

## HEALTH AND HUMAN SCIENCES

### **Associations of Physician Age and Empathy With Physician Assessment of Patients' Pain**

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Cancer pain is underassessed and undertreated. As a result, patients suffer needlessly, especially those struggling with persistent pain caused by metastatic cancer. Researchers have been working to identify patient and physician characteristics that contribute to disparities in patient pain care. Few studies, however, have examined the association between physician characteristics and thorough pain assessment. We hypothesized that physicians who assess patient pain more thoroughly would be younger and report being more empathetic.

Consenting physicians completed questionnaires that assessed age, gender, empathy, attachment style, and opinions about prescribing opioids for pain. Two standardized patients (SPs) visited each participating physician and covertly audio-recorded the appointment. The SPs presented as being in late stages of a terminal cancer and on inadequate doses of opioids for their pain. Audio files were transcribed and coded for pain assessment.

A correlation analysis revealed that physician age was negatively correlated with pain assessment, with an  $r$ -value of  $-0.33$ , a  $p$ -value of  $0.004$ , and a sample size of  $48$ . Physician self-reported empathy was positively correlated with more thorough pain assessment, with an  $r$ -value of  $0.32$  and a  $p$ -value of  $0.02$ . In a multivariate model, controlling for a negative view of opioids and physician secure attachment style, physician age remained significant with a  $\beta$ -value of  $-0.34$  and a  $p$ -value of  $0.002$ . Physician empathy was no longer significant with a  $\beta$ -value of  $4.45$  and a  $p$ -value of  $0.06$ .

Future research is needed to better understand how these characteristics affect patient treatment and how we can improve physician assessment of patient pain. Knowledge of attributes that influence physician care may enable physicians to identify behavioral changes that will maximize their efficacy in managing persistent pain.

*Research advisor Cleveland Shields writes: "As part of the Cancer Prevention Internship Program (CPIP), Hannah participated in physician-patient communication research in late-stage cancer patients. She organized transcripts of physician-patient interactions, helped train other undergraduates, and assisted with the coding of physician assessment of patients' pain."*