

PRESS RELEASE

New medics in death spike

Study suggests inexperienced medical staff make fatal medication errors

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Are new medical residents a threat to patients? According to Dr. David Phillips and Gwendolyn Barker from the University of California, San Diego in the US, fatal medication errors peak in July in teaching hospitals in particular, which coincides with the yearly influx of new medical residents who are given increased responsibility for patient care. Their findings¹ are published in the *Journal of General Internal Medicine*², published by Springer.

Phillips and Barker looked at the relationship between inexperience and medical error by focusing on changes in the number of medication mistakes (involving accidental overdose of a drug, wrong drug given or taken in error, drug taken inadvertently, and accidents in the use of drugs in medical and surgical procedures) in July, when thousands begin medical residencies. They tested the hypothesis that the arrival of new medical residents in July is associated with increased fatal medication errors.

They examined 244,388 US death certificates focusing on fatal medication errors as the recorded primary cause of death, issued between 1979 and 2006. They compared the observed number of deaths in July with the number of expected events in a given month for a given year. They also looked at whether there were any differences between deaths in and out of hospital in July as well as between counties with and without teaching hospitals.

The authors found that inside medical institutions, fatal medication errors spiked in July and in no other month. This July peak was visible only in counties with teaching hospitals. In these counties, the number of July deaths from medication errors was 10 percent above the expected level. No similar link was observed for other causes of death or for deaths outside hospitals.

The authors highlight several implications for medical policy. "Our findings provide fresh evidence for 1) re-evaluating responsibilities assigned to new residents; 2) increasing supervision of new residents; 3) increasing education concerned with medication safety. Incorporating these changes might reduce both fatal and non-fatal medication errors and thereby reduce the substantial costs associated with these errors."

References

1. Phillips DP & Barker GEC (2010). A July spike in fatal medication errors: a possible effect of new medical residents. *Journal of General Internal Medicine*; DOI 10.1007/s11606-010-1356-3
2. The *Journal of General Internal Medicine* is the official journal of the Society of General Internal Medicine.

The full-text article is available to journalists as a pdf.

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