

The Graduating Surgical Residents 2004 and Beyond: Will They Be Different?

Julie Ann Freischlag, MD, FACS
The William Stewart Halsted Professor
Chair, Department of Surgery
Surgeon-in-Chief
Johns Hopkins Medical Institutions

THEY ALREADY ARE...

Theoretical Advantages to the 80 Hour Experience

- **Time Management Skills**
- **Able to turn it “off” and “on”**
- **Has still done “intern scut” as an older resident**
- **Glad to see any resident in the OR – more OR experience earlier?**
- **More flexible**

Theoretical Disadvantage to the 80 Hour Experience

- Won't go that extra mile - will patients suffer?
- Don't understand "eat what you kill"
- Less operative experience?
- Want less call/ more partners
- Less flexible

A National Survey of Resident's Self-Reported Work Hours: Thinking Beyond Specialty

Baldwin DC, Daugherty Sr., Tsai R, Scott MJ Jr.

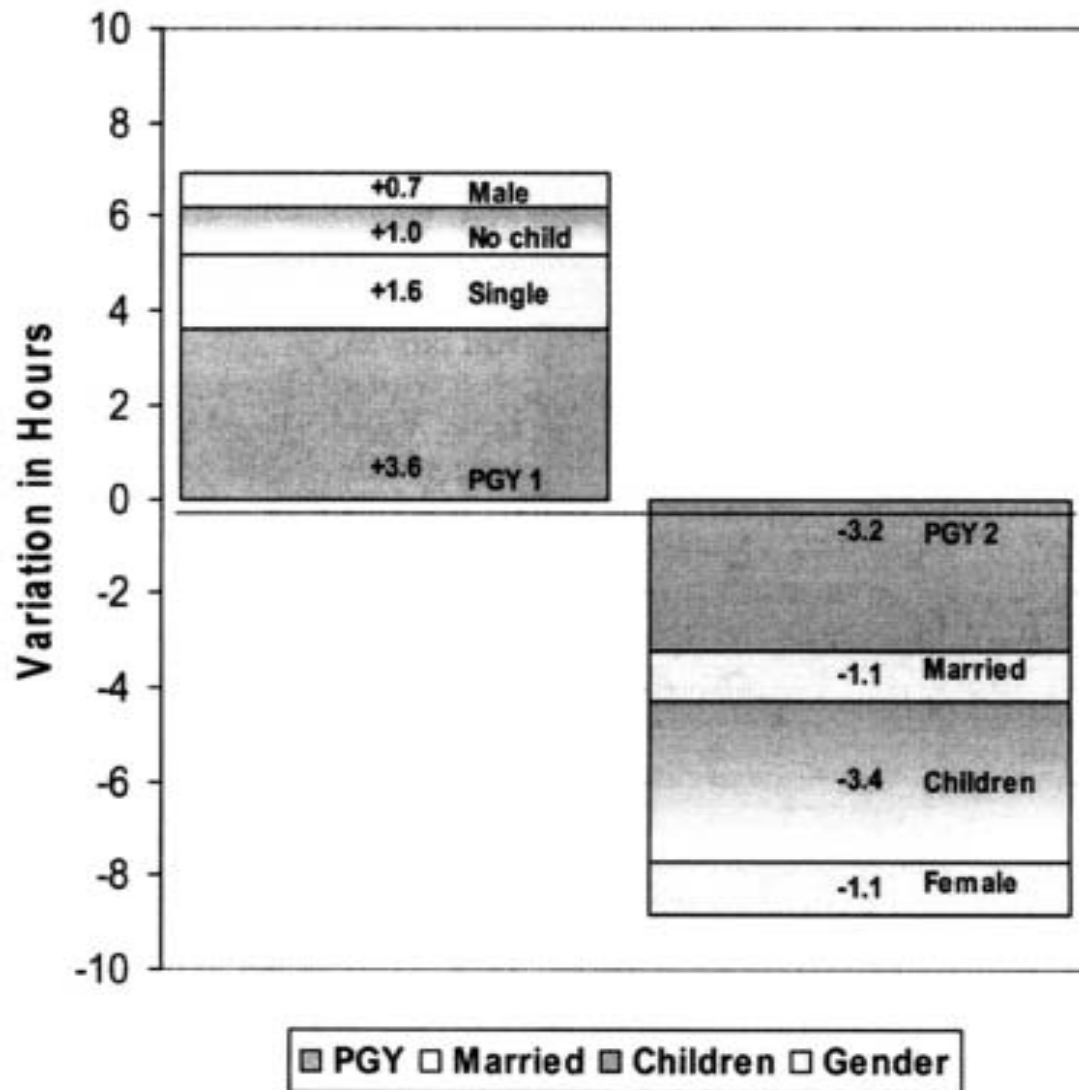


Figure 2. Variation around average residency work hours attributable to gender, children in the household, marriage, and postgraduate year for PGY1 and PGY2 residents combines (1998–1999 national survey).

Associations with Longer Hours

- Higher levels of perceived stress
- Perceived sleep deprivation
- Satisfaction with learning
- Inadequate supervision
- Working while ill
- Observations of others & self impaired
- Perceptions of humiliation and belittlement

Associations with Longer Hours

- **Reported conflict with others in workplace**
- **Made a significant medical error**
- **Sustained a serious personal accident or injury**
- **Behavioral changes – weight change, alcohol use and medication use**

Intensity of Experience

	<u>high</u>	<u>moderate</u>	<u>low</u>
Surgery	75.8%	20.4%	3.3%
Neurosurgery	83.3%	16.7%	
Orthopedics	47.1%	38.2%	13.2%
Urology	50%	50%	
Overall	21.2%	40.1%	36.0%

Work Hours:

- **Focus on numbers of hours needs to shift to what is achieved in those hours**
- **Why the variations between specialties?**

Would you choose surgery again?

PGY1	PGY2	PGY3	PGY4	PGY5
67.4%	83.3%	74.7%	84.4%	77.2%

Women: 77%

Men: 75.9%

Arch Surg 138:663-71,2003

We asked 187 faculty and residents* in the Department of Surgery at Johns Hopkins during a 4-week period in March 2004:

“Following the enactment of the ACGME Duty Hours Regulations...”

Overall Resident Training is:

	Worse	Same	Better	Cannot Comment
OVERALL	45%	19%	23%	14%
Attendings	66%	23%	11%	0%
PGY1	6%	0%	38%	56%
PGY2	14%	43%	43%	0%
PGY3	25%	42%	25%	8%
PGY4	50%	0%	50%	0%
PGY5	100%	0%	0%	0%

*overall response rate = 54% (98/187)

Patient care by residents is:

	Worse	Same	Better	Cannot Comment
OVERALL	48%	34%	5%	13%
Attendings	61%	34%	0%	5%
PGY1	13%	25%	13%	50%
PGY2	43%	43%	14%	0%
PGY3	42%	58%	0%	0%
PGY4	75%	25%	0%	0%
PGY5	100%	0%	0%	0%

Resident knowledge base is:

	Worse	Same	Better	Cannot Comment
OVERALL	11%	56%	14%	19%
Attendings	18%	73%	5%	5%
PGY1	0%	25%	19%	56%
PGY2	0%	71%	29%	0%
PGY3	8%	58%	25%	8%
PGY4	25%	50%	0%	25%
PGY5	0%	67%	0%	33%

Resident use of scientific studies in patient care is:

	Worse	Same	Better	Cannot Comment
OVERALL	5%	64%	8%	23%
Attendings	9%	70%	2%	18%
PGY1	0%	38%	13%	50%
PGY2	0%	86%	0%	14%
PGY3	8%	67%	25%	0%
PGY4	0%	75%	0%	25%
PGY5	0%	100%	0%	0%

Resident communication skills are:

	Worse	Same	Better	Cannot Comment
OVERALL	5%	64%	16%	16%
Attendings	9%	77%	9%	5%
PGY1	0%	25%	25%	50%
PGY2	14%	57%	29%	0%
PGY3	0%	75%	8%	17%
PGY4	0%	50%	50%	0%
PGY5	0%	100%	0%	0%

Resident professional behavior is:

	Worse	Same	Better	Cannot Comment
OVERALL	19%	47%	20%	15%
Attendings	30%	52%	16%	2%
PGY1	0%	19%	25%	56%
PGY2	14%	57%	29%	0%
PGY3	8%	67%	17%	8%
PGY4	50%	25%	25%	0%
PGY5	0%	67%	33%	0%

Resident time management is:

	Worse	Same	Better	Cannot Comment
OVERALL	6%	44%	29%	21%
Attendings	11%	52%	23%	14%
PGY1	0%	13%	31%	56%
PGY2	0%	57%	43%	0%
PGY3	0%	67%	33%	0%
PGY4	0%	50%	25%	25%
PGY5	0%	0%	67%	33%

Resident job satisfaction is:

	Worse	Same	Better	Cannot Comment
OVERALL	18%	22%	34%	26%
Attendings	23%	16%	34%	27%
PGY1	6%	13%	38%	44%
PGY2	43%	43%	14%	0%
PGY3	17%	42%	42%	0%
PGY4	25%	25%	50%	0%
PGY5	0%	33%	33%	33%

Faculty quality of life is:

	Worse	Same	Better	Cannot Comment
OVERALL	49%	16%	7%	28%
Attendings	82%	16%	2%	0%
PGY1	0%	13%	13%	75%
PGY2	29%	29%	14%	29%
PGY3	25%	17%	17%	42%
PGY4	25%	25%	0%	50%
PGY5	67%	0%	0%	33%

Resident sleep deprivation is:

	Worse	Same	Better	Cannot Comment
OVERALL	2%	9%	74%	15%
Attendings	5%	11%	70%	14%
PGY1	0%	0%	69%	31%
PGY2	0%	29%	71%	0%
PGY3	0%	8%	92%	0%
PGY4	0%	0%	100%	0%
PGY5	0%	33%	67%	0%

The number of years of general surgery residency should be:

	Decreased	Kept the Same	Increased	Cannot Comment
OVERALL	17%	56%	9%	18%
Attendings	16%	52%	9%	23%
PGY1	6%	69%	0%	25%
PGY2	14%	57%	0%	29%
PGY3	25%	58%	17%	0%
PGY4	0%	75%	25%	0%
PGY5	33%	67%	0%	0%

Should the maximum numbers of hours per week be increased?

	No, keep at 80 hrs	Yes, up to 90 hrs	Yes, up to 100 hrs	Yes, up to 110 hrs	Cannot Comment
OVERALL	41%	30%	17%	1%	11%
Attendings	30%	36%	18%	0%	16%
PGY1	63%	19%	13%	0%	6%
PGY2	43%	14%	29%	0%	14%
PGY3	58%	25%	8%	0%	8%
PGY4	50%	0%	25%	0%	25%
PGY5	0%	33%	33%	33%	0%

What are barriers to complying with work hours (check all that apply)?

	Pressure from attendings	Pressure from fellow residents	No administrative support	Hospital infrastructure	Not enough residents	Not enough physician extenders	Other
OVERALL	10%	8%	3%	22%	21%	26%	5%
Attendings	8%	8%	3%	23%	22%	26%	4%
PGY1	14%	12%	2%	26%	17%	21%	7%
PGY2	5%	5%	10%	24%	10%	33%	14%
PGY3	22%	10%	7%	10%	24%	24%	2%
PGY4	0%	0%	25%	25%	25%	13%	13%
PGY5	11%	0%	22%	22%	22%	22%	0%

What measures would help compliance with work hours?

	Night-float	More cross-coverage	More prelims/specialties	More categoricals	More ancillary support	Home call	Have cases go uncovered by residents	Other
OVERALL	10%	6%	15%	19%	27%	8%	10%	5%
Attendings	18%	9%	13%	16%	25%	10%	7%	3%
PGY1	0%	6%	18%	24%	32%	9%	6%	6%
PGY2	0%	7%	13%	20%	47%	0%	13%	0%
PGY3	9%	0%	21%	24%	21%	3%	18%	3%
PGY4	0%	0%	25%	25%	25%	0%	13%	13%
PGY5	0%	0%	17%	33%	33%	0%	0%	17%

Would you choose surgery again?

	Yes	No
OVERALL	91%	9%
Attendings	82%	18%
Residents	100%	0%

“The only way of discovering the limits of the possible is to venture a little way past them into the impossible.”

Arthur C. Clarke