# CHAPTER 18 – Rehabilitation Medicine The Language of Rehabilitation

#### Chapter 18 Teaching Overview

This chapter focuses on the language of rehabilitation medicine. When discussing rehabilitation medicine, it is a good idea to stress with students not only the importance of proper technique, but also empathy for patients. Therapists offer hope and motivation. Tell students to guard against becoming callous in their dealings with patients having disabilities or slow movement so that they do not become sloppy or careless, thinking what they are doing is not of great importance. Patients can perceive this, and even if a patient seems fine, the psychology of being disabled, dependent, or having less than normal functioning can wear on the patient emotionally. If the patient's attitude suffers, so will his or her motivation; he or she will not heal or cope as well as if they felt they were being cared for and there was hope at the end of the tunnel. Another important thing to focus on is the health professional's need to educate patients regarding their proposed plans of treatment since some therapy patients can carry out the treatment on their own at home. Incorporate activities to improve the students' ability to explain to the patient the type of therapy he or she can expect to undergo. Reinforce the concept that rehabilitation often involves teamwork: patient, doctor, therapists—often several kinds at once (e.g., stroke patients have PTs, OTs, speech therapists, etc.). A social worker may also be involved, as well as a nutritionist, psychologist or psychiatrist, and pain management specialists.

As with all lessons in this Lesson Planning Guide, you can and should modify them to best meet the needs of *your* students, *your* schedule, and *your* curricula.

#### **Teacher to Teacher:**

- It can be interesting for students to see the various modalities and assistive devices involved in rehabilitation.
   Bring some
  - to class and assist the students in identifying and understanding their function.
- Check to see if your class can tour the PT department at a local hospital or private facility.
- Ask a local physical therapist to come talk to the class regarding his or her job. Have students
  prepare questions in advance so they have them ready to ask the physical therapist on the day of the
  visit. These questions could be a homework assignment prior to the visit.

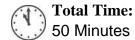
### **Chapter 18: Learning Outcomes**

Upon successful completion of the lessons in this chapter, your students will . . .

- Apply the language of rehabilitation medicine to the therapeutic methods used to assist recovery from injury and disease.
- Comprehend, analyze, spell, and write the medical terms of rehabilitation medicine so that they
  communicate and document accurately and precisely in any health care setting.
- Recognize and pronounce the medical terms of rehabilitation medicine so that they communicate verbally with accuracy and precision in any health care setting.
- Identify common conditions requiring restorative rehabilitation.
- Specify common techniques used in rehabilitation.

**Note:** These lessons are designed with ultimate flexibility in mind. When customizing the lessons for your own class, always choose activities that are most relevant to your curriculum, your students, and your teaching goals—especially if you do not have time to implement all of the provided activities into your class period.

### **Lesson 18.1: Restorative Rehabilitation**



#### **Lesson 18.1 Learning Objectives:**

Your teaching objective for this lesson is to help your students accomplish these learning objectives:

- 1. Identify the members of the rehabilitation team.
- 2. Discuss the purposes of rehabilitation medicine.
- 3. Define the goals for a restorative rehabilitation program for specific common problems.
- 4. Detail common medical problems that arise during rehabilitation.

#### **Prepare Your Materials:**

#### **Computers with Internet access**

**Lesson 18.1 PowerPoint® presentation** – Found on Instructor Resources, Online Resource Center, <a href="https://www.mhhe.com/allanmedlanguage2e">www.mhhe.com/allanmedlanguage2e</a>

in Lesson 18.1

Lesson 18.1 Student Note-taking Handout – Create by selecting the "Handouts" option when printing the PowerPoint presentation; select 3 slides per page to print slides with blank lines to the right where students can take notes

Lesson 18.1 Rephrasing Handout – Found on Instructor Resources, Online Resource Center, www.mhhe.com/allanmedlanguage2e

in Lesson 18.1

10 to 15 questions on Lesson 18.1 – Create using McGraw-Hill CONNECT (found on Instructor Resources, Online Resource Center, <a href="www.mhhe.com/allanmedlanguage2e">www.mhhe.com/allanmedlanguage2e</a>); select questions from Lesson 18.1

Balloon

*Date:* \_\_\_\_\_

### **Instructor Lesson Plan**

Chapter 18—Lesson 18.1

	TIME	ACTIVITY & INSTRUCTIONS	MATERIALS	OBJECTIVES
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Warm-up & Introduction	10 min	Activity Description: Introduction to rehabilitative medicine.  Step 1: Share with students the following examples of famous people who have regained movement or physical abilities through rehabilitative medicine:	Computers with Internet access	LO 2 LO 3
		<ul> <li>Christopher Reeve – Regained the lung capacity and ability to talk after his accident; he also regained the ability to make small movements in his elbows, wrists, fingers, hips, and knees.</li> <li>Patrick Rummerfield, the first spinal chord injury quadriplegic to become fully recovered; he spent three years learning to walk and use his hands and fourteen years relearning balance and</li> </ul>		
		<ul> <li>coordination.</li> <li>Dennis Byrd, a New York Jets football player paralyzed after a spinal injury; he eventually was able to walk again.</li> <li>Mike Utley, a Detroit Lions football player paralyzed after hitting his head on artificial turf; Utley can walk with the help of braces and crutches due to years of physical therapy.</li> <li>Stephen Hawking, a world-renowned physicist and professor diagnosed with motor neuron disease (ALS); physical therapy, occupational therapy, speechlanguage therapy, respiratory therapy, and other types of care have played an important role in his longevity with this</li> </ul>		
		disease.  Step 2: Ask students to share examples of people they know (or have heard of) who have regained mobility or physical abilities following rehabilitative medicine. Examples may include the following types of situations:  Stroke victims regaining skills  Accident victims regaining skills  Children born disabled gaining skills that wouldn't have been possible without physical therapy  People regaining the ability to talk through speech therapy  Injured and disabled veterans regaining		

	TIME	ACTIVITY & INSTRUCTIONS	MATERIALS	OBJECTIVES
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		skills (VA hospitals have extensive PT departments because of war wounds, amputations, etc.)  • Even things as simple as people building back up the muscles in an arm or leg after an injury.  Note: This is also a good time to discuss common accidents that result in the need for rehabilitation: motor vehicle accidents, construction accidents, swimming/diving accidents, sports injuries, etc.  Step 3: Tell students rehabilitation medicine involves the study, diagnosis, and treatment of people who have some sort of limitation (or limitations) due to a disease, disorder, or in Step 4: Ask students to use the Internet to find success stories or examples of rehabilitative medicine helping people to regain (or gain) skills or abilities.	jury	
Lecture	20 min	Lesson 18.1 Lecture/Discussion Reference the Speaker Notes for each slide to assist you in discussing the talking points. You can view or print "Notes Pages" to use during the lecture for easy reference (in PowerPoint, select "View," then "Notes Page").	Lesson 18.1 PowerPoint Presentation	LO 1 LO 2 LO 3 LO 4
Active Learning & Practice	15 min	Step 1: Distribute the Lesson 18.1 Rephrasing Handout.  Step 2: Tell students that their task is to rewrite each of these sentences in their own words so that a patient would understand it.  Step 3: When students are finished, have them share some of the sentences they wrote and critique them as a group.  Consider whether they would be understood by the appropriate patient audience.	Lesson 18.1 Rephrasing Handout	LO 1 LO 2 LO 3 LO 4
Review	5 min	Activity Description: Balloon review game  Step 1: Toss the beach ball or balloon to a student. If the student catches it, he or she has two chances to answer the question. If he or she drops it, only one chance is given.  Step 2: If the student answers correctly, he or she should toss the balloon or beach ball	Balloon  10 to 15 questions from Lesson 18.1	LO 1 LO 2 LO 3 LO 4

	TIME	ACTIVITY & INSTRUCTIONS	MATERIALS	OBJECTIVES
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		to another student.  Step 3: Ask the next student a question and give him or her the appropriate number of guesses (one if he or she drops it; two if he or she catches it.)  Step 3: Continue in this manner until all of the questions have been answered or all students have had a turn. (It is not a bad thing to repeat questions—the reinforcement is good for students.)		
Homework Assignment		<ul> <li>Read Lesson 18.2.</li> <li>Complete the Lesson 18.1 exercises from the textbook.</li> <li>Complete several exercises online for additional review and practice.</li> </ul>		

#### **Lesson 18.1 Masters**

Lesson 18.1 Rephrasing Handout

## **Medical Language for Modern Health Care:**

### Lesson 18.1 – Restorative Rehabilitation

	<b>Directions:</b> Rewrite each sentence using your own words and keeping in mind the given audience.
1.	Sentence: The ability of an individual to perform ADLs can be used as a measurement tool to assess therapy and care needs.  Audience: The adult son of an 65-year-old man having recently suffered a stroke.
2.	<b>Sentence:</b> After hip replacement surgery, the patient should not internally rotate or adduct the leg and should not bend the trunk to below 90° to the thigh. <b>Audience:</b> An 85-year-old woman recovering from hip replacement surgery, and her caretaker.
3.	Sentence: Coordinated multidisciplinary evaluation, management, and therapy add significantly to the chances of a good recovery.  Audience: The parents of an eight-year-old boy who suffered a head injury in a bicycling accident.
4.	Sentence: Seventy-five percent of all amputations are performed on people over 65 years with peripheral vascular disease (PVD) complicating arteriosclerosis and diabetes.  Audience: The wife of a patient who is about to have a below the knee amputation (BKA).
5.	<b>Sentence:</b> Anticoagulants, such as heparin and coumadin, are given and sequential (intermittent) pressure cuffs on the legs are used postoperatively to prevent DVT. <b>Audience:</b> A 72-year-old male patient who has had a hip fracture and also suffers from mild dementia, his spouse, and a paid home health aide who will be caring for him.

### **Lesson 18.2: Techniques and Tools of Rehabilitation**



#### **Lesson 18.2 Learning Objectives:**

Your teaching objective for this lesson is to help your students accomplish these learning objectives:

- 1. Identify the various types and benefits of cold treatments.
- 2. Explain the benefits of the different types of heat therapies.
- 3. Differentiate between the two forms of electrical stimulation and their uses.
- 4. Describe the use of hyperbaric oxygen.
- 5. Recognize the values of different techniques for assisting patients to perform the activities of daily living.

#### **Prepare Your Materials:**

**10 to 12 strings** – Long enough to be hung from the ceiling (or door frame) and reach to about a foot from the ground.

Weights and strings – Tie on the bottom ends of the strings that have been hung from the ceiling in various areas of the classroom. The weights should hang down almost to, but not touching, the floor so that they create a "level" straight vertical line students can use to judge alignment.

**Lesson 18.2 PowerPoint**® **presentation** – Found on Instructor Resources, Online Resource Center, <u>www.mhhe.com/allanmedlanguage2e</u>

in Lesson 18.2

Lesson 18.2 Student Note-taking Handout – Create by selecting the "Handouts" option when printing the PowerPoint presentation; select 3 slides per page to print slides with blank lines to the right where students can take notes

Guest Speaker – Invite a local physical therapist or physical therapy assistant to come to class to discuss some of the tools and techniques used in his/her job

## **Instructor Lesson Plan**

Chapter 18—Lesson 18.2

<i>Date:</i>
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	TIME	ACTIVITY & INSTRUCTIONS	MATERIALS	OBJECTIVES
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Warm-up & Review	10 min	Activity Description: Check over answers to Lesson 18.1 textbook exercises.	Textbook – Lesson 18.1 exercises	(Review Lesson 18.1 concepts)
		Step 1: Students were to complete the Lesson 18.1 exercises as homework. Have them check their own answers or trade with another student.		
		Step 2: Go over the correct answers with students and make sure everyone understands them. Emphasize correct pronunciation of all of the terms.		
Introduction	5 min	Activity Description: Weighted strings activity to assess students' posture and alignment.	Weights on strings hanging from the ceiling	LO 5
		Step 1: Have students work with a partner or small group. Each group should go and stand by one of the weights tied to a string and hanging from the ceiling.		
		Step 2: Tell students that the weight hanging from the string makes a straight vertical line that can be used to compare to a patient's posture and alignment.		
		Step 3: One student in each group should stand beside each weighted string.		
		Step 4: Have the remaining students compare the student and the vertical line made by the string and answer this question:		
		Are the student's ears, shoulders, hips, and knees in alignment with each other and straight according to the string line? (Discuss what "in alignment" means; refer back to Chapter 5: The Musculoskeletel System; The Language of Orthopedics in the discussion concerning fractured bones that are "realigned".)		
		Which parts, if any, are out of line?		

	TIME	ACTIVITY & INSTRUCTIONS	MATERIALS	OBJECTIVES
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		Step 5: Have students switch places so that each student gets a turn to be "analyzed."		
		Step 6: Additional alignment checks can be done, such as the following:  Are the student's ears both level with		
		each other (or is one higher or lower)?		
		Are the student's shoulders level with each other?		
		<ul> <li>Are the student's hips level with each other?</li> <li>Are the student's knees level with</li> </ul>		
		each other?  Note: People often have one arm or leg that is longer or shorter than the other, even if only by a fraction. Unequal leg length accounts for a lot of low back pain.		
		Step 7: Tell students that the weighted string is a simple tool that can be used to determine proper alignment and posture of the body. There are many other tools and techniques used in rehabilitative medicine that they will learn about in the Lesson 18.2 Lecture/Discussion.		
Lecture	20 min	Lesson 18.2 Lecture/Discussion Reference the Speaker Notes for each slide to assist you in discussing the talking points. You can view or print "Notes Pages" to use during the lecture for easy reference (in PowerPoint, select "View," then "Notes Page").	Lesson 18.2 PowerPoint Presentation	LO 1 LO 2 LO 3 LO 4 LO 5
Active Learning & Practice	10 min	Activity Description: Guest speaker		LO 1 LO 2 LO 3
		Step 1: Ask a guest speaker to come to your class to talk to students about the different types of techniques and tools they use to help rehabilitate patients. Some guest speakers bring in some of these tools to demonstrate and/or show the students.		LO 4 LO 5
		Step 2: Encourage students to ask questions about the tools and techniques used.		

	TIME	ACTIVITY & INSTRUCTIONS	MATERIALS	OBJECTIVES
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Review	5 min	Activity Description: Review exercises  Step 1: As a large group, go through the Lesson 18.2 exercises in the textbook.  Step 2: As students are reading their answers aloud, pay attention to their pronunciation and reinforce the correct pronunciation. Any exercises that are not completed in class may be assigned as homework.	Textbook – Lesson 18.2 exercises	LO 1 LO 2 LO 3 LO 4 LO 5
Homework Assignment		<ul> <li>Complete the Chapter 18 Review exercises.</li> <li>Instruct students to review the terms in the Word Analysis and Definition Tables from Lessons 18.1 and 18.2 and practice spelling and pronouncing them correctly.</li> </ul>		

Lesson 18.2 Masters		
(none)		