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**Study Finds High Rate of Depression Among Resident Physicians**

An analysis that included more than 17,000 physicians in training finds that nearly one-third screened positive for depression or depressive symptoms during residency, according to a study in the December 8 issue of *JAMA*.

Studies have suggested that resident physicians experience higher rates of depression than the general public. Beyond the effects of depression on individuals, resident depression has been linked to poor-quality patient care and increased medical errors. However, the estimated prevalence of this disorder varies substantially between studies. A reliable estimate of depression prevalence during medical training is important for informing efforts to prevent, treat, and identify causes of depression among residents, according to background information in the article.

Douglas A. Mata, M.D., M.P.H., of Brigham and Women's Hospital and Harvard Medical School, Boston, and colleagues conducted a systematic review and meta-analysis of 54 studies involving 17,560 physicians. Studies were included that had information on the prevalence of depression or depressive symptoms among resident physicians, and were published between January 1963 and September 2015. Studies were eligible for inclusion if they used a validated method to assess for depression or depressive symptoms. Three studies used clinical interviews and 51 used self-report instruments.

The researchers found that the overall pooled prevalence of depression or depressive symptoms was 29 percent (4,969/17,560 individuals). Prevalence estimates ranged from 21 percent to 43 percent, depending on how the prevalence was measured. There was an increased prevalence with increasing calendar year. In a secondary analysis of 7 longitudinal studies, the median absolute increase in depressive symptoms with the onset of residency training was 16 percent. No statistically significant differences were observed between studies of only interns vs only upper-level residents, or studies of nonsurgical vs both nonsurgical and surgical residents.

“Because the development of depression has been linked to a higher risk of future depressive episodes and greater long-term morbidity, these findings may affect the long-term health of resident doctors. Depression among residents may also affect patients, given established associations between physician depression and lower-quality care. These findings highlight an important issue in graduate medical education,” the authors write.

“Further research is needed to identify effective strategies for preventing and treating depression among physicians in training.”

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**Editor’s Note**: Please see the article for additional information, including other authors, author contributions and affiliations, financial disclosures, funding and support, etc.

**Editorial: Resident Depression**

Thomas L. Schwenk, M.D., of the University of Nevada School of Medicine, Reno, comments on the findings of this study in an accompanying editorial.

“The solutions to this endemic can be classified into 3 categories: provide more and better mental health care to depressed physicians and those in training, limit the trainees' exposure to the training environment and system that are thought to contribute at least in part to poorer mental health and wellness, and consider the possibility that the medical training system needs more fundamental change.”

“The prevalence of depressive symptomatology and disease in physicians in training reported by Mata et al is a significant and important marker for deeper and more profound problems in the graduate medical education system that is in need of equally profound change.”

(doi:10.1001/jama.2015.15408; Available pre-embargo to the media at [http:/media.jamanetwork.com](http://media.jamanetwork.com))

**Editor’s Note**: The author has completed and submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest and none were reported.

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