In the Limelight: April 2020

This monthly feature highlights three articles in the current print and online issue of Mayo Clinic Proceedings. These articles are also featured on the Mayo Clinic Proceedings’ YouTube Channel (https://youtu.be/9tRfFX_lo2Q).

THE SUPERVISOR-SUPERVISEE INTERACTION AND STAFF SATISFACTION

In their delivery of patient care, health care organizations are founded upon cross sectional teamwork that brings together individuals with diverse health care expertise and responsibilities. Health care organizations are also hierarchical as individuals in a given work unit are answerable to an ascending managerial structure, with supervisors appointed at various levels. The interaction between supervisor and supervisee is a critical one because it integrates levels of an organization; it serves as a bidirectional conduit for both top-down and bottom-up communication; it evaluates work-related performance and expectations; and it provides an opportunity for an employee to dialogue with supervisory staff, to discuss challenges encountered, and to explore career opportunities and aspirations. This interaction is also a substantial determinant of staff satisfaction and the lack thereof manifested as burnout. For example, in studies published 5 years ago in Mayo Clinic Proceedings, Shanafelt et al demonstrated an association between physician satisfaction and burnout with organizational leadership. In their survey involving more than 2800 physicians, the likelihood of satisfaction increased by 9% and that of burnout decreased by 3% for each 1-point increase in relevant composite physician leadership score. Two years later, in presenting organizational strategies to promote physician satisfaction and reduce burnout, Shanafelt and Noseworthy underscored the importance of this association by listing and discussing “Harness the Power of Leadership” as the second of their 9 strategies. In the present issue of Mayo Clinic Proceedings, Dyrbye et al address this issue for nonphysician health care employees in a survey in which some 40,000 employees responded (70% response rate). Leadership was assessed by a modified Mayo Clinic Leadership Score in which 8 aspects of leadership and 1 composite score were evaluated by the employee. Satisfaction was evaluated by a single targeted question regarding contentment with Mayo Clinic, with a 5-point response scale. Burnout was assessed by 2 items from the Maslach Burnout Inventory, each with a 7-point scale. The data demonstrate that satisfaction and burnout correlated with the 8 specific aspects of leadership as well as the composite leadership score. Notably, the likelihood of satisfaction increased by 11% and burnout decreased by 7% for each 1-point increase in relevant leadership score. Other significant findings in this study included the fact that satisfaction was less likely and burnout more likely in employees who were either younger or had longer service, and that the job category significantly influenced the level of satisfaction and burnout. As pointed out by the authors, younger employees may have greater difficulty in integrating responsibilities of their professional life with familial responsibilities and other aspects of their personal life; and employees with longer service may experience greater difficulty in adapting to the ever changing landscape in the work place, or may have long unfulfilled professional aspirations. The importance of the study by Dyrbye et al is that it underscores the care and discernment institutions must exercise when selecting supervisors and leaders because their leadership skills and behavior influence employee satisfaction and burnout; and it emphasizes that organizational strategies intended to improve satisfaction and reduce burnout in employees have to be
cognizant of and accommodate the modulatory effects of such factors as age, duration of service, and job category.


BEARING THE BURDEN OF MIGRAINE

On an individual level, migraine can cause recurrent suffering that is inestimable. On a national and worldwide level, migraine is a relatively common disease that afflicts 10% to 15% of these populations, ranks among diseases that impose the longest duration of disability during a patient’s lifetime, and exacts substantial and long-term health care costs. Migraine’s burden of illness has the potential for far-ranging adverse effects on one’s personal, familial, and professional life. In a prior study in Mayo Clinic Proceedings, for example, Buse et al reported that individuals with migraine had diminished involvement in family activities, significant misgivings regarding their parenting ability, and persisting feelings of financial insecurity for themselves and their families, all because of their personal affliction with migraine. Migraine is heterogeneous in its frequency, severity, duration of acute attacks, and attendant symptoms and conditions—this thus raises the question as to how do sufferers of migraine bear the burden of their disease. This issue is addressed specifically as regards the use of acute prescription medications by Hutchinson et al in the present issue of Mayo Clinic Proceedings. The authors analyzed data from the Chronic Migraine Epidemiology and Outcomes Study (CaMEO), an Internet-based, self-reporting, cross-sectional study that compiled information on the demographics, clinical course, disabilities, and comorbid conditions of migraine. This study also undertook longitudinal surveys at intervals of 3 months. Patient-reported outcomes included the Migraine Disability Assessment (MIDAS), the Migraine Symptom Severity Scale (MSSS) score, and the Migraine-Specific Quality of Life Questionnaire (MSQ). The data demonstrate that of the 13,624 respondents, those who never used acute prescription medications for migraine (64.5%) far outnumbered those who did (22.9%), with 12.6% of respondents being discontinued users. Current users, who tended to be older and female, exhibited the highest monthly frequency of headaches (more than 7 days), the highest degree of migraine symptom severity, the worst migraine-related disability, and the highest prevalence of anxiety and depression as assessed by targeted questionnaires. Of the medications used by current users approximately 50% involved triptans, with lower frequency of use involving opioids and nonsteroidal anti-inflammatory agents, and less still of barbiturates; only 2.1% of respondents reported the use of ergot derivatives. Individuals who never used prescription medicines tended to be younger and male, and had less severe disease and disability; yet even in this subgroup almost 30% reported moderate to severe disability from migraine and more than 10% suffered from migraine attacks at least 10 days per month. Individuals who never used prescription medicines gave as their reasons the fact that their migraine attacks were endurable with their nonprescription drug strategy and other self-treatment approaches; their concerns about side effects and cost of prescription medicines; and that they were unaware that such prescription-based medications were available. As emphasized by Hutchinson et al, inadequate treatment of acute attacks of migraine not only prolongs their duration, but also predisposes to chronic migraine and attendant disability. There is thus an unmet need for better therapies for acute attacks, one that may benefit all subgroups of individuals.
afflicted by migraine, and especially so for the current user subgroup given their heavy burden of disease and disability. Finally, greater engagement of individuals who never used prescription medicines with health care professionals may aid their understanding of the range of therapeutic options, may more effectively manage their acute attacks, and may mitigate the risks of disease progression and sustained disability.


THEMATIC REVIEWS ON PERIOPERATIVE MEDICINE
Mayo Clinic Proceedings thanks Dr Karen Mauck for her expertise and leadership in bringing together a series of thematic reviews of salient topics in perioperative medicine, the first of which appears in this issue. This inaugural article by Bierle et al centers on the first phase (preoperative) of the triphasic field (preoperative/operative/postoperative) of perioperative medicine, specifically addressing preoperative evaluation before noncardiac surgery and providing risk assessment of the asymptomatic patient. After providing an overview of the physiology of surgical stress and anesthesia, Bierle et al succinctly discuss risk assessment with attention to surgical urgency and risks that are specific for surgery, the patient, and the organ system, among others. In addition to relevant textual discussions, Bierle et al provide helpful, self-explanatory tables that summarize the following: the outcomes, advantages, and limitations of assorted risk assessment calculators; a system-based approach to critical aspects of the history and physical exam in risk assessment; and the indications and role for preoperative testing in asymptomatic patients. The review discusses preoperative assessment in special patient populations including those who are geriatric, pregnant, or obese, and in patients who have chronic liver disease, HIV, or those that refuse blood products. The article concludes with a table demonstrating how perioperative risk can be documented in the medical record to effectively communicate risk factors and proposed risk reduction modalities. In her introduction to these thematic reviews, Dr Mauck outlines the topics that will be covered by subsequent articles and underscores key considerations in perioperative medicine including: the multidisciplinary nature of this dynamic field and evolving practice; the rise in surgical volumes in recent years, underpinned, in part, by an aging population with an increased need for surgical procedures, and yet a population with increasing medical complexity, multimorbidity, and frailty; the importance and increasing utilization of the Perioperative Surgical Home model of care; and the emphasis in perioperative medicine on such objectives as cohesiveness of care, reducing morbidity, improving outcomes, enhancing postsurgical recovery, and decreasing the length of stay, rates for hospital readmission, and cost of care. Assorted types of stress and their attendant diseases often occur unexpectedly, whereas the nature of the biologic stress and the medical and other risks that will be imposed by impending anesthesia and surgery are evaluated during preoperative evaluation. As underscored by both articles, such evaluation, including that of risk assessment, provides a window of opportunity for formulating management and strategies aimed at risk reduction.


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