
Nursing Care for Women with Fibroids: Assessment and Management

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Abstract:

Nursing care for women with uterine fibroids focuses on comprehensive assessment and tailored management strategies. An initial assessment involves a detailed patient history, including symptom evaluation (such as heavy menstrual bleeding, pelvic pain, and urinary issues) and physical examination. Diagnostic imaging, such as ultrasound or MRI, may be employed to confirm the presence and size of fibroids. Nurses play a crucial role in educating patients about fibroids, their potential complications, and treatment options, which may include medication, lifestyle modifications, and surgical interventions. Empathetic support and open communication are essential to help patients navigate their symptoms and treatment choices, ensuring they feel empowered and informed. Management of fibroids often requires a multidisciplinary approach involving gynecologists, primary care providers, and nursing staff. Nurses should monitor the patient's response to treatment, assess for any side effects or complications, and provide education on symptom management strategies. Emphasis on informed consent and shared decision-making is vital, fostering a supportive environment where women feel comfortable discussing their concerns and preferences. Additionally, nurses should be alert to the potential physical and emotional repercussions of fibroids, advocating for mental health support when necessary. Ongoing follow-up care and reassessment are key components to ensure optimal patient outcomes and quality of life.

Keywords: Uterine Fibroids, Patient Assessment, Symptom Management, Diagnostic Imaging, Treatment Options, Medication, Lifestyle Modifications, Surgical Interventions, Multidisciplinary Approach, Patient Education, Informed Consent, Emotional Support, Follow-up Care.

Introduction:

Uterine fibroids, also known as leiomyomas, are benign tumors that arise from the muscular layer of the uterus. They are highly prevalent among women of reproductive age, with estimates suggesting that up to 70-80% of women will develop fibroids by the age of 50. Despite their non-cancerous nature, fibroids can lead to a variety of health issues, including heavy menstrual bleeding, pelvic pain, and complications during pregnancy, affecting both physical health and quality of life. As healthcare professionals, nurses play a pivotal role in the

assessment and management of women with fibroids, making it essential to understand the complexities of fibroid disease, current management strategies, and the vital aspects of nursing care [1].

The clinical presentation of uterine fibroids varies widely, with many women remaining asymptomatic and unaware of their condition. However, for those who do experience symptoms, the impact can be profound. Heavy menstrual bleeding, known as menorrhagia, is the most common complaint and can lead to anemia and decreased overall health. Additionally, women may experience increased

pelvic pressure, pain during intercourse, and complications like uterine prolapse. Recognizing these symptoms is crucial for timely intervention, which often involves a multi-disciplinary approach including gynecologists, radiologists, and primary care providers [2].

The assessment of uterine fibroids begins with a comprehensive patient history followed by a thorough physical examination. Nurses are often the first point of contact and thus are instrumental in identifying symptoms that warrant further investigation. Tools such as transvaginal ultrasound or magnetic resonance imaging (MRI) are often employed to visualize fibroids, determine their size and location, and assess their impact on adjacent structures. The nursing assessment extends beyond physical symptoms; it also includes evaluating the emotional and psychological impact of fibroids on a woman's life. Many women experience stress, anxiety, and altered body image as a result of their condition, which should be acknowledged and supported through empathetic nursing care [3].

Management of fibroids can be both medical and surgical, emphasizing the nurse's role in patient education and support. Medical management options include hormonal therapies aimed at reducing symptoms, such as combined oral contraceptives and progestin-releasing intrauterine devices (IUDs), which help to control heavy bleeding. Non-hormonal treatments like nonsteroidal anti-inflammatory drugs (NSAIDs) can also relieve pain associated with fibroids. For women who do not respond to medical management or have significant symptoms, surgical options may be considered. These include procedures such as myomectomy, which involves the surgical removal of fibroids, or hysterectomy, the removal of the uterus. The choice of treatment should be guided by factors such as the woman's symptoms, desire for future fertility, and personal preferences. The nurse's role in facilitating informed decision-making through accurate information and emotional support cannot be overemphasized [4].

In addition to clinical treatment, non-pharmacological interventions such as lifestyle modifications and support groups can be beneficial. Nurses can encourage a holistic approach, advising women on weight management, dietary changes, and stress-reduction techniques that may alleviate symptoms. Furthermore, providing a supportive environment where women can express their

feelings and experiences regarding fibroids can significantly enhance their emotional well-being and coping strategies [5].

Pathophysiology and Symptoms of Fibroids:

Uterine fibroids, also known as leiomyomas or myomas, are benign tumors that arise from the smooth muscle tissue of the uterus. These tumors are among the most common gynecological conditions affecting women, particularly during their reproductive years. Although they are typically non-cancerous, fibroids can significantly impact a woman's quality of life by causing a variety of symptoms and complications. Understanding the pathophysiology of fibroids is crucial for diagnosis, treatment, and management [6].

Fibroids originate from the smooth muscle cells of the myometrium, the thick middle layer of the uterus. The precise etiology of fibroid formation is complex and multifactorial, involving a series of genetic, hormonal, and environmental factors. Studies have indicated a strong genetic predisposition, suggesting that fibroids often run in families. Genetic mutations have been observed in the smooth muscle cells of fibroids, specifically in genes such as MED12, which plays a role in gene expression [7].

Hormonal influences, particularly from estrogen and progesterone, are also crucial in the growth and development of fibroids. Fibroids tend to increase in size during the reproductive years when hormone levels are elevated, and they often shrink after menopause when hormone levels decline. The majority of fibroids contain more estrogen and progesterone receptors compared to normal myometrial tissue, indicating that hormonal stimulation significantly contributes to their development [8].

Growth Factors and Extracellular Matrix

In addition to hormonal factors, fibroid growth is associated with various growth factors, including insulin-like growth factors (IGFs) and transforming growth factor-beta (TGF- β). These growth factors can enhance the proliferation of smooth muscle cells and affect the extracellular matrix (ECM), a complex network of proteins and other molecules that provide structural and biochemical support to tissues. In fibroids, alterations in the ECM contribute to excessive tissue fibrosis and abnormal stiffness, further promoting tumor growth.

Abnormal vascularization also occurs in fibroids, leading to an increased blood supply that supports their growth [9].

Types of Fibroids

Fibroids can be classified into several types based on their location within the uterus:

1. **Intramural fibroids:** These are located within the muscular wall of the uterus and are the most common type [10].
2. **Subserosal fibroids:** These grow on the outer surface of the uterus and may protrude outward.
3. **Submucosal fibroids:** These develop just beneath the uterine lining and can protrude into the uterine cavity.
4. **Pedunculated fibroids:** These are attached to the uterus by a stalk-like structure and can occur either subserosally or submucosally [10].

Understanding the classification of fibroids is important as it helps determine the symptoms experienced and the appropriate treatment options.

Symptoms of Fibroids

Uterine fibroids can be asymptomatic; however, a significant proportion of women experience a range of symptoms that can vary depending on the size, number, and location of the fibroids. The main symptoms associated with fibroids include:

1. Abnormal Uterine Bleeding

One of the most common and distressing symptoms of uterine fibroids is abnormal uterine bleeding. Women may experience heavy menstrual bleeding (menorrhagia), prolonged periods, or bleeding between periods. Submucosal fibroids, which grow into the uterine cavity, are particularly implicated in causing menorrhagia due to their effect on the endometrium and surrounding tissues. This excessive bleeding can lead to anemia, causing fatigue, weakness, and other complications [11].

2. Pelvic Pain and Pressure Symptoms

Many women with fibroids report experiencing pelvic pain or discomfort. This can manifest as a dull ache or a feeling of pressure in the lower abdomen.

Larger fibroids, especially those causing distortion of the uterus or adjacent organs, can lead to discomfort. Women may also experience pain during sexual intercourse (dyspareunia) as a result of fibroid-related pressure [11].

3. Urinary and Bowel Symptoms

Fibroids can also exert pressure on adjacent organs, leading to urinary and bowel symptoms. Subserosal fibroids, in particular, may compress the bladder, resulting in increased urinary frequency, urgency, or in severe cases, urinary retention. Similarly, fibroids pressing against the rectum can cause constipation or discomfort during bowel movements [12].

4. Reproductive Issues

In some cases, fibroids can interfere with reproductive health. Submucosal fibroids can disrupt implantation during early pregnancy, leading to infertility or miscarriage. Furthermore, fibroids can also lead to complications during pregnancy, including an increased risk of cesarean delivery or preterm labor [13].

5. Other Symptoms

Women with fibroids may also experience additional symptoms, such as lower back pain or leg pain if the fibroids put pressure on nearby nerves. Symptoms can vary widely based on fibroid size, location, and individual anatomy, leading to different experiences among women.

Comprehensive Nursing Assessment:

In the realm of healthcare, nurses play a pivotal role in the assessment and treatment of patients. A comprehensive nursing assessment is a systematic and holistic approach that goes beyond merely gauging vital signs or symptoms. It incorporates an in-depth evaluation of physical, psychological, social, and environmental factors that influence a patient's health [13].

The primary objective of a comprehensive nursing assessment is to gather essential information that directs patient-centered care. It serves as the foundation for establishing diagnoses, formulating care plans, and implementing interventions. A

thorough assessment not only identifies existing health issues but also recognizes potential risks and motivates preventative measures. This proactive approach is vital, as it contributes to improved patient outcomes, reduces hospital readmission rates, and enhances overall health management [14].

Moreover, an effective nursing assessment fosters good communication between healthcare providers and patients. When nurses conduct comprehensive assessments, they engage patients in their own care, encouraging them to share their concerns or preferences. This builds trust and rapport, essential elements for effective therapeutic relationships. Ultimately, comprehensive nursing assessment recognizes the complexity of human health, emphasizing that physical ailments often coincide with emotional and social factors that must be addressed [14].

Components of Comprehensive Nursing Assessment

A comprehensive nursing assessment encompasses multiple components that together create a holistic picture of a patient's health status. These components include the following:

1. **Health History:** This foundational element begins with gathering a detailed patient history, which includes medical, surgical, and family histories, as well as a review of current medications and allergies. Understanding a patient's past health behavior helps in predicting future health issues [15].
2. **Physical Examination:** A head-to-toe assessment forms the core of the physical examination, where nurses evaluate the basic systems: cardiovascular, respiratory, musculoskeletal, gastrointestinal, neurological, and integumentary, among others. These assessments help in identifying abnormalities or changes in the patient's physical condition.
3. **Psychosocial Assessment:** Mental health is an integral aspect of overall wellbeing. Including stress factors, mental health history, coping mechanisms, and support systems during the assessment allows nurses to tailor interventions that address psychological needs [15].
4. **Functional Assessment:** Evaluating a patient's ability to carry out daily activities is crucial. This assessment determines the patient's functional status and any limitations they may face, guiding decisions regarding rehabilitation or assistance required.
5. **Cultural and Spiritual Assessment:** Patients come from diverse backgrounds with unique cultural beliefs and practices. Understanding a patient's cultural and spiritual needs ensures that care is respectful and aligns with their values, promoting better engagement in treatment [15].
6. **Environment Assessment:** Evaluating the patient's living conditions, support systems, and socioeconomic factors allows nurses to identify environmental influences on health and recovery, facilitating a more comprehensive care plan [15].

The Assessment Process

Conducting a comprehensive nursing assessment requires a systematic approach, typically defined by several key steps:

1. **Preparation:** Before engaging with the patient, nurses must prepare by reviewing available data and ensuring they have the necessary tools and environment conducive to gathering information [16].
2. **Data Collection:** This involves both subjective and objective data collection. Subjective data includes the patient's reported symptoms and experiences, while objective data comprises measurable information obtained through physical examinations and diagnostic tests.
3. **Data Organization and Analysis:** Once data are gathered, nurses must analyze and organize the information to identify patterns and correlations, which can inform clinical judgments and decisions [16].
4. **Nursing Diagnosis:** Using the information collected, nurses can formulate nursing diagnoses that reflect the patient's condition. This step is crucial for developing an effective care plan.

5. **Implementation and Evaluation:**

Following the diagnosis, nurses implement tailored interventions and regularly evaluate the patient's progress, making adjustments as necessary [16].

Challenges in Conducting a Comprehensive Nursing Assessment

Despite its importance, conducting a comprehensive nursing assessment can present challenges. Among these challenges is the time constraint that many nurses face in fast-paced healthcare environments. Limited time can lead to superficial assessments that overlook critical aspects of a patient's health [17].

Moreover, the variety of patient populations can introduce complexity into the assessment process. Assessing individuals from diverse cultural backgrounds requires sensitivity and specific strategies to ensure communication and understanding. Language barriers and differing health beliefs may hinder effective assessment, emphasizing the need for cultural competence among nursing professionals [17].

Additionally, technological advances in healthcare can complicate the assessment process. Nurses must balance the use of electronic health records with personal interactions to maintain a humanistic approach to care. Overreliance on technology may detract from the crucial interpersonal relationships that are intrinsic to nursing practice [17].

Diagnostic Imaging and Evaluation:

Fibroids, or uterine leiomyomas, are non-cancerous growths of the uterus that can develop during a woman's childbearing years. Although many women with fibroids are asymptomatic, about 25% to 50% of women experience significant symptoms that can adversely impact their quality of life. Common symptoms include heavy menstrual bleeding, pelvic pain, and pressure symptoms that can affect urinary and bowel function. Given the prevalence and potential complications associated with fibroids, diagnostic imaging plays a crucial role in assessing their presence, size, location, and impact on adjacent pelvic structures [18].

Uterine fibroids are classified based on their location within the uterus: intramural (within the uterine wall), subserosal (projecting from the outer surface), and submucosal (bulging into the uterine cavity). The size of fibroids can vary significantly, ranging from a few millimeters to several centimeters in

diameter. While most fibroids do not require treatment, those that cause severe symptoms may necessitate medical or surgical intervention. Therefore, an accurate evaluation is vital to tailor the most effective management plan [19].

The initial evaluation of a woman suspected to have fibroids typically begins with a thorough clinical assessment, encompassing a detailed medical history, a physical examination, and an assessment of symptoms. Clinicians often inquire about menstrual history, previous gynecological conditions, family history of fibroids, and any associated symptoms. Upon physical examination, a provider may note uterine enlargement, which can raise suspicion for fibroids, particularly if the uterus is palpably enlarged [19].

Imaging Modalities for Fibroid Evaluation

The selection of imaging modalities for the diagnosis and evaluation of fibroids must consider multiple factors, including clinical urgency, availability of equipment, the patient's medical history, and the need for further anatomical detail. The most frequently utilized imaging techniques include:

1. Transvaginal Ultrasound (TVUS):

Transvaginal ultrasound is often the first-line imaging modality for evaluating suspected fibroids due to its availability, cost-effectiveness, and non-invasive nature. This technique provides excellent visualization of the uterus, allowing for the assessment of fibroid size, number, and location. Moreover, TVUS can evaluate associated complications, such as changes in endometrial thickness and the presence of adenomyosis. One of the limitations of ultrasound, however, is its operator-dependence, which can influence the quality and accuracy of the results [20].

2. Abdominal Ultrasound:

Abdominal ultrasound can also be used, although it is generally less preferred than transvaginal ultrasound for pelvic evaluation. Abdominal ultrasound is useful in certain situations, such as gross uterine size assessment and when the transvaginal approach is contraindicated (e.g., in patients with certain anatomical abnormalities) [21].

3. Magnetic Resonance Imaging (MRI):

MRI is particularly advantageous for women with larger fibroids, complex cases, or when there is uncertainty regarding the diagnosis. MRI provides

high-resolution images and detailed anatomical information, allowing differentiation between fibroids, other pelvic masses, and adjacent structures. Additionally, MRI can assist in treatment planning by providing information about the fibroid subtype, as well as the uterus's relationship to surrounding organs. It is especially useful for patients considering minimally invasive procedures like MRI-guided focused ultrasound surgery, which requires a precise understanding of fibroid anatomy [21].

4. Hysterosalpingography (HSG):

Hysterosalpingography is an X-ray procedure that involves injecting a contrast dye into the uterus and fallopian tubes. While it is primarily used for fertility evaluations, HSG can provide information about the uterine cavity and detect submucosal fibroids. However, this technique is less commonly used for routine fibroid assessment compared to ultrasound and MRI [22].

5. Hysteroscopy:

Hysteroscopy is both a diagnostic and therapeutic procedure that involves inserting a thin, lighted tube into the uterus. It allows for direct visualization of the uterine cavity and can be used to remove submucosal fibroids during the same procedure. Although hysteroscopy is highly effective for diagnosing and treating fibroids, it is considered an invasive procedure and is typically reserved for cases with suspected submucosal fibroids or when other imaging modalities are inconclusive [23].

Clinical Considerations and Implications of Imaging Findings

When evaluating women with fibroids, various factors guide the choice of imaging technique, including patient symptoms, fibroid characteristics, and comorbid conditions. For example, a woman with severe, symptomatic fibroids may warrant advanced imaging if the initial ultrasound is inconclusive. In contrast, routine monitoring of asymptomatic fibroids may only require periodic follow-up with ultrasound [24].

The interpretation of imaging findings is also critical in determining the appropriate management. The size, number, and location of fibroids influence treatment options, ranging from watchful waiting to medication or surgery. For instance, submucosal fibroids causing heavy menstrual bleeding are often

treated hysteroscopically, while larger intramural or subserosal fibroids might necessitate abdominal surgery or uterine artery embolization [25].

Treatment Modalities: Medical and Surgical Options:

In the realm of healthcare, the selection of treatment modalities is pivotal in the management of diseases and conditions. These modalities can be broadly categorized into two major types: medical and surgical options. Each category encompasses a variety of interventions tailored to address specific health concerns, varying in mechanisms, applications, benefits, and potential risks. Understanding these modalities is essential for healthcare professionals and patients alike, as informed decision-making can significantly impact treatment outcomes and quality of life [26].

Medical Treatment Modalities

Medical treatment encases a wide array of non-invasive interventions aimed at managing health conditions, alleviating symptoms, or preventing disease progression. Medical modalities range from pharmacological therapies to lifestyle modifications [27].

1. Pharmacological Interventions

At the forefront of medical treatments are pharmacological agents, which include prescription medications, over-the-counter drugs, and supplements. These agents are formulated to target specific pathogenic processes, reduce symptoms, or achieve other therapeutic effects [27].

- **Antibiotics and Antivirals:** Used to combat bacterial and viral infections, respectively, these drugs play a crucial role in treating conditions ranging from pneumonia to HIV/AIDS. Effective antibiotic stewardship is essential to minimize resistance.
- **Analgesics and Anti-inflammatory Drugs:** Medications such as NSAIDs (non-steroidal anti-inflammatory drugs) and corticosteroids are commonly prescribed to manage pain and inflammation associated with various conditions, including arthritis and acute injuries.
- **Hormonal Treatments:** Hormonal therapies, such as insulin for diabetes or

hormone replacement therapy for menopausal symptoms, address endocrine imbalances, restoring physiological function and improving patient wellbeing [27].

- **Chemotherapy and Immunotherapy:** For cancer management, chemotherapy utilizes cytotoxic drugs to destroy cancer cells, while immunotherapy empowers the body's immune system to recognize and fight tumors. These modalities require careful administration and monitoring due to potential side effects [27].

2. Non-Pharmacological Interventions

In addition to medications, non-pharmacological treatments often play a foundational role in holistic care. These approaches can be highly effective either alone or in conjunction with pharmacotherapy [28].

- **Physical Therapy:** This rehabilitation approach focuses on restoring movement and function following injury or surgery. Tailored exercise regimens and modalities such as ultrasound or electrical stimulation can significantly enhance recovery [28].
- **Psychotherapy and Counseling:** For mental health conditions, therapeutic interventions like cognitive-behavioral therapy (CBT) provide patients with strategies to manage stress, anxiety, and depression.
- **Diet and Nutrition:** Nutritional therapy is increasingly recognized as pivotal in the management of chronic diseases, such as diabetes, cardiovascular disease, and obesity. Lifestyle modifications concerning dietary habits can lead to significant health improvements.
- **Complementary and Alternative Medicine (CAM):** Practices like acupuncture, chiropractic care, and herbal medicine are utilized by some patients seeking relief and enhancing overall wellness. However, the efficacy and safety of these modalities can vary, necessitating cautious integration [28].

Surgical Treatment Modalities

Surgical treatment encompasses invasive procedures aimed at correcting anatomical abnormalities, removing diseased tissues, or providing palliative care. While surgery often represents a more aggressive approach, it can yield transformative results for patients suffering from various medical conditions [29].

1. Types of Surgical Interventions

Surgical modalities can be classified into several categories, each addressing specific health issues [29].

- **Elective Surgery:** Procedures such as hernia repair, gallbladder removal, and joint replacements fall under this category, typically performed to alleviate pain or improve quality of life without immediate life-threatening implications [30].
- **Emergency Surgery:** Interventions such as appendectomies or trauma surgeries necessitated by acute medical conditions require prompt action to prevent serious complications or death.
- **Minimally Invasive Surgery:** Techniques such as laparoscopic or robotic surgeries involve smaller incisions and offer benefits like reduced pain, shorter recovery times, and decreased hospital stays, leading to improved patient outcomes [30].
- **Transplant Surgery:** Organ transplantation represents a life-saving intervention for end-stage organ failure, with the complexity and ethical considerations involved requiring meticulous donor-recipient matching and lifelong management of immunosuppressive therapy [30].

2. Considerations and Risks

Surgical interventions, while often essential, carry inherent risks including infection, bleeding, and anesthesia complications. Preoperative assessments and informed consent processes play a crucial role in ensuring that patients understand the potential benefits and risks associated with surgery [31].

Post-surgical care is also critical to successful recovery. Follow-up appointments, rehabilitation therapy, and patient education regarding signs of

complications are vital components of the surgical recovery process [31].

Integrative Approaches

In recent years, there has been a growing recognition of the need for integrative approaches that combine medical and surgical modalities for optimal patient outcomes. Multidisciplinary teams composed of physicians, surgeons, and allied health professionals work collaboratively to provide personalized care plans based on a comprehensive understanding of each patient's unique medical history, preferences, and needs [32].

For instance, for patients with chronic pain conditions, the integration of medical management (such as pain relief medications) with surgical options (like spinal surgery) and physical therapy yields a more holistic approach, aiming to improve overall functionality and quality of life [32].

Patient Education and Empowerment Strategies:

To effectively educate women about fibroids, it is important to start with a firm understanding of the condition itself. Fibroids are composed of smooth muscle cells and fibrous connective tissue, and they vary in size, shape, and location within the uterus. While some women may remain asymptomatic and require no treatment, others may experience debilitating symptoms that prompt medical intervention [32].

Educational strategies should include clear explanations of the types of fibroids—subserosal, intramural, and submucosal—as well as potential treatment options, including medication, hormone therapy, and surgical interventions like myomectomy or hysterectomy. Understanding the complexity of fibroids helps patients make informed decisions about their health [32].

The primary step in patient empowerment is providing comprehensive educational materials. Brochures, newsletters, and online resources from reputable medical organizations can offer valuable insights into fibroid symptoms, diagnosis, and treatment options. Educational resources should address common myths and misconceptions about fibroids—an essential aspect of effective patient education. For example, women should be educated about the various risk factors associated with fibroids and how lifestyle modifications, such as diet and exercise, may help manage symptoms.

Additionally, the development of an interactive online platform or mobile application can enhance accessibility to information through articles, videos, and patient testimonials. These platforms could also feature symptom trackers, helping women monitor their condition and engage in meaningful conversations with healthcare providers [33].

Empowering women with fibroids significantly relies on the establishment of open communication between patients and healthcare providers. Women should feel encouraged to articulate their symptoms, concerns, and treatment preferences. Patients who actively engage in discussions with their physicians are in a better position to receive tailored interventions that consider their unique needs and lifestyle [33].

Healthcare providers should promote shared decision-making, providing detailed explanations of diagnostic procedures such as ultrasound, MRI, and hysteroscopy, as well as the benefits and risks of various treatment options. A collaborative approach can help alleviate the anxiety and uncertainty that often accompany a fibroid diagnosis [34].

Peer support is an invaluable element in the journey for women with fibroids. Empowerment often flourishes in community settings where women can share experiences, feelings, and coping strategies. Support groups, whether in-person or online, serve as platforms for women to connect with others experiencing similar challenges. Offering a safe space for discussion fosters a sense of belonging and validation, which can significantly mitigate feelings of isolation.

Healthcare providers should facilitate referrals to local or virtual support groups. Furthermore, organizing educational events featuring expert speakers can deepen the understanding of fibroids and introduce women to new treatment modalities. Such initiatives not only enhance knowledge but also instill hope by highlighting real-life success stories from fellow women [35].

Empowerment involves teaching women to advocate for their health. Educational sessions could include workshops on how to prepare for medical appointments, including creating lists of questions and concerns to discuss with healthcare providers. Encouraging patients to seek second opinions when confronted with concerning treatment recommendations can play a critical role in their journey.

Additionally, creating a toolkit for self-advocacy can equip women with practical skills. This could entail tips on understanding medical jargon, knowing their rights as patients, and identifying when to seek further care or support. The cultivation of self-advocacy skills leads to increased confidence in navigating the healthcare system [36].

Lastly, it is essential to address the holistic aspects of living with fibroids. While medical interventions are critical, lifestyle factors play a significant role in symptom management. Educational resources should incorporate discussions about nutrition, physical activity, and stress management techniques. For instance, introducing dietary changes that promote hormonal balance, such as increasing fiber intake and minimizing processed foods, can help women feel more in control of their health [36].

Incorporating mindfulness practices—such as yoga, meditation, or exercise—can provide coping strategies to help women manage the emotional toll of living with a chronic condition. Educational sessions should invite experts in these fields to provide insights and practical advice to women managing fibroids [37].

Holistic Management Approaches:

In an increasingly complex world characterized by interconnected ecological, social, and economic systems, the necessity for a comprehensive understanding of management practices has never been greater. Holistic management approaches have emerged as a framework that considers the multi-dimensional nature of problems facing organizations, communities, and ecosystems. By embracing a whole-systems perspective, these approaches aim to create sustainable solutions that address the needs of various stakeholders and promote long-term viability [38].

At its core, holistic management is an integrated decision-making framework that emphasizes the interrelationships among social, economic, and environmental factors. This approach recognizes that no single aspect of a system can be understood in isolation from others; instead, it encourages stakeholders to view challenges and opportunities within the broader context of interconnected systems [39].

The foundational concept of holistic management arose from the agricultural domain, particularly in

the context of sustainable land use and food production. Pioneered by Allan Savory in the 1980s, Savory's holistic management framework was originally designed to address desertification and declining agricultural productivity caused by conventional grazing and farming practices. Over time, the principles of holistic management have transcended agriculture, finding applications in diverse areas including business strategy, community development, and environmental conservation [40].

Principles of Holistic Management

1. **Contextual Decision-Making:** Effective holistic management begins with understanding the context in which decisions are being made. This involves identifying the goals of all stakeholders, the resources available, and the potential impacts of various options. By framing decisions within the specific context of the system, managers can develop more relevant and sustainable solutions [41].
2. **Systems Thinking:** Holistic management emphasizes a systems thinking approach, which requires recognizing the interdependencies within a system. Stakeholders are encouraged to analyze how different elements—such as economic performance, social equity, and environmental health—affect each other. This comprehensive viewpoint facilitates better decision-making and encourages synergies [42].
3. **Long-Term Perspective:** A fundamental tenet of holistic management is the adoption of a long-term perspective. Immediate solutions may yield short-term benefits but could compromise long-term sustainability. By prioritizing the long-term health of the ecosystem and community, holistic management encourages decisions that are beneficial over time [43].
4. **Inclusive Stakeholder Engagement:** Recognizing the diverse interests of various stakeholders is critical in holistic management. Engaging stakeholders in the decision-making process fosters collective ownership over initiatives, enhances transparency, and builds trust. This participatory approach not only improves

the quality of decisions but also strengthens community resilience [44].

5. **Adaptive Learning:** Holistic management advocates for continuous learning and adaptation. This principle recognizes that environmental, social, and market conditions can change over time, necessitating adjustments in management strategies. Policies and practices must be flexible enough to adapt to new information and evolving circumstances [45].

Methodologies in Holistic Management

Holistic management approaches can be implemented through various methodologies, each designed to address specific contexts and challenges. Some of the notable methodologies include:

1. **Holistic Resource Management (HRM):** This methodology expands Savory's principles by focusing on managing natural resources sustainably while considering economic and social factors. HRM techniques include adaptive grazing management, which involves adaptive grazing practices to enhance soil health and increase biodiversity [46].
2. **Whole-systems Design:** This methodology is often applied in architectural and urban planning contexts. It incorporates principles of permaculture and biomimicry, aiming to design systems that integrate human needs with ecological functions. For instance, in city planning, a whole-systems design might involve incorporating green spaces and sustainable transportation systems to create a balanced urban ecosystem [47].
3. **Integrated Coastal Zone Management (ICZM):** ICZM exemplifies a holistic approach in managing coastal areas. This methodology involves collaborating with various stakeholders—ranging from local communities to businesses—to create strategies that balance environmental conservation with economic development. It is particularly relevant in addressing the challenges posed by climate change and rising sea levels [48].

4. **Collaborative Governance:** This approach promotes multisectoral collaboration among governments, private sectors, and civil society. Collaborative governance frameworks aim to enhance coordination and foster partnerships to address societal challenges. By leveraging diverse expertise and resources, this methodology aims to design and implement innovative solutions that reflect the input of multiple stakeholders [48].

Benefits of Holistic Management Approaches

The implementation of holistic management approaches offers several key benefits:

1. **Increased Sustainability:** By considering the long-term impacts of decisions on ecological and socio-economic systems, holistic management fosters practices that contribute to sustainable resource use and environmental health [49].
2. **Enhanced Resilience:** Systems that are managed holistically tend to be more adaptable to changes and disruptions. The emphasis on stakeholder engagement and adaptive learning helps build resilient communities and organizations that can respond effectively to crises [49].
3. **Improved Decision Quality:** Since holistic management encourages comprehensive data collection and stakeholder involvement, decisions are more informed, inclusive, and tailored to the specific needs of a community or organization.
4. **Synergistic Outcomes:** By recognizing the interdependencies within systems, holistic management can create strategies that generate multiple benefits. For example, restoring degraded land can enhance local food production, increase biodiversity, and improve water quality simultaneously [49].
5. **Empowerment and Social Equity:** Holistic management approaches prioritize inclusive stakeholder engagement, thus empowering marginalized groups and promoting social equity. This ensures that the voices of all affected parties are heard and respected in decision-making processes [49].

Follow-Up Care and Long-Term Management:

Follow-up care and long-term management are critical components of patient healthcare that ensure the effectiveness of initial treatments and promote optimal health outcomes over time. These processes are not merely add-ons to the primary treatment but are integral to the healthcare continuum, addressing physical, emotional, and social aspects of recovery. They involve a structured approach to monitoring, evaluating, and modifying treatment plans to accommodate changes in patient status, medical advancements, and emerging healthcare needs [50].

Follow-up care typically takes place after a patient has undergone treatment for a health condition, be it surgical, therapeutic, or otherwise. Its primary goals are to monitor recovery, prevent complications, and provide necessary adjustments to treatment plans. Follow-up appointments often include a review of the patient's condition through physical examinations, laboratory tests, and patient histories. This ongoing dialogue between healthcare providers and patients is essential for identifying any emerging issues early and fortifying the therapeutic relationship [51].

The Importance of Follow-Up Care

1. **Monitoring Health Progress:** One of the key functions of follow-up care is to closely monitor the patient's progress after a treatment. This is particularly crucial for chronic conditions such as diabetes, hypertension, and cardiovascular diseases, where the disease trajectory can significantly change over time [52].
2. **Reducing the Risk of Complications:** Regular follow-up can help detect complications or side effects of medications early in the process, ensuring that timely interventions can be implemented. For instance, in cancer survivors, regular screenings can lead to the early detection of metastasis or recurrence [53].
3. **Adherence to Treatment Plans:** Consistent follow-up encourages patients to adhere to their treatment plans, including medication regimens and lifestyle modifications. It reinforces the importance of self-management and proactive healthcare habits.

4. **Enhanced Patient Education:** Follow-up visits provide opportunities for healthcare providers to educate patients further about their conditions, including how to manage symptoms, lifestyle changes, and the importance of follow-up care itself [54].

Long-Term Management: A Continuous Process

Long-term management refers to the ongoing supervision of a patient's health status over an extended period, typically involving chronic illnesses. Unlike acute conditions that require short-term intervention, chronic illnesses often necessitate multifaceted approaches due to their complex nature and prolonged duration [55].

1. **Comprehensive Care Plans:** Effective long-term management requires developing a comprehensive care plan tailored to each patient's unique needs. This plan must consider physiological, emotional, and social factors, ensuring that treatment strategies are holistic.
2. **Multi-Disciplinary Approach:** Long-term management often demands collaboration among various healthcare professionals, including physicians, nurses, physical therapists, dietitians, and mental health specialists. This multi-disciplinary team works cohesively to address different aspects of the patient's health, promoting integrated care [56].
3. **Lifestyle Modifications:** In chronic disease management, lifestyle changes play a critical role. Health practitioners often recommend diet modifications, exercise regimens, and smoking cessation programs as initial components of management. Patients are encouraged to take an active role in these changes, supported by regular follow-ups.
4. **Patient Empowerment:** Empowering patients to take charge of their health is a core tenet of long-term management. Programs that promote self-management skills demonstrate better patient outcomes, as individuals who understand their conditions and the rationale for their treatments are more likely to engage in self-care practices [57].

5. **Utilization of Technology:** Advances in technology have revolutionized long-term management strategies. Telehealth services, health apps, and remote monitoring devices help maintain continuous patient engagement while providing valuable data to healthcare providers for enhanced decision-making [58].

The Role of Follow-Up Care in Specific Contexts

1. **Chronic Diseases:** For conditions such as diabetes and chronic obstructive pulmonary disease (COPD), systematic follow-up care and long-term management are essential. Monitoring blood sugar levels, lung function tests, and lifestyle assessments allow physicians to tailor treatments effectively. Furthermore, regular education on disease-specific management fosters patient basic awareness and adherence [58].
2. **Mental Health:** Mental health conditions require continuous engagement and follow-up care due to the episodic nature of various diagnoses like depression, anxiety, and bipolar disorder. Implementing consistent psychotherapeutic sessions and routine medication check-ups ensures that patients receive the support they need to manage their conditions effectively. Building a therapeutic alliance through follow-up visits can mitigate feelings of isolation and despair in patients, resulting in improved clinical outcomes [59].
3. **Post-Operative Care:** Following surgical procedures, patients benefit from structured follow-up protocols aimed at monitoring healing, preventing infections, and assessing the effectiveness of the surgery. Follow-up consultations can identify complications early, allow for regular assessment of pain management, and facilitate discussions about the physical rehabilitation required for optimal recovery [59].

Challenges in Follow-Up Care and Long-Term Management

Despite its importance, follow-up care and long-term management face numerous challenges.

Limited access to healthcare providers, socioeconomic factors, non-adherence to follow-up appointments, and inadequate patient education can hinder their effectiveness.

Moreover, fragmented healthcare systems can result in data silos that prevent seamless information sharing between medical professionals. Consequently, patients may receive redundant tests or miss important historical treatment information, reducing the overall continuity of care and resulting in suboptimal health outcomes [60].

Conclusion:

In conclusion, the nursing care for women with uterine fibroids is critical in ensuring comprehensive assessment, effective management, and support throughout their healthcare journey. Given the complexity of fibroid-related symptoms and their impact on women's quality of life, nurses play a vital role in facilitating accurate diagnosis, implementing appropriate treatment strategies, and providing holistic care. By prioritizing patient education and fostering a collaborative approach, nurses empower women to make informed decisions about their health and treatment options.

Furthermore, recognizing the need for ongoing support—both physical and emotional—is essential in the management of fibroids. Continuous follow-up and reassessment are crucial to addressing any arising concerns and adjusting care plans accordingly. As healthcare professionals, it is our responsibility to advocate for personalized care that prioritizes the unique needs and preferences of each patient. Ultimately, through dedicated nursing interventions and a multidisciplinary approach, we can enhance the overall well-being and quality of life for women affected by fibroids.

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