan, BS, Robert D. Keeley, MD, Matthew Engel, MPH, Caroline Emsermann, MS, and David Brody, MD Interpersonal Factors in Brief Treatment of Depression:
Further Analyses of the National Institute of Mental Health Treatment of
Depression Collaborative Research Program

Sidney J. Blatt Yale University David C. Zuroff McGill University















# What do patients remember?











Bus Crash Luke Fildes

# What's the ROI?







# Culture of Care

Source: Barsade Admin Sci Q 2014

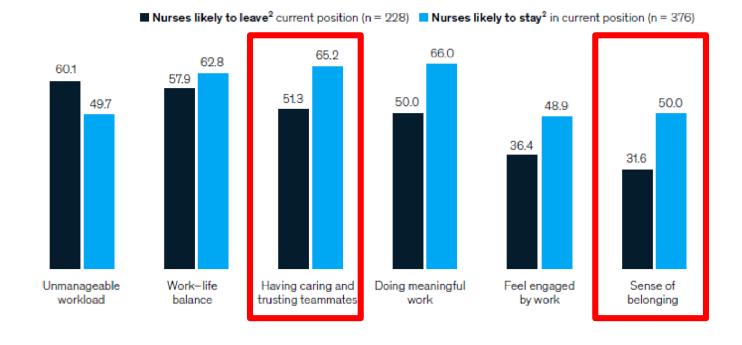






### Nurses

Factors
affecting
decision to
stay or leave



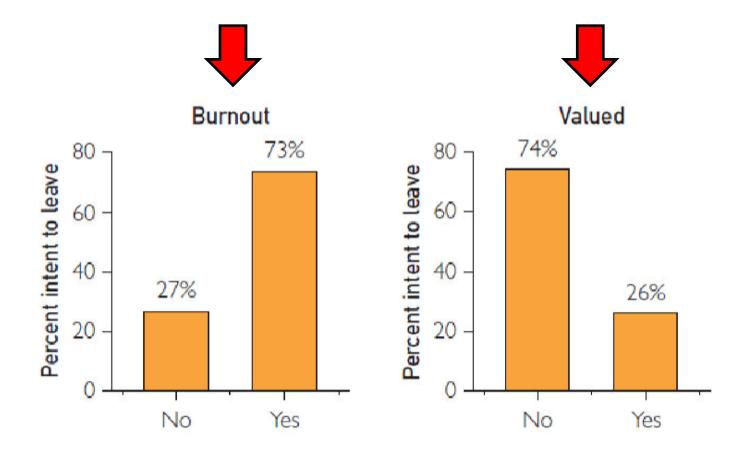
McKinsey & Co. 2022







## **COVID Stress and Work Intentions**



Mayo Clinic Proceedings 2021







## The "Drivers" of Malpractice Cases

In a study of plaintiff depositions for malpractice lawsuits that were settled against a large metropolitan medical center, researchers found that, in general, patients and families decided to litigate because they perceived their doctors did not care.

They said that doctors were unavailable, discounted their concerns, communicated poorly, or just failed to understand the patient's or family's perspective. It wasn't the technical part of the medical care; it was the caring part of the medical care.

Source: Beckman et al Archive of Internal Medicine







# **The Compassion Mindset**

1. Compassion is evidence-based medicine

2. Change is possible

3. It's about *time* 







## Change is *Possible*



RESEARCH ARTICLE

Curricula for empathy and compassion training in medical education: A systematic review

Sundip Patel<sup>1</sup>, Alexis Pelletier-Bui<sup>1</sup>, Stephanie Smith<sup>1</sup>, Michael B. Roberts<sup>2</sup>, Hope Kilgannon<sup>1,3</sup>, Stephen Trzeciak<sup>3,4</sup>, Brian W. Roberts<sup>0,1,3</sup>\*

1 Department of Emergency Medicine, Cooper University Health Care, Cooper Medical School of Rowan University, Camden, NJ, United States of America, 2 Institutional Research and Outcomes Assessment, Philadelphia College of Osteopathic Medicine, Philadelphia, PA, United States of America, 3 Center for Humanism, Cooper Medical School of Rowan University, Camden, NJ, United States of America, 4 Department of Medicine, Cooper University Health Care, Cooper Medical School of Rowan University, Camden, NJ, United States of America

\* roberts-brian-w@cooperhealth.edu

Patel et al PLOS ONE 2019







# Mindset Matters

"Failure is an opportunity to grow"

GRUW I H MINDSET

"I can learn to do anything I want"

"Challenges help me to grow"

"My effort and attitude determine my abilities"

"Feedback is constructive"

"I am inspired by the success of others"

"I like to try new things" "Failure is the limit of my abilities"

## FIXED MINDSET

"I'm either good at it or I'm not"
"My abilities are unchanging"

"I don't like "I can either do it, to be challenged" or I can't"

"My potential is predetermined"

"When I'm frustrated, I give up"

> "Feedback and criticism are personal

"I stick to what I know"

Dweck 2006







# Time







# 40 Seconds







# Compassion is a powerful beneficial therapy for the *giver*, too.







# n = 1

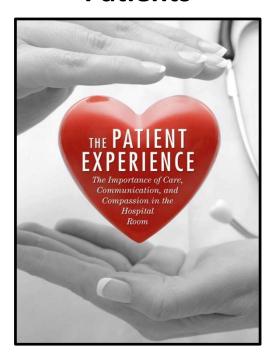






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#### **QR Contact Info:**



## The Daily Dose

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