

# The Effect of the Hidden Curriculum on Resident Burnout and Cynicism

MARTHA E. BILLINGS, MD  
 MICHAEL E. LAZARUS, MD  
 MARJORIE WENRICH, MPH  
 J. RANDALL CURTIS, MD, MPH  
 RUTH A. ENGELBERG, PHD

## Abstract

**Introduction** Residents learn and participate in care within hospital cultures that may tolerate unprofessional conduct and cynical attitudes, labeled the “hidden curriculum.” We hypothesized that this hidden curriculum may have deleterious effects on residents’ professional development and investigated whether witnessing unprofessional behavior during residency was associated with burnout and cynicism.

**Methods** We surveyed internal medicine residents at 2 academic centers for 3 years (2008–2010). Hidden curriculum items assessed exposure to unprofessional conduct. We used regression analyses to examine if hidden curriculum scores were associated with cynicism and the Maslach Burnout Inventory depersonalization and emotional exhaustion domain scores.

**Results** The response rate was 48% (337 of 708). In the 284 surveys analyzed, 45% of respondents met burnout

criteria and had significantly higher hidden curriculum scores (26 versus 19,  $P < .001$ ) than those not meeting criteria. In cross-sectional analyses, the hidden curriculum score was significantly associated with residents’ depersonalization, emotional exhaustion, and cynicism scores. Cynicism scores were also associated with burnout.

**Conclusions** Exposure to unprofessional conduct was associated with higher burnout and cynicism scores among internal medicine residents. We also found that cynicism and burnout were significantly associated and may be measures of similar but not necessarily identical responses to the challenges posed by residency. Measuring the hidden curriculum and cynicism may provide direction for educators attempting to reform hospital culture and improve resident well-being.

*Editor’s Note: The online version of this article contains the questionnaire used in this study.*

**Martha E. Billings, MD**, is Senior Fellow, Health Service Research & Development, Department of Veterans Affairs, Puget Sound Health Care System, and Division of Pulmonary Critical Care Medicine, Department of Medicine, University of Washington; **Michael E. Lazarus, MD**, is Assistant Program Director, Department of Medicine, David Geffen School of Medicine, University of California, Los Angeles; **Marjorie Wenrich, MPH**, Vice-Chair, Office of the Dean, School of Medicine, University of Washington; **J. Randall Curtis, MD, MPH**, is Professor, Division of Pulmonary Critical Care Medicine, Department of Medicine, University of Washington; and **Ruth A. Engelberg, PhD**, is Associate Professor, Division of Pulmonary Critical Care Medicine, Department of Medicine, University of Washington.

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## Introduction

Professionalism is a priority within medical education. The American Association of Medical Colleges (AAMC) Group on Educational Affairs and the Accreditation Council for Graduate Medical Education (ACGME) have worked to assess professionalism, identifying areas for research and implementation.<sup>1,2</sup> Yet, frequent value conflicts remain between the ideals of professionalism and the “hidden curriculum,” the unintended messages conveyed by faculty, staff, and senior residents in teaching hospitals, and the resulting unprofessional culture conveyed to learners.<sup>3–5</sup>

During medical school, nearly all students report observing unethical and unprofessional behavior<sup>6,7</sup> and

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Corresponding author: Martha E. Billings, MD, VA Puget Sound Health Service Research & Development, 1100 Olive Way, Suite 1400, Seattle, WA 98101, 206.277.4150, mebillin@u.washington.edu

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describe participating in what they considered unethical behavior.<sup>8</sup> They also demonstrate less empathy, more cynicism, and a decline in humanitarianism.<sup>6,9–11</sup> These findings suggest that the hidden curriculum may have a damaging impact on medical students' professional development.

The impact of residency training on residents' professionalism is less well established. Residency training is a time of intense demands during which residents are immersed within hospital culture. Professional values of altruism, integrity, and empathy may be supplanted by efficiency, cynicism, and detachment.<sup>12–14</sup> One study<sup>15</sup> showed an increase in unprofessional behaviors after internship. Because moral behaviors and attitudes are often situation-sensitive, residents may be “deprofessionalized” in these stressful working conditions.<sup>16</sup>

This learning environment may also impact residents' personal well-being. Burnout, operationally defined as a syndrome of emotional depletion and maladaptive detachment after prolonged occupational distress,<sup>17</sup> has an estimated prevalence of 50% to 76% among residents.<sup>18</sup> It is associated with lower empathy, poorer patient care, and increased perceived medical error.<sup>19,20</sup> Medical student burnout has been associated with more unprofessional behavior.<sup>21</sup> Perceived mistreatment is also common; residents may feel abused, belittled, and humiliated by those in authority.<sup>14,22</sup> These experiences, as well as observations of unprofessional conduct and cynicism, may contribute to the indifference and emotional fatigue characteristic of burnout.

The relationship between the hidden curriculum and resident burnout and cynicism has not been explored. In this study, we sought to assess whether the hidden curriculum is associated with burnout and cynicism among internal medicine residents. We piloted 2 measures: (1) a hidden curriculum scale and (2) a cynicism scale. Our operational definition of cynicism included an attitude of pessimism and disillusionment related to, yet distinct from, the detachment of burnout. To provide some construct validation for the cynicism scale, we evaluated the association between burnout and cynicism.

## Methods

### Design and Participants

We conducted a survey of postgraduate year (PGY)–1 through 3 (PGY-1 through PGY-3) internal medicine residents at the University of Washington (UW) (N = 157 in 2008, N = 167 in 2009, and N = 168 in 2010) and the University of California, Los Angeles Medical Center

### What was known

Unintended messages in the learning and care environment, termed the “hidden curriculum,” have a negative effect on learners' professional development.

### What is new

Residents exposed to what they perceived as unprofessional conduct scored higher on measures of burnout and cynicism.

### Limitations

Sample from 2 institutions, low response rate, potential for response bias.

### Bottom line

Assessing the presence and impact of the hidden curriculum may improve resident will-being.

(UCLA) (N = 106 in 2009, N = 108 in 2010). We contacted residents (N = 708) via e-mail to complete a 10-minute online survey at UW in 2008–2010 and at UCLA in 2009–2010. Survey responses were anonymous and coded to allow matching of subjects over time. A \$5 coffee card or online gift certificate was offered as incentive via a separate form. The University of Washington Human Subjects Division and the Internal Review Board at the University of California, Los Angeles, approved our study.

### Measures

We developed survey items from an extensive review of the literature, and information and measures obtained from professional organizations, such as the AAMC Assessment of Professionalism Project,<sup>1</sup> the ACGME Advancing Education in Medical Professionalism,<sup>2</sup> and the American Board of Internal Medicine Project Professionalism,<sup>23,24</sup> and focus groups that reviewed item content, usability, and feasibility.<sup>25</sup> We conducted 2 focus groups in early 2008 with 15 internal medicine residency graduates. The questionnaire is provided as online supplemental material.

**The Hidden Curriculum** We adapted our 20-item questionnaire from the surveys of Baldwin et al concerning intern experiences.<sup>22,26</sup> Items included reports of (1) perceived humiliation (5 items); (2) observed unprofessional conduct by faculty and residents (11 items); and (3) witnessed falsification of the medical record (4 items) during the past year of training. All items used a 5-point Likert scale (1 = never to 5 = 6 or more times). We summed all endorsed items into a total hidden curriculum score (0–80), with higher scores indicating more observed unprofessional conduct. The scale had a Cronbach  $\alpha$  of 0.89. PGY-1 residents had just begun their residencies at the time of the survey and did not complete this questionnaire.

TABLE 1  
DEMOGRAPHIC CHARACTERISTICS OF  
INTERNAL MEDICINE RESIDENTS (N = 284)

	No. (%)
Women <sup>a</sup>	153 (54)
Training year <sup>a</sup>	
PGY-1	116 (41)
PGY-2	84 (30)
PGY-3	81 (29)
Survey year <sup>a</sup>	
2008	62 (22)
2009	103 (36)
2010	119 (42)
Site <sup>a</sup>	
University of Washington	187 (66)
University of California, Los Angeles	95 (34)

Abbreviation: PGY, postgraduate year.

<sup>a</sup>Missing data: Sex (n = 2), site (n = 2), and training year (n = 3).

**Burnout** We used 2 domains from the Maslach Burnout Inventory (MBI) to assess burnout: depersonalization (MBI-D) and emotional exhaustion (MBI-EE).<sup>17</sup> These MBI domains have been validated in previous studies of resident burnout.<sup>18,20,28</sup> Five items measure depersonalization and 9 items measure emotional exhaustion. Both domains use a 7-point Likert scale (1 = never to 7 = daily) and may be scored either continuously or dichotomously. Burnout was defined as an MBI-D score greater than 9 or an MBI-EE score greater than 26 as in prior studies.<sup>20,21,27</sup>

**Cynicism** As there was no validated tool measuring the construct of cynicism in internal medicine, we created a new 5-item instrument. Questions were developed from preliminary findings of a qualitative study investigating cynicism among medical students, residents, and faculty in academic medicine (Molly Blackley Jackson, MD, University of Washington, personal communication, April 16, 2008). Four of the questions used a 6-point Likert scale (1 = never to 6 = constantly). One item used a 7-point Likert scale (1 = never to 7 = daily). We standardized the responses to range from 0 to 5 in both instances and summed the items to create a total cynicism score (0–25). Higher scores reflected a higher degree of cynicism; the Cronbach  $\alpha$  was 0.81 in our sample.

### Analysis

To avoid bias, we selected 1 survey for respondents with multiple surveys. We examined hidden curriculum,

burnout subscales (MBI-D and MBI-EE), and cynicism scores descriptively and with bivariate analyses, testing for associations with the following covariates: year of training, site, sex, and survey year. We also compared hidden curriculum and cynicism scores by burnout status (yes/no). For all the bivariate associations, we used Mann-Whitney tests to account for nonnormal distributions.

To assess for associations between the hidden curriculum and each outcome (MBI-D and MBI-EE, cynicism scores) for PGY-2 and PGY-3 residents, we used multivariate linear regression with robust standard errors, controlling for year of training, site, sex, and survey year. We used similar multivariate regression models to evaluate the association of cynicism with continuous MBI-D and MBI-EE scores, using data from all residents.

### Results

A total of 337 of 708 (48%) eligible residents completed the online survey and 284 (43%) surveys were selected for analyses. Most respondents were from UW (66%, 187 of 284) owing to the extra year of recruiting and a larger training program at that site (TABLE 1). Response rates were greater at UCLA (57%, 121 of 214), from PGY-1 residents (54%, 149 of 275) and in the second survey year (50%, 137 of 276). Sex distribution was similar to that of the study population.

### Description of Hidden Curriculum Exposure and Bivariate Associations

Respondents reported exposure to unprofessional conduct by faculty, peers, and staff (TABLE 2): more than two-thirds felt humiliated by nurses (n = 115) and by patients (n = 113) and witnessed residents being disrespectful to patients (n = 114). A third (n = 51) witnessed faculty demean another service or specialty on 4 or more occasions. The mean total hidden curriculum score was 23.5 (standard deviation [SD], 13.6; n = 159). The hidden curriculum score did not differ by year of training, sex, or survey year but varied significantly by site (20.3 versus 27.6,  $P = .001$ , TABLE 3).

### Description of Burnout Scores and Bivariate Associations

The MBI-D mean was 9.1 (SD, 5.3; n = 281) and the MBI-EE mean was 21.7 (SD, 11.0). Maslach Burnout Inventory subscores did not differ significantly by training year, site, sex, or survey year. Forty-five percent (127 of 281) met burnout criteria with either an MBI-D score greater than 9 or an MBI-EE score greater than 26. The frequency of respondents meeting these criteria did not differ significantly by training year, site, sex, or survey year. Hidden curriculum scores and cynicism scores were significantly

TABLE 2 HIDDEN CURRICULUM ITEM ENDORSEMENTS BY POSTGRADUATE (PGY)-2 AND PGY-3 RESIDENTS (N = 166)

Item	Never, No. (%)	Once, No. (%)	2-3, No. (%)	4-5, No. (%)	≥ 6 Times, No. (%)
Observed medical record falsification by:					
Junior residents	86 (52)	11 (7)	36 (22)	17 (10)	16 (10)
Senior residents	98 (59)	11 (7)	30 (18)	14 (9)	12 (7)
Nurses	97 (58)	12 (7)	32 (19)	15 (9)	10 (6)
Faculty	119 (72)	13 (8)	21 (13)	2 (1)	10 (6)
Felt humiliated by:					
Junior residents	136 (82)	17 (10)	11 (7)	2 (1)	0 (0)
Senior residents	97 (58)	28 (17)	31 (19)	7 (4)	3 (2)
Nurses	51 (31)	34 (21)	40 (24)	26 (16)	15 (9)
Faculty	98 (59)	21 (13)	32 (19)	9 (6)	5 (3)
Patients	53 (32)	22 (13)	57 (34)	19 (11)	15 (9)
Observed criticism of service/specialty by:					
Residents	18 (11)	10 (6)	51 (31)	29 (18)	58 (35)
Faculty	28 (17)	19 (11)	67 (41)	29 (18)	22 (13)
Observed patient being disrespected by:					
Residents	52 (31)	19 (11)	54 (33)	10 (6)	31 (19)
Faculty	124 (75)	15 (9)	23 (14)	2 (1)	2 (1)
Observed nurse being disrespected by:					
Residents	34 (21)	18 (11)	54 (33)	26 (16)	34 (21)
Faculty	101 (61)	28 (17)	24 (15)	6 (4)	7 (4)
Observed resident being disrespected by:					
Residents	50 (30)	21 (13)	52 (31)	13 (8)	30 (18)
Faculty	83 (50)	35 (21)	37 (22)	5 (3)	5 (3)
Observed medical student disrespected by:					
Residents	82 (50)	21 (13)	36 (22)	9 (6)	17 (10)
Faculty	143 (86)	17 (10)	5 (3)	0 (0)	1 (1)
Observed faculty disrespected by resident:	49 (30)	27 (16)	48 (29)	15 (9)	26 (16)

higher for respondents meeting burnout criteria than for those who did not (TABLE 3).

### Description of Cynicism Scores and Bivariate Associations

More than half ( $n = 154$ ) of respondents reported that they “often” to “constantly” heard cynical comments about internal medicine from colleagues and peers (TABLE 4). The mean cynicism score was 10.7 of 25 (SD, 4.6;  $n = 279$ ). Cynicism scores did not differ significantly by training year, site, or survey year. Men had significantly higher cynicism scores than women (11.7 versus 9.9,  $P = .001$ ).

### Multivariate Associations Between Hidden Curriculum Exposure, Burnout, and Cynicism

In multivariate linear regressions adjusted for year of training, site, sex, and survey year, the hidden curriculum score was positively associated with depersonalization (MBI-D), emotional exhaustion (MBI-EE), and cynicism scores (TABLE 5A). Cynicism scores were significantly associated with MBI-D and MBI-EE scores ( $P < .001$ , TABLE 5B) and sex was a significant covariate, with women scoring higher on the MBI-EE domain than men.

TABLE 3 COMPARISON OF SURVEY SCORES

	Hidden Curriculum Score (n = 159)	Cynicism Score (n = 279)	MBI-D (n = 281)	MBI-EE (n = 278)
Sex <sup>a</sup>				
Women	21.6 (12.1)	9.9 (4.4) <sup>b</sup>	8.9 (5.1)	22.5 (10.9)
Men	25.7 (14.9)	11.7 (4.6) <sup>b</sup>	9.4 (5.1)	20.7 (11.0)
Training year <sup>a</sup>				
PGY-1	...	10.9 (4.6)	9.1 (5.7)	22.2 (11.2)
PGY-2	22.0 (12.3)	10.6 (4.4)	8.8 (4.7)	20.0 (10.0)
PGY-3	24.8 (14.4)	10.7 (4.9)	9.3 (5.1)	22.5 (11.6)
Site <sup>a</sup>				
Site 1	20.3 (12.3) <sup>b</sup>	10.6 (4.5)	9.0 (5.2)	21.4 (10.9)
Site 2	27.6 (13.7) <sup>b</sup>	10.9 (4.6)	9.2 (4.8)	21.7 (10.5)
Survey year <sup>a</sup>				
2008	21.0 (13.8)	10.5 (4.8)	8.3 (4.8)	21.0 (8.9)
2009	26.0 (14.4)	10.5 (4.5)	8.9 (4.9)	20.9 (11.7)
2010	22.3 (12.3)	11.1 (4.5)	9.7 (5.7)	22.7 (11.3)
Burnout status <sup>c</sup>				
Burned out	26.0 (19–34) <sup>d</sup>	12.7 (9.7–16.2) <sup>d</sup>	N/A	N/A
Not burned out	19.0 (10–28) <sup>d</sup>	8.7 (6.7–10.8) <sup>d</sup>	N/A	N/A

Abbreviations: MBI-D, Maslach Burnout Inventory–depersonalization; MBI-EE, Maslach Burnout Inventory–emotional exhaustion; PGY, postgraduate year; N/A, not applicable.

<sup>a</sup> Scores reported as mean (SD).

<sup>b</sup>  $P < .05$  based on Mann-Whitney tests.

<sup>c</sup> Scores reported as median (interquartile range).

<sup>d</sup>  $P < .001$  based on Mann-Whitney tests.

## Discussion

Unprofessional conduct by resident colleagues and faculty conveys a hidden curriculum that contradicts professional standards and may undermine physician ideals. Consistent with prior studies,<sup>22,26</sup> respondents reported frequently observing fellow residents engaging in unprofessional conduct. As residents are role models for interns and medical students,<sup>12</sup> witnessing residents being disrespectful may dehumanize patients<sup>11</sup> and perpetuate an unprofessional culture.<sup>28</sup> We also found that residents and faculty were frequently observed criticizing other specialty services. This may be a pervasive characteristic of academic medical culture and may foster cynical attitudes.<sup>12</sup> Finally, respondents felt humiliated frequently by nurses and patients, suggesting unprofessionalism has societal roots beyond physicians.

Previous studies suggest that cynicism is a prevalent feature of medical culture<sup>11,13,29,30</sup> and may have significant consequences for physicians' behaviors and attitudes.<sup>31</sup> Furthermore, cynicism may result in loss of empathy and decreased humanism,<sup>10</sup> traits needed to

form strong patient-physician relationships.<sup>31</sup> Our findings suggest that cynicism may be socialized through the hidden curriculum.<sup>28</sup> The 5-item tool we used to measure cynicism performed well, demonstrating expected strong correlation with depersonalization and internal consistency. This instrument requires further psychometric testing and validation to ensure that it measures the construct of cynicism and to confirm its relationship to burnout.

Residents who met burnout criteria witnessed significantly more unprofessional behavior overall than those who did not. These data suggest that an unprofessional learning environment is associated with resident distress. Previous studies<sup>18,27</sup> have identified feelings of lack of control, loss of autonomy, and stressful work relationships as contributors to burnout. A recent study of medical students showed a correlation between burnout scores (MBI-EE and D) and poor professional climate scores,<sup>32</sup> supporting our findings. The professionalism climate instrument functions much like our hidden curriculum

TABLE 4 CYNICISM SCALE ITEM ENDORSEMENTS BY POSTGRADUATE (PGY)-1, PGY-2, AND PGY-3 RESIDENTS (N = 284)

Cynicism Item	Never, No. (%)	Rarely, No. (%)	Sometimes, No. (%)	Often/Monthly, No. (%)	Frequently/Weekly, No. (%)	Constantly/Daily, No. (%)
I feel that a career in medicine cannot live up to my expectations	51 (18)	93 (33)	86 (31)	27 (10)	13 (5)	11 (4)
I hear cynical comments about medicine from my colleagues/peers	3 (1)	32 (11)	94 (33)	78 (28)	57 (20)	19 (7)
I feel that the health care system does NOT support me in my efforts to care for patients	4 (1)	40 (14)	107 (38)	68 (24)	41 (15)	23 (8)
I have noticed a loss of respect by others for my profession	29 (10)	93 (33)	82 (29)	42 (15)	22 (8)	14 (5)
I feel cynical about the practice of medicine	26 (9)	68 (24)	109 (38)	21 (7)	49 (17)	9 (3)

measure, assessing observed behavior of faculty, residents, and students. The atmosphere created by unprofessional comments and cynical attitudes may impact residents' well-being, leading to increased detachment. Alternatively, residents who meet criteria for burnout may perceive their environment more negatively, creating a "toxic" learning environment. Lower empathy scores, a construct related to cynicism, also correlated with a poorer professional climate among medical students.<sup>32</sup> This supports our results showing an association between unprofessional conduct and increased cynicism.

Cynicism and burnout were also highly associated, perhaps reflecting related constructs. In our operational definitions, we

have attempted to differentiate these constructs, defining cynicism as a pessimistic view of medical care and burnout as a detached approach to patient care. However, this differentiation may be arbitrary. Rather than a coping response to the stresses of residency and protecting from burnout,<sup>33</sup> cynicism may overlap with the construct of burnout and arise in response to similar job stresses and challenges.

This study has a number of limitations. First, the sample is drawn from only 2 academic institutions with a low response rate. Response bias may have significantly affected the results, with burnout likely affecting participation rates. Second, the hidden curriculum and cynicism instruments have not been validated and require additional

TABLE 5A ASSOCIATION BETWEEN HIDDEN CURRICULUM SCORES, BURNOUT, AND CYNICISM FOR POSTGRADUATE (PGY)-2 AND PGY-3 RESIDENTS (N = 166)<sup>a,b</sup>

Predictors	MBI-D <sup>c</sup>	MBI-EE <sup>d</sup>	Cynicism <sup>e</sup>
Hidden curriculum	<b>0.2 (0.1, 0.2)</b>	<b>0.2 (0.1, 0.4)</b>	<b>0.1 (0.1, 0.2)</b>
PGY-3 training year <sup>f</sup>	0.31 (-1.2, 1.8)	2.5 (-1.0, 6.0)	0.01 (-1.4, 1.4)
Site 2	<b>-1.8 (-3.4, -0.2)</b>	-3.5 (-7.5, 0.5)	-1.2 (-2.7, 0.4)
Women	-0.1 (-1.5, 1.4)	2.0 (-1.5, 5.5)	<b>-2.0 (-3.3, -0.6)</b>
Survey year 2008 <sup>g</sup>	-1.7 (-3.9, 0.5)	-1.7 (-6.7, 3.4)	1.6 (-3.7, 0.6)
Survey year 2009 <sup>g</sup>	-0.6 (-2.2, 1.1)	-0.5 (-4.4, 3.4)	-0.4 (-1.8, 1.1)

Abbreviations: MBI-D, Maslach Burnout Inventory–depersonalization; MBI-EE, Maslach Burnout Inventory–emotional exhaustion.

<sup>a</sup> Results reported as  $\beta$  (95% confidence interval) from multivariable linear regression with robust estimators.

<sup>b</sup> Bolded values are significant ( $P < .05$ ).

<sup>c</sup> MBI-D outcome, regression statistics:  $R^2 = 0.20$ ,  $P < .001$ ,  $n = 157$ .

<sup>d</sup> MBI-EE outcome, regression statistics:  $R^2 = 0.09$ ,  $P = .03$ ,  $n = 154$ .

<sup>e</sup> Cynicism outcome, regression statistics:  $R^2 = 0.18$ ,  $P < .001$ ,  $n = 156$ .

<sup>f</sup> Referent = PGY-2 training year.

<sup>g</sup> Referent = survey year 2010.

TABLE 5B  
ASSOCIATION BETWEEN BURNOUT AND  
CYNICISM FOR POSTGRADUATE (PGY)-1,  
PGY-2, AND PGY-3 RESIDENTS (N = 284)<sup>a,b</sup>

Predictors	MBI-D <sup>c</sup>	MBI-EE <sup>d</sup>
Cynicism	<b>0.8 (0.7, 0.9)</b>	<b>1.4 (1.2, 1.7)</b>
PGY-2 training year <sup>e</sup>	-0.1 (-1.3, 1.1)	-1.2 (-3.8, 1.3)
PGY-3 training year <sup>e</sup>	0.6 (-0.6, 1.8)	1.4 (-1.3, 4.1)
Site 2	-0.4 (-1.5, 0.7)	-0.8 (-3.2, 1.7)
Women	0.6 (-0.4, 1.6)	<b>4.5 (2.3, 6.7)</b>
Survey year 2008 <sup>f</sup>	-1.3 (-2.7, 0.1)	-0.8 (-3.8, 2.3)
Survey year 2009 <sup>f</sup>	-0.5 (-1.6, 0.6)	-0.8 (-3.3, 1.6)

Abbreviations: MBI-D, Maslach Burnout Inventory–depersonalization; MBI-EE, Maslach Burnout Inventory–emotional exhaustion.

<sup>a</sup> Results reported as  $\beta$  (95% confidence interval) from multivariable linear regression with robust estimators.

<sup>b</sup> Bolded values are significant ( $P < .05$ ).

<sup>c</sup> MBI-D outcome, regression statistics:  $R^2 = 0.44$ ,  $P < .001$ ,  $n = 273$ .

<sup>d</sup> MBI-EE outcome, regression statistics:  $R^2 = 0.36$ ,  $P < .001$ ,  $n = 271$ .

<sup>e</sup> Referent = PGY-1.

testing. Professionalism, although extensively studied, is difficult to measure; there are few validated, reliable instruments.<sup>34</sup> Our survey was developed and implemented before publication of the professionalism climate instrument, which appears to gather similar data about the learning environment in medical school.<sup>35</sup> Our study establishes a similar promising instrument focusing on witnessed and experienced unprofessional conduct in residency. Further psychometric evaluation of our instrument and comparison with the professionalism climate instrument is necessary. Third, many of the survey items relied on recall of experiences during a prior year, which is subject to recall bias and may be influenced by resident well-being. The survey assesses 1 point in time; responses to burnout and cynicism questions likely vary, depending on residents' rotations and on other life stressors we did not explore. Finally, this cross-sectional analysis can only demonstrate associations, not causality.

## Conclusions

Our data demonstrate an association between the hidden curriculum—that is, exposure to unprofessional behaviors—and measures of resident burnout and cynicism. We found that cynicism and burnout were also significantly associated and may be measures of similar but not necessarily identical behavioral responses to the challenges posed by residency. Measures that appropriately assess unprofessional behaviors and residents' responses to these behaviors may help in the development and evaluation of interventions to reduce these behaviors and their effect on residents. These instruments

may serve as a first step toward reforming institutional culture and preventing the development of disillusioned, detached, and unprofessional residents. Further studies are needed to assess whether a more humanistic culture leads to greater compassion, empathy, and enhanced resident well-being in an effort to achieve the goal of training physicians who demonstrate the values of professionalism.

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