

What's New in the Patient Safety World

August 2018

Burnout and Medical Errors

We've done numerous columns on the impact of fatigue on medical errors. A recent study published in the Mayo Clinic Proceedings ([Tawfik 2018](#)) showed that physicians reporting excessive fatigue were almost 40% more likely to have reported a major medical error in the prior 3 months. But, more surprisingly, the study showed that physicians reporting symptoms of **burnout** were more than twice as likely to have reported a major medical error in the prior 3 months.

The study was based upon physicians in the American Medical Association Physician Masterfile invited to respond to an anonymous survey. The survey was completed by 19% of those who opened the request for participation. Note that the term "burnout" was not used in the survey. Rather, questions included symptoms commonly related to burnout.

54.3% of respondents reported symptoms of burnout, 32.8% reported excessive fatigue, and 6.5% reported recent suicidal ideation. One other factor assessed was a poor or failing patient safety grade in their primary work area and this was reported by 3.9% of respondents. Overall, 10.5% of respondents reported making a major medical error in the prior 3 months. Error in judgment (39%), diagnoses (20%), and technical mistakes (13%) were the most commonly reported errors.

Physicians reporting errors were more likely to have symptoms of burnout (77.6% vs 51.5%;), fatigue (46.6% vs 31.2%), and recent suicidal ideation (12.7% vs 5.8%).

In multivariate modeling, odds ratios (OR) for association with errors were 2.22 for burnout, and 1.38 for excessive fatigue.

As you'd expect, errors were more likely to be reported as the safety grade for their primary work unit worsened. For safety grades B, C, D, and F the respective odds ratios for errors were 1.70, 1.92, 3.12, and 4.37 compared to safety grade A. In a press release about the study ([White 2018](#)), co-author Tait Shanafelt said, "This indicates both the burnout level as well as work unit safety characteristics are independently related to the risk of errors." Lead author Danial Tawfik noted the study also showed that rates of medical errors actually tripled in medical work units, even those ranked as extremely safe, if physicians working on that unit had high levels of burnout. He felt this indicates that burnout may be an even a bigger cause of medical error than a poor safety environment.

As with any study based on responses to a survey, there may well be some degree of selection bias and the results show an association but not necessarily causality. But, while there may be some inaccuracy in the actual statistics, we believe the overall message of the study: burnout is a real problem and it contributes to medical errors and untoward patient outcomes.

We, thus, need better ways to recognize physician burnout and interventions to offer support when we recognize it. Other industries have recognized job burnout and developed approaches to address it. We need to borrow from those industries and apply their approaches to healthcare. An excellent review on physician burnout also recently appeared in the Mayo Clinic Proceedings ([Olson 2017](#)).

Also of interest is another recent study that showed physician burnout symptoms were fewer in small independent primary care practices ([Blechter 2018](#)). Over 70% of those physicians were solo practitioners so the authors propose one explanation could be the autonomy (ie, control of work environment) associated with owning one's own practice as opposed to working in an integrated health system or Federally Qualified Health Center where providers are subject to greater administrative regulations. They also found that higher “adaptive reserve” scores were associated with lower levels of burnout. They suggest that interventions to reduce burnout in primary care practices should focus on strengthening factors that support organizational capacity for change (ie, strong communication, leadership supports, innovation).

References:

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