Original Investigation

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**Association of Clinical Specialty With Symptoms of Burnout and Career Choice Regret Among US Resident Physicians**

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**Question**  Do rates of burnout and career choice regret among resident physicians vary by clinical specialty?

**Findings**  In this prospective cohort study of 3588 second-year resident physicians with follow-up since medical school, reported symptoms of burnout occurred in 45.2% of participants and career choice regret in 14.1%. However, there were wide ranges of prevalence by clinical specialty (29.6%-63.8% for burnout symptoms and 7.4%-32.7% for career choice regret).

**Meaning**  Symptoms of burnout and career choice regret were prevalent among US resident physicians.

**Abstract**

**Importance**  Burnout among physicians is common and has been associated with medical errors and lapses in professionalism. It is unknown whether rates for symptoms of burnout among resident physicians vary by clinical specialty and if individual factors measured during medical school relate to the risk of burnout and career choice regret during residency.

**Objective**  To explore factors associated with symptoms of burnout and career choice regret during residency.

**Design, Setting, and Participants**  Prospective cohort study of 4732 US resident physicians. First-year medical students were enrolled between October 2010 and January 2011 and completed the baseline questionnaire. Participants were invited to respond to 2 questionnaires; one during year 4 of medical school (January-March 2014) and the other during the second year of residency (spring of 2016). The last follow-up was on July 31, 2016.

**Exposures**  Clinical specialty, demographic characteristics, educational debt, US Medical Licensing Examination Step 1 score, and reported levels of anxiety, empathy, and social support during medical school.

**Main Outcomes and Measures**  Prevalence during second year of residency of reported symptoms of burnout measured by 2 single-item measures (adapted from the Maslach Burnout Inventory) and an additional item that evaluated career choice regret (defined as whether, if able to revisit career choice, the resident would choose to become a physician again).

**Results**  Among 4696 resident physicians, 3588 (76.4%) completed the questionnaire during the second year of residency (median age, 29 [interquartile range, 28.0-31.0] years in 2016; 1822 [50.9%] were women). Symptoms of burnout were reported by 1615 of 3574 resident physicians (45.2%; 95% CI, 43.6% to 46.8%). Career choice regret was reported by 502 of 3571 resident physicians (14.1%; 95% CI, 12.9% to 15.2%). In a multivariable analysis, training in urology, neurology, emergency medicine, and general surgery were associated with higher relative risks (RRs) of reported symptoms of burnout (range of RRs, 1.24 to 1.48) relative to training in internal medicine. Characteristics associated with higher risk of reported symptoms of burnout included female sex (RR, 1.17 [95% CI, 1.07 to 1.28]; risk difference [RD], 7.2% [95% CI, 3.1% to 11.3%]) and higher reported levels of anxiety during medical school (RR, 1.08 per 1-point increase [95% CI, 1.06 to 1.11]; RD, 1.8% per 1-point increase [95% CI, 1.6% to 2.0%]). A higher reported level of empathy during medical school was associated with a lower risk of reported symptoms of burnout during residency (RR, 0.99 per 1-point increase [95% CI, 0.99 to 0.99]; RD, −0.5% per 1-point increase [95% CI, −0.6% to −0.3%]). Reported symptoms of burnout (RR, 3.20 [95% CI, 2.58 to 3.82]; RD, 15.0% [95% CI, 12.8% to 17.3%]) and clinical specialty (range of RRs, 1.66 to 2.60) were both significantly associated with career choice regret.

**Conclusions and Relevance**  Among US resident physicians, symptoms of burnout and career choice regret were prevalent, but varied substantially by clinical specialty. Further research is needed to better understand these differences and to address these issues.