

## LESSON PLAN

**Course:** DH112 Introduction to Dental Hygiene Practice

**Topic:** Patient Reception and Ergonomic Practice

**Audience:** Adult Learners (Junior Level Dental Hygiene Students)

**Time:** 50 minutes

**Materials:** Computer, PowerPoint, Typodont

**Instructional Objectives:**

Upon completion of the lecture, the student should be able to:

1. Describe the rules of etiquette in relationship to patient reception and care.
2. Identify the range of working positions for a right-handed and left-handed clinician.
3. Discuss the elements of a neutral working position.
4. Explain the ergonomic risk factors of clinical dental hygiene practice.
5. Recommend daily or weekly stretches or exercises beneficial in preventing musculoskeletal disorders.

**References:**

American Dental Hygienists' Association. (2025). Standards for Clinical Dental Hygiene Practice.

Ayoub, H. M., & Darby, M. L. (2018). *Ergonomic best practices*. Dimensions of Dental Hygiene. <https://dimensionsofdentalhygiene.com/article/ergonomic-best-practices/>

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Gehrig, J. S. (2019). *Fundamentals of periodontal instrumentation* (8th ed.). Jones & Bartlett Learning.

Ludwig, E. A. (2022, September 23). *Ergonomic equipment considerations for the dental hygienist*. Dimensions of Dental Hygiene. <https://dimensionsofdentalhygiene.com/article/ergonomic-equipment-considerations-for-the-dental-hygienist/>

TIME	LESSON CONTENT	NOTES – MEDIA – Q/A
3 minutes	<p><b>I. ANTICIPATORY SET</b></p> <p><b>A. Introduction</b>  Our patients' comfortability and well-being should be an important consideration throughout an appointment. From introductions to treatment room set-up and services provided, all of it matters and makes an impact with our patients that carries over into our reputation as an office. However, as clinicians, we must also be able to function effectively in a way that ensures career longevity and affords us the ability to avoid unnecessary stress and fatigue on our bodies, such as various musculoskeletal disorders and injuries.</p> <p><b>B. Gain Attention/Motivate</b>  How does everyone here like being able to feel the things they are touching? Painting, knitting, weightlifting; all of these things, and more, become difficult tasks to a person suffering from a musculoskeletal disorder. Imagine going through the day losing feeling in your hands, numbness and tingling like little needles, waking up each night to your hands feeling as if they are on fire. This is an example of what someone with a musculoskeletal disorder may experience.</p> <p><b>C. Activate Prior Knowledge</b>  Can you recall a time when you had a positive experience at a doctor's office? What do you think made that experience stand out? When you sit at a desk in class for a long time, what do you notice about your posture or comfort? What adjustments could make it more comfortable?</p> <p><b>D. Establish Rationale</b>  By attending today's lecture, you are going to become familiar with how to prepare and properly greet and receive a patient for treatment. You will also be quipped with the knowledge, habits, and healthy practices you can take action on to keep your bodies healthy and prolong your careers.</p>	<p><b>Slide #1:</b> Title Slide: Patient Reception and Ergonomic Practice</p> <p><b>Q:</b> In your opinion, is it more important for a patient to be comfortable or the clinician?</p> <p><b>A:</b> Answers will vary, but the students will learn that the correct answer is "it is more important for the clinician to be 'comfortable', working in an ergonomic fashion".</p> <p><b>Slide #2:</b> Photo of treatment room layout.</p> <p><b>Slide #3:</b> Photo of person in pain (indicating hands).</p> <p><b>Q:</b> Can anyone share a positive, memorable experience they had at a doctor's or dental office?</p> <p><b>A:</b> Answers will vary based on experiences.</p>

TIME	LESSON CONTENT	NOTES – MEDIA – Q/A
1 minute	<p data-bbox="358 260 922 327">E. <u>Present Instructional Objectives</u> After today's lecture, you should be able to:</p> <ol data-bbox="407 365 1013 785" style="list-style-type: none"><li data-bbox="407 365 1013 436">1. Describe the rules of etiquette in relationship to patient reception and care.</li><li data-bbox="407 443 1013 514">2. Identify the range of working positions for a right-handed and left-handed clinician.</li><li data-bbox="407 520 1013 592">3. Discuss the elements of a neutral working position.</li><li data-bbox="407 598 1013 669">4. Explain the ergonomic risk factors of clinical dental hygiene practice.</li><li data-bbox="407 676 1013 785">5. Recommend daily or weekly stretches or exercises beneficial in preventing musculoskeletal disorders.</li></ol>	<p data-bbox="1040 260 1300 296">Slide #4: Objectives</p> <p data-bbox="1040 405 1373 506">Note: Primary information coming from the Wilkins' textbook, chapter 8.</p>

TIME	LESSON CONTENT	NOTES – MEDIA – Q/A
2 minutes	<p><b>I. PREPARATION FOR THE PATIENT</b></p> <p>a. Treatment Area</p> <ol style="list-style-type: none"> <li>i. Inviting</li> <li>ii. Surfaces prepared</li> <li>iii. Instruments</li> <li>iv. Equipment</li> <li>v. Patient chair</li> <li>vi. Clinician chair</li> </ol> <p>b. Records</p> <ol style="list-style-type: none"> <li>i. Review charts</li> <li>ii. Personal notes</li> <li>iii. Anticipate procedures</li> </ol>	<p><b>NOTES – MEDIA – Q/A</b></p> <p><b>Slide #5:</b> Preparation for the Patient</p> <p><b>Note:</b> Tx area should be prepped, clean, inviting, and ready to receive your patient so you may efficiently begin the appointment. Have patient chair set to a good height (not too low/high) and in supine position with arm rest open for patients to easily sit and clinician chair set to proper ergonomic height.</p>
2 minutes	<p><b>II. PATIENT RECEPTION</b></p> <p>a. Introduction</p> <ol style="list-style-type: none"> <li>i. Proper greeting</li> <li>ii. Your name</li> <li>iii. Role</li> </ol> <p>b. Escort Patient to Dental Chair</p> <ol style="list-style-type: none"> <li>i. Elderly Assistance</li> <li>ii. Wheelchairs</li> <li>iii. PPE</li> </ol>	<p><b>Slide #6:</b> Patient Reception</p> <p><b>Q:</b> What would be a proper greeting of an elderly patient?</p>
2 minutes	<p><b>III. POSITION OF THE PATIENT</b></p> <p>a. General Positions</p> <ol style="list-style-type: none"> <li>i. Upright <ol style="list-style-type: none"> <li>1. Reception</li> </ol> </li> <li>ii. Semi-supine <ol style="list-style-type: none"> <li>1. 45*</li> <li>2. Cardiovascular problems</li> <li>3. Respiratory problems</li> <li>4. Vertigo</li> </ol> </li> <li>iii. Supine <ol style="list-style-type: none"> <li>1. Brain &amp; heart level</li> <li>2. Main tx position</li> <li>3. Ideal circulation</li> </ol> </li> <li>iv. Trendelenburg <ol style="list-style-type: none"> <li>1. Back 10-15*</li> <li>2. Brain lower than heart</li> <li>3. Medical emergencies</li> </ol> </li> </ol> <p>b. The Dental Chair</p> <ol style="list-style-type: none"> <li>i. Comfort <ol style="list-style-type: none"> <li>1. Relaxed patient</li> </ol> </li> <li>ii. Ergonomic access <ol style="list-style-type: none"> <li>1. Thin back</li> </ol> </li> </ol> <p>c. Use of Dental Chair</p> <ol style="list-style-type: none"> <li>i. Controls</li> </ol>	<p><b>A:</b> Hello, Mrs. Jones. I am “XXX” and I will be your dental hygienist today. How are you?</p> <p><b>Slide #7:</b> Position of the Patient (photos of chair positions).</p> <p><b>Slide #8:</b> photo of dental chair.</p>

TIME	LESSON CONTENT	NOTES – MEDIA – Q/A
6 minutes	<p><b>POSITION OF THE CLINICIAN</b></p> <p><b>IV. NEUTRAL WORKING POSITION</b></p> <p>a. Objectives</p> <ol style="list-style-type: none"> <li>i. Build habits</li> <li>ii. Endurance</li> </ol> <p>b. Description of Neutral Seated Position</p> <ol style="list-style-type: none"> <li>i. Back           <ol style="list-style-type: none"> <li>1. Neutral spine</li> </ol> </li> <li>ii. Head           <ol style="list-style-type: none"> <li>1. &lt;20* tilt</li> </ol> </li> <li>iii. Eyes           <ol style="list-style-type: none"> <li>1. Downward</li> </ol> </li> <li>iv. Shoulders           <ol style="list-style-type: none"> <li>1. Relaxed</li> <li>2. Parallel to hips</li> </ol> </li> <li>v. Elbows           <ol style="list-style-type: none"> <li>1. Close to body</li> </ol> </li> <li>vi. Forearms           <ol style="list-style-type: none"> <li>1. Parallel to floor</li> </ol> </li> <li>vii. Wrist           <ol style="list-style-type: none"> <li>1. Straight with forearm</li> </ol> </li> <li>viii. Hips           <ol style="list-style-type: none"> <li>1. Slightly higher than knees</li> </ol> </li> <li>ix. Thighs           <ol style="list-style-type: none"> <li>1. Even weight distribution</li> </ol> </li> <li>x. Knees           <ol style="list-style-type: none"> <li>1. Slightly apart</li> </ol> </li> <li>xi. Feet           <ol style="list-style-type: none"> <li>1. Flat</li> </ol> </li> </ol> <p>c. Clinician–Patient Positioning</p>	<p><b>Slide #9:</b> Position of the Clinician with photo</p> <p><b>Note:</b> Have a chair available to demonstrate the various positions and have the students mimic.</p> <p><b>Slide #10:</b> Focus on upper body (photo).</p> <p><b>Slide #11:</b> Focus on lower body (photo).</p>
4 minutes	<p><b>V. CLINICIAN-PATIENT POSITIONING</b></p> <p>a. Working Distance</p> <ol style="list-style-type: none"> <li>1. 15-22inches</li> </ol> <p>b. Clock Position</p> <ol style="list-style-type: none"> <li>1. Right-handed           <ul style="list-style-type: none"> <li>- 8:00 - 12:00</li> <li>- 1:00 selectively</li> </ul> </li> <li>2. Left-handed           <ul style="list-style-type: none"> <li>- 4:00 – 12:00</li> <li>- 11:00 selectively</li> </ul> </li> </ol>	<p><b>Slide #12:</b> Clinician-Patient Position</p> <p><b>Slide #13:</b> Clock illustration with clinician.</p> <p><b>Note:</b> Be sure to note if there are left-handed students and demonstrate BOTH clock positions.</p>

TIME	LESSON CONTENT	NOTES – MEDIA – Q/A
2 minutes	<b>VI. TREATMENT AREA</b> a. The Clinician's Chair i. Traditional ii. Saddle iii. Balance ball	<b>Slide #14:</b> Treatment Area  <b>Slide #15:</b> Clinician's Chair
1 minute	b. Vision i. Lighting 1. Chair 2. Ceiling 3. Head-mounted 4. Loupe light	<b>Q:</b> What type of chair do you think you would like to use in practice?
6 minutes	ii. Magnification 1. Loupes 2. Through-the-lens 3. Ergo iii. Handpieces 1. Corded 2. Cordless 3. Sterilization iv. Instruments 1. Handles 2. Sharpened 3. Power instruments v. Gloves 1. Proper fit vi. Cords 1. Straight 2. coiled	<b>A:</b> Answers will vary, no right or wrong solution.  <b>Slide #16:</b> Lighting  <b>Slide #17:</b> Loupes  <b>Note:</b> Student will get to order loupes in 4 <sup>th</sup> quarter, after meeting with various loupe reps.  <b>Slide #18:</b> Handpieces  <b>Slide #19:</b> Instruments  <b>Slide #20:</b> Gloves  <b>Slide #21:</b> Cords
3 minutes	<b>VII. ERGONOMIC PRACTICE</b> a. Scope of Ergonomic Dental Hygiene i. Strain /fatigue ii. MSD iii. Arms-reach for all instruments	<b>Slide #22:</b> Scope of Ergo Dental Hygiene Practice
5 minutes	b. Related Occupational Problems i. Carpal Tunnel ii. Thoracic Outlet iii. Bursitis iv. Tendonitis v. Disk herniation	<b>Slide #23:</b> List of various MSD.
5 minutes	c. Ergonomic Risk Factors i. Static positions ii. Awkward positions iii. Repetition iv. Pinch force v. Vibration vi. Stress vii. Insufficient rest viii. Poor physical fitness	<b>Slide #24:</b> List of risk factors.

TIME	LESSON CONTENT	NOTES – MEDIA – Q/A
3 minutes	<b>VIII. SELF-CARE</b> a. Safe work practices b. Wellness	<b>Slide #25: Self-Care</b>  <b>Note:</b> NWP – neutral working position
3 minutes	i. Sleep ii. Rest iii. Nutrition iv. Physical activity v. NWP vi. Stress management vii. Environmental temperatures c. Daily Functional Movement Exercises i. Yoga ii. Strength training iii. Stretching iv. Chair-side stretching v. Chiropractic care vi. Physical therapy	<b>Note:</b> Colder temps make dexterity more difficult  <b>Q:</b> What types of activities do you do now, that you consider self-care?  <b>A:</b> Answers will vary, may include exercise, meditation, reading, massage, etc.  <b>Note:</b> Demonstrate some quick chair-side exercises (door frame stretch, neck rolls, finger stretching, etc.).
TIME	<b>SUMMARY:</b>	
2 minutes	<p>As health professionals, we must be knowledgeable and prepared for all aspects of our daily activities, including patient reception, perception, and preparation. Remember to be mindful of your patient’s experience, a relaxed and comfortable patient will be less anxious and receptive to treatments. However, it is important to keep the health and condition of your own bodies a priority. Be mindful of your ergonomics with every patient and even practice good habits at home and in your everyday activities. Musculoskeletal disorders are far too common in dentistry; however, there are actions you can take to prevent them from happening to you. Good ergonomics, healthy habits, and self-care must be a priority.</p>	<b>Slide #26: Yoga Poses</b>  <b>Slide #27: Questions?</b>  <b>Note:</b> Thank the learners for their attention and participation.

<b>TIME</b>	<b>LESSON CONTENT</b>	<b>NOTES – MEDIA – Q/A</b>
10 minutes	<p><b>CRITICAL THINKING ACTIVITY:</b></p> <p>Present various photo slides of clinicians and patients different positions. Evaluate them for proper ergonomics and discuss what should be done differently.</p>	<p>Slides #28-32: Photo Slides</p>

## Test Items

**Objective #1** - Describe the rules of etiquette in relationship to patient reception and care.

**Test Item #1:** How should a patient be greeted in the dental office when you are receiving them in the reception area?

- A. "Hello, I am Holly the hygienist!"
- B. "Hello, Mrs. Jones. I am Holly, and I will be your hygienist today."
- C. "Hello Bob, I am Holly, and I will be your hygienist."
- D. "Hello, Mr. Jones, you can follow me right this way, I will be working with you today."

**Objective #2** - Identify the range of working positions for a right-handed and left-handed clinician.

**Test Item #2:** What would be the best ergonomic clock-position a clinician would be in if they were scaling the buccal surfaces of tooth #3?

- A. Right-handed 12 o'clock, left-handed 3 o'clock.
- B. Right-handed 3 o'clock, left-handed 12 o'clock
- C. Right-handed 9 o'clock, left-handed 1 o'clock
- D. Right-handed 1 o'clock. left-handed 3 o'clock

**Objective #3** - Discuss the elements of a neutral working position.

**Test Item #3:** Evaluate the positions below and determine which is the best neutral working position.

- A. Feet flat on the floor, spine straight, hips even, head tilt less than 15°, arms close to body.
- B. Feet flat on the floor, spine straight, hips lower than the knees, head tilt less than 15°, arms close to the body.
- C. Forearms parallel to the floor, torso leaned towards the patient, raised shoulders.
- D. Forearms 45° to the floor, spine straight, head tilt less than 15°, hips even.

**Objective #4** - Explain the ergonomic risk factors of clinical dental hygiene practice.

**Test Item #4:** In a short paragraph, explain the ergonomic risk factors of clinical dental hygiene practice.

**Objective #5** - Recommend daily or weekly routines beneficial in preventing musculoskeletal disorders.

**Test Item #5: In 4-5 sentences**

**Correct Answer Key:**

1. B

2. C

3. A

4. Answers may vary slightly.

Clinical dental hygienists face several ergonomic risk factors that can lead to musculoskeletal disorders over time. These include prolonged static postures, awkward positioning, repetitive motions, and forceful exertions during procedures. Poorly designed equipment and inadequate breaks further contribute to strain on the neck, shoulders, back, and wrists

5. Answers may vary.

To reduce these risks, practitioners should use ergonomic tools, maintain neutral posture, take regular breaks, and incorporate stretching and strengthening exercises into their routines.

Hygienists can incorporate daily stretches like neck rolls, shoulder rolls, chest openers, wrist stretches, spinal twists, and hamstring or hip flexor stretches, especially if you sit for long periods. A few times per week, add strength and mobility exercises such as glute bridges, planks, bird-dogs, wall angels, squats, and resistance band rows to support posture and joint health. Set reminders to move every hour, add chairside stretches to their daily routine, maintain an ergonomic workspace, and stay hydrated to keep muscles functioning optimally.

SELF-EVALUATION  
OF YOUR STUDENT TEACHING EXPERIENCE:

**1. What did you do to try and establish good immediacy with the class? Did it work?**

Today I was with a new cohort, that I had not previously met with. I started by introducing myself and sharing details about my hygiene journey with them. I stood in front of them, not behind the podium and walked around the room a lot. I tried to make good eye contact and be upbeat and enthusiastic!

**2. What did you do with your hands while you lectured? Did you make gestures, fidget with an object, or hide them in your pocket? In looking back on this, do you think this was effective in helping you connect with the audience or emphasize important points?**

I tried not to fidget as much this time as I did the last. I made myself leave my necklace alone and did not have paper in my hands. I did have my hands in my pockets a lot, which is something I know I do often in clinic as well while walking around. While speaking about important points, I was speaking with my hands, and because of the ergonomic content of this lecture, I was able to be interactive with them. I would demonstrate a neutral working position, or clock position, and have them try the same. I think this was helpful and kept them engaged.

**3. Did you move around while you lectured? Did you move close to audience members or pace around the room?**

I was walking around more this time and would go from one side of the front space to the other. I did not stand in the center much because that is where the TV is, and it's not mounted very high.

**4. Where did your eyes most often focus? Did you make eye contact with the learners?**

I did try to make a lot of eye contact with the learners. I try to gauge understanding, or confusion, by looking at them.

**5. What did you do when you finished one content segment and were ready to move onto the next? Said unnecessary words like "okay" or "Um"? Asked if there were any questions? Made a verbal transition?**

I knew going into the first session that I default to "okay" more than I would like. However, I think I did better this time, there were less evaluations indicating that I used it excessively, and Mrs. McBane also thought the same on her evaluation.

**6. Describe how you used vocal variations? Did you change your vocal tone or speed any?**

I was a little more nervous with this group, I can hear my voice become a little shaky in the beginning of the lecture. A few times I wished I would have slowed down, but I think I had caught onto that and repeated myself more slowly to make sure I wasn't losing anyone.

**7. Explain your use of humor? What did you do or say?**

I was able to make them, and Mrs. McBane laugh. At one point, we were discussing general chair positions for the patient, and I gave them an anecdote. I explained how patients will sometimes give us a hard time about reclining in the chair, but doctors come in and tip them upside down and they don't utter a word!

**8. What did you do when you needed to emphasize main points?**

Emphasizing main points, I tend to repeat the information. I also nod my head while speaking and ask the class if they understand.

**9. What did you do if students were inattentive?**

Again, this time I did not notice much inattention. There was one girl who kept picking up her phone, so I went and stood nearly in front of her, and she put it down. I noticed her look at Mrs. McBane when she did it as well, to see if she had noticed. It didn't seem to happen again, that I could tell.

**10. What did you do to encourage student participation and engagement?**

This was easier this time, I think because the content allowed for more interaction. I had them modeling proper ergonomic positions and body postures. We also evaluated several photo examples of clinicians and they were asked to point out the errors or things the hygienist was doing accurately.

**11. What was the main thing you learned about yourself as a future educator from this experience?**

I still do not like to listen to myself, I feel like I sound really young! I also found this experience to be more fun than the last. I felt better prepared for this lecture, it's a topic I like to talk about, and I think that helped me to relax and be more confident.

**12. Reflect on your interactions and conversations with the site supervisor. Elaborate on insights and perspectives you gained from them regarding their unique experiences with teaching adult learners, and their professional experiences within the organization or institution where they work.**

Mrs. McBane did prepare me for this group ahead of time. She told me that they have been a tough group so far, a lot of big attitudes and frequently argumentative. She said that she had to sternly address them when they first began the program because of the disrespect that they were exhibiting to another instructor. That made me nervous. However, she said that if I made it clear with my actions and words, if necessary, from the beginning, that they seem to be better behaved. I was relieved that everything went well and maybe it was because we had an easy introduction, and they got to know my background before diving in? Mrs. McBane also said that although this group has been the most challenging so far, not all of them are like this. It can be hard to not let a few ruin our experiences and if I do face these challenges, to remember that, typically, the good times outweigh the bad.