Health and Wellness Data Among Allergists and Immunologists:
How Does This Compare With Our Colleagues?

GAILEN D. MARSHALL, JR., MD PHD, FACAAI
THE R. FAER TRIPPLET SR. MD CHAIR OF ALLERGY AND IMMUNOLOGY
PROFESSOR OF MEDICINE, PEDIATRICS, PATHOLOGY AND POPULATION SCIENCE
THE UNIVERSITY OF MISSISSIPPI MEDICAL CENTER
JACKSON, MS

Disclosures

No relevant financial disclosures
Health

a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity (WHO)

Cannot be attained or maintained solely by "pills or procedures"

Involves the initiation and maintenance of homeostasis

Influenced by multiple “nonphysical” components
  ◦ Outlook – optimism vs pessimism
  ◦ Sense of personal control and accomplishments
  ◦ recognition of relationships between spirituality and health

WHO Definition of QOL

WHO defines Quality of Life as an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns.

It is a broad ranging concept affected in a complex way by the person's physical health, psychological state, personal beliefs, social relationships and their relationship to salient features of their environment.

https://www.who.int/healthinfo/survey/whoqol-qualityoflife/en/
Professional Burnout Syndrome

Syndrome of excessive emotional load, or burnout, comprising a negative set of emotional and physical responses to chronic work stress.

Principal manifestations
- Emotional exhaustion
- Depersonalization toward patients, staff, family, friends
- Loss of a sense of personal accomplishment

Maslach and Jackson 1996

Is Physician Burnout a Problem in America?

2019 Medscape national Burnout and Depression Report
Surveyed over 15,000 physicians in more than 29 specialties
44% described themselves as partially or totally burnout
Highest risk was Urology followed by Neurology, PM&R and general internal medicine
AI was reported to have a burnout rate of 37%
- Only 150 allergists questioned
- Data were gathered with a non-validated instrument
Assessing The North American Allergist-Immunologist Burnout Risk: ACAAI Physician Wellness Taskforce

2016 ACAAI Annual Presidential Symposium
- Preserving the Essence of Practicing Allergy
  - Why reinvention of the doctor-patient relationship is the key to physician-led healthcare reform” Mark O’Hollaren, MD
  - The Care In Caring: Finding what is timeless in an era of change Abraham Verghese, MD

Overwhelming response from audience in response to many perceived challenges and impediments to our practices

2016-17 ACAAI President Stephen Tilles MD formed a Physician Wellness taskforce charged with trying to determine the level of physician burnout risk among North American practicing Allergist-Immunologist members of the ACAAI

Taskforce members included Drs. Michael Blaiss, Amar Dixit, Daniel Ein Tracy Fausnight, Gailen Marshall, Travis Miller, Anil Nanda, Maeve O’Connor, Tammy Peng, Wanda Phipatanakul, Michael Rupp and William Silvers

The taskforce decided to administer the Maslach Burnout Inventory online funded by the College

22 element questionnaire that assesses level of emotional exhaustion, depersonalization and sense of personal accomplishments as well as certain demographic identifiers

Two separate opportunities were offered
- US and Canadian AI specialist who self described as practicing clinicians (community and academic)
- Fellows-in-training

The opportunity to participate was extended in 2 separate studies over a three month period to 2495 practicing AI members and 318 FIT members

360 practicing members (14.3%) and 61 FITs (16.9%) completed the survey anonymously via web-based system
The Maslach Burnout Inventory

Well validated instrument used in many studies reporting physician and educator burnout

3 categories

- **Emotional exhaustion** measures feelings of being emotionally over extended and exhausted by one's work leading to emotional depletion distinct from physical exhaustion or mental fatigue
- **Depersonalization** measures an unfeeling and impersonal response toward recipient of one's service, care, treatment or instruction
- **Personal accomplishment** measures feelings of competence and successful achievement in one's work and emphasizes effectiveness and success in having a beneficial effect on people

Each question answered

- 0 never
- 1 a few times a year or less
- 2 once a month or less
- 3 a few times a month
- 4 weekly
- 5 a few times per week
- 6 every day

Demographics of Respondents to the Maslach Burnout Inventory

<table>
<thead>
<tr>
<th>Variable</th>
<th>No. (%) of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Physician members</td>
</tr>
<tr>
<td>Age, y</td>
<td></td>
</tr>
<tr>
<td>&lt;30</td>
<td>1 (0.003)</td>
</tr>
<tr>
<td>31-40</td>
<td>57 (16.0)</td>
</tr>
<tr>
<td>41-50</td>
<td>69 (19.3)</td>
</tr>
<tr>
<td>51-60</td>
<td>101 (28.2)</td>
</tr>
<tr>
<td>61-70</td>
<td>99 (27.7)</td>
</tr>
<tr>
<td>≥71</td>
<td>31 (8.7)</td>
</tr>
<tr>
<td>Time in practice, y</td>
<td></td>
</tr>
<tr>
<td>&lt;5</td>
<td>36 (10.1)</td>
</tr>
<tr>
<td>5-10</td>
<td>39 (11.0)</td>
</tr>
<tr>
<td>11-20</td>
<td>71 (20)</td>
</tr>
<tr>
<td>21-30</td>
<td>108 (30.4)</td>
</tr>
<tr>
<td>≥31</td>
<td>101 (28.5)</td>
</tr>
</tbody>
</table>
Overall MBI Scores

MBI Scores by Gender
MBI Scores by Age

MBI Group Frequency Rating
Group Frequency Standard Deviation

<table>
<thead>
<tr>
<th>Category</th>
<th>Group Standard Deviation</th>
<th>General Population Standard Deviation</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional Exhaustion</td>
<td>1.2</td>
<td>1.2</td>
<td>1.6</td>
</tr>
<tr>
<td>Depersonalization</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
</tr>
<tr>
<td>Personal Accomplishment</td>
<td>0.9</td>
<td>0.9</td>
<td>0.8</td>
</tr>
</tbody>
</table>

MBI Scores for FIT \((n=61)\)

<table>
<thead>
<tr>
<th>Category</th>
<th>Average for Your Group</th>
<th>Standard Deviations of the Group’s Frequency on the MBI-HSS</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional Exhaustion</td>
<td>2.7</td>
<td>Emotional Exhaustion</td>
<td>1.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Depersonalization</td>
<td>1.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Personal Accomplishment</td>
<td>0.8</td>
</tr>
<tr>
<td>Depersonalization</td>
<td>1.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal Accomplishment</td>
<td>4.4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Are there Signals in the Data?

- Emotional exhaustion scores for physician members and FITs higher than controls
  - This effect most pronounced in younger member respondents
- Depersonalization was less than controls
- Personal accomplishments greater than controls
- No gender differences identified
- No consistent effect of years in practice

MBI Frequency Distribution

![MBI Frequency Distribution Chart]

- Emotional Exhaustion
- Depersonalization
- Personal Accomplishment
MBI Frequency by Gender

**MALE**

- n=233

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Frequency Distribution</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional Exhaustion</td>
<td>A few times a year or less</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Once a month or less</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Once a week</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>A few times a week</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Every day</td>
<td>15</td>
</tr>
</tbody>
</table>

**FEMALE**

- n=124

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Frequency Distribution</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional Exhaustion</td>
<td>A few times a year or less</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Once a month or less</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>Once a week</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>A few times a week</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Every day</td>
<td>3</td>
</tr>
</tbody>
</table>

**MBI Frequency Distribution in FIT**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Frequency Distribution</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional Exhaustion</td>
<td>A few times a year or less</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Once a month or less</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Once a week</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>A few times a week</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Every day</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Frequency Distribution</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depersonalization</td>
<td>A few times a year or less</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Once a month or less</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Once a week</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>A few times a week</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Every day</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Frequency Distribution</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Accomplishment</td>
<td>A few times a year or less</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Once a month or less</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Once a week</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>A few times a week</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Every day</td>
<td>0</td>
</tr>
</tbody>
</table>
More Subtle Signals?

**Emotional exhaustion present**
- at least several times monthly in 176/360 (48.9%) members and 36/61 (59.1%) FITs
- at least once per week in 102/360 (28.3%) members and 18/61 (29.5%) FITs

**Depersonalization present**
- at least several times monthly in 55/360 (15.2%) members and 20/61 (32.7%) FITs
- at least weekly in 21/360 (5.8%) members and 4/61 (6.6%) FITs

Potential Confounders

- Relatively small sample size
- No real differentiation for
  - Geographical location
  - Practice environment
- Motivation for responding to questionnaire may be biased
- Sensitivity/specificity of this assessment tool for allergists-immunologists
Conclusions and Future Directions

AI is a specialty that provides significant personal satisfaction and sense of accomplishment.

There are subgroups in both members and FITs sampled who exhibit signs of burnout risk.

Though relative small in percentages, the risk is for this fraction to grow particularly given current social conditions.

The ACAAI is committed to continued the efforts to identify and assist those at risk for burnout to help our colleagues and, ultimately, our patients.
Allergy and Immunology Wellness Session, 2021 ACAAI Annual Meeting: New Orleans, LA:

**Personal Resilience**

- Anil Nanda, MD, FACAAI
- Community Private Practice
- Asthma and Allergy Center
  - Lewisville and Flower Mound, Texas
- Clinical Faculty
  - Division of Allergy and Immunology
  - University of Texas Southwestern Medical Center
  - Dallas, Texas

**Disclosures**

- No financial relationships to disclose
Learning Objectives

• Characterize ways to address and improve wellness and burnout issues during the COVID pandemic and beyond, specifically with regards to allergy and immunology physicians

• Identify methods to improve individual physician resilience
Why Burnout and Wellness Matter

- Patient Care
- Patient Satisfaction
- Quality of Care
- Malpractice Risk
- Practice Staff Turnover
- Early Retirement
- Provider Personal Health and Personal Stresses

Office Practice Setting

- Electronic Medical Records (EMR)
- Billing and Insurance Issues
- Office Politics (“Adult Bullying”)
- Dissatisfied Patients
- Dissatisfied Staff
- Malpractice Lawsuits
- Bias/Discrimination
- Difficult Colleagues
- Prior Authorizations
- COVID-19
Personal Factors

- Personal Relationship Issues (i.e.: Marital Issues, Family Relationships)
- Depression/Substance Use/Suicide
- Dealing with Personal Death
- Change of Practice/Employment/Retirement
- Financial Issues
- Discrimination/Harassment
- COVID-19

Causes of Physician Burnout-Personal Physician Factors

- Service/Sense of Duty: Self Sacrifice
- Excellence: Perfectionism
- Curative Competence: Personal Responsibility for Patient Outcomes
- Compassion: Emotional Isolation
Personal/Individual Resilience

• Capacity to respond to stress in a healthy way to achieve goals at a minimal physical and psychological cost

• “Bounce Back” from Adversity Even Stronger Than Before

Individual Resilience

• Maintain Adequate Sleep, Nutrition, and Exercise
• Finding a Sanctuary Outside of Medicine (i.e. Hobbies)
• Addressing Spirituality
• Addressing physical, emotional, and/or substance abuse issues
• Seeking professional counseling and mental health care
• Authorities/Legal Action
• Take your vacations!
Individual Resilience

• Maintain Adequate Sleep, Nutrition, and Exercise

• (Easier Said Than Done!) 😊

Individual Resilience

• Finding a Sanctuary Outside of Medicine
  - Hobbies
Individual Resilience

• Addressing Spirituality
• Mindfulness
• One’s Own Sense and Purpose

Individual Resilience

• Addressing physical, emotional, and/or substance abuse issues
• Seeking professional counseling and mental health care

Professional Applications/Medical Center/Hospital Privileges
Individual Resilience

• Authorities/Legal Action

Individual Resilience

• Take your vacations!
Individual Resilience

-Maintaining a Sense of Humor

-Keep a “humor” file
-Humor online
-Patient Humor
-Humor with Staff

-Keep it Appropriate

Moore K. Adding a dose of levity to practice. Fam Pract Mgmt 2002

Individual Resilience

• Rediscover the reason(s) for going into healthcare
• Becoming a Mentor (high school, college students rotating in practice)
• Recording/Remembering things one is grateful for at the end of each workday

Nanda et al. Provider Health and Wellness. JACI: In Practice 2017
Individual Resilience: At the Physician Office

- Acknowledge even “small wins”
- (“routine” medical cases/treatments)
- Don’t agonize over “small losses”
- (uncertain diagnoses, need for referral, etc.)
- “Check your ego at the door”
- Focus on what you enjoy about clinical practice/workday

Personal Resilience: Basic Tenants

COVID-19: Personal Resilience

- Fears
- Practice/Economic Uncertainties
- Looking at “Silver Linings"
- The balance between “living your life” and “being safe”
- Leadership
- Boosting morale through patient education regarding COVID-19 and COVID-19 vaccines
- Rediscovering Reason(s) for Going into Healthcare (i.e.: Public Health Service)


Allergy and Immunology Wellness

- Prior to Medical School
- Medical School
- Residency
- Allergy and Immunology Fellowship
- Allergy and Immunology Career
- Local/State/National/International Allergy and Immunology Organizations
Thank You

• ACAAI
• ACAAI Integrative Medicine Committee
• Payel Gupta, MD, FACAAI
• Dipa Sheth, MD, FACAAI
• Maeve O'Connor, MD, FACAAI
• Gailen Marshall, Jr., MD, PhD, FACAAI

• Allergy and Immunology Colleagues

• anilnanda@yahoo.com