

# The OHNEP Interprofessional Oral Health Faculty Toolkit

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## Adult Gerontology Acute Care Nurse Practitioner Program

### CURRICULUM INTEGRATION OF INTERPROFESSIONAL ORAL HEALTH CORE COMPETENCIES:

- Advanced Physical Assessment Across the Lifespan
- Principles of Adult Gerontology Acute Care I- II
- Principles of Adult Gerontology Acute Care III
- Resources



# INTRODUCTION

The **Oral Health Nursing Education and Practice (OHNEP)** program has developed an **Interprofessional Oral Health Faculty Tool Kit** to provide you with user-friendly curriculum templates and teaching-learning resources to use when integrating oral health and its links to overall health in your Adult Gerontology Acute Care Nurse Practitioner program.

Oral health and its relation to overall health has been identified as an important population health issue. *Healthy People 2020* (2011), the 2011 IOM Reports, *Advancing Oral Health in America* and *Improving Access to Oral Health Care for Vulnerable and Underserved Populations*, as well as the IPEC Competencies (2016), challenged HRSA to develop interprofessional oral health core competencies for primary care providers. Publication of the HRSA report, *Integration of Oral Health and Primary Care Practice* (2014), reflects those interprofessional oral health competencies that can be used by Adult Gerontology Acute Care Nurse Practitioners for faculty development, curriculum integration and establishment of “best practices” in clinical settings.

The HRSA interprofessional oral health core competencies, the IPEC competencies and the NONPF core competencies provide the framework for the curriculum templates and resources. Exciting teaching-learning strategies that take students from **Exposure to Immersion to Competence** can begin in the classroom, link to simulated or live clinical experiences and involve community-based service learning, advocacy and policy initiatives as venues you can readily use to integrate oral health into your existing primary care curriculum. The Adult Gerontology Acute Care Nurse Practitioner curriculum template illustrates how oral health can be integrated into acute care health assessment and clinical management courses.

The *Smiles for Life* interprofessional oral health curriculum provides a robust web-based resource for you to use along with the oral health curriculum template for each course. A good place to begin oral health integration is by transitioning the **HEENT** component of the history and physical exam to the **HEENOT** approach. In that way, you and your students will **NOT** forget about including oral health in patients encounters.

Research evidence continues to reveal an integral relationship between oral and systemic health. It is important for nurse practitioners on the frontline of acute care to have the oral health competencies necessary to recognize both normal and abnormal oral conditions and provide acute care patients with education, prevention, diagnosis, treatment and referral as needed.

We encourage you and your students to explore the resources in the templates as you “weave” oral health and its links to overall health into your Adult Gerontology Acute Care Nurse Practitioner program. If you need additional technical assistance, please feel free to contact us at **OHNEP@nyu.edu**.

## AGACNP Curriculum Integration of Interprofessional Oral Health Competencies in Advanced Physical Assessment

ADVANCED PHYSICAL ASSESSMENT ACROSS THE LIFESPAN		1) EXPOSURE: INTRODUCTION		2) IMMERSION: DEVELOPMENT		3) COMPETENCE: ENTRY-TO-PRACTICE	
<div>IPEC Competencies: Values and Ethics, Roles and Responsibilities Interprofessional Communication, Teams &amp; Teamwork</div> <div>HRSA Oral Health Competencies: Oral Health Risk Assessment, Oral Health Evaluation, Oral Health Preventive Intervention, Communication and Education</div> <div>NONPF Competencies: Assesses the complex acute, critical, and chronically-ill patient for urgent and emergent conditions, using both physiologically and technologically derived data, to evaluate for physiologic instability and risk for potential life-threatening conditions</div> <div>CONSTRUCTS</div>	ENTRY LEVEL ASSESSMENT	<div>KNOWLEDGE: ORAL EXAM</div> <div>Goal: Understand the oral exam</div> <div><ul style="list-style-type: none"><li>Complete <a href="#">Smiles for Life (SFL)</a> Module #7, including Clinical Cases, and submit Certificate of Completion</li><li>Review the materials provided in the <a href="#">ACE.S Teaching Strategies</a> that focus on oral health (NLN)</li></ul></div> <div>Read:</div> <div><ul style="list-style-type: none"><li><a href="#">Putting the Mouth Back in the Head: HEENT to HEENOT</a> (Haber et al., 2015)</li><li><a href="#">Oral Health: An Essential Component of Primary Care</a> (Hummel et al., 2016)</li></ul></div>	<div>SKILL/BEHAVIOR</div> <div>Goal: Describe best practices in dental caries management across the lifespan</div> <div><ul style="list-style-type: none"><li>Review <a href="#">ADA Adult Caries Risk Assessment Tool</a> for patients over age 6 (Appendix 1)</li><li>Read and discuss <a href="#">CAMBRA: Best Practices in Dental Caries Management</a> (Hurlbutt, 2011)</li></ul></div>	<div>SKILL/BEHAVIOR</div> <div>Goal: Demonstrate integration of HEENOT</div> <div><ul style="list-style-type: none"><li>Using SP in simulation experience, demonstrate competency in oral health history (including frequency of sugar/tobacco/alcohol intake), risk assessment and physical exam of adult in acute setting, identifying any oral abnormalities</li><li>Each student will compare acute care oral health assessment skills with classmate; review <a href="#">Impaired oral health status on admission is associated with poor clinical outcomes in post-acute inpatients: A prospective cohort study</a> (Shiraishi et al., 2018)</li></ul></div>			
		<div>KNOWLEDGE: ORAL CARE OF ADULT</div> <div>Goal: Understand oral care issues of adults in acute care</div> <div><ul style="list-style-type: none"><li>Complete <a href="#">Smiles for Life (SFL)</a> Modules #1 &amp; 3, including Clinical Cases, and submit Certificates of Completion</li><li>Read <a href="#">Oral Health Patient Facts</a>: Overview, Diabetes, HPV</li></ul></div>	<div>SKILL/BEHAVIOR</div> <div>Goal: Identify oral pathologies</div> <div><ul style="list-style-type: none"><li>Review Oral Abnormalities in the SFL Photo Gallery on the mobile app</li><li>Discuss diagnoses – related risk factors and management strategies</li></ul></div>	<div>SKILL/BEHAVIOR</div> <div>Goal: Describe oral health practices of different cultures</div> <div><ul style="list-style-type: none"><li>Read <a href="#">Tooth loss in middle-aged adults with diabetes and hypertension: Social determinants, health perceptions, oral impact on daily performance (OIDP) and treatment need</a> (Maia et al., 2018)</li><li>Each student will choose one culture and report on oral health practices of that culture</li></ul></div>			
		<div>KNOWLEDGE: ORAL CARE OF OLDER ADULT</div> <div>Goal: Understand oral care of older adults in acute care</div> <div><ul style="list-style-type: none"><li>Complete <a href="#">Smiles for Life (SFL)</a> Module #8, including Clinical Cases, and submit Certificate of Completion</li><li>Read <a href="#">Oral Health Patient Facts</a>: Older Adult</li></ul></div>	<div>SKILL/BEHAVIOR</div> <div>Goal: Documentation of oral health</div> <div><ul style="list-style-type: none"><li>Develop an electronic health record entry for an older adult with an acute care health condition (e.g., diabetes, pneumonia, congestive heart failure, dementia), which includes oral health history, risk assessment, exam and management plan (HEENOT)</li></ul></div>	<div>SKILL/BEHAVIOR</div> <div>Goal: Understand Issues related to oral health of older adults in acute care settings</div> <div><ul style="list-style-type: none"><li>Read <a href="#">Xerostomia Among Older Adults with Low Income: Nuisance or Warning?</a> (Lee et al., 2016)</li><li>Post and explain causes of xerostomia in older adults and management strategies on discussion board</li></ul></div>			

INTERPROFESSIONAL PARTNERSHIP & COLLABORATIVE PRACTICE FOR OPTIMIZATION OF PATIENT HEALTH OUTCOMES

# Smiles for Life: A National Oral Health Curriculum

Access Smiles for Life Modules and Resources here:

<https://smilesforlifeoralhealth.org>



# Smiles for Life: A National Oral Health Curriculum

## Download Smiles for Life Modules

To download the SFL Modules for classroom instruction:

1. Go to  
<https://www.smilesforlifeoralhealth.org>
2. Select "Teach Curriculum"
3. Select the course(s) you would like to download.
4. Select "Download Module"

### Download PowerPoint Presentation

#### Instructions



1. Click the appropriate link below
2. Select "**Save**" (NOT "Open")
3. Browse to choose desired location, and save file (some browsers may default to saving to the Downloads folder)

- The presentation is a PowerPoint **slide show** (.pps) which when opened will automatically display in presentation mode.
- To run the slide show, click on the file. Advance the slides using your mouse or the space bar. To exit slide show, click the ESC button.
- These presentations are locked and are not intended to be editable.
- PowerPoint presentations are only compatible with PC systems.
- A Mac compatible version of the presentation is available.

#### Download Module



Module 2:  
Child Oral  
Health

#### Teaching Case for Small Group Instruction: Pediatric

[Learner Version](#)  
[Moderator Version](#)



#### Speaker Notes



#### Download Video

Knee-to-Knee Child Oral Exam



Mac compatible  
version

# Smiles for Life: A National Oral Health Curriculum

## Recognizing Oral Abnormalities

Download the Smiles for Life mobile app to access the Photo Gallery.

AG-ACNP Students should find and review the following oral abnormalities:

- Linea Alba
- Geographic tongue
- Fissured tongue
- Aphthous ulcers
- Oral papilloma from HPV
- Candidiasis
- Herpes
- Denture Stomatitis
- Angular cheilitis
- Dental caries
- GERD
- Gingival Recession
- Gingivitis
- Periodontitis
- Abscess
- Hairy Leukoplakia
- Oral malignancy
- Melanoma



# APPENDIX 1

## Advanced Physical Assessment Across The Lifespan

### American Dental Association Caries Risk Assessment Form (Ages >6)

ADA American Dental Association® America's leading advocate for oral health			
Caries Risk Assessment Form (Age >6)			
Patient Name: _____			
Birth Date: _____		Date: _____	
Age: _____		Initials: _____	
	Low Risk	Moderate Risk	High Risk
<b>Contributing Conditions</b>			
Check or Circle the conditions that apply			
I.	Fluoride Exposure (through drinking water, supplements, professional applications, toothpaste)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
II.	Sugary Foods or Drinks (including juice, carbonated or non-carbonated soft drinks, energy drinks, medicinal syrups)	Primarily at mealtimes <input type="checkbox"/>	Frequent or prolonged between meal exposures/day <input type="checkbox"/>
III.	Caries Experience of Mother, Caregiver and/or other Siblings (for patients ages 6-14)	No carious lesions in last 24 months <input type="checkbox"/>	Carious lesions in last 7-23 months <input type="checkbox"/>
IV.	Dental Home: established patient of record, receiving regular dental care in a dental office	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<b>General Health Conditions</b>			
Check or Circle the conditions that apply			
I.	Special Health Care Needs (developmental, physical, medical or mental disabilities that prevent or limit performance of adequate oral health care by themselves or caregivers)	<input type="checkbox"/> No	Yes (over age 14) <input type="checkbox"/>
II.	Chemo/Radiation Therapy	<input type="checkbox"/> No	Yes (ages 6-14) <input type="checkbox"/>
III.	Eating Disorders	<input type="checkbox"/> No	<input type="checkbox"/> Yes
IV.	Medications that Reduce Salivary Flow	<input type="checkbox"/> No	<input type="checkbox"/> Yes
V.	Drug/Alcohol Abuse	<input type="checkbox"/> No	<input type="checkbox"/> Yes
<b>Clinical Conditions</b>			
Check or Circle the conditions that apply			
I.	Cavitated or Non-Cavitated (incipient) Carious Lesions or Restorations (visually or radiographically evident)	No new carious lesions or restorations in last 36 months <input type="checkbox"/>	1 or 2 new carious lesions or restorations in last 36 months <input type="checkbox"/>
II.	Teeth Missing Due to Caries in past 36 months	<input type="checkbox"/> No	<input type="checkbox"/> Yes
III.	Visible Plaque	<input type="checkbox"/> No	<input type="checkbox"/> Yes
IV.	Unusual Tooth Morphology that compromises oral hygiene	<input type="checkbox"/> No	<input type="checkbox"/> Yes
V.	Interproximal Restorations - 1 or more	<input type="checkbox"/> No	<input type="checkbox"/> Yes
VI.	Exposed Root Surfaces Present	<input type="checkbox"/> No	<input type="checkbox"/> Yes
VII.	Restorations with Overhangs and/or Open Margins: Open Contacts with Food Impaction	<input type="checkbox"/> No	<input type="checkbox"/> Yes
VIII.	Dental/Orthodontic Appliances (fixed or removable)	<input type="checkbox"/> No	<input type="checkbox"/> Yes
IX.	Severe Dry Mouth (Xerostomia)	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Overall assessment of dental caries risk: <input type="checkbox"/> Low <input type="checkbox"/> Moderate <input type="checkbox"/> High			
Patient Instructions: _____ _____			

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## AGACNP Curriculum Integration of Interprofessional Oral Health Competencies in Principles of Adult Gerontology Acute Care I- II

PRINCIPLES OF ADULT GERONTOLOGY ACUTE CARE I-II	1) EXPOSURE: INTRODUCTION	2) IMMERSION: DEVELOPMENT	3) COMPETENCE: ENTRY-TO-PRACTICE	INTERPROFESSIONAL PARTNERSHIP & COLLABORATIVE PRACTICE FOR OPTIMIZATION OF PATIENT HEALTH OUTCOMES
<b>IPEC Competencies:</b> Values and Ethics, Roles and Responsibilities Interprofessional Communication, Teams & Teamwork	<b>KNOWLEDGE: ORAL HEALTH EDUCATION</b> <i>Goal:</i> Understand importance of maintaining oral health throughout hospitalization  Read: • <a href="#">The Impact of Hospitalization on Oral Health</a> (Terezakis et al., 2011) • <a href="#">Oral Care of Hospitalised Older Patients in the Acute Medical Setting</a> (Salamone et al., 2013) • <a href="#">Oral health and oral care in short-term care</a> (Koistinen et al., 2019)  • Watch <a href="#">Oral Health in Older Adults in Acute Care Settings</a> (NICHE 2014)	<b>SKILL/BEHAVIOR</b> <i>Goal:</i> Provide comprehensive health maintenance services to patients in acute care  Read : • <a href="#">Who Needs Oral Care?</a> (Konradsen et al., 2014) • <a href="#">Evaluating and Managing Dental Complaints in Primary and Urgent Care</a> (Idzik and Krauss, 2013) • <a href="#">Improving the oral health of older people in hospital</a> (Gibney et al., 2018)  • Develop management plan for patients in acute care and include HEENOT in history, risk assessment, exam and management plan	<b>SKILL/BEHAVIOR</b> <i>Goal:</i> Advocate for smoking cessation programs in your acute care setting  Read: • <a href="#">High Intensity Interventions Promote Smoking Cessation Among Hospitalized Adults</a> (Ostroff, 2013) • <a href="#">Nursing Interventions for Smoking Cessation</a> (Rice et al., 2013)  • Develop an evidence-based plan for smoking cessation in older adults with COPD, diabetes, CAD or CVD	
<b>HRSA Oral Health Competencies:</b> Oral Health Risk Assessment, Oral Health Evaluation, Oral Health Preventive Intervention, Communication and Education	<b>KNOWLEDGE: ORAL CARE MAINTENANCE</b> <i>Goal:</i> Understand relationship of oral care and VAP & HAP  • Review <a href="#">Oral Health and Mechanically Ventilated Critically Ill Adults</a> (Jones et al., 2014) Read: • <a href="#">Reducing missed oral care opportunities to prevent non-ventilator associated hospital acquired pneumonia</a> (Munro & Baker, 2018) • <a href="#">Implementation and dissemination of a department of veterans affairs oral care initiative</a> (Munro et al., 2018) • <a href="#">Hospital Acquired Pneumonia Prevention Initiative-2</a> (Baker & Quinn, 2018)	<b>SKILL/BEHAVIOR</b> <i>Goal:</i> Provide comprehensive health maintenance services to reduce risk of VAP and non-VAP  Read: • <a href="#">Oral care after stroke: Where are we now?</a> (Lyons et al., 2018) • <a href="#">Prevalence of stroke-related sarcopenia and its association with poor oral status in post-acute stroke patients</a> (Shiraishi et al., 2018) • Develop an evidence-based oral care protocol for mechanically ventilated patients, include HEENOT in history, risk assessment, exam and management plan	<b>SKILL/BEHAVIOR</b> <i>Goal:</i> Collaborate interprofessionally to provide comprehensive oral healthcare services to mechanically ventilated patients  • Read <a href="#">The effect of tooth brushing, irrigation, and topical tetracycline administration on the reduction of oral bacteria in mechanically ventilated patients</a> (Hayashida et al., 2016) • Present an Interprofessional panel (e.g., AGCNP, MD, DDS, nutritionist, respiratory therapist) on oral health issues in hospitalized patients, Include dentures, nutrition, smoking, VAP, stroke, surgery.	
<b>NONPF Competencies:</b> Provides for the promotion of health and protection from disease by assessing for risks associated with care of complex acute, critical, and chronically-ill patients	<b>KNOWLEDGE: ORAL-SYSTEMIC CONNECTION</b> <i>Goal:</i> Understand importance of oral health care in palliative care settings  • Watch <a href="#">Oral Health at the End of Life</a> (Wholihan, 2014) • Watch <a href="#">Oral Health in Long-Term and Palliative Care Settings</a> (NICHE, 2014) • Read <a href="#">Developing an Interprofessional Oral Health Education System That Meets the Needs of Older Adults</a> (Atchison et al., 2019)	<b>SKILL/BEHAVIOR</b> <i>Goal:</i> Understand importance of oral health in palliative care settings  • Develop an evidence-based oral care protocol for patients in palliative care, include HEENOT in history, risk assessment, exam and management plan	<b>SKILL/BEHAVIOR</b> <i>Goal:</i> Collaborate interprofessionally to provide comprehensive oral healthcare services to adults in palliative care  • Develop an evidence-based oral care protocol for patient in palliative care • Present an Interprofessional panel (e.g., AGCNP, MD, DDS, speech & language pathologist) on oral health and symptom management in palliative care patients	



## AGACNP Curriculum Integration of Interprofessional Oral Health Competencies in Principles of Adult Gerontology Acute Care III

PRINCIPLES OF ADULT GERONTOLOGY ACUTE CARE III		1) EXPOSURE: INTRODUCTION		2) IMMERSION: DEVELOPMENT		3) COMPETENCE: ENTRY-TO-PRACTICE		
<div>IPEC</div> <div>Competencies:</div> <div>Values and Ethics, Roles and Responsibilities, Interprofessional Communication, Teams &amp; Teamwork</div> <div>HRSA Oral Health Competencies:</div> <div>Oral Health Risk Assessment, Oral Health Evaluation, Oral Health Preventive Intervention, Communication and Education</div> <div>NONPF Competencies:</div> <div>Assesses individuals with complex health issues and co-morbidities, including the interaction with aging and acute and chronic physical and mental health problems; Works collaboratively with a variety of health professionals to achieve patient care goals, promote stabilization and restoration of health in complex acute, critical, and chronic illness.</div> <div>CONSTRUCTS</div>		ENTRY LEVEL ASSESSMENT	<div>KNOWLEDGE: HOSPITALIZED ADULT WITH CHRONIC DISEASE</div> <div>Goal: Recognize oral health care needs of hospitalized patients with chronic diseases</div> <div>Students read about one chronic disease (Appendix 1) and present findings to class:</div> <div><ul style="list-style-type: none"><li>• Cardiovascular</li><li>• Kidney Disease</li><li>• Liver Disease</li><li>• HIV</li><li>• Diabetes</li><li>• Cancer</li></ul></div>		<div>SKILL/BEHAVIOR</div> <div>Goal: Identify oral manifestations of chronic disease in hospitalized adults</div> <div><ul style="list-style-type: none"><li>• Each student will develop a comprehensive oral care plan for patient with chronic disease and oral health needs, include HEENOT in history, risk assessment, exam and management plan</li><li>• Collaborate on case study (Appendix 2) of adult hospitalized for diabetic ketoacidosis</li></ul></div>		<div>COLLABORATIVE PANEL</div> <div>Goal: Collaborate interprofessionally to provide comprehensive oral healthcare services to adult in acute care with chronic disease and oral health care needs</div> <div><ul style="list-style-type: none"><li>• Students will create interprofessional panel to collaborate on developing a management plan for hospitalized patients with chronic disease and oral health care needs, including appropriate referral structures</li></ul></div>	
			<div>KNOWLEDGE: HOSPITALIZED ADULT IN ICU</div> <div>Goal: Recognize oral health care needs of hospitalized patients in ICU</div> <div>Read:</div> <div><ul style="list-style-type: none"><li>• <a href="#">Oral Health and Care in the ICU</a> (Munro et al., 2004)</li><li>• <a href="#">Periodontal Disease as a Risk Factor for Ischemic Stroke</a> (Grau et al., 2004)</li></ul></div>		<div>SKILL/BEHAVIOR</div> <div>Goal: Identify oral health care needs of patients in ICU</div> <div><ul style="list-style-type: none"><li>• <a href="#">Prevalence of stroke-related sarcopenia and its association with poor oral status in post-acute stroke patients</a> (Shiraishi et al., 2018)</li><li>• Student will develop comprehensive oral health care plan for adults in ICU, include HEENOT in history, risk assessment, exam and management plan</li></ul></div>		<div>COLLABORATIVE PANEL</div> <div>Goal: Collaborate interprofessionally to provide comprehensive oral healthcare services to hospitalized adults in ICU</div> <div><ul style="list-style-type: none"><li>• Students will create interprofessional panel (e.g., AGCNP, MD, DDS, respiratory therapists) to collaborate together on developing a management plan for patients in ICU</li></ul></div>	
			<div>KNOWLEDGE: HOSPITALIZED OLDER ADULTS WITH NEUROLOGICAL DISORDERS</div> <div>Goal: Recognize oral health needs of hospitalized older adults with neurologic problems</div> <div>Read:</div> <div><ul style="list-style-type: none"><li>• <a href="#">Randomised clinical trial: Efficacy of strategies to provide oral hygiene activities to nursing home residents with dementia who resist mouth care</a> (Jablonski et al., 2018)</li><li>• <a href="#">Ensuring Oral Health for Older Individuals with Intellectual and Development Disabilities</a> (Waldman &amp; Perlman, 2012)</li></ul></div>		<div>SKILL/BEHAVIOR</div> <div>Goal: Develop comprehensive oral health plan for hospitalized older adults with neurologic problems</div> <div><ul style="list-style-type: none"><li>• Read <a href="#">Parkinson's Disease Oral Health Module: Interprofessional Coordination of Care</a> (Jeter et al., 2018)</li><li>• Student will develop comprehensive oral health care plan for hospitalized older adults with Parkinson's disease, include HEENOT in history, risk assessment, exam and management plan</li></ul></div>		<div>COLLABORATIVE PANEL</div> <div>Goal: Collaborate interprofessionally on case study of older adult with cognitive decline and oral health needs</div> <div><ul style="list-style-type: none"><li>• Read <a href="#">Oral Health and Interprofessional Collaborative Practice</a> (Kaufman et al., 2016)</li><li>• AG-ACNP and dental students to collaborate on developing a comprehensive oral health management plan for older adults with dementia and oral health needs</li><li>• <a href="#">Maturation of the MOUTH Intervention: From Reducing Threat to Relationship-Centered Care</a> (Jablonski et al., 2016)</li></ul></div>	
INTERPROFESSIONAL PARTNERSHIP & COLLABORATIVE PRACTICE FOR OPTIMIZATION OF PATIENT HEALTH OUTCOMES								

## APPENDIX 1

## *Principles of Adult Gerontology Acute Care III*

### Oral Health Needs of Hospitalized Adults with Chronic Diseases

#### **Cardiovascular:**

Sanchez, P., Everett, B., Salamonson, Y., Ajwani, S., Bhole, S., Bishop, J., ... & George, A. Oral health and cardiovascular care: Perceptions of people with cardiovascular disease. *PLoS One*, 12(7), e0181189. doi: 10.1371/journal.pone.0181189.

#### **Kidney Disease:**

Blue, C., Isringhausen, K., & Dils, E. (2011). Raising oral health awareness among nephrology nurses. *Journal of Dental Hygiene*, 85(2), 151-157.

#### **Liver Disease:**

Groenkjaer, L.L. (2015) Oral care in hepatology nursing: Nurses' knowledge and education. *Gastroenterology Nursing*, 38(1), 22-30. doi: 10.1097/SGA.0000000000000086.

#### **HIV:**

Bradley E.L.P., Vidot, D.C., Gaul, Z., Sutton, M.Y., & Pereyra, M. (2018). Acceptability of oral rapid HIV testing at dental clinics in communities with high HIV prevalence in South Florida. *PLoS One*, 13(4), e0196323. doi: 10.1371/journal.pone.0196323.

#### **Diabetes:**

Poudel, P., Griffiths, R., Wong, V.W., Arora, A., & George, A. (2017). Knowledge and practices of diabetes care providers in oral health care and their potential role in oral health promotion: A scoping review. *Diabetes Research and Clinical Practice*, 130, 266-277. doi: 10.1016/j.diabres.2017.06.004.

#### **Cancer:**

Hartnett, E. (2015). Integrating oral health throughout cancer care. *Clinical Journal of Oncology Nursing*, 19(5), 615-619. doi: 10.1188/15.CJON.615-619.

Palay, C. (2017). Dental care: Unmet oral needs of patients with cancer and survivors. *Clinical Journal of Oncology Nursing*, 21(5), 629-632. doi: 10.1188/17.CJON.629-632.

## APPENDIX 2

## *Principles of Adult Gerontology Acute Care III*

### Diabetes Case Study

**Presentation:** A 48-year-old Hispanic woman with a long history of obesity, diabetes, dyslipidemia, and reactive airway disease presented to the hospital emergency department with a 5-day history of weakness, fever, productive cough, nausea, and vomiting.

Patient report and chart review confirmed that 2 years before this presentation, her diabetes had been managed with diet alone. In the past year, glipizide (Glucotrol), metformin (Glucophage), and ultralenteinsulin were added because of poor glycemic control.

On examination, her temperature was 99.1° F, blood pressure was 98/64 mmHg, pulse was 136, and respirations were 36. There was a strong smell of ketones in the exam room. The patient was drowsy but cogent. Her head and neck exam revealed poor dentition and symptoms of periodontal disease. Her lung sounds were clear without wheezes or rhonchi. Her heart sounds were normal. The abdominal exam revealed mild epigastric tenderness to deep palpation but no rebound tenderness or guarding. Extremities were well perfused with symmetric pulses.

Laboratory results were remarkable for a room air arterial blood gas with pH of 7.12, pCO<sub>2</sub> of 17mmHg, and bicarbonate of 5.6 mEq/l. Urinalysis revealed 4+ glucose and 3+ ketones. Chemistry panel revealed a glucose of 420 mg/dl, BUN of 16 mg/dl, creatinine of 1.3 mg/dl, sodium of 139mEq/l, chloride of 112 mEq/l, CO<sub>2</sub> of 11.2 mmol/l, and potassium of 5.0 mEq/l. Chest X-ray revealed no infiltrate.

#### Questions

- 1. Is this patient experiencing diabetic ketoacidosis (DKA)?**
- 2. What type of diabetes does this patient have?**
- 3. What kind of oral care would be important to provide to the patient?**
- 4. What is the relationship between diabetes and periodontal disease?**
- 5. Who is on your interprofessional team and what are the roles of each team member?**
- 6. What is included in your plan for inpatient treatment?**
- 7. What are the expectations for outpatient treatment?**

## ONLINE RESOURCES

- Layout © Centre for Interprofessional Education, University of Toronto, 2009

# RESOURCES

- Idzik, S., & Krauss, E. (2013). Evaluating and Managing Dental Complaints in Primary and Urgent Care. *The Journal for Nurse Practitioners*, 9(6), 329-338. doi: 10.1016/j.nurpra.2013.04.015
- Institute of Medicine. *Advancing Oral Health in America*. Washington, D.C.: National Academies Press; 2011. doi:10.17226/13086
- Interprofessional Education Collaborative. *Core Competencies for Interprofessional Collaborative Practice: 2016 Update*. Washington, DC; 2016. Retrieved from <https://nebula.wsimg.com/2f68a39520b03336b41038c370497473?AccessKeyId=DC06780E69ED19E2B3A5&disposition=0&alloworigin=1>.
- IOM (Institute of Medicine) and NRC (National Research Council). 2011. *Improving access to oral health care for vulnerable and underserved populations*. Washington, DC: The National Academies Press. Retrieved from <https://www.healthypeople.gov/2020/tools-resources/evidence-based-resource/improving-access-to-oral-health-care-for-vulnerable-and>
- Jablonski, R.A., Kolanowski, A., Therrien, B., Mahoney, E. K., Kassab, C., & Leslie, D. L. (2018). Randomised clinical trial: Efficacy of strategies to provide oral hygiene activities to nursing home residents with dementia who resist mouth care. *Gerodontology*, 35(4), 365-375. doi: 10.1111/ger.12357.
- Jablonski, R.A., Kolanowski, A., Winstead, V., Jones-Townsend, C., & Azuero, A. (2016). Maturation of the MOUTH Intervention: From Reducing Threat to Relationship-Centered Care. *Journal of Gerontological Nursing*, 42(3), 15-23. doi: 10.3928/00989134-20160212-05.
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