28. Which of the following is included in the BE-FAST mnemonic that could suggest a stroke of the vertebrobasilar circulation of the posterior fossa?
- **A.** Balance
- **B.** Focus
- **C.** Tremor

29. As noted in the article, predisposing factors to the development of an intracranial infection include
- **A.** cirrhosis.
- **B.** endocarditis.
- **C.** colitis.

30. The authors note that the clinical presentation of a patient with a sinus-related intracranial infection is often characterized by the persistence of
- **A.** nausea and vomiting.
- **B.** petechiae.
- **C.** nuchal rigidity.

31. The cardinal presenting symptom of a brain abscess is
- **A.** fever.
- **B.** headache.
- **C.** altered mental status.

32. Common abnormal laboratory findings with intracranial infections include an elevated white blood cell count with a predominant
- **A.** eosinophilia.
- **B.** lymphocytosis.
- **C.** neutrophilia.

33. Contiguous spread of infection from the sinuses is frequently caused by the
- **A.** Hemophilus species.
- **B.** Streptococcus species.
- **C.** Clostridium species.

34. As noted in the article, empiric antibiotic therapy for intracranial infection includes what drug that is added to the regimen to treat a clinically suspected staphylococcal coinfection?
- **A.** vancomycin
- **B.** piperacillin
- **C.** azithromycin

35. What imaging study do Brouwer et al. (2014) recommend to further assess the extent of intracranial infection and the presence of any associated complications?
- **A.** positron emission tomography scan
- **B.** computed tomography scan
- **C.** magnetic resonance imaging

36. Sharma et al. (2014) report that potential long-term neurologic sequelae of intracranial infection in children include
- **A.** loss of the sense of smell.
- **B.** aphasia.
- **C.** trigeminal neuralgia.

RESEARCH TEST QUESTIONS

The Quality of Symptoms in Women and Men Presenting to the Emergency Department with Suspected Acute Coronary Syndrome (pp. 357-365)

1. Compared to women in the study described in this article, the men were more likely to have
- **A.** non-ST segment elevation acute coronary syndrome (ACS).
- **B.** hypercholesterolemia.
- **C.** diabetes mellitus.

2. Compared to the men, which statement is true regarding women's symptoms in this study?
- **A.** Women were significantly less likely to experience chest pressure.
- **B.** Women were significantly more likely to have higher overall symptom distress.
- **C.** Women were significantly more likely to report chest heaviness.

3. Which statement is true regarding the quality of symptoms or symptom distress in this study?
- **A.** Women who ruled-in for ACS had higher overall symptom distress than women who ruled-out.
- **B.** Men who ruled-in for ACS had higher overall symptom distress compared to men who ruled-out.
- **C.** Men who ruled-in for ACS had significantly higher overall symptom distress than women who ruled-in for ACS.

4. Regarding the quality of symptoms and overall symptom distress, the researchers in this study noted
- **A.** a positive interaction with patients' age.
- **B.** an inverse interaction with the patients' family history of ACS.
- **C.** no significant interaction with patients' history of diabetes.

5. Compared with patients who ruled-in for ACS, patients who ruled-out were more likely to experience
- **A.** jaw/neck/throat pain.
- **B.** simultaneous arm and shoulder pain.
- **C.** upper back pain.

6. Women who ruled-in for ACS were more likely than men ruled-in for ACS to experience
- **A.** mid-chest pain.
- **B.** left arm pain.
- **C.** upper back pain.

7. In the 2011 study by Mackay et al. of symptoms from myocardial ischemia, female gender was a strong predictor of
- **A.** left shoulder discomfort.
- **B.** jaw/teeth/throat/ or neck discomfort.
- **C.** epigastric discomfort.

Anxiety and Stress in Live Disaster Exercises (pp. 366-373)

8. As noted in the article, which statement is true regarding cortisol awakening response (CAR)?
- **A.** Shift work has been associated with increasing CAR.
- **B.** CAR is increased with chronic stress.
- **C.** Low socioeconomic status may suppress CAR.

9. Which statement is true regarding alpha amylase levels?
- **A.** They are increased during times of psychological stress.
- **B.** They are decreased during exercise.
- **C.** Anxiety causes a decrease in the level of alpha amylase.

10. Compared to the mean preintervention Y-1 (State) score of 31.18 on the State-Trait Anxiety Inventory (STAI) in the study described in this article, the mean Y-1 score postintervention was
- **A.** 41.09.
- **B.** 47.92.
- **C.** 51.11.

11. Which statement is true regarding the mean postintervention Y-2 (Trait) score on the STAI?
- **A.** The score demonstrated a statically significant decrease from the preintervention score.
- **B.** The score demonstrated a statically significant increase from the preintervention score.
- **C.** There was no statistically significant difference between pre- and postintervention scores.

12. Results of the pre- and postintervention laboratory testing in this study revealed that the
- **A.** alpha amylase levels were elevated.
- **B.** cortisol levels were slightly decreased.
- **C.** alpha amylase and cortisol levels were within normal range.

13. Qualitative themes identified in this study include
- **A.** strategy.
- **B.** preparation.
- **C.** debriefing.

14. The authors note that focus-group participants identified anxiety in making decisions, especially regarding
- **A.** what to do first.
- **B.** the level of triage.
- **C.** where to report for duty.

15. Boudarene et al. (2002) postulated that the "first stress response and primary protest" is
- **A.** state anxiety.
- **B.** the biological response.
- **C.** trait anxiety.

16. Team participant performance on the final exercise in the study described in this article indicated
- **A.** passing performance.
- **B.** impeded performance.
- **C.** failed performance.

Shared Decision-Support Tools in Hospital Emergency Departments: A Systematic Review (pp. 386-393)

17. According to Elwyn (2012), in the third step of shared decisions, the professional
- **A.** actively engages the patient's family in providing assistance in decision making.
- **B.** informs the patient about what will happen in each stage of their ED visit.
- **C.** supports the patient when considering preferences and deciding what is best.

18. In the 2000 study by Iglesias-Lepine et al., what percentage of ED physicians reported that they provided a comprehensive discussion on the risks of treatment?
- **A.** 53.9%
- **B.** 62.7%
- **C.** 71.4%

19. In the studies by Hess et al. (2012, 2016), what did patients report when shared decision-support tools (SDSTs) were used?
- **A.** less anxiety
- **B.** more decision-making conflicts
- **C.** greater satisfaction with care

20. In the 2016 study by Hess et al., the average length of discussions with patients in the SDST intervention group was how much longer than in the control group?
- **A.** 1.3 minutes
- **B.** 3.5 minutes
- **C.** 5.2 minutes

21. Compared to the patients with low-risk chest pain in the control group, what did Hess et al. (2016) report about the patients in the SDST group?
- **A.** The ED length of stay was shorter.
- **B.** The mean number of tests was lower.
- **C.** There were fewer admissions to the observation unit.

22. In the 2017 study by Geurts et al., the implementation of SDSTs in the care of children with acute gastroenteritis resulted in
- **A.** fewer diagnostic tests performed.
- **B.** less time in the waiting room before treatment.
- **C.** greater use of oral rehydration solutions.

23. As noted in the article, barriers to the implementation of SDSTs in the emergency department include
- **A.** the physicians' preference to decide on a treatment plan by themselves.
- **B.** the physicians' belief that SDSTs do not have benefit.
- **C.** the belief that patients prefer physicians to decide for them.

24. Results from the 2009 study by Slot et al. revealed that most of the patients who had suffered strokes and were provided with information on thrombolysis
- **A.** preferred to take part in decisions.
- **B.** could not decide on a course of action.
- **C.** wanted a family member or the physician to decide.

25. Which statement is true regarding the format of SDSTs?
- **A.** Graphical methods typically have not been shown to be effective at enhancing the perception of risk.
- **B.** Presenting information to ED elderly patients in video format can be effective in improving their knowledge about treatment.
- **C.** Computer-based tools have been found to be extremely useful for educating older adults.

Pediatric Emergency Department Staff Preferences for a Critical Incident Stress Debriefing (pp. 403-410)

26. When participants reported using "stress reduction with others," most of them stated that they spoke to
- **A.** the ED manager.
- **B.** family or friends.
- **C.** a chaplain.

27. Stress reduction with one's own family was described as problematic because
- **A.** some of the critical incident (CI) details could disturb family members.
- **B.** sometimes families were unwilling to listen to the CI review.
- **C.** family members did not understand the clinical implications of the CI.

28. The most common form of "stress reduction with self" reported by the participants was
- **A.** prayer.
- **B.** exercising.
- **C.** consuming alcohol when no longer on duty.

29. The primary purpose that the participants reported for having a constructive critique was for
- **A.** negative feedback.
- **B.** criticism of specific staff.
- **C.** staff improvement.

30. During a critical incident stress debriefing (CISD), participants stated that they wanted to focus on
- **A.** emotional aspects of the CI.
- **B.** clinical issues.
- **C.** coping mechanisms.

31. Which statement is true regarding participants' views on CISD participation?
- **A.** Anyone present for the CI could attend a CISD.
- **B.** CISDs should be mandatory.
- **C.** Even if participants dealt with CIs on their own, they still wanted to be part of a formal CISD.

32. Whom did participants indicate as their choice for CISD facilitator?
- **A.** a nurse
- **B.** a physician
- **C.** a chaplain

33. Regarding the timing of the CISD, the majority of the participants preferred that it should occur
- **A.** on their day off.
- **B.** at the next staff meeting.
- **C.** within 12 – 24 hours of the CI.

34. When asked to describe what participants would like to experience to lower stress after a CI, the most common response was
- **A.** off-unit time.
- **B.** positive reinforcement.
- **C.** to care for a non-critical child.

35. Most of the microdebriefing processes used at the facility described in this article took up to
- **A.** 10 minutes.
- **B.** 20 minutes.
- **C.** 30 minutes.

36. As noted in the article, what was available if staff required further assistance than could be supplied in a microdebriefing?
- **A.** a meeting with the ED manager
- **B.** a full CISD session
- **C.** the Employee Assistance Program

Pediatric Triage Education for the General Emergency Nurse: A Randomized Crossover Trial Comparing Simulation with Paper-Case Studies (pp. 394-402)

37. When describing how more than 80% of centers report barriers to implementing the full pediatric readiness guidelines, Gausche-Hill et al. (2015) noted that the most frequent barrier reported was
- **A.** the cost of training.
- **B.** inadequate commitment by administration.
- **C.** a lack of support from the ED providers.

38. The data collection and both educational interventions described in this article took place in a single, individual session that required
- **A.** 30 minutes.
- **B.** 1 hour.
- **C.** 2 hours.

39. Travers et al. (2009) reported that pediatric patients were more likely to be mistriaged if they had medical complaints such as
- **A.** pain from occult injuries or blunt trauma.
- **B.** fever or respiratory conditions.
- **C.** abdominal discomfort or nausea/vomiting.

40. During the high-fidelity simulation (HFS) component of the education, the researcher functioned as the
- **A.** physician.
- **B.** parent.
- **C.** patient.

41. The mean agreement rate on the pretest (that reflected the percent of correct triage responses) was 41% compared to what mean agreement rate on the post-test?
- **A.** 55%
- **B.** 73%
- **C.** 91%

42. The mean agreement on the midpoint test was
- **A.** 54.5%.
- **B.** 62.1%.
- **C.** 70.9%.

43. Comparing the test results from both of the education groups revealed that
- **A.** the paper-based cases (PBC)-then-HFS group had a statistically significantly greater pretest to post-test change in score.
- **B.** the HFS-then-PBC group had a statistically significantly greater pretest to post-test change in score.
- **C.** there was no statistically significant difference in the change of scores between groups.

44. Which statement is true regarding correlations between the demographic variables of the participants and the final triage agreement rates?
- **A.** Participants with more than 5 years of ED experience had higher final triage agreement rates than those with less than 5 years of ED experience.
- **B.** Participants who reported a lower pre-comfort level had lower final triage agreement rates.
- **C.** No target demographic variable was found to have a relationship with the final triage agreement rate.

45. Which statement is true regarding the improvement in comfort level of the participants?
- **A.** Participants in the PBC-then-HFS group had a greater improvement in postintervention comfort compared to the HFS-then-PBC group.
- **B.** Participants in the HFS-then-PBC group had a greater improvement in postintervention comfort compared to the PBC-then-HFS group.
- **C.** There was no statistically significant difference between groups for the improvement in comfort level.

46. When examining the under- and overtriage rates on the tests, compared to undertriage rates of 30% and overtriage rates of 29% on the pretest, the rates on the post-test were
- **A.** 35% undertriage and 24% overtriage.
- **B.** 29% undertriage and 15% overtriage.
- **C.** 22% undertriage and 5% overtriage.

47. Each of the 3 sets of 8 cases used in this study had a case at what Emergency Severity Index (ESI) level that scored uniformly poorly with participants over- or undertriaging it?
- **A.** level 2
- **B.** level 3
- **C.** level 4

Emergency Nurses' Perception of Geriatric Readiness in the ED Setting: A Mixed-Methods Study (pp. 374-385)

48. The geriatric resource that the highest number of survey respondents reported was *always available* was
- **A.** commodes/bedside toileting.
- **B.** communication (dry erase) boards in rooms.
- **C.** blanket warmers.

49. What was the resource that the most respondents indicated was *never available* in their emergency departments?
- **A.** safety mats (next to beds)
- **B.** color contrast environment/décor
- **C.** bed alarms

50. Fewer than one third of respondents reported which human resource was *always available?*
- **A.** case management (RN)
- **B.** a sexual assault nurse examiner (SANE)
- **C.** elder abuse services

51. What service was noted to be *always available* by fewer than 25% of respondents?
- **A.** psychiatric evaluation
- **B.** hospice-evaluation services
- **C.** chaplain services

52. To optimize care of geriatric patients in the emergency department, what did survey participants rank as their top priority?
- **A.** treatment and assessment protocols for use with geriatric patients
- **B.** geriatric-friendly equipment
- **C.** nursing education specific to emergency care of geriatric patients

53. More than 70% of survey respondents reported that geriatric patients are screened routinely for
- **A.** activities of daily living.
- **B.** substance use/abuse.
- **C.** risk of malnutrition.

54. When caring for a geriatric patient in the emergency department, the item for which respondents screened the least often was
- **A.** potentially inappropriate medications.
- **B.** caregiver stress.
- **C.** delirium.

55. The highest number of respondents reported that it was *easy* or *somewhat easy* to communicate
- **A.** with a nursing facility (regarding received or returning patients).
- **B.** about outpatient follow-up with a specialist.
- **C.** regarding a palliative care consult/follow-up.

56. According to the respondents, the communication that was deemed to be the most *difficult* or *somewhat difficult* was with
- **A.** home-based services (visiting nurse, personal care assistants, home physical therapy).
- **B.** hospice agency consult/follow-up.
- **C.** rehabilitation, respite, or a nursing facility for placement directly from the emergency department.

57. A barrier to specialized geriatric care in the emergency setting, noted by participants, was a lower interest in the care of older patients by
- **A.** nurses working 12-hour shifts from 11 AM to 11 PM.
- **B.** newer nurses who had not received training as certified nurse assistants (CNAs).
- **C.** nurses with 15 or more years of emergency nursing experience.

58. The respondents reported that a facilitator to caring for geriatric patients included which resource?
- **A.** pressure-reducing mattresses
- **B.** physical/occupational therapy evaluations
- **C.** adequate numbers of CNAs

59. The focus-group participants reported that desired outcomes of improved geriatric emergency care would be
- **A.** improving heart failure care.
- **B.** reducing unnecessary wide net testing.
- **C.** decreasing wait times for geriatric patients.

60. The single most enthusiastically discussed intervention to improve geriatric care was
- **A.** telesitters (direct observation).
- **B.** postdischarge follow-up.
- **C.** a dedicated pharmacist for medication management.

PRACTICE IMPROVEMENT TEST QUESTIONS

Using Mathematical Modeling to Improve the Emergency Department Nurse-Scheduling Process (pp. 425-432)

1. In the 2013 study by Albertsen et al., workers' self-scheduling resulted in improved
- **A.** nursing retention.
- **B.** team work.
- **C.** work-life balance.

2. At the facility described in this article, nurse-staffing targets were based on several criteria, including
- **A.** patient arrivals.
- **B.** patient admissions.
- **C.** staff competence.

3. Key features of the self-scheduling process described in this article include:
- **A.** the day begins and ends at 11 pm.
- **B.** every nurse works a combination of 8- and 12-hour shifts, based on his/her contract.
- **C.** the ED manager adjusts the completed schedule based on skill mix.

4. Which statement is true regarding when the nurses were assumed to take their meal breaks?
- **A.** All nurses working an 8-hour shift during the day took their meal during the first block of their shifts.
- **B.** All nurses working 12-hour shifts took their breaks during the middle 4-hour block of their shifts.
- **C.** Four nurses worked only 4-hour shifts and did not take meal breaks.

5. The self-scheduling solution described in this article required how many additional nursing hours to cover meal breaks and meet the nurse-staffing targets?
- **A.** 16
- **B.** 28
- **C.** 34

6. The majority of additional nursing resources were allotted during the time of the highest number of patients in the emergency department, which was at
- **A.** 7 AM and 3 PM.
- **B.** 3 PM and 11 PM.
- **C.** 11 PM and 7 AM.

7. What is the procedure when there are empty shifts?
- **A.** Nurses can sign up for overtime and work an 8- or 12-hour shift.
- **B.** The department is understaffed for those shifts.
- **C.** Nurses may elect to work in 4-hour time allotments.

8. Which statement is true under the new schedule?
- **A.** Nurses have fewer holiday shifts to work per year.
- **B.** Nurses have to be on call for one additional shift per month to prevent understaffing.
- **C.** Nurses are guaranteed to work the shift that they signed up for on the original schedule.

9. Compared to a total of 40 hours required for the scheduling team to reconcile the schedule using the old system, the total time to reconcile the schedule using the new process is approximately
- **A.** 9 hours.
- **B.** 15 hours.
- **C.** 18 hours.