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Teaching to the opioid epidemic – an interdisciplinary approach

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Dear Sir

Opioid abuse has emerged as a major public health crisis in the US. As half of opioid-related overdose deaths involve prescription drugs and 80% of patients using heroin begin using opioids with prescription drugs, prescriber behavior is a key aspect of the crisis. There is a need for medical educators to teach to this complex epidemic, helping students develop safe, effective pain management strategies.

In fall 2016, we convened an interdisciplinary team that included our state's Physician General, an anthropologist, sociologist/demographer, and internist to develop a session on opioid addiction for second-year students in a "Science of Health Systems" course. We began by establishing the skills/knowledge future physicians must acquire to mitigate the epidemic, including: (1) understanding socio-economic drivers of opioid addiction (e.g. economic deprivation, low social capital, stress, etc.), (2) competency around current pharmacological/non-pharmacological pain management strategies, and (3) appreciation of addiction-related stigma. The team then worked iteratively to write patient vignettes set in Pennsylvania that captured these themes and guided students in applying a socio-ecological model.

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Prior to the session, students were assigned pre-readings that provided historical context for the epidemic, focusing on the physician role in over-prescribing opioids. In the first hour, students discussed vignettes in small groups. In the second hour, students convened for a large-group session facilitated by the Physician General who spoke of the “perfect storm” that precipitated the crisis (i.e. marketing of opioids as ‘non-addictive’ and influx of heroin), provided overdose statistics, and summarized the current public health response (e.g. prescribing guidelines, naloxone distribution, prescription drug-monitoring program, ED referrals, and pain-management strategies, etc.). One emphasis for targeted long-term prevention efforts included a focus on locations where “stress-related” mortality is high to reduce not only opioid abuse and mortality, but other related mortalities.

Twenty-five, randomly-selected students evaluated the session, providing a mean rating of “4” (Likert scale 1–5, “4” corresponding to “Good”). In anonymous written comments, students expressed appreciation for the subject matter and desire for a longer large-group session. The design team emerged with a strong belief that the interdisciplinary partnership was essential to properly addressing the opioid epidemic’s socio-cultural intricacies. Lastly, while our medical school is fortunate to be located within ten miles of the state capital, we found it highly beneficial to partner with our Physician General in developing curricular content, and would encourage colleagues to forge academic-political partnerships, if practicable, when designing similar health systems courses.

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