## CORRESPONDENCE

## "WE'RE JINXED"—ARE **RESIDENTS' FEARS OF BEING JINXED DURING AN ON-CALL DAY FOUNDED?**

## To the Editor:

House officers often fear that they are in for bad luck when well-wishers offer them encouraging remarks during an on-call day. Supportive comments such as "Hope you don't have any more admissions" are often perceived as accomplishing the opposite of what is intended, namely to cause more admissions. We sought to determine whether this fear of being "jinxed" is justified.

We conducted a randomized controlled trial of house officers at two university-affiliated medical centers to assess the effects of being jinxed while on call. Participants were senior medical residents on the inpatient services at the University of Michigan Medical Center and the Ann Arbor VA Medical Center between February 1 and May 31, 2000. The institutional review boards of both medical centers approved the protocol; residents provided written informed consent.

Residents were randomly assigned to the "jinxed" or "nonjinxed" groups in the morning of on-call days. They were asked to select an unlabeled envelope containing either the jinx message, "You will have a great call day," or a blank form. When the jinx message was selected, it was read aloud to the resident. The following day, the residents were asked the following questions: "How many patients did you admit?", "How many hours of sleep did you get?", and "How difficult was your on-call day on a scale of 1 to 5?", a score of 1 being the easiest, and 5 being the most difficult. Before being randomly assigned, residents were asked to rate their baseline level of superstition on a scale of 1 to 5 (1 =least, 5 = most). Each resident could be enrolled more than once.

We used the Student t test to compare the number of admissions, hours

of sleep, and subjective level of difficulty of on-call days between jinxed and nonjinxed residents. A subgroup analysis was performed to examine the effect of a resident's baseline level of superstition on the jinx effect. All analyses used robust variance estimates to adjust for resident-level clustering effects. Statistical significance was determined using a twosided *P* value of 0.05.

Thirty residents were included in the study, and a total of 69 randomizations were performed; 33 were in the jinxed group and 36 were in the nonjinxed group. Overall, the mean (± SD) number of admissions per call day was  $6 \pm 2$  admissions, the number of hours of sleep was 3.3  $\pm$ 1.9 hours, and the subjective level of difficulty was 2.7  $\pm$  1.1. The residents, on average, rated their baseline level of superstition at  $2.7 \pm 1.4$ . Members of the jinxed and nonjinxed groups had no significant differences in important baseline characteristics. The general medical services were equally represented, with cardiology being the largest subspecialty service in both groups (36.4% of the jinxed group vs. 33.3% of the nonjinxed group, P = 0.77). The baseline level of superstition was similar in both groups (2.7 for jinxed vs. 2.7 for nonjinxed, P = 0.93). Overall, jinxed residents had significantly fewer admissions (5 vs. 6 admissions, P = 0.02), more hours of sleep (3.8 vs. 2.9 hours, P = 0.03), and reported a lower subjective level of difficulty of their call day (2.5 vs. 2.9, P = 0.04) when compared with nonjinxed residents. A resident's baseline level of superstition did not affect these results.

We found that being "jinxed" had no adverse effect on the number of admissions, hours of sleep, or level of on-call difficulty for senior medical residents. A statistically significant favorable "jinx" effect was actually noted.

Others have examined the effect of superstitious phenomenon on the

health care system, including the effects of a full moon on the number of emergency department visits (1), the presence of "black clouds" among residents (2), and the role of "luck" in nursing practice (3). While some may reject that a "jinx" mentality exists, we have observed that residents are often as superstitious as baseball players. Indeed, superstitions are a pervasive but scarcely studied component of house-officer culture. Hopefully, the results of this study will alleviate residents' fears during on-call days, thereby creating a less stressful work environment.

We cannot explain why being iinxed had a favorable effect. Either supportive remarks to residents actually produce a beneficial effect (which is their intent, after all), or more likely, these findings are due to chance. Nevertheless, we found no evidence that offering encouraging remarks to residents during on-call periods jinxes them. Such remarks may therefore be provided to residents without fear of causing more admissions, less sleep, or a harder

> Andrew Ahn, MD Massachusetts General Hospital Boston, Massachusetts

Brahmajee K. Nallamothu, MD, MPH **University of Michigan** Medical School Ann Arbor, Michigan

> Sanjay Saint, MD, MPH University of Michigan Medical School Ann Arbor VA Medical Center Ann Arbor, Michigan

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