

Gerontological Nursing

ELEVENTH EDITION

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Eleventh Edition

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9 8 7 6 5 4 3 2 1

Printed in Mexico

Cataloging in Publication Data available on request from publisher

ISBN: 978-1-9752-4255-8

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This book is dedicated to those who have committed to gerontological nursing whose efforts, although often unrecognized and unappreciated, make a significant difference to the quality of life of a significant segment of our population.





Preface

Gerontological nursing has been an evolving and dynamic specialty that crosses multiple specialties. The complexities and challenges of this field have grown as greater diversity is present in the older population's health status, ethnicity, race, religion, family composition, sexual orientation, lifestyle, and goals. Whereas decades ago, the focus of most of their activities was related to the management of health conditions in older adults, today's gerontological nurses face a more informed population. Today's older adults desire active involvement in their care, expect to have treatment options thoroughly discussed with them, and want to actively participate in the plan of care developed. In addition to the management of the many chronic conditions that increase in prevalence with age, today's older adults may seek advice and assistance for measures to sharpen mental function, increase sexual satisfaction, cope with the behavioral problems of the grandchildren they are raising, reduce facial wrinkles, select the best nursing home to meet their needs, manage the ambivalence they feel about retirement, deal with grief over the death of their lesbian partner, or properly use medical cannabis for pain relief. They are interested in exploring complementary and alternative therapies that can assist them with maintaining their health and managing health conditions. The diversity, needs, interests, and expectations of today's older population definitely cause gerontological nursing to be a highly complex and interesting specialty.

Consistent with the changes in the older population and the growth of the specialty, *Gerontological Nursing* has evolved over time. The first edition of this text was launched when the specialty of gerontological nursing was young. At that time, the challenge was for nurses to gain an understanding

of the normal aging process and the unique aspects of caring for the diseases older adults presented. Today, nurses face a complex specialty that utilizes a wide range of knowledge. This new edition of *Gerontological Nursing* provides evidence-based knowledge on a wide range of topics to equip nurses to meet the holistic needs of an increasing and diverse older population.

TEXT ORGANIZATION

Gerontological Nursing, 11th edition, is organized into five units.

Unit 1, *The Aging Experience*, provides basic knowledge about the older population and the aging process. The growing cultural and sexual diversity of this population is discussed, along with the navigation of life transitions and the changes to the body and mind that typically are experienced.

Unit 2, *Foundations of Gerontological Nursing*, provides an understanding of the development and scope of the specialty, along with descriptions of the various settings that provide services to older adults. This unit reviews legal and ethical issues that are relevant to gerontological nursing and offers guidance in applying a holistic model to gerontological care.

Unit 3, *Health Promotion*, addresses the importance of measures to prevent illness and maximize function. Chapters dedicated to nutrition and hydration, sleep and rest, comfort and pain management, safety, and medications guide the nurse in identifying unique factors that can create risks, promoting basic health and preventing avoidable complications. New recommendations regarding vaccines have been included.

Unit 4, *Geriatric Care*, encompasses chapters dedicated to respiration, circulation, digestion

and bowel elimination, urinary elimination, reproductive system health, mobility, neurologic function, vision and hearing, endocrine function, skin health, and cancer. A review of the impact of aging, interventions to promote health, the unique presentation and treatment of illnesses, and integrative approaches to illness are discussed within each of these areas. In addition to a chapter on mental health disorders, a chapter reviewing delirium and dementia is included in recognition of the prevalence and care challenges of these conditions in the older population. Because chronic conditions affect most of this population, the last chapter of this unit is dedicated to nursing actions that can assist older individuals in living a full life with chronic conditions.

Unit 5, *Settings and Special Issues in Geriatric Care*, discusses the unique challenges gerontological nurses face in various care settings. Chapters in this unit cover rehabilitative care, acute care, long-term care, family caregiving, and end-of-life care. Chapters dedicated to spirituality and sexuality/intimacy support the holistic approach that is meaningful in gerontological care.

FEATURES

A variety of features enrich the content:

- **NEW! Assess Your Competency** offers questions based on the American Association of Colleges of Nursing's Recommended Baccalaureate Competencies and Curricular Guidelines for the Nursing Care of Older Adults.
- **Unfolding Patient Stories**, written by the National League for Nursing, are an engaging way to begin meaningful conversations in the classroom. These vignettes, which appear throughout the text near related content, feature patients from Wolters Kluwer's vSim for Nursing | Gerontology (codeveloped by Laerdal Medical) and DocuCare products; however, each Unfolding Patient Story in the book stands alone, not requiring purchase of these products. For your convenience, a list of these case studies, along with their location in the book, appears in the "Index of Selected Features" section later in this front matter.
- **Chapter Outlines** present an overview of the chapter's content.
- **Learning Objectives** prepare the reader for outcomes anticipated in reading the chapter.
- **Terms to Know** define new terms pertaining to the topic.
- **Communication Tips** offer suggestions to facilitate patient education and information exchange with older adults.
- **Consider This Case** features present clinical situations that offer opportunities for critical thinking. For your convenience, a list of these case studies, along with their location in the book, appears in the "Index of Selected Features" section later in this front matter.
- **Key Concepts** emphasize significant facts.
- **Points to Ponder** pose questions to stimulate thinking related to the content.
- **Assessment Guides** outline the components of general observations, interview, and physical assessment of major body systems. For your convenience, a list of the assessment guides, along with their location in the book, appears in the "Index of Selected Features" section later in this front matter.
- **Nursing Problem Highlights** provide an overview of selected nursing problems common in older adults.
- **Nursing Care Plans** demonstrate the steps in developing nursing problems, goals, and actions from identified needs. For your convenience, a list of the nursing care plans, along with their location in the book, appears in the "Index of Selected Features" section later in this front matter.
- **Bringing Research to Life** presents current research and describes how to apply that knowledge in practice.
- **Practice Realities** pose real-life examples of challenges that could be faced by a nurse in practice.
- **Critical Thinking Exercises** guide application.
- **Chapter Summary** reinforces key points and concepts.
- **Online Resources, Recommended Readings, and References** at the end of each chapter assist with additional exploration of the topic.

A COMPREHENSIVE PACKAGE FOR TEACHING AND LEARNING

To further facilitate teaching and learning, a carefully designed ancillary package has been developed to assist faculty and students.

Resources for Instructors

Tools to assist you with teaching your course are available upon adoption of this text at <http://thePoint.lww.com/Eliopoulos11e>.

- An **E-book** on **thePoint** gives you access to the book's full text and images online.
- The **Test Bank** lets you put together exclusive new tests from a bank containing hundreds of questions to help you in assessing your students' understanding of the material. Test questions link to chapter learning objectives. This test bank includes more than 900 questions.
- **PowerPoint Presentations** provide an easy way for you to integrate the textbook with your students' classroom experience, via either slide shows or handouts. Multiple choice and true/false questions are integrated into the presentations to promote class participation and allow you to use i-clicker technology.
- An **Image Bank** lets you use the photographs and illustrations from this textbook in your PowerPoint slides or as you see fit in your course.
- An **AACN Essentials Map** shows you how content connects with these important competencies.
- **Suggested Answers to the Critical Thinking Exercises in the Book** allow you to gauge whether students' answers are on the right track by providing main points that students are expected to address in the answers.
- Plus a **Sample Syllabus**.

A COMPREHENSIVE, DIGITAL, INTEGRATED COURSE SOLUTION: LIPPINCOTT® COURSEPOINT+

The same trusted solution, innovation, and unmatched support that you have come to expect from Lippincott CoursePoint+ is now enhanced with more engaging learning tools and deeper analytics to help prepare students for practice. This powerfully integrated digital learning solution combines learning tools, virtual simulation, real-time data, and the most trusted nursing education content on the market to make curriculum-wide learning more efficient and to meet students where they're at in their learning. And now, it's easier than

ever for instructors and students to use, giving them everything they need for course and curriculum success!

Lippincott CoursePoint+ for Eliopoulos: Gerontological Nursing, 11th edition includes the following:

- Engaging course content provides a variety of learning tools to engage students of all learning styles.
- A more personalized learning approach gives students the content and tools they need at the moment they need it, giving them data for more focused remediation and helping to boost their confidence.
- Powerful tools students need to learn the critical thinking and clinical judgment skills that will help them become practice-ready nurses, including the following:
 - *Lippincott's Adaptive Learning Powered by PrepU* provides a personalized learning experience for every student.
 - *vSim for Nursing | Gerontology* (also available for separate purchase), a virtual simulation platform codeveloped by Laerdal Medical and Wolters Kluwer, includes 12 gerontology patient scenarios that correspond to the National League for Nursing (NLN) Advancing Care Excellence for Seniors (ACES) Unfolding Cases. *vSim for Nursing | Gerontology* helps students develop clinical competence and decision-making skills as they interact with virtual patients in a safe, realistic environment. *vSim for Nursing* records and assesses student decisions throughout the simulation and then provides a personalized feedback log highlighting areas needing improvement.
- Unparalleled reporting provides in-depth dashboards with several data points to track student progress and help identify strengths and weaknesses.
- Unmatched support includes training coaches, product trainers, and nursing education consultants to help educators and students implement CoursePoint+ with ease.



Acknowledgments

There are many people who assisted in the development and revision of this book to whom I am most grateful.

Rachel Lucke, Senior Development Editor, and Jacqueline Saunders who filled that role before her provided relevant suggestions and editorial skills that contributed to this being a smooth process, and Vinodhini Varadharajalu, Editorial Coordinator, patiently helped me navigate the various aspects involved in production of the finished product.

My husband, George Considine, provided encouragement, patience, and support as I invested the time and energy in working on this revision.

Not to be forgotten is Bill Burgower, a Lippincott editor decades ago, who listened to my suggestion that their company should consider publishing a textbook for gerontological nurses, which resulted in me being invited to do so.

Lastly, but importantly, I offer deep appreciation and respect for the many nurses and nursing

assistants who have dedicated their careers to gerontological care. The realistic experiences they have shared have helped me in my writing to balance theory with practical advice to guide gerontological nursing actions.

Charlotte Eliopoulos

Wolters Kluwer would like to thank the following people for their contributions to the ancillary program:

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Digestion and Bowel Elimination

CHAPTER OUTLINE

Effects of Aging on Gastrointestinal Health

Gastrointestinal Health Promotion

Selected Gastrointestinal Conditions and Related Nursing Considerations

Dry Mouth (Xerostomia)
Dental Problems
Dysphagia
Hiatal Hernia
Esophageal Cancer
Peptic Ulcer
Cancer of the Stomach
Diverticular Disease
Colorectal Cancer
Chronic Constipation
Flatulence
Intestinal Obstruction
Fecal Impaction
Fecal Incontinence
Acute Appendicitis
Cancer of the Pancreas
Biliary Tract Disease

LEARNING OBJECTIVES

After reading this chapter, you should be able to:

1. Describe how aging affects gastrointestinal health.
2. Discuss measures to promote gastrointestinal health in older adults.
3. List symptoms and management of selected gastrointestinal conditions in older adults.

TERMS TO KNOW

Anorexia: lack of appetite

Cholelithiasis: the formation or presence of gallstones in the gallbladder

Diverticulitis: inflammation or infection of the pouches of intestinal mucosa

Dysphagia: difficulty swallowing

Esophageal dysphagia: difficulty with the transfer of food down the esophagus

Fecal incontinence: involuntary passage of stool

Flatus: gas in the intestinal tract

Gingivitis: inflammation of the gums surrounding the teeth

Hiatal hernia: portion of the stomach protrudes through an opening in the diaphragm

Oropharyngeal dysphagia: difficulty transferring food bolus or liquid from the mouth into the pharynx and esophagus

Periodontal disease: inflammation of the gums extending to the underlying tissues, roots of teeth, and bone

Digestion and bowel elimination are important functions of the gastrointestinal tract. Significantly fewer older people die from gastrointestinal problems than from diseases of other major body systems; however, these problems often are the source of many complaints and discomforts in this age group. Indigestion, belching, diarrhea, constipation, nausea, vomiting, anorexia, weight gain or loss, and **flatus** are among the bothersome problems that increasingly occur, even in the absence of organic cause. Gallbladder disease and various cancers of the gastrointestinal tract increase in incidence in later life. In addition, poor nutrition, medications, emotions, inactivity, and a variety of other factors influence the status of gastrointestinal health.

Usually, older adults are aware of their gastrointestinal discomforts and use various measures to manage symptoms of these problems. In some situations, misinformation can interfere with good gastrointestinal health (e.g., assuming that tooth loss is normal or believing a daily laxative is essential); in other circumstances, self-treatment can delay the diagnosis of pathologies (e.g., using antacids to mask symptoms of stomach cancer). Gerontological nurses play an important role in promoting gastrointestinal health in older adults and intervening when problems are identified.

EFFECTS OF AGING ON GASTROINTESTINAL HEALTH

The gastrointestinal system and accessory structures experience significant changes with age (see Chapter 5). The tongue atrophies, affecting the taste buds and decreasing taste sensations. Changes in taste sensations can also be related to xerostomia (dry mouth), the effects of some medications, diseases, and smoking. Saliva production decreases and swallowing may be more difficult. There is thinning of the oral mucosa and a weakening of the muscles involved in mastication, leading to a reduction in chewing efficiency. Gingival recession of the buccal surfaces of the teeth loosens tooth support. Degenerative changes in the smooth muscle lining of the lower esophagus result in

weaker esophageal contractions and weakness of the sphincter. As esophageal and stomach motility decrease, food can remain in the upper gastrointestinal system for a longer period of time; as a result, there is a risk of indigestion and aspiration. Decreased elasticity of the stomach reduces the amount of food that the stomach can accommodate at one time. The stomach has a higher pH as a result of the declines in hydrochloric acid and pepsin; this contributes to an increased incidence of gastric irritation in late life. The reduced presence of pepsin can interfere with the absorption of protein, whereas the decrease in hydrochloric acid can interfere with the absorption of calcium, iron, folic acid, and vitamin B₁₂. There are fewer cells on the absorbing surface of the intestinal walls affecting the absorption of dextrose, xylose, calcium, iron, and vitamins B, B₁₂, and D.

Slower peristalsis, inactivity, reduced food and fluid intake, drugs, and a diet low in fiber are responsible for the high incidence of constipation in older individuals. Decreased sensory perception may cause the signal for bowel elimination to go unnoticed, which can promote constipation. There is also a tendency toward incomplete emptying of the bowel with one bowel movement; 30 to 45 minutes after the initial movement, the remainder of the bowel movement may need to occur, and if not heeded, problems may develop.

The structure of the gallbladder and bile ducts is unchanged with age; bile salt synthesis decreases, however, contributing to the risk of gallstone development. The pancreas experiences fibrosis, atrophy, and fatty acid deposits, along with a reduction in pancreatic secretions; this can affect the digestion of fats and contribute to an intolerance for fatty foods. Although liver size decreases with age, liver function remains within normal limits. Hepatic blood flow can be reduced as a result of decreased cardiac output.

Healthy People 2030 Objective

Reduce the proportion of adults aged 45 years and over who have lost all their teeth.

GASTROINTESTINAL HEALTH PROMOTION

A variety of gastrointestinal conditions can be avoided by good health practices. Good dental hygiene (Box 18-1) and regular visits to the dentist can prevent disorders that can threaten nutritional intake, general health, comfort, and self-image.

BOX 18-1 Oral Health Practices for Older Adults

- Brush all tooth surfaces and the tongue at least twice daily with a soft-bristled toothbrush and fluoridated toothpaste. Use an up-and-down brushing motion. If arthritis, weakness, or other problems interfere with the ability to adequately brush teeth, obtain a large-handled, battery-powered, or electric-powered toothbrush.
- Floss between teeth daily. Floss aids are available to compensate for arthritic fingers or other problems that can interfere with flossing.
- If mouthwash is used, avoid those that contain alcohol. (Mouthwash is not a substitute for brushing.)
- Swab sticks (e.g., lemon-glycerin) should be avoided as they dry the oral mucosa and erode tooth enamel.
- Brush the teeth or rinse the mouth after consuming candy or other sweets.
- If dentures are worn, remove them at night and soak them in water. Clean the dentures and the gums of the mouth before replacing the dentures in the mouth.
- If hard candy and gum are desired, use sugar-free varieties.
- Visit a dentist every 6 months. Less frequent visits are acceptable if a complete set of dentures is worn, but to detect oral diseases, dental evaluation remains important; consult with a dentist as to suggested frequency of visit.

The proper quantity and quality of foods can enhance general health and minimize the risk of indigestion and constipation. (See Chapter 11 for more specific information on ways to promote nutritional health.) Knowledge of the relationship of medications to gastrointestinal health is also important.

Natural ways to promote bowel elimination are important for older adults to incorporate into their daily routines, including good fluid intake, a diet rich in fruits and vegetables, activity, and the establishment of a regular time for bowel elimination (Fig. 18-1). Dietary fiber intake of 20 to 35 g/d is advisable; however, if fiber intake has been low, the amount should be gradually increased to prevent gas, bloating, diarrhea, and other symptoms. If a person dislikes eating high-fiber foods, these foods can be added to other foods (e.g., adding wheat bran to ground beef or muffins) to mask the taste. Plenty of fluids should accompany increased fiber intake. Because of the tendency for incomplete emptying of the bowel at one time, opportunity should be provided for full emptying and for repeated attempts at subsequent elimination. Sometimes, an older person's request to be taken to the bathroom or to have a bedpan for bowel elimination shortly before a movement occurs is viewed as an unnecessary demand and ignored; it is then wondered why bowel incontinence results. It is useful for older adults to attempt a bowel movement following breakfast, because the morning activity and ingestion of food and fluid following a period of rest stimulate peristalsis.

Astute assessment can reveal problems that patients may have omitted sharing with their healthcare providers and can identify practices that interfere with good health (Assessment Guide 18-1). Table 18-1 lists possible nursing problems related to gastrointestinal conditions.



FIGURE 18-1 ● A diet rich in fruits and vegetables is one natural means to promote bowel elimination.



ASSESSMENT GUIDE 18-1: GASTROINTESTINAL FUNCTION

GENERAL OBSERVATIONS

- **General appearance.** Pallor can be associated with blood loss from gastrointestinal bleeding. Weakness and fatigue can be due to malnutrition, fluid and electrolyte imbalances, or bleeding. Note obesity or unusual thinness.
- **Odors.** Unusual breath odors can be associated with disorders. Halitosis can indicate poor oral hygiene practices, disease of the oral cavity or esophagus, lung abscess or infection, liver disease, or uremia.
- **Skin.** Dry skin and skin with poor turgor can indicate dehydration; scaling, itching, discolored skin, or skin eruptions can result from a variety of nutritional deficiencies.

INTERVIEW

Carefully structured questions can reveal hidden problems, particularly in older adults who accept some gastrointestinal symptoms as normal or who have lived with these symptoms for so long that they no longer consider them abnormalities. Questions should review topics such as the following:

- **Status of teeth or dentures.** "When was your last dental exam? How do you care for your teeth or dentures? When did you get your dentures; how do they fit? Do you have any pain, bleeding, or other symptoms?"
- **Taste, appetite.** "Does food taste differently to you than it did in the past? What do you do to make food taste better? How is your appetite; how does it compare to earlier years?"
- **Symptoms.** "Do you ever have a sore mouth, difficulty swallowing, choking, a sense that something has 'gone down the wrong hole,' nausea, vomiting, bleeding from your mouth, blood in your vomitus or stool, pain or burning in your stomach or intestines, diarrhea, constipation, gas, bleeding from your rectum?" Specific questions should be asked to explore each positive response.
- **Weight.** "Have you noticed any recent changes in your weight? Have you been trying to gain or lose weight?"
- **Digestion.** "How often do you have indigestion? What seems to cause it and how is it managed? Is there a sense of fullness or discomfort in the chest after meals? Does regurgitation or belching ever occur?"
- **Elimination.** "How often do you have a bowel movement? Do you have to take special measures to move your bowels? If so, what are they? Do you strain to have a bowel movement? Is there ever blood in your stools or on the toilet tissue?

What are the color and consistency of your bowel movements?"

- **Diet.** "Describe what and when you eat in a typical day. Do foods have a different taste to you? Can you shop for and cook meals on your own? Has your eating pattern changed?"
- **Colorectal screening.** Ask if colorectal screening (e.g., fecal occult blood testing, sigmoidoscopy, and colonoscopy) has been done.

Further questions may be necessary in response to certain problems that emerge through the interview.

PHYSICAL EXAMINATION

Inspection, auscultation, percussion, and palpation aid in validating problems identified through the interview and in detecting undisclosed disorders. A systematic examination of the gastrointestinal system would review the following:

- **Lips.** Note symmetry, color, moisture, and general condition. Because capillaries are abundant in the lips, a bluish discoloration could reflect poor oxygenation. Cracks and fissures can be associated with riboflavin deficiencies, jagged teeth, or poorly fitting dentures.
- **Oral cavity.** With a tongue depressor and flashlight, inspect the mouth. The mucous membrane should be moist and may be pink or more darkly pigmented. Excessive dryness of the mucosa or tongue can indicate dehydration. Note lesions or areas of irritation, which could be caused by teeth, dentures, or pathologic conditions. White beads in the oral cavity can be a sign of moniliasis infections and should be cultured. Bleeding and swollen gums are most commonly associated with periodontal disease. Swollen gums also can result from phenytoin therapy or leukemia. Lead poisoning causes a bluish black line along the edge of the gums, but only if teeth are present. Older people can develop lead poisoning due to occupational exposure or contact within their home environment.
- **Tongue.** Examine the top and bottom surface of the tongue. A coating on the tongue can be associated with poor hygiene or dehydration. A smooth, red tongue occurs with iron, vitamin B₁₂, or niacin deficiencies. Thick, white patches can indicate leukoplakia, which could be precancerous. Give attention to lesions on the tongue that have been present for several weeks because they can be cancerous; they more frequently occur on the bottom surface than on the top of the tongue. Varicosities on the undersurface of the tongue are not unusual findings. Determine if the individual can move the tongue side to side and up and down.



ASSESSMENT GUIDE 18-1: GASTROINTESTINAL FUNCTION (*continued*)

- **Pharynx.** During normal swallowing, the vagus nerve causes the soft palate to rise and block the nasopharynx so that aspiration is prevented. To test this function, press a tongue depressor on the middle of the tongue, but not so far back that gagging results, and ask the patient to say “ah.” The soft palate should rise when “ah” is said. If soreness, redness, or white patches are present in the throat, a culture is warranted.
- **Abdomen.** Have the patient void and then lie supine on a firm surface; inspect the abdomen. Ask about any scars that are present; the patient may have forgotten to mention an appendectomy that occurred 50 years ago. Striae, or stretch marks, are pink or blue if newly developed and silvery white if old; they can result from obesity, ascites, pregnancy, or tumors. Note rashes, indentations, and other findings. Both sides of the abdomen should be symmetrical with no bulging areas. A symmetrical distension most commonly is due to obesity but can also be associated with ascites or tumors. Central, lower abdominal (i.e., below the umbilicus) distension occurs with bladder distension or tumors of the uterus or ovaries. Central, upper abdominal distension may result from gastric dilation or pancreatic tumors. The abdomen should rise and fall in conjunction with respirations. Peristaltic activity may be observed; sometimes, gently flicking a finger on the abdomen will stimulate peristalsis. With the diaphragm of the stethoscope, bowel sounds can be heard about once every 5 to 15 seconds; they usually are irregular. If no bowel sounds are heard, try stimulating them by flicking a finger on the abdomen. No sounds for at least 5 minutes can indicate the absence of bowel sounds, and medical evaluation would be warranted. Loud, gurgling sounds indicate increased peristaltic activity. Palpation of the abdomen should normally reveal no masses.
- **Rectum.** Perform a rectal examination with the patient in a standing position, bent over the examination table, or in a left lateral position with the right hip and knee flexed. Inspect the perianal area first. Flaccid skin sacs around the anus are hemorrhoids. Fissures, tumors, inflammation, and poor hygienic practices may be noted. Ask the patient to bear down, which could make additional hemorrhoids or rectal prolapse visible. Ask the patient to bear down again and insert a lubricated gloved finger into the anal canal. Assure the patient that it is normal to feel as if a bowel movement is imminent. The sphincter should tighten around the finger. Masses or other abnormalities along the rectal wall should be noted. A hard mass that prevents full palpation of the rectum may be a fecal impaction. Impactions may or may not be movable. If it is a fecal impaction, fecal material will be found on the glove or a discharge will occur when the examining finger is withdrawn.
- **Stool.** Obtain a stool specimen; fecal material withdrawn during the rectal examination can give clues to problems. Black, tarry stools can be associated with the ingestion of iron preparations or iron-rich foods or can indicate upper gastrointestinal bleeding; bright-red blood accompanies bleeding from the lower bowel or hemorrhoids; pale, fatty stool can occur with absorption problems; gray or tan stool is caused by obstructive jaundice; and mucus in the stool may result from inflammation.



COMMUNICATION TIP

If during the interview patients deny any problems with constipation when asked about their bowel elimination, it could be beneficial to ask them what measures they take to maintain bowel regularity. By probing, it may be discovered that patients are routinely using laxatives, giving themselves enemas, or experiencing regular bouts of diarrhea. Asking specific questions about these issues can aid in revealing problems that otherwise could be missed.

SELECTED GASTROINTESTINAL CONDITIONS AND RELATED NURSING CONSIDERATIONS

Dry Mouth (Xerostomia)

Saliva serves several important functions, such as lubricating soft tissues, assisting in remineralizing teeth, promoting taste sensations, and helping to control bacteria and fungi in the oral cavity. Reduced saliva, therefore, can have significant consequences.

TABLE 18-1 Nursing Problems Related to Gastrointestinal Problems

Causes or Contributing Factors	Nursing Problem
Anemia, constipation, obesity, vitamin and mineral deficiencies, dehydration	Weakness; reduced participation in activities
Age-related decreased colonic peristalsis and duller neural impulses for signal to defecate, anorexia, obesity, hemorrhoids, lack of roughage in diet, dehydration, habitual laxative use	Constipation
Medications, peptic ulcer, gastritis, ulcerative colitis, diverticulitis, diabetes, fecal impaction, tube feedings, stress	Diarrhea
Indigestion, constipation, hemorrhoids, flatus	Acute pain
Uncontrolled diabetes, infection, peritonitis, diarrhea, vomiting, blood loss, insufficient fluid intake, high-solute tube feedings	Dehydration
Diabetes, malnutrition, hemorrhoids	Potential for infection
Intestinal obstruction, anorexia, nausea, vomiting, poor dental status, altered taste sensations, constipation	Insufficient nutritional intake
Altered taste sensations, ethnic preferences, inactivity, lack of motivation to eat well	Weight gain
Diabetes, cancer, gingivitis, periodontal disease, jagged teeth, poorly fitting dentures, dehydration, malnutrition, dry mouth	Oral pain; poor dental status; insufficient food intake

Dry mouth can result from a variety of factors in addition to age-related slight declines in saliva secretion. Many of the medications used by older people (e.g., diuretics, antihypertensives, anti-inflammatories, and antidepressants) can affect salivation. Sjögren syndrome, a disease of the immune system, can reduce salivary gland function and cause severe dryness of the mucous membrane. Mouth breathing and altered cognition also contribute to this problem.

People with dry mouth benefit from frequent oral hygiene, not only because of the comfort obtained but also to reduce the higher risk of dental disease related to dry mouth. Saliva substitutes (e.g., Biotene Oral Balance, Orajel Dry Mouth Moisturizing, Salivart) are available as gels and rinses; however, sipping water to relieve dryness and stimulating saliva production with hard sugarless candy and gum are effective for many individuals. Research has shown that in medically compromised older adults with xerostomia, chewing gum can increase the flow rate of unstimulated salivary flow (Dodds et al., 2023).

Healthy People 2030 Objective

Reduce the proportion of adults aged 45 years and over with moderate and severe periodontitis.

Dental Problems

Dental care is important throughout an individual's life. Dental examination can be instrumental in the early detection and prevention of many problems that affect other body systems. Poor condition of teeth can restrict food intake, which can cause constipation and malnourishment (see Chapter 11); it can also detract from appearance, which can affect socialization, and this can result in a poor appetite, which also can lead to malnourishment. **Periodontal disease** can predispose older adults to systemic infection. Although dental care is important in preventing these problems, financial limitations prevent many older people from seeking dental attention. Some have the misconception that dentures eliminate the need for regular visits to the dentist; others, like many younger people, fear the dentist. The nurse should encourage regular dental examination and promote dental care, explaining that serious diseases can be detected by the dentist and helping patients find free or inexpensive dental clinics. Understanding how modern dental techniques minimize pain can alleviate fears. Although some older people may not have had the benefit of fluoridated water or fluoride treatments when younger, topical fluoride treatments are as beneficial to the teeth of older people as they are to younger teeth. The nurse should instruct patients to inform their dentists about health problems and medications they take to help them determine how procedures need to

be modified, what healing rate to expect, and which medications should not be administered.

Dental problems can be caused by tooth decay from an excessive intake of sweets due to altered taste sensation, a poor diet, or a low-budget carbohydrate diet. Deficiencies of B vitamins and calcium, hormonal imbalances, hyperparathyroidism, diabetes, osteomalacia, Cushing disease, and syphilis can be underlying causes of dental problems, and certain drugs, such as phenytoin, which can cause **gingivitis**, or antihistamines and antipsychotics, which cause severe dry mouth, can play a part. The aging process itself takes its toll on teeth. Surfaces are commonly worn down from many years of use, varying degrees of root absorption occur, and loss of tooth enamel can increase the risk of irritation to deeper dental tissue. Although benign neoplastic lesions develop more frequently than malignant ones, cancer of the oral cavity, especially in men, increases in incidence with age, as does moniliasis, which is often associated with more serious problems, such as diabetes or leukemia. It should not be assumed that all white lesions found in the mouth are moniliasis; biopsy is important to make sure they are not cancerous. Periodontal disease, which damages the soft tissue surrounding the teeth and supporting bones, has a high incidence among older adults and is a major cause of tooth loss. Dental caries occur less frequently in older people, but they remain a problem.



KEY CONCEPT

With age, the teeth experience a wearing down on the surfaces, decrease in the size and volume of pulp, increased brittleness, varying degrees of root absorption, and a loss of enamel.

Good oral hygiene is especially important to older people, who already may be having problems with **anorexia** or food distaste. Although the evidence is limited, some research suggests that poor periodontal health could increase the risk for cognitive decline (Asher et al., 2022; Banakar et al., 2023). The teeth, gums, and tongue should be brushed regularly using a soft toothbrush, which also can be used in gentle gum massage for people with dentures. Brushing is superior to using swabs, even for the teeth of unconscious patients. Daily flossing of natural teeth should also be performed. Because the buccal mucosa is thinner and less vascular with age, trauma to the oral cavity needs to be avoided. The nurse should notify the dentist and primary provider of an atonic or atrophic tongue, lesions, mucosa discoloration, loose teeth, soreness, bleeding, or any other problem identified during inspection and care of the oral cavity.

Healthy People 2030 Objective

Reduce the proportion of people who can't get the dental care they need when they need it.

Dysphagia

The incidence of swallowing difficulties increases with age. As swallowing depends on complex mechanisms involving several cranial nerves and the muscles of the mouth, face, pharynx, and esophagus, anything that impacts those structures can cause **dysphagia**. Gastroesophageal reflux disease (GERD) is a common cause, as are stroke and structural disorders. Dysphagia can be **oropharyngeal**, characterized by difficulty transferring food bolus or liquid from the mouth into the pharynx and esophagus and more common in people with neurologic damage, or **esophageal**, involving difficulty with the transfer of food down the esophagus and more common in people with motility disorders, sphincter abnormalities, or mechanical obstructions caused by strictures. Symptoms can be mild, such as occasional difficulties swallowing certain types of food, to a complete inability to swallow.

Careful assessment and observation assist in diagnosing the cause of the problem. The nurse should ask patients with dysphagia:

- When the problem began
- What other symptoms accompany the dysphagia (chest pain, nausea, or coughing)
- What types of foods trigger symptoms (e.g., solids or liquids)
- If the problem is intermittent or present with every meal

Observing food intake can offer insights into the nature of the problem. Referral to a speech-language pathologist is essential to developing an effective plan of care.

Prevention of aspiration and promotion of adequate nutritional status are major goals in the care of patients with dysphagia. The nurse should follow the recommendations of the speech-language therapist closely. Often, a soft diet and thickening of liquids are recommended to promote ease of swallowing; however, there are various levels of dietary modification that can be prescribed ranging from pureed to mechanically altered. Patients with dysphagia should eat in an upright position, ingesting small bites in an unhurried manner. Verbal cues may be needed. An easily accessible suction machine is beneficial in the event of choking. It is important to monitor food intake and weight.

Hiatal Hernia

The incidence of **hiatal hernia** increases with age, affecting more than half of people in the United States over age 50 years and is of greater incidence in older women. There is some thought that the low-fiber diet of Americans contributes to the high prevalence of this condition. The two types of hiatal hernia are sliding (axial) and rolling (paraesophageal). The sliding type is the most common and occurs when a part of the stomach and the junction of the stomach and esophagus slide through the diaphragm. Most patients with GERD have this type of hiatal hernia. In the rolling or paraesophageal type, the fundus and greater curvatures of the stomach roll up through the diaphragm. Heartburn, dysphagia, belching, vomiting, and regurgitation are common symptoms associated with hiatal hernia. These symptoms are especially problematic when the patient is recumbent.

Pain (sometimes mistaken for a heart attack) and bleeding also may occur. Diagnosis is confirmed by a barium swallow and esophagoscopy.

Most patients are managed medically. If the patient has obesity, weight reduction can minimize the problem. A bland diet may be recommended, as may the use of milk and antacids for symptomatic relief. Several small meals each day rather than three large ones help improve hiatal hernias and may be advantageous to older adults in coping with other age-related gastrointestinal problems. Eating before bedtime should be discouraged. Some patients may find it helpful to sleep in a partly recumbent position. H₂ blockers, such as ranitidine, cimetidine, or nizatidine, and proton pump inhibitors like lansoprazole and omeprazole often are prescribed. Nursing Care Plan 18-1 offers a sample care plan for the patient with hiatal hernia.

NURSING CARE PLAN 18-1

THE OLDER ADULT WITH HIATAL HERNIA

Problem: Acute pain

Goal

The patient is free from discomfort related to hiatal hernia

Nursing Actions

- Assist the patient in identifying situations that cause discomfort (e.g., bending, bedtime snacking); advise the patient to avoid them.
- Teach and support low-calorie diet if obesity is a problem.
- Advise the patient to eat five to six small-portioned meals during the day rather than three large meals; in a hospital or institutional setting, consult with dietician to arrange this meal plan.
- Instruct the patient to eat meals slowly and to sit upright while eating and for at least 1 hour thereafter.
- Discourage consumption of spicy foods, caffeinated beverages, carbonated beverages, and alcohol.
- Advise the patient to stop smoking if the patient has this habit; refer to smoking cessation program as needed.
- Advise the patient against consuming food for at least 2 hours prior to bedtime or nap.
- Instruct the patient to avoid heavy lifting, bending, wearing girdles or tight pants, and coughing or sneezing strenuously.
- Prevent constipation to avoid straining during bowel movements.
- Elevate upper portion of the bed by placing blocks under the head of the bed (this is preferable to raising upper portion of mattress due to risk of shearing force).
- Administer antacids as prescribed.

Nursing Problem: Insufficient nutritional intake

Goal

The patient consumes the prescribed diet; the patient is free from abdominal discomfort

Nursing Actions

- Consult with nutritionist and primary provider to develop diet plan appropriate for the patient.
- Instruct the patient to eat five or six small-portioned meals rather than three large ones.
- Identify foods that increase symptoms, and instruct the patient to omit these from diet; offer foods of equal nutritive value to replace food eliminated from diet if necessary.
- Record and monitor weight and dietary intake.

**KEY CONCEPT**

Several small meals throughout the day, rather than three large ones, not only are beneficial in the management of hiatal hernia but also have advantages for the gastrointestinal health of all older adults.

Esophageal Cancer

Although the incidence has been decreasing, most people affected by cancer of the esophagus are of advanced age. The most common types are squamous cell carcinoma and adenocarcinoma. This disease commonly strikes between the ages of 45 and 70 years and is of higher incidence in men. Black men with a history of alcohol use disorder and heavy smoking have a higher incidence of squamous cell esophageal carcinoma, whereas adenocarcinoma occurs more in White individuals. Poor oral hygiene and chronic irritation from tobacco, alcohol, and other agents contribute to the development of this problem. Barrett esophagus, a condition in which the normal lining of the esophagus is replaced by a type of lining usually found in the intestines (intestinal metaplasia), is associated with an increased risk of developing this cancer (Khieu & Mukherjee, 2023).

Dysphagia, weight loss, excessive salivation, thirst, hiccups, anemia, and chronic bleeding are symptoms of the disease. Unfortunately, symptoms often are not recognized until the disease is advanced, contributing to a poor prognosis. Barium swallow, esophagoscopy, and biopsy are performed as diagnostic measures. Treatment options include surgical resection, radiation, chemotherapy, laser therapy, and photodynamic therapy. Benign tumors of the esophagus are rare in older people.

Peptic Ulcer

In addition to stress, diet, and genetic predisposition as causes, particular factors are believed to account for the increased incidence of ulcers in older people, including longevity; more precise diagnostic evaluation; and the fact that ulcers can be a complication of chronic obstructive pulmonary disease, which is increasingly prevalent. Drugs commonly prescribed for older adults that can increase gastric secretions and reduce the resistance of the mucosa include aspirin, reserpine, tolbutamide, phenylbutazone, colchicine, and adrenal corticosteroids. Other risk factors include smoking, heavy alcoholic beverage consumption, caffeine use, high stress, and *Helicobacter pylori* infection.

Peptic ulcers tend to present with more acute symptoms in older adults, such as pain, bleeding, obstruction, and perforation. Diagnostic and

therapeutic measures resemble those used for younger adults. Addressing risk factors is important. The nurse should be alert to complications associated with peptic ulcer, which are more likely to occur with older adults, such as constipation or diarrhea caused by antacid therapy and pyloric obstruction resulting in dehydration, peritonitis, hemorrhage, and shock.

**POINT TO PONDER**

In what ways do diet, activity, emotions, and other factors affect your appetite, diet, digestion, and bowel elimination? Do you notice any patterns that you could correct, and if so, how?

Cancer of the Stomach

The incidence of gastric cancer increases with age, occurring most frequently in people between 50 and 70 years of age, with an average age of diagnosis of 68 years. It is more prevalent among men, people who smoke cigarettes, people living below the poverty threshold, and Black, Hispanic, and Asian/Pacific Islander individuals. Adenocarcinomas account for most gastric malignancies. Fortunately, the number of new cases in the United States has been decreasing, although it is more common in other countries (American Cancer Society, 2024).

Anorexia, epigastric pain, weight loss, and anemia are symptoms of gastric cancer; these symptoms may be insidious and easily mistaken for indigestion problems. Bleeding and enlargement of the liver may occur. Symptoms related to pelvic metastasis may also develop. Diagnosis is confirmed by barium swallow and gastroscopy with biopsy. Surgical treatment consisting of a partial or total gastrectomy is preferred. Chemotherapy and radiation, usually used together, may be used to destroy the cancer cells. If detected early, the prognosis is good, but when advanced, there is a poor prognosis. A diet low in red meats and high in antioxidants is believed to be helpful in preventing stomach cancer.

**KEY CONCEPT**

Symptoms of gastric cancer can be insidious and easily mistaken for indigestion.

Diverticular Disease

Multiple pouches of intestinal mucosa in the weakened muscular wall of the large bowel, known as diverticulosis, are common among older people. Chronic constipation, obesity, hiatal hernia, and atrophy of

the intestinal wall muscles with aging contribute to this problem. The low-fiber, low-residue diets that are common in Western societies are a major reason that diverticulosis is common in this country but rare in many third world countries. Most cases involve the sigmoid colon; many cases are asymptomatic. If symptoms are present, they can include slight bleeding, as well as a change in bowel habits (constipation, diarrhea, or both) and tenderness on palpation of the left lower quadrant. Usually, a barium enema identifies the problem. Surgery is not performed unless severe bleeding develops. Medical management is most common and includes an increase in dietary fiber intake, weight reduction, and avoidance of constipation.

Bowel contents can accumulate in the diverticula and decompose, causing inflammation and infection; this is known as **diverticulitis**. Although fewer than half the patients with diverticulosis develop diverticulitis, most patients who do are older adults. Older males tend to experience this problem more than any other group.

Overeating, straining during a bowel movement, alcohol, and irritating foods may contribute to diverticulitis in the patient with diverticulosis. Abrupt onset of pain in the left lower quadrant, similar to that of appendicitis but over the sigmoid area, is a symptom of this problem. Nausea, vomiting, constipation, diarrhea, low-grade fever, and blood or mucus in the stool may also occur. These attacks can be severely acute or slowly progressing; although the acute attacks can cause peritonitis, the slower forms can also be serious because of the possibility of lower bowel obstruction resulting from scarring and abscess formation or of rupture. In addition to the mentioned complications, fistulas to the bladder, vagina, colon, and intestines can develop. During the acute phase, efforts focus on reducing infection, providing nutrition, relieving discomfort, and promoting rest. Usually nothing is ingested by mouth, and intravenous therapy is used. When the acute episode subsides, the patient is taught to consume a low-residue diet. Surgery, performed if medical management is unsuccessful or if serious complications occur, may consist of a resection or temporary colostomy. Continued follow-up should be encouraged.

Colorectal Cancer

Cancer at any site along the large intestine is common with advancing age. The sigmoid colon and rectum tend to be frequent sites for carcinoma; in fact, colorectal cancer is the third most common malignancy in the United States. Although the pattern of symptoms frequently varies for each person, some common symptoms include the following:

- Rectal bleeding, bloody stools
- Change in bowel pattern

- Feeling of incomplete emptying of bowel
- Anorexia
- Nausea
- Abdominal discomfort, pain over affected region
- Weakness, fatigue
- Unexplained weight loss
- Anemia

Some older patients ignore bowel symptoms, believing them to be from constipation, poor diet, or hemorrhoids. The patient's description of bowel problems is less reliable than a digital rectal examination, which detects half of all carcinomas of the large bowel and rectum. Fecal occult blood testing is effective for early detection of colonic tumors. Diagnostic tests include colonoscopy with biopsy and CT colonography (virtual colonoscopy). Surgical resection with anastomosis or the formation of a colostomy is usually performed. Medical-surgical nursing textbooks can provide information on this surgery, and nurses should consult them for specific guidance on caring for patients with this condition.



KEY CONCEPT

The American Cancer Society recommends that beginning at 45 years of age individuals obtain an annual stool occult blood, fecal immunochemical test, and digital rectal examination because they can detect many cancers of the large bowel and rectum. In addition, a flexible sigmoidoscopy or CT colonography every 5 years or a colonoscopy every 10 years is advised as an important means to detect colorectal cancer. After age 75 years, screening should be based on prior screening history, overall health, and personal preference. Risk factors may warrant more frequent screening. Colorectal cancer screening is not recommended for people over age 85.

It is important to realize that a colostomy can present many problems for older adults. In addition to having to adjust to many bodily changes with age, a colostomy presents a major adjustment and a threat to a good self-concept. Older adults may feel that a colostomy further separates them from society's view of normal. Socialization may be impaired by the patient's concern over the reactions of others or by fear of embarrassing episodes. Reduced energy reserves, arthritic fingers, slower movement, and poorer eyesight are among the problems that may hamper the ability to care for a colostomy, thus causing dependency on others to assist with this procedure. This need for assistance may be perceived as a significant loss of independence for older people. Tactful, skilled nursing intervention can promote psychological

as well as physical adjustment to a colostomy. Continued follow-up is beneficial to assess the patient's changing ability to engage in this self-care activity, identify problems, and provide ongoing support and reassurance.

Chronic Constipation

Constipation is a common concern for older adults (see Nursing Problem Highlight 18-1). Many factors can contribute to this problem, including:

- Inactive lifestyle
- Low fiber and low fluid intake
- Depression
- Laxative abuse
- Certain medications, such as opiates, sedatives, and aluminum hydroxide gels

- Dulled sensations that cause the signal for bowel elimination to be missed
- Failure to allow sufficient time for complete emptying of the bowel

A diet high in fiber and fluid and regular activity can promote bowel elimination, and particular foods that patients find effective (e.g., prunes or chocolate pudding) can be incorporated into the regular diet. A mixture of raisins, prunes, dates, and currants can be a nourishing, tasty snack that promotes bowel elimination. (For individuals with chewing impairments, this can be blended with yogurt or applesauce.) Providing a regular time for bowel elimination is often helpful; mornings tend to be the best time for older adults to empty their bowels. Sometimes rocking the trunk from side to side and back and forth while sitting on the toilet will

NURSING PROBLEM HIGHLIGHT 18-1

CONSTIPATION

Overview

Constipation is a condition in which there is an infrequent passage of dry, hard stools. Some of the findings consistent with constipation include decreased frequency of bowel movements (as compared with the patient's normal pattern); straining to have bowel movements; hard, dry stools; abdominal distension and discomfort; palpable mass and sense of pressure or fullness in the rectum; poor appetite; backache and headache; reduced activity level; and request for or use of laxatives or enemas.

Causative or Contributing Factors

Age-related decrease in peristalsis, inactivity, immobility, hemorrhoidal pain, poor dietary intake of fiber and fluids, dehydration, certain diseases (e.g., hypothyroidism), surgery, dependency on laxatives or enemas, and side effects of medications (e.g., antacids, calcium, anticholinergics, barium, iron, and narcotics).

Goal

The patient establishes a regular pattern of bowel elimination and passes a stool of normal consistency without straining or experiencing discomfort.

Interventions

- Establish and maintain record of frequency and characteristics of bowel movements.
- Ensure that the patient consumes at least 1300 mL fluids daily (unless contraindicated).
- Review dietary pattern with the patient and educate as needed regarding the inclusion of high-fiber foods in diet; monitor dietary intake.
- Assist the patient in developing a program to increase activity level as appropriate.
- Assist the patient in developing a regular schedule for toileting; provide toileting assistance as needed; ensure privacy is provided during toileting; if bedpan must be used, be sure the patient is in upright position, unless contraindicated, and made comfortable.
- Consider use of herbs with laxative effects, such as aloe, dandelion root, cascara sagrada, senna, and rhubarb.
- Consult with the primary provider regarding use of vitamin C supplements several times daily until stool is soft (not to exceed 5000 mg/d).
- Administer laxatives, as prescribed; avoid long-term use of laxatives unless the patient's condition warrants otherwise.
- Monitor for fecal impaction.
- Assess the patient's use of laxatives and enemas; if dependency on laxatives or enemas for bowel elimination exists, educate the patient about hazards associated with this dependency and develop a plan to gradually taper usage of laxative or enema (abrupt discontinuation is contraindicated).
- Educate the patient as to nonpharmacologic means to stimulate bowel movement.

stimulate a bowel movement. Only after these measures have failed should medications be considered.



KEY CONCEPT

Measures to promote bowel elimination include scheduling a regular time for this function, drinking at least 1.5 L of fluids daily unless contraindicated, incorporating high-fiber foods into the diet, engaging in physical activity, and rocking the trunk from side to side and back and forth while sitting on the toilet.

Older people may need education concerning bowel elimination. The safe use of laxatives should be emphasized to prevent laxative misuse. The patient should be aware that diarrhea resulting from laxative abuse may cause dehydration, a serious threat to life. Dandelion root, cascara sagrada, senna, and rhubarb are herbs that stimulate bowel movement and can be taken to prevent constipation.

Older adults in a hospital or nursing home may benefit from an elimination chart that reflects the time, amount, and characteristics of bowel movements. This chart can help the nurse prevent constipation and fecal impaction by providing easily accessible data regarding bowel elimination. Even older people in the community can benefit from the use of an elimination record that they can maintain themselves.

Chronic constipation that does not improve with the usual measures may require medical evaluation, including anal, rectal, and sigmoid examinations, to determine the presence of any underlying cause.

Flatulence

Flatulence, which is common in older adults, is caused by constipation, irregular bowel movements, certain foods (e.g., the high-fiber foods promoted for increased dietary intake in recent years), and poor neuromuscular control of the anal sphincter. Achieving a regular bowel pattern and avoiding flatus-producing foods may relieve this problem, as may the administration of specific medications intended for this purpose. Sitting upright after meals is helpful in allowing gas to rise to the fundus of the stomach and be expelled.

Discomfort associated with the inability to expel flatus can occur occasionally. Increased activity can provide relief, as may a knee-chest position, if possible. A flatus bag consisting of a rectal tube with an attached plastic bag that prevents the entrance of air into the rectum can be beneficial in expelling flatus and providing relief.

Intestinal Obstruction

Partial or complete impairment of flow of intestinal contents in the large intestines most often occurs due to cancer of the colon; adhesions and hernias are the primary cause of obstructions in the small

intestine. Other causes of blockage include diverticulitis, ulcerative colitis, hypokalemia, vascular problems, and paralytic ileus, a mechanical obstruction that can occur following surgery due to nerves being affected by the extended lack of peristaltic activity.

Symptoms vary depending on the site and cause of the obstruction:

- Small bowel obstruction causes upper and mid-abdominal pain in rhythmic recurring waves related to the small intestine's attempt to push the contents through the obstruction. Vomiting occurs and may bring some relief.
- Obstructions occurring past the ileum cause abdominal distension so severe that the raised diaphragm can inhibit respirations. Vomiting is more severe than with small bowel blockages and initially is composed of semidigested food and later contains bile and is more watery.
- Obstruction of the colon causes lower abdominal pain, altered bowel habits, distension, and a sensation of the need to defecate. Vomiting usually does not occur until late, when the distension reaches the small intestine.

The nurse should review symptoms thoroughly and note bowel sounds. Bowel obstruction can cause high-pitched peristaltic rushes to be heard on auscultation. If the obstruction has persisted for a long time or the bowel has been significantly damaged, bowel sounds decrease and eventually are absent.

Timely intervention is essential to prevent bowel strangulation and serious complications. X-rays and blood evaluation typically are done to determine the cause and extent of the problem. Intestinal intubation is the major treatment and often helps to decompress the bowel and allow the obstruction to be broken. If medical management is unsuccessful or if the cause is due to vascular or mechanical obstructions, surgery is required. In addition to supporting the medical or surgical treatment plan, nurses need to promote the patient's comfort and ensure that fluid and electrolyte balance is restored and maintained.

Fecal Impaction

Prevention of constipation aids in avoiding fecal impaction. Observing the frequency and character of bowel movements may aid in detecting the development of an impaction; a bowel elimination record is essential for older people in a hospital or nursing home for identifying alternations in bowel elimination. Indications of a fecal impaction include the following:

- Distended rectum
- Abdominal and rectal discomfort
- Abdominal distension

CONSIDER THIS CASE



Mr. C is a 75-year-old participant in an adult day care program. In interviewing him, you learn that he had a cerebrovascular accident 2 years ago that left him with some right-sided weakness. His medical record indicates that he also has a history of hiatal hernia, depression, hypertension, and osteoarthritis. He is taking antihypertensive, antidepressant, and nonsteroidal anti-inflammatory drugs.

THINK CRITICALLY

- 1. What threats to gastrointestinal health exist for Mr. C?
- 2. What measures could be taken to reduce those threats?

- Oozing of fecal material around the impaction, often mistaken as diarrhea
- Palpable, hard fecal mass
- Rectal bleeding
- Urinary retention
- Nausea, vomiting
- Fever
- Rapid heartbeat from straining to pass feces

Because policies may vary, nurses should review the permissive procedures of their employing agency to ensure that removal of a fecal impaction is an acceptable nursing action. An enema, usually oil retention, may be prescribed to assist in the softening and elimination process. Manual breaking and removal of feces with a lubricated gloved finger will promote removal of the impaction. Sometimes, injecting 50 mL hydrogen peroxide through a rectal tube will cause breakage of the impaction as the hydrogen peroxide foams. Care should be taken not to traumatize or overexert the patient during these procedures.

Fecal Incontinence

Involuntary defecation, **fecal incontinence**, refers to the inability to voluntarily control the passage of stool. It is most often associated with fecal impaction in older adults who are institutionalized or physically or cognitively impaired. For this reason, the initial step is to assess for the presence of an impaction. If an impaction is not present, the nurse must assess for other causes. Possible causes of bowel incontinence include decreased contractile strength, impaired automaticity of the puborectal and external anal sphincter (secondary to age-related muscle weakness or injury to the pudendal nerve), loss of cortical control, and reduced reservoir capacity (secondary to surgical resection or the presence of a tumor). Proctosigmoidoscopy, proctography, and anorectal manometry are among the diagnostic tests used to evaluate this disorder. The cause of the incontinence dictates the treatment approach, which could include bowel retraining (Nursing Care Plan 18-2), drugs, surgery, or biofeedback.

NURSING CARE PLAN 18-2

THE OLDER ADULT WITH FECAL INCONTINENCE

Nursing Problem: Fecal incontinence

Goal

Nursing Actions

The patient achieves partial or complete restoration of bowel control.

- Record and evaluate the patient's bowel elimination pattern.
- Establish consistent time to toilet based on pattern.
- Position the patient in best physiologic position for bowel movement: sitting with normal posture.
- Have the patient lean forward or prop feet on stool to increase intra-abdominal pressure.
- Instruct the patient to bear down and attempt to defecate.
- Record results; ensure that the patient does not develop fecal impaction.
- If necessary, stimulate anorectal reflex with glycerin suppository 30–45 minutes before scheduled bowel movement.
- Supplement toilet activities with exercise and good fluid (minimally 1500 mL/d) and fiber intake unless contraindicated.

Acute Appendicitis

Although acute appendicitis does not occur frequently in older people, it is important to note that it may present with altered signs and symptoms if it does occur. The severe pain that occurs in younger people may be absent in older adults, whose pain may be minimal and referred. Fever may be minimal, and leukocytosis may be absent. These differences often cause a delayed diagnosis. Prompt surgery will improve the patient's prognosis. Unfortunately, delayed or missed diagnosis and the inability to improve the general status of the patient before this emergency surgery can lead to greater complications and mortality in older people with appendicitis.

Cancer of the Pancreas

Pancreatic cancer primarily affects older adults, peaking between ages 70 and 79 years, and is difficult to detect until it has reached an advanced stage. Risk factors for developing the disease include cigarette smoking, diabetes, obesity, and chronic pancreatitis. Anorexia, weakness, weight loss, and wasting are generalized symptoms easily attributed to other causes. Dyspepsia, belching, nausea, vomiting, diarrhea, constipation, and obstructive jaundice may occur as well. Fever may or may not be present. The person may experience epigastric pain radiating to the back. This pain is relieved when the person leans forward and is worsened when a recumbent position is assumed. Surgery is performed to treat this problem. Unfortunately, the disease is generally so advanced by the time diagnosis is made that the prognosis is usually poor.

Biliary Tract Disease

Cholelithiasis, the formation or presence of gallstones in the gallbladder, increases with age and affects females more frequently than males. Pain, often following meals, is the primary symptom. Treatment measures include nonsurgical therapies, such as rotary lithotrite treatment and extracorporeal shock wave lithotripsy, and standard surgical procedures. Obstruction, inflammation, and infection are potential outcomes of gallstones and require monitoring.

Cancer of the gallbladder primarily affects older people, especially females. Fortunately, this disease does not occur frequently. Pain in the right upper quadrant, anorexia, nausea, vomiting, weight loss, jaundice, weakness, and constipation are the usual symptoms. Although surgery may be performed, the prognosis for the patient with cancer of the gallbladder is poor.

BRINGING RESEARCH TO LIFE

Loneliness and Depressive Symptoms Are High Among Older Adults With Digestive Disease and Associated With Lower Perceived Health

Source: Cohen-Mekelburg, S., Jordan, A., Kenney, B., Cohen-Mekelburg, S., Jordan, A., Kenney, B., Burgess, H. J., Chang, J. W., Hu, H. M., Tapper, E., Langa, K. M., Levine, D. A., & Waljee, A. K. (2023). *Clinical Gastroenterology and Hepatology*, 22(3), P621–P629. <https://doi.org/10.1016/j.cgh.2023.08.027>

Individuals with digestive symptoms and diseases often are referred to and managed by gastroenterologists. These specialists are effective at diagnosing and offering treatment options for these problems. However, there is a risk that other problems these individuals may have that do not involve the gastrointestinal system, may not be identified and addressed.

This study analyzed Health and Retirement Study data that consisted of a nationally representative sample of individuals aged 50 years and older. The researchers examined the presence of loneliness, depression, and social isolation in people with digestive disease and those without digestive disease. It was identified that those individuals with digestive disease were more likely to report poor or fair health, loneliness, and moderate or severe depression.

It is easy for psychosocial problems to not surface during times that gastrointestinal problems are being addressed. Not identifying and effectively addressing these problems could affect patients' management of their gastrointestinal problems and compliance with the related plan of care. In addition, not addressing these mental health issues could lead to other serious health problems for the affected individuals. This reinforces the importance of comprehensive assessment regardless of the specialty service in which people receive care. Identified problems not related to the specialty service should be addressed as possible or referred to the appropriate service for treatment.

PRACTICE REALITIES

A local church with a membership of more than 2000 people has initiated a health ministry program and surveyed their members to assess needs. One of the findings of the survey was that less than 10% of the adults older than 60 years of age had ever had a colonoscopy. All of the respondents had insurance that could cover the cost of the procedure, so financial hardship wasn't an obstacle.

The church asks you to assist them in developing a campaign to encourage colorectal screening.

What would you envision the components of this program to be?

What strategies could stimulate interest of the church members?

CRITICAL THINKING EXERCISES

1. What age-related changes affect bowel elimination?
2. Describe the changes in dental care that have occurred since today's older adults were children and the ways this will affect the dental health of future generations of older people.
3. What preventive measures could you recommend to older adults to promote bowel elimination?
4. What are some actions that a nursing home could take to assess the presence of dysphagia and to monitor their residents for new or worsening dysphagia symptoms on an ongoing basis?

Chapter Summary

Although most of the gastrointestinal problems experienced by older adults are not life threatening, they can significantly affect the quality of life and health status of this population, thereby making their effective management important. Some gastrointestinal conditions can be prevented by good health practices, including regular oral hygiene, sound dietary practices, regular bowel elimination, and prompt attention to symptoms.

Gastrointestinal symptoms, although common, can indicate serious medical problems in older adults and need to be taken seriously. Conditions such as xerostomia, dysphagia, hiatal hernia, esophageal cancer, peptic ulcer, cholelithiasis, and cancer of the stomach, colon, and pancreas occur with greater frequency in older adults. Diagnosis of these problems can be difficult because of atypical symptomatology, self-medication that masks symptoms, and easy confusion with disorders of other systems. Astute questioning and alertness to subtle symptoms during the assessment can help these conditions to be diagnosed and treated early.

Online Resources

American Dental Association

<https://www.ada.org>

Centers for Disease Control and Prevention: Colorectal Cancer

<https://www.cdc.gov/colorectal-cancer/index.html>

Crohn's & Colitis Foundation of America

<https://www.crohnscolitisfoundation.org>

National Institute of Dental and Craniofacial Research

<https://www.nidcr.nih.gov>

United Ostomy Associations of America

<https://www.ostomy.org>

References

- American Cancer Society. (2024). *Key statistics about stomach cancer*. Retrieved January 5, 2024, from <https://www.cancer.org/cancer/stomach-cancer/about/key-statistics.html>
- Asher, S., Stephen, R., Mantyla, P., Suominen, A. L., & Solomon, A. (2022). Periodontal health, cognitive decline, and dementia: A systematic review and meta-analysis of longitudinal studies. *Journal of the American Geriatrics Society*, 70(9), 2695–2709.
- Banakar, M., Sadabadi, Y., Mehran, M., & Abbasi, F. (2023). Beyond the mouth: The impact of periodontal disease on dementia. *Evidence-Based Dentistry*, 24, 138–139. Retrieved January 26, 2024, from <https://doi.org/10.1038/s41432-023-00925-0>
- Dodds, M. W. J., Haddou, M. B., & Day, J. E. L. (2023). The effect of gum chewing on xerostomia and salivary flow rate in elderly and medically compromised subjects: A systematic review and meta-analysis. *BMC Oral Health*, 23(1), 406.
- Khieu, M., & Mukherjee, S. (2023). Barrett esophagus. *StatPearls* (Internet). StatPearls Publishing. Retrieved January 24, 2024, from <https://www.ncbi.nlm.nih.gov/books/NBK430979/>

Recommended Readings

- Artale, S., Terzoni, S., Destrebecq, A., Sansone, C. M., Vitale, M. T., Sala, E., & Ferrara, P. (2023). Abdominal massage and laxative use for constipation: A pilot study. *British Journal of Nursing*, 32(14), 666–671.
- Barry, B. J., & Chang, Y. P. (2022). A standardized positive physical approach to improve oral hygiene for nursing home residents with Alzheimer's disease and related dementias. *Journal of Gerontological Nursing*, 48(11), 15–20.
- Bryant, A. L., Hirschey, R., Cajola, C. E., Chan, Y. N., Cho, Y., Plassman, B. L., Wu, B., Anderson, R. A., & Bailey Jr., D. E. (2024). Care partners experience of an oral health intervention for individuals with mild cognitive impairment and mild dementia using behavior change technique: A qualitative study. *Geriatric Nursing*, 56, 40–45.
- Calderwood, A. H., Tosteson, T. D., Walter, L. C., Hua, P., & Onega, T. (2022). Colonoscopy utilization and outcomes in older adults: Data from the New Hampshire Colonoscopy Registry. *Journal of the American Geriatrics Society*, 70(3), 801–811.
- Chen, L., Cao, H., Wu, X., Xu, X., Ji, X., Wang, B., Zhang, P., & Li, H. (2022). Effects of oral health intervention strategies on cognition and microbiota alterations in patients with mild Alzheimer's disease: A randomized controlled trial. *Geriatric Nursing*, 48, 103–110.
- Eriksen, K. S., Lode, K., Husebo, S. I. E., & Kørner, H. (2022). Exploring variables affecting sense of coherence and social support in recovery after colorectal cancer surgery among the oldest old. *Geriatric Nursing*, 47, 81–86.

- Filippou, C., Thomopoulos, C., Konstantinidis, D., Siafi, E., Tatakis, F., Manta, E., Drogkaris, S., Polyzos, D., Kyriazopoulos, K., Grigoriou, K., Tousoulis, D., & Tsioufis, K. (2023). DASH vs Mediterranean diet on a salt restriction background in adults with high normal blood pressure or grade 1 hypertension: A randomized controlled trial. *Clinical Nutrition*, 42(10), 1807–1816.
- Friedman, A. B., Chen, A. T., Wu, R., Coe, N. B., Halpern, S. D., Hwang, U., Kelz, R. R., & Cappola, A. R. (2022). Evaluation and disposition of older adults presenting to the emergency department with abdominal pain. *Journal of the American Geriatrics Society*, 70(2), 501–511.
- Hatta, K., Murotanii, Y., Takahashi, T., Gondo, Y., Kamide, K., Masui, Y., Ishizaki, T., Ogata, S., Matsuda, M. I., Mihara, Y., Fukutake, M., Nishimura, Y., Hagino, H., Higashi, K., Maeda, Y., & Ikebe, K. (2022). Decline of oral functions in old-old adults and their relationship with age and sex: The SONIC study. *Journal of the American Geriatrics Society*, 70(2), 541–548.
- Jeong, B. A., Lee, K. H., Fan, H., & Uhm, M. Y. (2022). Development of a scale for assessing meal satisfaction in older adults: Meal satisfaction assessment questionnaire (MSAQ). *Geriatric Nursing*, 44, 30–38.
- Lei, X., Dai, J., & Qiu, D. (2024). The effect of nurse assisted colonoscopy on adenoma detection rates: A meta-analysis of randomized controlled trials. *International Journal of Colorectal Disease*, 39(1), 19. <https://doi.org/10.1007/s00384-023-04585-5>
- Rao, S. S. C., Quigley, E. M. M., Chey, W. D., Sharma, A., & Lembo, A. J. (2023). Randomized placebo-controlled phase 3 trial of vibrating capsule for chronic constipation. *Gastroenterology*, 164(7), 1201–1210.
- Slack-Smith, L., Ng, T., Macdonald, M. E., & Durey, A. Rethinking oral health in aging: Ecosocial theory and intersectionality. *Journal of Dental Research*, 102(8), 844–848. <https://doi.org/10.1177/00220345231175061>
- Underland, L. J., Schnatz, P. F., Wild, R. A., Saquib, N., Shadyab, A. H., Allison, M., Banack, H., & Wassertheil-Smoller, S. (2022). The impact of weight change and measures of physical functioning on mortality. *Journal of the American Geriatrics Society*, 70(4), 1228–1235.
- Varela, A. E., Rodriguez, J. E., & Farrell, T. W. (2022). Oral health is an integral component of age-friendly care. *Journal of the American Geriatrics Society*, 70(8), 2442–2444.
- Yu, L., Li, Y., Zhang, D., Huang, W., Li, R., Zhu, J., Li, R., Zhao, J., & Wang, J. (2022). A risk prediction model for dysphagia in older patients: A single-center prospective study. *Geriatric Nursing*, 44, 24–29.