

## Chapter 1: Establishing the Therapeutic Alliance

### Multiple Choice

1. Which of the following statements is true about interactions with patients?
  - A. Our attitudes are expressed at a conscious level as well as an unconscious level.
  - B. Our past experiences have little to do with our present therapeutic relationships.
  - C. Our past experiences shape our attitudes toward our patients, but not our beliefs.
  - D. Unchallenged assumptions about our patients generally are favorable.
2. Based on common biases in the U.S. healthcare community, which of the following patients is likely to be at *greatest* risk for experiencing negative bias?
  - A. A 10-year-old boy with chickenpox
  - B. A 28-year-old obese Mexican woman with chest pain
  - C. A 43-year-old female athlete with a fractured leg
  - D. A 72-year-old Caucasian man with osteoarthritis of the knee
3. Which of the following questions is considered MOST culturally inclusive to ask when obtaining a patient's history?
  - A. "Do you live with your wife?"
  - B. "Can your wife help you with bathing?"
  - C. "Can your husband prepare the meals while you are healing?"
  - D. "Are you in a relationship?"
4. Which of the following actions would be MOST helpful in changing healthcare biases?
  - A. Be aware of behaviors in others that might reflect bias.
  - B. Look for reinforcement of beliefs within a common peer group.
  - C. Reflect annually on personal attitudes and beliefs about others.
  - D. Seek out commonalities with those perceived as different.
5. Which of the following statements about nonverbal communication is MOST accurate?
  - A. It is more difficult to interpret than spoken words.
  - B. It is used as a primary means of communicating information.
  - C. It is used to communicate interpersonal attitudes.
  - D. It makes up about 25% of our communication with patients.
6. Which of the following communication approaches is BEST when communicating with patients in an adult rehabilitation unit?
  - A. Ask all patients with whom you are working whether they understand what you have said.
  - B. Read the chart before seeing the patient so that you can refer to them by first name.

- C. Ask the patient how they prefer to be addressed.
  - D. Use correct medical terminology with your patients to explain therapeutic interventions.
7. Therapists in a nursing home have poor productivity and often lack creativity with interventions. Which of the following factors MOST likely accounts for these problems?
- A. The patients are very demanding and have difficult personalities.
  - B. The staff do not genuinely care about the patients.
  - C. The staff is experiencing burnout.
  - D. The staff is older and less likely to use evidence-based interventions.
8. Patients' rights are MOST regulated for which of the following individuals?
- A. A 6-month-old boy having surgery for shunt placement
  - B. A 19-year-old woman from Russia having scoliosis surgery
  - C. A 63-year-old man who is terminally ill with lung cancer
  - D. A 75-year-old woman who just had her hip replaced after a fall
9. Which of the following BEST defines culture?
- A. A group of people living in a specific area
  - B. The fact or state of belonging to a social group
  - C. The geographical characteristics associated with a group
  - D. The beliefs, customs, and norms of a particular group
10. Which of the following examples is indicative of acculturation in the United States?
- A. A Jewish couple from Israel attends an orthodox temple.
  - B. A Swedish couple travels 20 miles to shop at a Danish market.
  - C. A rural Vietnamese youth sings in a local rock group.
  - D. An elderly Latino man speaks only Spanish at home.
11. Which of the following responses would be MOST expected for a 17-year-old high school football player who sustained a spinal cord injury 5 months ago?
- A. Asking several questions about the accident and outcomes
  - B. Denial and lack of acknowledgement of new limitations
  - C. An interest in participating in therapy and following recommendations to improve outcomes
  - D. Increased anxiety with lack of adherence to treatment recommendations
12. What would be the BEST response to a patient who is visibly upset, expresses concerns about dying, and wants to talk about spiritual matters?
- A. Allow them to express her concerns and offer additional resources.
  - B. Tell them that it is hospital policy that you can only discuss therapy with her.
  - C. Tell them that you will go get the physician to speak with her.
  - D. Tell them what you believe so she can choose the best spiritual path.

13. Which of the following factors is MOST likely to motivate patients to engage in ongoing healthful behaviors?

- A. Awareness that significant change is needed
- B. Freedom from demands of work and home
- C. Knowing the benefits of healthful behaviors
- D. A high sense of self-esteem

14. When working with a patient who recently had a transtibial amputation, what is the MOST effective way to encourage adherence to an exercise program?

- A. Include only exercises that he can do lying down.
- B. Design exercises so that they require assistance from his partner.
- C. Design the exercise program to be performed multiple times a day.
- D. Include exercises that will further his goal of walking with a prosthesis.

**Short Answer**

15. Establishing good rapport enhances patients' perceptions of being valued and respected. List two benefits of patients' enhanced perceptions of value and respect.

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16. List three behaviors that might indicate underlying negative beliefs that could hinder your clinical effectiveness.

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17. List three tips for effective listening in a healthcare encounter.

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18. Patient education is an integral part of many therapeutic interventions, and not all patients learn information the same way. List three different ways you might give patients information to facilitate learning.

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19. A 22-year-old patient in a rehabilitation unit following a spinal cord injury has made multiple verbal sexual advances during therapy sessions. Identify three appropriate responses to this behavior.

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20. Name three elements of effective stress management.

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21. List three ways a rehabilitation clinic can create an LGBTQIA-friendly environment.

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22. Reframe the following negative terminology into more empowering terms:

- a. The patient suffered a stroke.
  - b. The patient is a 30-year-old schizophrenic with a history of medication noncompliance.
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23. Describe the difference between hospice and palliative care.

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## ANSWERS

1. **ANS: A** Rationale: When interacting with patients, clinicians must be aware that their attitudes are expressed at a conscious level as well as an unconscious level. Our experiences have a great deal to do with how we interact with patients and shape our attitudes and beliefs. Unchallenged assumptions can create negative interactions with our patients.
2. **ANS: B** Rationale: Although the 72-year-old man may experience age bias, the 28-year-old obese Mexican woman with chest pain may be subject to bias based on obesity, nationality, and gender, as well as on symptoms that are not as well recognized in a young person or in a female.
3. **ANS: D** Rationale: Using gender- and sexual orientation-neutral terminology conveys respect and acceptance. “Are you in a relationship?” invites inclusivity compared with “Are you married?” or “What is your wife’s name?”
4. **ANS: D** Rationale: When we find commonalities with our patients, they tend to minimize our biases. Being aware of behaviors in others will not help us individually face our biases. It is inappropriate to attempt to reinforce our biases with peer groups, because doing so does not help change our beliefs. An annual reflection is hardly adequate to meaningfully identify and change our biases.
5. **ANS: C** Rationale: Body language is used to negotiate interpersonal attitudes and is typically easier to interpret than spoken words. Words, not body language, are used primarily to

communicate information. Body language makes up the majority of our communication—about 93%, not 25%, of our communication.

6. **ANS: C** Rationale: Asking how the patient prefers to be addressed avoids assumptions about gender or familiarity and empowers the patient. Although patient understanding is important, there are more effective ways to make sure that your patients have understood key concepts, such as asking them to repeat information back to you or asking if they can imagine making the requested change. Using medical terms when explaining interventions may be confusing to patients.
7. **ANS: C** Rationale: Poor productivity and frequent absenteeism are common signs of moderate to severe burnout.
8. **ANS: A** Rationale: Care would be most regulated for a 6-month-old boy undergoing shunt placement, because this patient is likely the most vulnerable and least likely to be able to advocate for himself. In general, the greater the perceived vulnerability of the population, the more closely regulated the care is. Older patients can also experience increased vulnerability, but as adults they are assumed to be better able to advocate for themselves and therefore require less oversight and regulation of their care than pediatric patients.
9. **ANS: D** Rationale: *Culture* is best defined as the beliefs, customs, and norms of a particular group. A group of people living in a specific area refers to a *population* or *community*. A *society* is defined as the fact or state of belonging to a social group. *Race* refers to the geographical characteristics associated with a group.
10. **ANS: C** Rationale: This option is the only example of engaging in a local aspect of the dominant U.S. culture. The other options are examples of limited acclimation to U.S. customs and attitudes.
11. **ANS: C** Rationale: Showing an interest in doing what he can to get better is behavior that is more commonly observed after a period of adjustment to the situation. The other options are all typical responses in the acute stage of injury or disability.
12. **ANS: A** Rationale: Therapists are expected to be open to assuming the role of concern for the spiritual lives of their patients, and patients should be offered the appropriate resources to deal effectively with this aspect of their health. It is not within the therapist's scope of practice to provide spiritual guidance, however.
13. **ANS: D** Rationale: Self-esteem plays a large role in motivating patients. Patients with high self-esteem are more likely to feel in control of their lives and more motivated to be engaged in healthful behaviors.
14. **ANS: D** Rationale: Including exercises that will prepare the patient to walk with a prosthesis is the best choice because studies have shown that patients are more motivated to adhere to treatment programs that are functionally related, as described in this answer.
15. **ANS:** Patients who perceive that they are personally valued and respected have better clinical outcomes. Patients who feel valued and respected are much less likely to pursue legal actions against healthcare workers.
16. **ANS:** Behaviors include withdrawing from patient interactions; relying on protocols and routine treatments without considering the individual's specific needs; using humor that makes fun of the patient; using unauthorized nicknames for the patient; and referring to a patient by diagnosis or treatment group.
17. **ANS:** Tips include looking at the person who is talking; making appropriate eye contact; focusing on what the person is saying; avoiding doing other things while the person is talking; allowing time for the person to process and respond to what you have said; and making sure you understand by summarizing or rephrasing what the patient has said.

18. **ANS:** Match the content and instructional method to the patient's age, developmental stage, knowledge base, and health condition. Inquire about the patient's preferred way of learning. Provide important information in multiple formats. Pace the information provided to prevent cognitive overload. Engage the patient physically and cognitively when possible. Provide feedback. Practice recall of information and performance of activities in settings that are realistic. Encourage patients' questions and comments.
19. **ANS:** Set appropriate expectations and consequences without scolding. Document the interaction and inform your supervisor. Request a mental health referral for the patient to facilitate healthy adjustment to loss.
20. **ANS:** Delineate clearly between work and personal life. Engage in regular aerobic exercise, meditation, relaxation, and mindfulness practices. Nurture supportive relationships.
21. **ANS:** Engage in education regarding LGBTQIA issues. Use patients' preferred pronouns. Create intake and documentation forms that allow for nonbinary sex, gender, and sexual orientation categories. Provide relevant educational pamphlets. Avoid making gender and sexual orientation assumptions in patient communications (e.g., assumptively using "Mr.," "Ms.," or "Mrs." when addressing patients, assuming patients have spouses of the opposite sex or gender).
22. **ANS:** (a) The patient experienced a stroke. (b) The patient is a 30-year-old diagnosed with schizophrenia with a history of inconsistent adherence to medication regimens.
23. **ANS:** Palliative care is specialized care for patients with serious illness; however, it is not specific to end-of-life care. Hospice is end-of-life care where healthcare team members and families of dying patients work together to alleviate the patient's pain and to allow them to die with dignity. Physical and occupational therapy professionals play a vital role in both palliative care and hospice care to maximize functional mobility and comfort.

## **Chapter 2: The Mechanics of Movement**

### **Multiple Choice**

1. Which of the following BEST describes center of mass (CoM)?
  - A. The balance point of an object
  - B. The direction of movement when weight is added
  - C. The point directly behind the gravity pull
  - D. The push or pull that modifies movement
2. Which of the following statements is true regarding how CoM affects patients' movement?
  - A. *Center of pull* is another term for CoM.
  - B. Each body part, such as a leg or an arm, has its own CoM.
  - C. The whole body has a CoM that cannot be localized.
  - D. When weight is added to the body, the CoM moves away from the added weight.
3. Which of the following is an example of an internal force commonly used when assisting patients with movement?
  - A. Ankle weights

- B. Friction
  - C. Gravity
  - D. Muscular tension
4. Which of the following statements regarding vectors and representation of movement forces is true?
- A. For internal forces, the tail of the arrow lies at the muscle attachment on the moving lever of the muscle exerting the force.
  - B. Gravity is only depicted as a vertical arrow with the tail of the arrow originating behind a point at about S2.
  - C. Muscle contraction force is depicted with an arrow pointing opposite to the combined effect of the muscle fibers.
  - D. The arrow on the vector is straight and points in the direction away from force exertion.
5. Which of the following is considered an open chain exercise?
- A. Mini squats
  - B. Push-ups
  - C. Sit-to-stand
  - D. Biceps curls
6. Which of the following force-couple applications is LESS than optimal for patients to use when preparing to transition from sitting to standing?
- A. Leaning forward and pulling up with both arms supported on the walker
  - B. Leaning forward and using the hip and thigh muscles to achieve liftoff
  - C. Pushing the upper trunk into the back of the chair while sliding the pelvis forward
  - D. Shifting from side to side to walk the hips forward to the front of the chair
7. What is the MOST likely cause for a patient to develop atrophy while on a ventilator in the intensive care unit (ICU)?
- A. The appropriate amount of load applied to the tissues
  - B. Too little load applied to the tissues
  - C. Too much load applied to the tissues
  - D. Repeated rapid load to the tissues
8. When transferring a patient from the edge of the bed to a wheelchair using a stand-pivot transfer, which of the following positions is MOST appropriate for the caregiver?
- A. Close to the patient with feet close together and with hips and knees bent
  - B. Feet spread apart with hips and knees straight while leaning the trunk backwards
  - C. Close to the patient with feet spread apart and staggered with hips and knees bent
  - D. Feet spread apart and staggered with hips and knees bent while leaning the trunk backwards

9. Which of the following would be MOST effective in promoting stability during patient-care activities?
- A. Increase the distance of the CoM above the base of support (BoS).
  - B. Minimize the BoS.
  - C. Position the line of gravity (LoG) posterior to the BoS.
  - D. Position the LoG near the center of the BoS.
10. Which of the following factors is key to preserving dynamic trunk stability?
- A. A neutral pelvis
  - B. Decreased or reduced lumbar lordosis
  - C. Extension of the hips
  - D. Flexion of the spine
11. Your patient has been in bed for the past 7 days with acute pneumonia. When a patient is preparing to stand for the first time since being hospitalized, which of the following muscle actions must occur?
- A. The back extensor muscles must be able to counteract inertia.
  - B. The hip extensor muscles must be able to control the LoG.
  - C. The knee extensor muscles must be able to counteract gravity.
  - D. The knee flexor muscles must be able to control the CoM.
12. To understand the fundamental principles of movement, it is MOST important to know which of the following?
- A. The amount of ground reaction force in Newtons
  - B. The direction of force application
  - C. The distance between the CoM and the BoS
  - D. The exact measure of inertia to be overcome
13. In which of the following scenarios is momentum MOST likely to be an element that needs to be controlled?
- A. A patient is bridging in the bed to scoot to the right.
  - B. A patient is rolling from his back to his right side.
  - C. A patient is transferring from the floor to standing using a chair for support.
  - D. A patient is walking with crutches and a full leg cast.

### Matching

Match the following terms to their definitions.

- A. Pulling that tries to stretch or lengthen tissue
- B. The amount of force across a given area
- C. The force applied to a given area



- D. Twisting force about a structure's axis
- E. Two opposite direction forces, parallel to contacting surfaces

- 14. Pressure
- 15. Shear
- 16. Stress
- 17. Tension/tensile forces
- 18. Torsion

#### ANSWERS

1. **ANS: A** Rationale: CoM is the balance point of an object.
2. **ANS: B** Rationale: Each body part has its own CoM. The body's CoM is anterior to S2. When weight is added to the body, the CoM moves toward, not away from, the added weight.
3. **ANS: D** Rationale: Muscular tension is the only option that is an internal force. The other options are external forces.
4. **ANS: A** Rationale: For internal forces, the tail of the arrow lies at the attachment of the muscle exerting the force. When depicting gravity, the arrow tail is at the CoM of the object being affected; S2 is not the only point of origin. To depict muscle contraction force, the arrow points in the same direction as the combined effect of the muscle. The arrow on the vector points in the direction in which the force is exerted.
5. **ANS: D** Rationale: Open kinetic chain exercises are when the distal segment is free to move in relation to the proximal chain. When performing mini squats and sit-to-stand, the distal lower extremity is fixed to the ground. When performing push-ups, the distal segment of the upper extremity is fixed to the ground. When performing biceps curls, the distal upper extremity is free to move.
6. **ANS: C** Rationale: Pushing the upper trunk into the back of the chair while sliding the pelvis forward actually results in an increased moment arm and therefore requires more muscle force to bring the trunk forward into flexion. Leaning forward and pulling up with both arms supported on a walker does not describe a typical force couple. Leaning forward and using the hip and thigh muscles to achieve liftoff is an effective force couple. Shifting from side to side to "walk" the hips forward to the front of the chair is an effective, though less frequently used, method of moving forward.
7. **ANS: B** Rationale: Atrophy is a sign of inadequate load to the tissues.
8. **ANS: C** Rationale: When initiating a stand-pivot transfer, the caregiver should have a wide BoS with the CoM low and over the BoS. The distance between the caregiver and patient is decreased as much as possible while allowing the necessary movement.
9. **ANS: D** Rationale: The LoG should be near the center of the BoS. You want to decrease the distance between the CoM and the BoS, not increase it. You want the BoS in a greater, not a smaller, area.
10. **ANS: A** Rationale: A neutral pelvis is considered to be the safe or neutral zone for the lumbar spine. The other options do not refer to dynamic trunk stabilization techniques.

11. **ANS: C** Rationale: The knee extensor muscles are the primary movers in the effort to counteract the pull of gravity. Although the back extensors are working, they are not primarily counteracting inertia. Likewise, the hip extensors and knee flexors are active, but not necessarily to control the LoG or CoM.
12. **ANS: B** Rationale: Knowing the direction of force application helps to make clinical judgments related to patient movement.
13. **ANS: D** Rationale: A patient walking with crutches and a full leg cast is the most likely scenario in which momentum forces need to be controlled. The forward swing of the involved leg generates momentum. The added weight of the cast increases the forward momentum. If uncontrolled, the momentum will pull the patient forward beyond their BoS, causing a fall.
14. **ANS: D**
15. **ANS: A**
16. **ANS: C**
17. **ANS: E**
18. **ANS: B**

### **Chapter 3: Special Environments**

#### **Multiple Choice**

1. Which of the following clinician behaviors is MOST likely to help a patient cope with the challenges of the intensive care unit (ICU) environment?
  - A. Performing therapy as passively as possible to avoid disturbing the patient
  - B. Keeping the lights on all the time to reduce the patient's fear
  - C. Placing familiar objects within the patient's line of sight
  - D. Rotating the therapists treating the patient to prevent patient boredom
2. For some patients, the psychological stresses brought on by the ICU environment can be intense enough that they result in symptoms similar to which of the following conditions?
  - A. Bipolar disorder
  - B. Hypochondria
  - C. Posttraumatic stress disorder
  - D. Long-term dementia
3. Which of the following tasks is MOST important to attend to when working with a patient in the cardiac care unit?
  - A. Silencing any audible alarms on the machines and monitors
  - B. Keeping closely to the timed treatment schedule