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ABSTRACT SPOTLIGHT

Evidence Based Medicine Subcommittee

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Burnout continues to effect trainee/faculty experiences; solutions are needed to avoid physicians shortages.

Steinberg et al (PS6; 4062643) Among female trainees (N=1017) at 26 GME institutions enrolled in a digital coaching program, 570 (73.0%; of the 781 completing the Maslach Burnout Inventory) met criteria for burnout, 267 (26%) had intent to leave their specialty within 2 years, 175 (17%) had intent to leave their program before graduation, and 105 (10%) had no intent to stay at their current institution if offered a job.

Rotenstein et al (SAO1; 4064077) found in a longitudinal analysis (2013-2020) of CMS Provider Utilization and Payment Data (N= 738,205) that female physicians across all specialties leave the workforce significantly earlier than male counterparts: -7.5 years (95% CI: -8.8, -6.1; $p<0.001$) in primary care.

Parris et al (SAO1; 4059368) found in a clinical trial with 183 trainees from 9 departments randomized to receive professional coaching (N=94) vs. usual support, coachees were less likely to be involved in a medical error (2.18, $P=0.09$), and had decreased burnout scoring (1.38 pre vs 1.25, post, $p<0.001$, burnout cutoff 1.33).

Sikon et al (PS4; 4060162) found in qualitative interviews with 106 faculty dyads at an AMC that ~68% of participants agreed that dyads influenced their decision to stay at the organization.

Disparities impact patient care; health policy and navigator-based initiatives may help mitigate these effects.

Ly et al (PS3; 4060377) found in an analysis of 3.3 million Veteran Health Association patients with HbA1s tested between 2010-2019 that patients identifying as racial or ethnic minorities were less likely to start a diabetes medication (aOR for American Indian or Alaska Native Veterans was 0.74, 95% CI 0.68-0.80; aOR for Black Veterans was 0.70, 95% CI 0.68- 0.71).

Martinez et al (SAD1; 4064341) found among 10,647 inpatient admissions to an AMC, patients identifying as Black were less likely to be discharged to a post-acute care facility even when recommended by physical therapy [OR 0.53, 95% CI (0.41, 0.67)].

Linares et al (PS3; 4064447) found that decreased knowledge of interpreter rights (seen in 71% of N=14,295 California Health Interview Survey participants surveyed 2012-2021) was associated with delays in prescriptions and decreased preventive care use among patients with language preferences other than English.

Gupta et al (PS4; 4028347), In an analysis of colonoscopies (N=5249) performed in an integrated health system (2019-2023), found that disparities in colonoscopy wait times were reduced for patients with self-pay and Medicaid (by 33.39 days when compared to 2021; 95% CI: 10.31 – 56.47) coverage following implementation of a patient navigator for underinsured patients.

Stefanescu et al (PS2; 4063989) found in a cross-sectional analysis of Medicare survey data (2015-2020) that beneficiaries identifying as Black enrolled in Medicare Advantage (MA) vs. traditional Medicare (TM) had higher overall preventive care use (preventive care index 3.63 vs. 3.44).

Reducing opioid prescriptions can have negative consequences

Wang (PS4; 4017638) used a semi-structured individual qualitative interview method to assess the perspectives on opioid prescribing of physicians and patients over 65 years of age who were on long-term opioid medications for chronic pain. They found that opioids were a last resort, that they improved patient functioning and quality of life, and that patients felt that deprescribing was unnecessary unless an adverse event occurred. Many patients had had negative experiences with tapering. Physicians expressed dissatisfaction with their ability to taper and monitor tapering and they expressed concerns over patient resistance to reducing their pain medication.

Black (PS 1; 4064687) examined the overdose deaths of 463 adults who had their opioid therapy discontinued and had had a fatal opioid-related overdose in Connecticut. 34% of the deaths occurred within the first month. Both the slope of opioid discontinuation and dose at time of discontinuation were positively associated with death. Sudden discontinuation from higher prescribed opioid doses predicted opioid-related deaths within one month. Although not mentioned, the overdose deaths were presumably due to the non-standardized dosing of illicit opioids. Additionally, on a national level, there is a strong relationship between the discontinuation in opioid prescribing and the increase in opioid deaths.

Kertesz (PS 3; 4056066) performed a retrospective study of the reasons why patients committed suicide after their prescribed opioids were reduced or eliminated. Psychological autopsies (interviews) were conducted with 9 bereaved survivors. Factors contributing to the patient's suicide included the disruption of the pain care relationship being the "final straw," perceived burdensomeness to others, and a loss of a sense of belongingness. Additional issues were mental health and substance dependence.

Kagarmanova (PS3; 4064544) assessed whether their pain management and decision support tool I-COPE could change opioid prescribing among older adults with chronic pain, opioid use, and/or opioid use disorder. They enrolled a population before the intervention (N=1,683) and another during the intervention period (N=1,643). Total MME decreased and mean MME significantly decreased. Important omissions included that the project did not report on increases in: pain scores, illicit opioid use, illicit opioid poisonings and deaths, and suicides.

Generative AI: Large Language Model (LLM) and Generative Pretrained Transformer (GPT) can help clinicians

Kerman (PS2; 4063075) asked the question, can an LLM assist physicians in their clinical reasoning? They developed 6 diagnostic cases and recruited 9 2nd and 3rd year IM residents. Approximately half the residents were asked to make the diagnoses with standard reference materials and the rest with the addition of GPT-4. The standard group scored 11.7 and the LLM group 15.7 ($p < 0.001$). In terms of percentage of all possible points, the standard group scored 62.8% and the LLM group scored 82.6% correct. The LLM significantly improved resident performance in clinical reasoning and it may be a good educational tool. The researchers did not assess whether the LLM would improve the performance of practicing physicians.

Skittle (PS6; 4061020) determined what characteristics of a clinical case helped a GPT improve its accuracy on a three-item differential diagnosis (DDx). They found that comorbidities and past histories did not improve diagnostic accuracy. They also found that increasing the clinical exam findings, renaming the time course of the illness, adding semantic qualifiers, and adhering to the correct presentation pattern, i.e., clinical background, time course of illness, and clinical syndrome improved diagnostic accuracy. These results are what one would expect for a patient presenting with a new medical condition.