

Duty-Hour Restrictions and the Work of Surgical Faculty: Results of a Multi-Institutional Study

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Abstract

Purpose

To examine whether duty-hour restrictions have been consequential for various aspects of the work of surgical faculty and if those consequences differ for faculty in academic and nonacademic general surgery residency programs.

Method

Questionnaires were distributed in 2004 to 233 faculty members in five academic and four nonacademic U.S. residency programs in general surgery. Participation was restricted to those who had been faculty for at least one year. Ten items on the questionnaire probed faculty work experiences. Results include means, percentages, and *t*-tests on mean differences. Of the 146 faculty members

(63%) who completed the questionnaire, 101 volunteered to be interviewed. Of these, 28 were randomly chosen for follow-up interviews that probed experiences and rationales underlying items on the questionnaire. Interview transcripts (187 single-spaced pages) were analyzed for main themes.

Results

Questionnaire respondents and interviewees associated duty-hour restrictions with lowered faculty expectations and standards for residents, little change in the supervision of residents, a loss of time for teaching, increased work and stress, and less satisfaction. No significant differences in these perceptions ($p \leq .05$) were found

for faculty in academic and nonacademic programs. Main themes from the interviews included a shift of routine work from residents to faculty, a transfer of responsibility to faculty, more frequent skill gaps at night, a loss of time for research, and the challenges of controlling residents' hours.

Conclusions

Duty-hour restrictions have been consequential for the work of surgical faculty. Faculty should not be overlooked in future studies of duty-hour restrictions.

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The duty-hour restrictions for residents enacted by the Accreditation Council for Graduate Medical Education (ACGME) in July 2003 have been the topic of heated debate.^{1,2} Research on duty-hour restrictions has tended to focus on residents and overlook faculty. We focus here on faculty in general surgery programs and explore how the restrictions have influenced their work. Studies conducted prior to the nationwide enactment of the ACGME duty-hour restrictions suggest that faculty believed the rules would decrease the quality of surgical education^{3–5} and increase faculty workloads.⁵ Only one study has explored faculty workloads and perceptions of the new duty-hour restrictions.⁶ That single-institution study suggested that substantial majorities of

surgical faculty believed the restrictions increased their work hours and, more generally, negatively affected faculty.

In this study, we probed two main issues. First, do faculty believe that the duty-hour restrictions have been consequential for various aspects of their work? Second, do faculty in academic and nonacademic residency programs have different views as to whether the restrictions have been consequential for their work? In this article, we present findings drawn from a larger study at nine general surgery residency programs⁷ on the views and experiences of surgical faculty and residents after one year of experience with the duty-hour restrictions. Our study included roughly equal numbers of faculty members in academic and nonacademic programs, thus permitting an exploration of the hypothesis that faculty views might differ across types of programs.

Method

We asked a total of 233 faculty members from nine residency programs in general

surgery located in eight states in three different time zones to participate. Five of the programs were academic and four were nonacademic (two community and two hybrid or mixed programs). We used a questionnaire and a set of follow-up interviews to probe the reasoning behind faculty views of the duty-hour restrictions.

Onsite coordinators in each program secured approval of the study from their local institutional review boards (IRBs), arranged administration of the questionnaire, addressed questions or concerns that arose, gathered completed forms (which respondents enclosed in envelopes to ensure confidentiality and anonymity) from a drop box, and returned materials to JEC, the lead author. Eligibility to participate, determined by the coordinators, was restricted to faculty members who had held a faculty position (but not necessarily at their present institutions) for at least one year. All participants thus had an effective baseline experience of at

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least one year before the restrictions began. Study coordinators distributed the questionnaires during May, June, July, and August 2004. A total of 146 faculty members (63%) returned the completed questionnaire.

Ten items on the questionnaire probed faculty members' perceptions of their work. Most questions explicitly asked participants to compare the present with the past, a comparison prompted by a common question stem: "The shift to the 80-hour work week. . . ." Responses were given on a four-point scale (strongly agree = 1, agree = 2, disagree = 3, and strongly disagree = 4). "Neutral" and "no opinion" options were not offered, as discussions with the study team suggested that these were issues about which faculty were unlikely to have neutral or unformed views. Methodological considerations of the merits of neutral⁸ and no-opinion categories⁹ supported the decision to omit those options. The questionnaire was reviewed and critiqued by the director of the Survey Research Center at the University of Georgia.

A final question asked participants if they would be willing to participate in a follow-up interview. Responses to that

question allowed us to compare the views of those who volunteered—and thus entered the pool of potential interviewees—with those who declined. That analysis showed no significant differences in questionnaire responses ($p \leq .05$) between those who volunteered for interviews and those who declined. Those who volunteered for an interview were instructed to complete a contact information form and return it in an envelope separate from the questionnaire to ensure the anonymity of the questionnaire respondents (an IRB requirement). From the 101 questionnaire respondents (69%) who volunteered to be interviewed, we randomly chose 28 for interviews. Two authors (JEC and WF) conducted the semistructured interviews by telephone. All interviews were recorded (with permission) and transcribed.

Analysis strategies differ for the two types of evidence. Questionnaires were optically scanned, hand-checked for accuracy, and entered into a STATA¹⁰ (version 8) database for the statistical analysis. We make use of means and percentages who "agree or strongly agree" with questions. Two-tailed mean difference *t*-tests were used to assess

statistical significance. The interviews were analyzed by coding common themes regarding work experiences. Thematic coding of the 187 single-spaced pages of interview transcripts was done by hand (after five readings of the interviews) and then again with QSR NVivo,¹¹ which is software that facilitates the coding and analysis of qualitative evidence.

Results

Table 1 shows the characteristics of questionnaire respondents and interviewees. Table 2 shows overall means, overall percentages who "agreed or strongly agreed" with each question, means for faculty in nonacademic and academic programs, and the *p* value for the two-tailed *t* test on the mean difference. The first three items suggest that respondents associated duty-hour restrictions with lowered expectations and standards for residents, little improvement in the supervision of residents, and a loss of time available for teaching. Although there is evidence that faculty call schedules may have changed somewhat (items 4 and 5), the most notable patterns with respect to work experiences are found in responses to items 7 through 10. Substantial majorities believed that the duty-hour restrictions increased their workloads and required them to perform duties traditionally handled by residents. Over half agreed that the restrictions increased work-related stress and decreased the satisfaction they derive from their academic role.

The means on the right-hand side of Table 2 explore the hypothesis that faculty assessments of the duty-hour restrictions might vary across academic and nonacademic residency programs. Some have speculated that academic programs would be especially hard-hit by the restrictions.¹² Our results, however, indicate no significant mean differences across the two types of programs. Our study provided adequate statistical power (.85) to detect a mean difference of .5 with an assumed standard deviation of 1.¹³ On average, the gap in means across the two program types was only .14, a small difference on a four-point scale. Similar views, not a lack of statistical power, produced the pattern of statistical insignificance.

The interviews allowed us to go beyond expressions of agreement or

Table 1

Characteristics of Faculty Who Responded to Questionnaires and Participated in Interviews about the Consequences of Duty-Hour Restrictions, Nine U.S. General Surgery Residency Programs, 2004

Characteristic	No. (%) questionnaire respondents	No. (%) interviewees
Gender		
Male	125 (86)	24 (86)
Female	18 (12)	4 (14)
Missing	3 (2)	0 (0)
Residency program		
1	13 (9)	3 (11)
2	27 (19)	3 (11)
3	8 (6)	3 (11)
4	23 (16)	3 (11)
5	15 (10)	4 (14)
6	9 (6)	3 (11)
7	17 (12)	3 (11)
8	11 (8)	3 (11)
9	23 (16)	3 (11)
Program type		
Academic	68 (47)	15 (54)
Nonacademic	78 (53)	13 (46)
Total	146 (100)	28 (100)

Table 2

Assessments of 146 Faculty Members at Four Nonacademic and Five Academic U.S. General Surgery Programs on the Consequences of Duty-Hour Restrictions, 2004*

Item	Overall		Mean rating for faculty in		Mean difference p value
	Mean rating	% who agreed or strongly agreed	Nonacademic programs	Academic programs	
The shift to the 80-hour work week has . . .					
1. Decreased faculty expectations and standards for residents	2.05	75	1.96	2.16	.15
2. Improved faculty supervision of residents	3.06	15	3.04	3.09	.62
3. Decreased the time I have available to teach residents	2.16	67	2.25	2.05	.13
4. Increased the overall time I am on call	2.62	37	2.67	2.55	.42
5. Increased the number of times I have been called back to the hospital	2.54	42	2.56	2.52	.74
6. Decreased the time I devote to enhancing my surgical skills	2.98	11	2.97	2.98	.91
7. Increased my workload at the hospital	2.11	69	2.17	2.04	.32
8. Requires that I perform duties previously handled by residents	2.10	73	2.14	2.04	.43
9. Increased the stress I feel from my work	2.28	61	2.36	2.18	.19
10. Decreased the satisfaction I derive from my academic position	2.10	55	2.39	2.04	.86

* Responses were given on a four-point scale: 1 = strongly agree, 4 = strongly disagree.

disagreement and to probe in more detail faculty beliefs about how the restrictions had influenced their work. What became evident is that the particular circumstances of each interviewee—even within a single residency program—were diverse and consequential. As with questionnaire data, variation appears in qualitative interview data and it would be incorrect to state or imply that faculty spoke with one voice. We focus here on the five most common themes, each of which surfaced repeatedly in the interviews: a shift of routine clinical work from residents to faculty, an increase in loose ends and faculty responsibility, more frequent skill gaps at night, a loss of time for research, and the challenges of controlling resident hours. We consider each theme in turn, illustrating faculty views with representative extracts from the interviews.

A shift of routine clinical work

In all, 107 (73%) of the faculty members who completed the questionnaire agreed that the duty-hour restrictions required them to perform duties traditionally handled by residents. The interviews provided insight into the shifting of work from residents to faculty. Consider the following:

Interviewer: Do you feel that the new rules influence the kinds of things you're doing at the hospital or the frequency with which you are doing various activities?

Surgeon: Yes, in fact I just got done dictating three discharge summaries. Normally I wouldn't have done those. Housestaff usually would have done those. It's shifting the work. I'm doing basically the H & P, the discharge summaries, and the stuff that they did in preop and postop care. I see that they are pretty much just going to the operating room because they're under such tight restrictions and it affects their education. So to answer your question, yes I'm doing more of the pre- and postop work that is kind of mundane because we're just short because of the number of restrictions on the residents. (Case 1)

In their comments about the shifting of work from residents to faculty, interviewees expressed exasperation that bordered on indignation. Residencies, after all, have long been structured according to graded responsibility, whereby the least experienced are given the relatively simple clinical tasks. Duty-hour restrictions mean that those at the top of the skill and status hierarchy are increasingly required to perform tasks traditionally associated with low status and skill. Some faculty were concerned

that performing relatively basic clinical activities was a loss of status. Consider the following pair of comments that touched on this issue:

We are doing more work. Me putting in chest tubes or doing central lines or doing things by myself isn't why I became a faculty member. I came to teach and to pursue my own research interests. Me doing those things umpteen times isn't good. I already know how to do it, so it's not intellectually stimulating for me. And it doesn't help anyone else learn how to do it. (Case 2)

The little trivial stuff can be done by the residents. That's how they learn. They work their way up to more and more technically difficult cases. They learn more about patient dynamics and they get more responsibility. It's a graded responsibility. Well, we're taking a lot of that away from them now, because now we have to figure out who's on, when they're on, when they're leaving. We have to do it ourselves. Then that takes away the time for us to do more cerebral things, to spend more time in the literature, to understand the disease process which we're dealing with. And to be able to pass on that learning. (Case 3)

In these and other comments, it became clear that for many the need to perform routine, low-level clinical activities was

perceived as inconsistent with their status as faculty. When faculty perform those clinical activities, it “doesn’t help anyone else to learn how to do it,” nor does it allow faculty time to “do more cerebral things,” losses that interviewees perceived stem from the new duty-hour restrictions.

Loose ends and faculty responsibility

A main form of additional work was described as “loose ends.” Consider the following observations of one faculty member about the work that had shifted to faculty:

Interviewer: Have you seen a shift in the kinds of things that you’re doing at the hospital as a result of the resident rules?

Surgeon: Yes I have.

Interviewer: Can you give me some examples of that?

Surgeon: Yeah, most of it is just loose ends. I don’t have the residents there for the stuff that I’m used to having them there for. Following up on loose ends, checking the films, making afternoon rounds, putting in the central line. A lot of it may be service related but also stuff, just the thoroughness of making sure everybody is tucked in before they go home. I’ve kind of changed my thinking to if a resident is there, that’s great, but the buck really stops with me. I’m making my own afternoon rounds. I’m reviewing everything rather than calling the resident and going over things. I just do it because half the time they’re not there. (Case 4)

Checking films and putting in central lines are activities that, most commonly, had been performed by residents. But there is clearly more to the comment than a concern about increased faculty involvement in routine clinical activities. Rather, there has been a shift in perceived responsibility for those loose ends from residents to attendings. That increased sense of responsibility, coupled with the conviction that “half the time they’re not there,” leads the surgeon quoted here to do less work in concert with residents. That implies more responsibility and more work performed without residents’ assistance.

Many went beyond the ideas already expressed about “loose ends” to suggest that there has been a fundamental shift of responsibility for patient care away from residents. The word “ownership” came up in this context, expressed well by the

following surgeon, who links it to the quality of patient care:

Interviewer: Now is it your sense that the duty-hour restrictions have had any effect upon patient care?

Surgeon: Yeah, I think it has gotten worse. It used to be that the attendings were there for advice. The service was run by the residents. The residents had ownership of those patients, whether it be true ownership or just figuratively, they were very much responsible for those patients. It was their responsibility to make sure that the patient didn’t have an adverse outcome and that they got better as quickly as possible. And residents were invested in their patients. They really wanted their patients to do well. Now, and I’ve seen this in the last year, the patients are now my patients, and the residents are there to help out. There’s no ownership of the patient anymore by the residents. So they don’t have that sense that if something happens, “Well, it’s my patient, and it’s my fault.” It’s, you know, the attending’s patient and it’s too bad that that happened. But they had to go home, so that’s just the way it goes.

Interviewer: I wonder if you think that’s really because of the rules. In restricting hours you offer people the chance to throw their hands up and say, “Well, they’re not my patients,” or “How could I have known?” Or do you think it’s other changes too, perhaps the need for faculty to sign off on more things for reimbursement?

Surgeon: In my mind, it’s purely this thing where, “You’re not there so you don’t know about it so it’s not your responsibility.” That just didn’t happen before. It wasn’t acceptable. And if it did happen, that resident wasn’t there very long. And now it’s called one of the growing pains of the new system. (Case 2)

It is, of course, difficult to pinpoint precisely which of the many changes in residency programs have contributed to residents’ loss of “ownership” of patients. In the mind of this surgeon and other faculty interviewed, the restrictions provide a key point of leverage for a shift of responsibility from residents to faculty.

More frequent skill gaps at night

Interviewees believed the reduction in resident staffing, especially at night, increased the likelihood of a skill and experience deficit that faculty were obliged to overcome. That pattern is described in the following:

Interviewer: I would like to get a sense of how the duty-hour reductions may have affected your own work.

Surgeon: Well, it obviously means I spend more time in the hospital. I have to come in more at night, and have to take care of more types of tasks that typically the residents would take care of. I’m a pediatric surgeon and we have two residents that are on the pediatric surgical service at a time. And obviously with just two of them and the work hour restrictions they can’t cover every night of call. So, about half the time, we have a resident from one of the other services that’s cross covering our patients; and sometimes the resident who is cross covering is somebody who hasn’t even done a ped surgery rotation, so they don’t know anything about pediatric surgery. And so things that we could otherwise deal with over the phone with a good resident in the hospital talking to us, we end up having to come in and look at and deal with ourselves, because you don’t know the level of competency of the person that you are talking to. (Case 5)

Interviewees believed that reductions in resident staffing have produced gaps in knowledge and experience that are filled only when attending surgeons return to the hospital, a finding confirmed by our questionnaire respondents who agreed that duty-hour restrictions increased the frequency with which faculty were “on call” and “called in” at night. As another faculty member put it, “it [the rules] directly increased my work load, especially on call, and especially with after-hours emergency things” (Case 6).

A loss of time for research

In both academic and nonacademic programs, interviewees perceived that more time spent on routine clinical activities would erode research activities. Consider the comments of an attending surgeon in an academic program:

Interviewer: What are some of the changes there with respect to your academic work?

Surgeon: I have a lab, you know we have a basic science lab, and I can almost never go to the lab anymore because I’m called every 30 minutes for trivial things that the residents normally would take care of. I mean the teams are smaller now, they have to leave at 5 or 6 o’clock, and normally I would go to the lab at 4:30 or 5 and work till 7 or so. But now I’m called because “this IV ran out” or “what do you think I should do with this?” You know, crap like that that I shouldn’t be involved in. (Case 3)

A loss of two or more hours a day of research time is considerable by any standard. Faculty in nonacademic programs are less likely than those in

academic programs to have time specifically earmarked for research. Moments for research are often “stolen” from time allocated to clinical activities, a point made by the following faculty member in a nonacademic program:

I don't know where the time is going to come from. The problem for us in this private practice based system is that there's no way to protect time for research unless you just do it on your own. And that means that you're funding your own time because you're cutting out your own practice and you're cutting into your own income. That makes it difficult. (Case 6)

Time transfers of this sort become more difficult as clinical demands increase with the workload shift from residents to faculty. Increased clinical demands, exacerbated by the duty-hour restrictions, may well portend a long-term decline in the research activities and accomplishments of surgical attendings in both academic and nonacademic programs.

Challenges of controlling resident hours

Faculty spoke about how their programs took seriously the need to monitor and curtail resident hours and call schedules, efforts that consume time and require attention. Faculty were ambivalent when they were required to sanction once-laudable-but-now-improper conduct on the part of residents. Consider the educational and ethical messages in the following comment:

The problem over and over again is that you tell them, “You can't stay because you're putting the entire program in jeopardy.” And, you know, I'll tell a resident, “Take the weekend off.” And I come in on Sunday morning and there is the resident making rounds. “I said you were supposed to take the rest of yesterday off and today off! What are you doing here?” And they say, “Well, I just came in, I'm making rounds to see my patients.” Well, you know, it's bad education for me to say, “You're not allowed to do that. You're being a bad resident by feeling in a very conscientious fashion that you have an obligation to come see that patient.” So, you know, we are sending mixed messages. I think it runs counter to the ethics that everyone wants to see from the medical profession. (Case 7)

In Bosk's terms,¹⁴ residents used to commit serious and often unforgivable “normative errors” when they failed to embrace fully the role of surgeon, a role

which required selfless devotion to patients; entire residency programs can now be jeopardized if residents are unwilling to commit normative errors by setting aside the traditional role obligations of the surgeon. The restrictions thus force faculty to permit—and in fact demand—conduct from residents that is inconsistent with traditional professional values and long-standing expectations.¹⁵

In addition to their concerns about regulating overachieving residents who sought to do more than permitted under the new duty-hour restrictions, some faculty perceived that at least some residents used the rules to reduce or shirk various involvements:

Surgeon: I know that there are a number of residents that lie to their attendings about how much they are in the hospital. And they're not being asked to put in that kind of time. And then on the other hand, there are some that are lying about how many hours they are putting in from the other side. And so what happens is that it gives more leeway for them to get out of what they don't want to do. For example, if you don't happen to like going to clinic, your 80 hour work week is up, but if there's a real good case, maybe it's not.

Interviewer: Okay. That seems to be one aspect of the rules—they give people a wedge to manipulate those kinds of situations.

Surgeon: Right. (Case 8)

Another faculty member described this perception in similar terms: “If you have someone who is, shall we say, inclined to slough off, I think the system can facilitate that” (Case 9). The situation becomes a vexing problem for faculty because it is difficult—if not impossible—for them to distinguish legitimate limitations from manipulative shirking on the part of residents. These efforts to regulate residents' activities, which the faculty members believed follow directly from the restrictions, were viewed by many as a time-consuming chore fraught with moral contradictions. One surgeon put it this way: “In the past, that very thing you are being penalized for now, oh my goodness, you were praised to the highest for it. It's just a total turnaround” (Case 10).

Discussion

In our study, we addressed two main questions. We first asked whether

surgical faculty viewed the duty-hour restrictions as consequential for their own work. As shown by our findings from the questionnaire and the follow-up interviews, faculty perceived the restrictions to be consequential. Many stated that their workloads had increased, that they did some of the work previously performed by residents, that stress levels had increased, and that satisfaction had decreased. The interviews provided insights into a shift of routine clinical work from residents to faculty, an increase in “loose ends” and a shift of responsibility, the emergence of skill gaps at night, a loss of time for research, and the challenges of monitoring and controlling resident work hours. Our second question was whether the perceived consequences of the duty-hour restrictions varied for faculty in academic and nonacademic programs. We examined this question with the questionnaire data only, as there were too few interviews to support valid comparisons. Our data suggest that the responses of faculty did not vary by program type.

The results provide evidence for what many had predicted: a reduction in the work hours of one group will result in a shift of work and responsibility to another group in the absence of a concerted effort to supply additional staff or enhance organizational efficiencies. In the interviews, most faculty claimed that their hospitals were either unable or unwilling to hire physician assistants or other staff who could do some of the work that had been done in the past by residents. One attending, for example, responded to a question about whether the hospital had hired additional staff since the duty-hour restrictions were enacted with hearty laughter and the retort, “That's wishful thinking” (Case 11). Our findings suggest that at least a portion of the work of residents, and the responsibility that goes along with that work, has shifted to attending surgeons.

The interview results suggest that attending surgeons might be responding to more than an objective shift of work and responsibility. The duty-hour restrictions represent a disruption to the symbolic aspects of a traditional status hierarchy. By assuming more involvement in basic clinical work, faculty are in effect revisiting involvements most typically associated

with those of lower status—namely, the medical students and interns who are at the bottom of the status hierarchy. How much actual or objective time faculty spend in those activities may be less significant than the mere fact of their involvement in status-inconsistent activities. A status and a role, like those of a surgical attending, traditionally imply a set of behavioral expectations, and to mix more routine, less-valued activities into those expectations is to devalue the status and the role.

Because time and activities have both symbolic and objective components, the symbolic changes induced by the restrictions may become as consequential as objective changes. That possibility would make sense of a puzzling pattern presented by Winslow et al.⁶ In an earlier study, Winslow et al.⁵ obtained self-reported data on faculty work hours before the duty-hour restrictions mandated in 2003. In the follow-up study, they learned that self-reported work hours by the same faculty had not, objectively, increased with the new restrictions, although 60% of general surgery faculty subjectively perceived that their hours had increased. The coexistence of no change in objective hours with the subjective perception of greater workloads may well stem from the way the restrictions have challenged the symbolic aspects of time and activities. This is a line of inquiry that future research might profitably explore more fully.

Although our study's design included nine programs and permitted an examination of the views of faculty in academic and nonacademic residencies, it nonetheless had important limitations, two of which we note here. First, our study rested upon faculty's subjective assessments of the duty-hour restrictions. Although subjective assessments are important and consequential, they are not the same as objective measurements. As Winslow et al.⁶ demonstrated, subjective perceptions of increased workloads may well coexist with evidence that objective workloads have not changed. We did not, however, establish objective measures of work activities or hours prior to the introduction of the duty-hour restrictions, and thus lacked the requisite baseline needed to assess change.

A second limitation was our inability to explain variation in the consequences of the restrictions for the work of surgical faculty. As our results from the questionnaire and the interviews show, some faculty believed that the restrictions were quite consequential for their workloads and activities, whereas others perceived fewer consequences. Our data collection efforts aimed to document how the restrictions had influenced faculty and whether their experiences differed in academic and nonacademic programs. The questionnaire was not designed to collect information about the attributes of faculty and the organizations in which they work; it thus failed to provide data on factors that might have explained variation in the reactions of faculty to the duty-hour restrictions. Although the interviews allowed for more flexibility and insights about this matter, they were too few in number to support a valid explanation of variation. This is an important issue for future research.

Despite these and other limitations, we maintain that our study provides an informative examination of the consequences of the ACGME duty-hour restrictions for the work of surgical faculty. Such assessments and analyses are necessary if we are to understand the consequences of the restrictions for a group that is absolutely essential for the long-term well being of surgical education. Faculty should not be overlooked in future studies of duty-hour restrictions.

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Teaching and Learning Moments

Hand in Hand

“Could you wash my hand?” a recent amputee asked nervously as I entered his room. A veteran of Operation Iraqi Freedom, surgical revisions, and wound infections, he knew what questions I would be asking. In anticipation of my arrival, he had just finished rummaging through the trash in search of the freshly-changed wound dressings that might hold a clue as to whether his stump was infected and might require yet another surgery.

His anxious request startled me. I tried to regain my composure and feign some semblance of confidence as I renewed my approach. How? Should I use one or both hands? Should I use gloves, or would that distance us and reduce rapport? How much time should I spend soaping? Scrubbing? If too quick, he might think it too perfunctory, too slow, then inappropriately intimate. How hard? If too light, then he might think it not thorough enough.

I’m not sure why I was hesitant. This wasn’t my first time dealing with amputees. Sadly the cafeteria, units, wards, and hallways of Walter Reed Army Medical Center now teem with new amputees. But these amputees are different. Unlike the amputees I was used to caring for—elderly patients who gradually lost limbs to peripheral vascular disease or diabetes—these amputees found in

the hallways of Walter Reed are much younger, and their losses occurred abruptly, often violently. Absent or distorted limbs surreally juxtaposed on muscular, robust torsos evoke many emotions from examiners and caregivers. Empty pajama sleeves dangle from the broad shoulders of soldiers, sailors, marines, national guardsmen, and civilian contractors.

Yesterday, they were proud warriors. Today, they are veterans frustrated by a sudden need to remaster activities of daily living. They are no less proud, and they are always reluctant to accept unsolicited assistance. That’s why his request shocked me. Eventually my apprehension subsided and my right brain took over. We met at the sink where I washed his hand in an almost Zen-like manner. Each finger. Each web space. Then the palm. Afterwards he seemed satisfied with my technique, and for a moment I reveled in how I seemed to bring him such relief.

My elation soon evaporated when, after struggling to dress himself and button his pajama bottoms, he again asked me for help. My hesitation returned. There is some element of dexterity necessary in order to dress someone else. It may be second nature to a person who has children, but not having kids, I initially found it challenging to tie someone else’s shoe. Because I lacked practice, my slowness

and fumbling added to the uncomfortable nature of the encounter.

I’ll bet that I’m not the only physician unhinged by such a request. It might seem like repeated contact with amputees would make one get used to the situation, but despite years of clinical practice, this patient encounter stood out for the patient’s startling admission of his own vulnerability. It doesn’t matter how many amputees you’ve treated; each is unique, and every one evokes a different response, sometimes a very unexpected response.

Medical schools should expose students to washing and dressing patients as part of their curricula so they are better prepared to meet all types of patient needs. These skills are not as simple or inconsequential as they might seem. Few activities convey more caring and compassion, and few enhance healing more. Physicians should be, or must become through additional training, comfortable with this level of physical connection with their patients. We are always at our best when we apply the art and science of medicine hand in hand.

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