

ORIGINAL ARTICLE

Endometrial Cancer in Unani/Persian Medicine (9th–19th Century) Compared with Modern Perspectives

Abstract

Endometrial pathology occupies a significant, though underexplored, place in the medical literature of classical Unani/Persian medicine (9th–19th century CE). This historiographical study examines how prominent physicians—such as Rhazes, Avicenna, al-Jurjani, and Abulcasis—conceptualized what they termed *saratan* (*sarataan*) or *'urūd* (*urooz*) of the uterus: a condition characterized by hard, brawny swellings, ulceration, foul discharge, and progressive emaciation. Drawing on primary textual sources, the paper traces the evolution of diagnostic criteria, humoral etiologies (particularly melancholic predominance), and therapeutic strategies—including dietary regulation, phlebotomy, herbal suppositories, and abzan (herbal sitz baths). Rather than framing Persian medicine as “alternative,” this analysis situates it within its own epistemic framework, emphasizing its internal coherence and clinical empiricism. The study reveals a sophisticated, multi-stage model of uterine malignancy that reflects centuries of cumulative observation and theoretical refinement. By foregrounding the history of concepts rather than clinical comparison, this work contributes to a deeper understanding of gynecological knowledge in the Persian medical tradition and underscores the value of contextual historiography in the history of medicine.

Key words: Unani/Persian Medicine, History of Medicine, Historiography, Female, Endometrial Cancer, Uterus

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Introduction

Endometrial pathology represents a critical yet understudied domain in the history of Unani/Persian medicine. From the 9th to the 19th century CE, physicians operating within the Unani/Persian medical tradition—such as Ali Ibn Sahl Rabban al-Tabari, Rhazes, Al-Akhawyni Bokhari, Haly Abbas, Abulcasis, Avicenna, Jurjani, Ibn Jazla, Alī ibn Aḥmad al-Baghdādī, Najib ad-Din Samarqandi, Mansur ibn Ilyas Shirazi, Burhan-ud-din Kermani, Mohammed-bin Mohammed-bin Abdullah, Muqim Arzani, and Mohammad Azam Nazim Jahan—developed a systematic framework for understanding uterine diseases, grounded in humoral theory and refined through centuries of clinical observation. Unlike later biomedical models, this tradition conceptualized gynecological disorders not merely as anatomical anomalies, but as manifestations of systemic imbalance, particularly melancholic predominance and obstructive pathology in the pelvic region. Unani/Persian medicine, as a historically autonomous scientific tradition, emerged from the synthesis of pre-Islamic Iranian, Hellenistic, and Indic medical knowledge, and evolved into a coherent system with its own epistemological foundations, pedagogical institutions (e.g., bimaristans and madrasas), and textual canon (Hossein Hashemi, et al., 2020). Its geographical reach—from Shiraz to Delhi and from Samarkand to Andalusia—facilitated the transmission and refinement of gynecological knowledge across linguistic and cultural boundaries. Notably, uterine diseases occupied a prominent place in this corpus: physicians documented conditions ranging from suffocation of the womb (*khabt al-rahm*) and deviation (*inḥirāf*) to ulceration, prolapse, and malignant swellings termed *saratan* (*sarataan*) or *'urūd* (*urooz*). Among these, endometrial cancer—though not designated by that modern nosological label—was recognized as a distinct, progressive, and often fatal condition, characterized by hard, brawny tumors near the cervix, foul discharge, emaciation, and resistance to conventional remedies. The study of endometrial cancer offers a unique window into the internal logic of Unani/Persian medical reasoning: how symptoms were interpreted, how etiologies were constructed within the humoral framework, and how therapeutic strategies (e.g., dietary regulation, phlebotomy, abzan baths, and topical formulations) were selected based on stage, temperament, and prognosis. This historiographical study examines primary medical texts from the 9th to the 19th century to reconstruct the conceptual evolution of uterine *saratan* in Unani/Persian medicine. Rather than evaluating classical knowledge against modern benchmarks, it seeks to understand how this tradition itself defined, diagnosed, and managed endometrial malignancy—thereby contributing to the broader project of recovering the history of women's health in pre-modern Iran.

This study aims to reconstruct the conceptual framework of endometrial malignancy in Unani/Persian medicine—specifically, how physicians of this tradition defined, categorized, and managed what they termed *saratan* (*sarataan*) or *'urūd* (*urooz*) of the uterus from the 9th to 19th centuries CE. Rather than evaluating classical knowledge against modern biomedical criteria, the analysis foregrounds the internal logic of Unani/Persian medical reasoning: the interplay of humoral theory, clinical observation, and therapeutic decision-making.

To achieve this, the study pursues three historiographical objectives:

To trace the textual evolution of uterine *saratan* across key medical works, identifying continuities and divergences in its etiology, symptomatology, and staging;



To analyze the epistemological basis of therapeutic interventions—such as abzan (herbal baths), phlebotomy, and topical formulations—in light of humoral physiology and disease progression models;

To situate this knowledge within the broader history of women's health in pre-modern Iran, highlighting its methodological distinctiveness vis-à-vis later biomedical paradigms.

Previous scholarship on gynecological pathology in Unani/Persian medicine remains limited, though foundational. Montazerghaem et al. (2017) briefly addressed reproductive disorders—including uterine *saratan*—within a broader survey of women's health, but without detailed textual analysis. Rouhi & Mohammadzadeh Mazinan (2019) catalogued cancer types in early Islamic medical texts (up to the 6th AH/12th CE), yet their taxonomy relied on modern nosological categories rather than emic conceptual frameworks. Similarly, Sahebkar et al. (2012) provided a valuable inventory of cancer-related passages in major canonical works (e.g., *Canon*, *al-Hāwī*), but focused on therapeutic agents rather than the underlying pathology or diagnostic reasoning (Montazerghaem, et al., 2017; Rouhi, and Mohammadzadeh Mazinan, 2019; Sahebkar, et al., 2012).

Crucially, none of these studies systematically examined the historical development of uterine malignancy as a distinct clinical entity across the full temporal span of Unani/Persian medicine (9th–19th CE). This gap is significant: from Rhazes' early description of brawny swellings near the cervix to Arzani's refined staging of ulcerative progression, the conceptualization of *saratan* underwent notable refinement—reflecting both theoretical elaboration and cumulative clinical experience. The present study addresses this historiographical lacuna by adopting a diachronic, text-critical approach to primary sources.

Materials and Methods

This study employs a historiographical and text-critical methodology to reconstruct the conceptualization and management of uterine malignancy—termed *saratan* (*sarataan*) or '*urūd* (*urooz*)—in Unani/Persian medicine from the 9th to the 19th century CE. The research design follows three interrelated phases:

1. Source Selection and Inclusion Criteria

Primary texts were selected based on the following criteria:

Authoritativeness: Works by physicians recognized as canonical in the Unani/Persian medical tradition (e.g., Rhazes, Avicenna, Jurjani, Arzani);

Explicit discussion of uterine swellings classified as *saratan* or '*urūd* with clinical features consistent with endometrial malignancy (e.g., progressive, ulcerative, hard, near-cervical tumors with foul discharge and emaciation);

Availability of critical editions or peer-reviewed translations to ensure textual reliability.

2. Textual Analysis and Conceptual Mapping

All passages on uterine *saratan* were extracted from original Arabic and Persian editions (where accessible) or from scholarly translations (e.g., *Canon of Medicine*, *al-Hāwī*). Key variables recorded included:

Etiological models (e.g., melancholic predominance, obstructive pathology, menstrual irregularity);

Symptomatology and staging (e.g., benign vs. malignant ulceration, early vs. advanced signs);

Therapeutic rationales (e.g., phlebotomy for melancholic evacuation, abzan baths for



local cleansing, diet for humor balance).

To ensure interpretive fidelity, ambiguous terms (e.g., brawny swelling, wound that does not heal) were cross-referenced across multiple authors and contextualized within the humoral framework. Secondary scholarly commentaries (e.g., Montazerghaem, et al., 2017; Sahebkar, et al., 2012) were consulted for terminological consistency, but primary sources remained the analytical anchor.

3. Historiographical Synthesis

Rather than comparing classical descriptions with modern biomedical categories, this study traces the internal evolution of the concept:

How did diagnostic criteria shift from Rhazes' early anatomical focus ("brawny swelling near the cervix") to Arzani's refined prognostic staging?

What continuities and divergences exist in etiological reasoning (e.g., liver/spleen dysfunction vs. melancholic obstruction)?

How were therapeutic strategies aligned with disease stage and temperament—a reflection of the tradition's clinical empiricism within a theoretical system?

This approach prioritizes reconstructing the epistemic logic of Unani/Persian medicine, rather than evaluating it against external benchmarks—a methodological stance consistent with contemporary historiography of pre-modern sciences.

Discussion

Endometrial Cancer in Modern Medicine

Cancer remains a major global health challenge and the second leading cause of death in developed countries, following cardiovascular diseases. Among women, cervical cancer ranks as the fourth most common malignancy worldwide (Sharifi, et al., 2018). Endometrial cancer primarily originates in the endometrial lining of the uterine wall. Other uterine malignancies include uterine sarcoma (arising from the myometrial layer) and cervical cancer (originating in the lower uterine segment).

Modern oncology classifies cancer progression into three general stages:

Localized (primary tumor): confined to the endometrium;

Regional (nodal involvement): spread to adjacent tissues or lymph nodes;

Metastatic (distant spread): dissemination to distant organs, rendering the disease largely incurable (Sharifi, et al., 2018; Shahvaroughi Farahani, 2017).

In the early stage, tumor growth may be subtle but irreversible if undetected. As the disease progresses, malignant transformation often follows a prolonged precancerous phase. In advanced stages, tumor invasion leads to tissue destruction, systemic dissemination, and significant morbidity (Shahvaroughi Farahani, 2017).

Endometrial Cancer Signs and Risk Factors in Modern Medicine

Endometrial cancer is often asymptomatic in its early stages; therefore, screening plays a critical role in early detection. The most common clinical sign is abnormal uterine bleeding, particularly in postmenopausal women. In advanced stages, patients may experience excessive vaginal discharge, weight loss, urinary tract obstruction, or pelvic pain—symptoms that may reflect local tumor progression (Jafary Azad, 2012; Bokhman, 1983). Tumor extension to the pelvic wall can also lead to sciatica or lower back pain, especially when associated with urinary obstruction (Jafary Azad, 2012; Bokhman, 1983).



It should be noted that human papillomavirus (HPV) is strongly associated with cervical cancer, not endometrial cancer. While HPV is the most common sexually transmitted infection—with over 100 types, of which approximately 40 affect the female reproductive tract—it is not considered a primary etiological factor in endometrial carcinoma (Burchell, et al., 2006; Dadkhah, and Alishah, 2006). Established risk factors for endometrial cancer include: obesity, early menarche (before age 12), late menopause (after age 50), nulliparity or infertility, family history of endometrial or colorectal cancer, prior pelvic radiation therapy, smoking, dietary factors, immunosuppression, and lack of regular gynecological screening (Karimi Zarchi, et al., 2010; Sholf, and Newcomb, 1998; Khorasanizadeh, et al., 2013).

Endometrial Cancer Prevention and Treatment in Modern Medicine

Cancer prevention and early diagnosis are essential for disease control and improving life expectancy. In modern practice, endometrial cancer prevention follows two main approaches:

Primary prevention focuses on health promotion, lifestyle modification (e.g., weight management), and, where indicated, hormonal interventions. Although HPV vaccination is highly effective for cervical cancer, it is not currently indicated for endometrial cancer prevention.

Secondary prevention relies on early detection through clinical awareness and, in high-risk cases, targeted surveillance (Jafary Azad, 2012).

Screening for endometrial cancer differs from cervical cancer: there is no population-based screening program (e.g., Pap smear) for asymptomatic women, as endometrial cancer typically presents with early, perceptible symptoms—most notably abnormal uterine bleeding (Jafary Azad, 2012; Aminisani, and Armstrong, 2012). Prompt evaluation of such symptoms is therefore emphasized as the cornerstone of early diagnosis.

Delayed diagnosis remains a major concern: studies indicate that nearly half of women diagnosed with endometrial cancer had not undergone prior evaluation for warning signs (Aminisani, and Armstrong, 2012; Bell, et al., 2013). This underscores the importance of timely clinical assessment, especially in postmenopausal women.

Treatment strategies are tailored to disease stage, histological type, and patient factors (e.g., fertility desire). Standard modalities include:

Surgery (total hysterectomy with bilateral salpingo-oophorectomy) as the primary treatment for early-stage disease;

Conservative management (e.g., progesterone therapy) may be considered in select cases where fertility preservation is desired (Shahvaroughi Farahani, 2017);

Adjuvant therapies — including radiation, chemotherapy, and, in select cases, laser ablation — for advanced or high-risk disease (Saghafi, et al., 2015; Turazza, et al., 1997).

In advanced stages, treatment may extend to pelvic lymphadenectomy and resection of involved adjacent structures (Shahvaroughi Farahani, 2017). Thus, recognition of early signs—particularly abnormal bleeding—remains critical for prognosis and therapeutic success.

Causes of Endometrial Cancer from the Perspective of Classical Unani/Persian Physicians

Classical Unani/Persian physicians classified endometrial malignancy as a gynecologi-



cal disorder, often designated as *saratan* (*sarataan*) or '*urūd* (*urooz*). Uterine swellings were broadly categorized, with malignant forms distinguished by hardness, progression, and resistance to treatment (Zahrawi, 2001, pp. 145, 223). Such conditions were attributed primarily to melancholic humor (*sawdā'*), and were regarded as dangerous and potentially fatal (Ibn Jazla Baghdadi, 2014, pp. 198–199).

The lesion was commonly described as a brawny edema, typically localized near the cervix (Baghdadi, 1983, pp. 36–41; Haly Abbas, 2008, p. 278; Rhazes, 2016, p. 283). This pathological swelling was believed to obstruct uterine cleansing and menstrual flow, thereby exacerbating humoral imbalance (Shams al-Din, 2008, p. 146; Shah Arzani, 2001, p. 985; Samarqandi, 2013, p. 273; Kermani, 2015, p. 473; Shirazi, 2003, pp. 459–466).

Several etiological factors were proposed, including:

Hepatic dysfunction, leading to the generation of abnormal humors;

Splenic insufficiency, impairing the body's ability to filter and absorb pathological substances;

Dietary influences, particularly the consumption of substances deemed to provoke melancholy or stagnation (Tabatabaei, 2011, pp. 184–185);

Dominance of melancholic humor, considered the central pathogenic mechanism in uterine *saratan* (Baghdadi, 1983, pp. 36–41; Haly Abbas, 2008, p. 278; Ibn Jazla Baghdadi, 2014, pp. 198–199; Nazem Jahan, 2008, p. 672).

Notably, Görges, a physician associated with the Jundishapur medical tradition, linked endometrial pathology to menstrual irregularities and the accumulation of stagnant blood clots in the uterine cavity—a view recorded by Rhazes in *al-Hāwī* (Rhazes, 2001, pp. 130–132).

Signs and Symptoms of Endometrial Cancer from the Perspective of Classical Unani/Persian Physicians

Classical Unani/Persian physicians documented the clinical manifestations of uterine malignancy in relation to disease progression. According to these sources, patients with uterine *saratan* (*sarataan*) presented with a constellation of signs, including:

Severe uterine pain (Baghdadi, 1983, pp. 36–41).

Irregular pulse and palpitations, often accompanied by a sensation of heat (Baghdadi, 1983, pp. 36–41; Avicenna, 1989, p. 40).

Cutaneous discoloration, described as black or greenish hue (Ibn Jazla Baghdadi, 2014, pp. 198–199).

Systemic symptoms: weight loss, generalized edema, fever, and distended superficial vessels (Haly Abbas, 2008, p. 278; Shams al-Din, 2008, p. 146; Shah Arzani, 2008, pp. 188, 674–675; Abulcasis, 2004, pp. 849–850).

Referred pain to the eyes, head, forehead, pelvis, and legs (Haly Abbas, 2008, p. 278; Shams al-Din, 2008, p. 146; Shah Arzani, 2008, pp. 188, 674–675; Abulcasis, 2004, pp. 849–850).

Excessive uterine discharge (Jurjani, 2012, p. 954).

Jurjani emphasized that early diagnosis was possible through palpation, as malignant tumors were characteristically hard and resistant to pressure, detectable either anteriorly or posteriorly. He also noted urinary incontinence and defecation difficulties as late signs (Jurjani, 2012, p. 954).



Importantly, physicians distinguished between benign and malignant forms based on ulcer morphology (Abulcasis, 2004, pp. 849–850; Al-Akhawyni Bokhari, 1992, pp. 533, 539).

A benign lesion was described as small, rounded (like a bean), reddish, and relatively painless (Ibn Jazla Baghdadi, 2014, pp. 198–199; Haly Abbas, 2008, p. 278; Shah Arzani, 2001, p. 985; Kermani, 2015, p. 473);

A malignant tumor, in contrast, was associated with intense pain, ulceration, foul odor, persistent discharge, emaciation, pallor, loss of appetite, and scanty menstruation (hypomenorrhea) (Haly Abbas, 2008, p. 278; Kermani, 2015, p. 473). (Figure 1).



Figure 1. A picture of the anatomy of a pregnant woman in the book titled “*Sharh al-Asbab wa al-Alamat*” by Burhan-ud-din Kermani (1409-1449 AD), American National Library of Medicine

Prevention and Treatment of Endometrial Cancer from the Perspective of Classical Unani/Persian Physicians

Classical Unani/Persian physicians emphasized dietary regulation as a primary preventive measure, aiming to preserve humoral equilibrium and avoid melancholic accumulation. They advised consumption of temperate and moistening foods—including barley, bread, goat meat, chicken, lettuce, spinach, fig, grapes, sweet plum, apple, raisin, and Armenian cucumber—while discouraging melancholy-provoking substances (Rhazes, 2016, p. 283; Kermani, 2015, p. 473; Shah Arzani, 2008, pp. 188, 674–675; Nazem Jahan, 2014, p. 973). To promote digestive function and prevent stagnation, laxative agents such as Persian manna, almond kernel and oil, olive tea, and raisin were recommended (Rhazes, 2016, p. 283; Kermani, 2015, p. 473; Shah Arzani, 2008, pp. 188, 674–675; Nazem Jahan, 2014, p. 973). Additional supportive remedies included cow’s dough, sumac, pomegranate



and apple juice, fennel, rock candy (*nabāt*), chicory seeds, and *Adiantum capillus-veneris* (Shirazi, 2003, pp. 459–466).

In the event of disease onset, phlebotomy (*faṣd*) was frequently advocated—particularly in early stages—to evacuate excess melancholic humor and halt progression (Kermani, 2015, p. 473; Shah Arzani, 2008, pp. 188, 674–675; Jurjani, 2012, p. 954). Physicians stressed that topical applications must be precisely calibrated: overly mild formulations were deemed ineffective, while excessively potent ones could harden tissues and exacerbate the lesion (Tabatabaei, 2011, pp. 184–185).

Treatment feasibility was largely stage-dependent. According to several authors, intervention was only viable in initial phases (Baghdadi, 1983, pp. 36–41; Rhazes, 2016, p. 283; Avicenna, 1989, p. 40). Al-Jurjani, however, regarded established uterine *saratan* as incurable, advocating instead for palliative management guided by the thermal and moisture qualities of remedies (Jurjani, 2012, p. 954). Abulcasis proposed specific formulations for early-stage cases, such as mixtures of egg, barley, opium, coriander, and rose oil (Abulcasis, 2007, p. 223). For indurated, painless swellings, ointments, suppositories, and washes were recommended; at disease onset, milder agents—including gillyflower oil, chamomile oil, floral oils, duck fat, and *Plantago ovata*—were favored (Baghdadi, 1983, pp. 36–41; Rhazes, 2016, p. 283).

A notable therapeutic modality was the herbal sitz bath (*abzan*), described as a basin—often of metal—designed to accommodate the patient in a seated position (Vakiliinia, Alizadeh Vaghasloo, and Asghari, 2019). Used primarily for ulcerative or suppurative uterine lesions, the abzan typically contained decoctions of hollyhock (*khatmi*), Crambe, violet leaves, flaxseed, and chard (Samarqandi, 2013, p. 273; Abulcasis, 2004, pp. 849–850; Nazem Jahan, 2014, p. 973; Mohammad Ibn Abdolah, 2004, p. 540). Rhazes further prescribed a formulation incorporating breast milk, opium, saffron, and suppository preparation (Rhazes, 2016, p. 283)—reflecting an integrative approach combining systemic and local action.

Classical Unani/Persian physicians employed plant-derived essential oils as part of a broader strategy for pain relief and local lesion management. Application methods included topical rubbing and gentle pressing using prepared herbal mixtures. Al-Akhawyni Bokhari, in *Hidayat al-Muta'allemin fi al-Tibb*, specifically recommended almond and lily essential oils for alleviating uterine pain (Al-Akhawyni Bokhari, 1992, pp. 533, 539). Additional analgesic oils cited in the tradition include narcissus, chamomile, and flaxseed oils (Jurjani, 2012, p. 954; Mohammad Ibn Abdolah, 2004, p. 540).

Suppositories and analgesic ointments were also widely prescribed. Kermani (2015, p. 473), Shah Arzani (2008, pp. 188, 674–675), and Abulcasis (2007, p. 223) noted their use in managing painful or indurated swellings. Ibn Jazla Baghdadi provided a detailed formulation for an ointment intended to reduce pain in uterine malignancy in *Taqwim al-Abdan fi Tadbir al-Insan* (2014, pp. 198–199). Similarly, Najib ad-Din Samarqandi, in *Al-Asbab wa al-'Alamat*, affirmed the efficacy of suppositories in uterine pain management (Samarqandi, 2013, p. 273).

Specific topical mixtures included:

A paste of barley flour, beans, lentils, hollyhock, violet, and coriander juice (Shirazi, 2003, pp. 459–466);

A compound of egg yolk, violet oil, hollyhock oil, and date flour (Ibn Jazla Baghdadi,



2014, pp. 198–199); and juices of coriander, chicory, lettuce, and extracts of Armenian flower (Shah Arzani, 2008, pp. 188, 674–675; Nazem Jahan, 2014, p. 973).

Physical examination by a trained midwife—using manual palpation and, where indicated, specialized instruments—was considered essential for accurate diagnosis. Based on findings, personalized topical regimens were then prescribed (Zahrawi, 2001, pp. 145, 223). Notably, Mansur ibn Ilyas Shirazi recommended uterine cleansing with a mild solution of opium dissolved in breast milk in *Kifaya-yi Mansuri* (Shirazi, 2003, pp. 459–466).

Overall, these interventions reflect a systematic approach to symptom control, emphasizing anesthetic, anti-inflammatory, and cleansing properties of natural substances. As many authors observed, uterine *saratan* was regarded as a progressive and largely refractory condition—especially in advanced stages—requiring early, stage-appropriate intervention.

Result

Investigating the Traditional Works of Unani/Persian Medicine on Endometrial Cancer

Gynecological diseases—including their types, etiologies, prevention, and treatment—received notable attention from classical Unani/Persian physicians. At first glance, this attention might appear selective, possibly influenced by sociocultural norms that limited open discussion of women's health. Consequently, only a subset of medical texts engaged directly with gynecological conditions. Nevertheless, the high prevalence of acute reproductive health issues—such as infertility, obstructed labor, and maternal mortality—prompted sustained clinical and theoretical engagement.

Royal patronage also played a role: commissions from rulers and elites encouraged the compilation of specialized works, while personal, familial, or professional motivations further motivated physicians to document their observations and practices. Collectively, these factors contributed to a rich, though uneven, corpus on women's health.

Classical Unani/Persian physicians were well-acquainted with uterine disorders and developed systematic approaches to managing conditions such as difficult labor, infertility, and malignancies. Many authored dedicated sections—or entire treatises—on gynecology and midwifery. As one of the enduring themes in Unani/Persian medical literature (9th–19th century CE), this tradition formed a continuous, if non-linear, intellectual lineage that informs our understanding of the historical trajectory of women's medicine.

Given its significance, Table 1 presents the most prominent physicians in this field and their relevant works.

Conclusion

Cancer remains a prevalent human disease. Historical evidence suggests that specialized attention to female-specific malignancies in European and American medicine emerged relatively late—largely from the 19th century onward. In contrast, Unani/Persian medical literature, from the 9th to the 19th century, consistently addressed gynecological disorders—including uterine malignancy—with notable depth, as exemplified in the works of Rhazes, Avicenna, Jurjani, and Arzani.

This study confirms that classical Unani/Persian physicians developed a systematic understanding of endometrial pathology: they recognized its progressive nature, distinguished benign from malignant forms, and linked clinical signs (e.g., hard cervical



Table 1: Classical Unani/Persian Physicians and Their Works on Endometrial Cancer (9th–19th Century CE)

Summary of opinions	Name of book or books	Life cycle	Physicians
Pathology and pharmacology (detailed explanation of embryology, pregnancy, and reproductive system diseases, along with treatment recommendations) (Tabari, 2012, p. 271).	<i>Firdous al-Hikmah</i>	(838-870 AD)	Ali Ibn Sahl Rabban Al-Tabari
A medicinal encyclopedia with a specific chapter (Chapter 9) devoted to vaginal and uterus diseases, pregnancy, abortion causes, and endometrial cancer (Rhazes, 2001, pp. 130-132).	<i>Al-Kitab al Hawi</i>	(854-925 AD)	Rhazes
Treatment of gynecological and pediatric diseases (Rhazes, 2008, pp. 497–500).	<i>Kitab al- Mansuri fi al- Tibb</i>		
Menstruation and treatment of uterus and vaginal diseases (Rhazes, 1998, pp. 111–112).	<i>Man la Yahduruhi Al-Tabib</i>		
A medical history containing the gynecological explanations of some patients (Rhazes, 1964, pp. 57, 72).	<i>Ghessas va Hekayat Al-Marzee</i>		
Uterus diseases and treatment recommendations (Rhazes, 2016, p. 283).	<i>Taghasim al- Elal</i>	(-983 AD)	Al-Akhawyni Bokhari
Gynecological subjects including uterine pains, hypomenorrhea, uterine ulcers, imperforated hymen, childbirth, abortion, endometrial cancer, and uterine disease prevention and treatment (Al-Akhawyni Bokhari, 1992, pp. 533, 539).	<i>Hidayat al-Muta'allemin fi al-Tibb</i>		
A magnificent theoretical and practical work on gynecology. Its 18th chapter, with 35 articles, explains reproductive system diseases of men and women in detail, as well as gynecological diseases and treatment of swellings and endometrial and breast cancer (Haly Abbas, 2008, p. 278).	<i>Kitāb Kāmil aṣ-Ṣinā'a al-Tibbiyya</i>	(930-994 AD)	Haly Abbas
Treatment of uterine diseases, planning abnormal deliveries, difficult parturition techniques, delivery of dead fetus and placenta (Abulcasis, 2004, pp. 849–850).	<i>Kitab al-Tasrif</i>	(936-1013 AD)	Abulcasis
Uterine diseases and cancer (Abulcasis, 2007, p. 223).	<i>Al-Jaraha</i>		
Delivery tools, uterine anatomy, uterine diseases and cancer, infertility, pregnancy signs, fetal diagnosis, and healthy pregnancy and childbirth (Avicenna, 1989, p. 40).	<i>The Canon of Medicine (Al-Qanun fi't-Tibb)</i>	(980-1037 AD)	Avicenna
Pregnancy, causes of difficult parturition and cancer (Jurjani, 2012, p. 954).	<i>Zakhireh-i Kharazm-shahi,</i>	(1041-1136 AD)	Jurjani
Practical medicine and urgent treatments; cause of obstructed labor, difficult parturition treatment, and low milk supply (Jurjani, 1990, pp. 217–219).	<i>Khafi Alayee</i>		
Pregnancy and its signs, difficult parturition, fetal sex signs, gender-specific remedies, contraception, lactation issues, and gynecological cancers (Jurjani, 1966, pp. 281, 555).	<i>Al-Iqraz al-Tebbieh</i>		
A medical book addressing different diseases including gynecological diseases (e.g., endometrial cancer), its types, and treatments (Ibn Jazla Baghdadi, 2014, pp. 198–199).	<i>Taqwim al-Abdan fi Dadbir al-Insan</i>	(-1100 AD)	Ibn Jazla Baghdadi
Gynecology and gynecological diseases: amenorrhea/menorrhagia, uterine suffocation, pimple uterus, hemorrhoids, cervical deviation, vaginal obstruction, uterine itching, infertility causes/treatment, and endometrial cancer signs/treatment (Baghdadi, 1983, pp. 36–41).	<i>Al- Mokhtarat fi Teb</i>	(1122-1214 AD)	Alī ibn Aḥmad al-Baghdādī
Gynecological diseases (Samarqandi, 2013, p. 273).	<i>al-Asbab wa al-'Alamat</i>	(-1222 AD)	Najib ad-Din Samarqandi



Presented in theoretical and practical parts; the second part is devoted to uterine diseases (Shirazi, 2003, pp. 459–466).	<i>Kifaya-yi Mansuri</i>	(1380-1422 AD)	Mansur ibn Ilyas Shirazi
Gynecological diseases, treatments, and endometrial cancer (Kermani, 2015, p. 473).	<i>Sharh al-Asbab wa al-'Alamat</i>	(1409-1449 AD)	Burhan-ud-din Kermani
Four chapters; one deals with different diseases including uterine diseases (Mohammad Ibn Abdolah, 2004, p. 540).	<i>Tohfe Khani</i>	Seventeenth century	Mohammed bin Mohammed bin Abdullah
Gynecological diseases and treatment approaches; a separate chapter addresses endometrial cancer (Shah Arzani, 2001, p. 985).	<i>Mizan al- Teb</i>	Seventeenth century	Muqim Arzani
Uterine anatomy, different gynecological diseases, and treatment recommendations (Shah Arzani, 2008, pp. 188, 674–675).	<i>Teb Akbari</i>		
Different uterine diseases and treatment methods (Nazem Jahan, 2008, p. 672).	<i>Exir Azam</i>	Nineteenth century	Mohammad Azam Nazim Jahan
Gynecological diseases (Nazem Jahan, 2014, p. 973).	<i>Ramooz-e-Azam</i>		

swellings, foul discharge, emaciation) to underlying humoral imbalances—particularly melancholic predominance. While modern medicine has advanced diagnostic precision and therapeutic options (e.g., surgery, chemotherapy, radiation), the classical tradition offered a coherent, stage-based management framework:

Lifestyle and dietary regulation (e.g., avoidance of melancholy-provoking foods, use of barley, fig, and pomegranate),

Herbal interventions (e.g., abzan baths, topical oils, suppositories),

Localized procedures (e.g., phlebotomy, uterine cleansing with opium–milk solution).

Rather than positioning Unani/Persian medicine as “alternative,” this analysis affirms its value as a historically autonomous system—one grounded in sustained clinical observation and internal theoretical consistency. Its contributions lie not in substituting modern oncology, but in enriching the historical understanding of women’s health and offering potential leads for ethnopharmacological inquiry (e.g., *Adiantum capillus-veneris*, *Viola odorata*).

Prevention remained central to the classical paradigm—echoing contemporary emphasis on modifiable risk factors. Future research could fruitfully examine the pharmacological basis of selected historical formulations through rigorous phytochemical and in vitro studies, thereby bridging historiography and translational science.

Authors’ Contribution

The authors confirm their contribution to the paper as follows: Conceptualization, Writing-Reviewing, Resources: Zahra Hossein Hashemi, Seyyed Alireza Golshani, Fereshteh Boosaeidi, Supervision: Mohammad Ebrahim Zohalinezhad. Validation and Editing: Seyyed Alireza Golshani. All authors read and approved the final version of the work.

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out in compliance with the relevant professional and legal requirements under the sole responsibility of the principal investigator and collaborators.

Conflict of Interest

None.

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