

## ORIGINAL ARTICLE

### Assessing Maternal Health in the Medical Manuscript “*Resaleh Tadbir-e Hawamel*”

#### Abstract

Studies related to women and their various issues have always been significant throughout history. When examining the historical deprivation of Iranian women across different periods, it becomes clear that research resources in this field are quite limited. This is especially true regarding pregnancy and issues directly related to a woman's body. Therefore, “*Resaleh Tadbir Hawamel*,” authored by Mohammad Salim ibn Mohammad Safi Javanshir Qarabaghi Hajilo, Adib Al-Hokama, is one of the sources accessible from the Qajar era that can be studied. The purpose of this article is to analyze the pregnancy health of women as presented in “*Resaleh Tadbir Hawamel*,” which is particularly important for understanding the Qajar period. Given the historical nature of the topic, this research aims to uncover hidden aspects by thoroughly examining “*Resaleh Tadbir Hawamel*” and other sources. The findings are based on the idea that the author of the treatise believed that, until his time, no scientific book had been written addressing measures and treatment methods related to the health of pregnant women. By writing this treatise, he aimed to establish a scientific approach to this area of medicine, particularly in light of Iran's ongoing confrontation with new scientific ideas and the scarcity of female doctors specializing in reproductive health. Thus, in addition to critiquing the unscientific methods of uninformed individuals in this field, the treatise discusses a range of issues—from the most specific to the most general—regarding pregnant women, offering appropriate solutions and treatment options.

**Key words:** *Resaleh Tadbir Hawamel*, Pregnancy Health, Medical History, Qajar, Female, Pregnant Women, Iran

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## Introduction

The Qajar period is one of the most significant eras in Iran's history, especially in the history of medicine in Iran. It should be noted that the Qajar dynasty officially began with the coronation of Agha Mohammad Khan (1210 A.H) in Tehran, and lasted until 1344 A.H/1925 A.D. (1304 A.S.H), when Ahmad Shah, the last king of this dynasty, was removed from the throne—about one hundred and thirty-four lunar years and thirty solar years. During this time, the medicine of Galen and Avicenna gave way to modern medicine. (Elgood, 1978) Among the Qajar kings, Naser al-Din Shah's reign (1847-1895 A.D./1264-1313 A.H), who traveled to Europe three times during his rule, is particularly important in the history of medicine. His first trip to Europe marked the beginning of a new chapter in establishing medical facilities in Tehran.

Following these developments in Iran's medical field, a treatise titled *Tadbir Hawamal* was published in 1311 A.H. by Mohammad Salim ibn Mohammad Safi Javanshir Qarabaghi Hajilo Adib al-Hokama. It was produced under the efforts of the Minister of Education, supervised by Ali Qalikhani Mokhbar al-Dawlah, and with the attention of Amir al-Omra Nasr al-Sultaneh, Amir Toman, Mohammad Walikhani—the Minister of Coins (Muskokat).

This version is available in the library of the Islamic Council under registration number 128015, which was written in 37 two-page frames and completed by Ali Akbar Taleghani on the 29th of Rajab al-Murjab 1311 A.H. (1893 A.D.).

Since Naser al-Din Shah's reign lasted from 1264 A.H. to 1313 A.H. (1847–1895 A.D.), and this treatise was written in 1311 A.H./1893 A.D., it follows that it was composed during the final years of his rule. Additionally, since it was mentioned at the beginning of this treatise that it was published with the support and efforts of two ministers, Education and Coins (Muskokat), it indicates that the government at that time put significant effort into producing such treatises.

There is not much information about the author of this treatise. But regarding the family of Qarabaghi, it should be said that they were one of the most prestigious families in the Caucasus and during the Qajar period, some members of this family took refuge in the court of Iran after the complete domination of the Russians over Qarabagh, and later became the owners of high-ranking positions in the Qajar court. It seems that Muhammad Salim, the author of this treatise, along with his family, had a lot of influence in the Qajar court, and he was nicknamed Adib al-Hokama by the Qajar court. (Figure 1)

The treatise "*Tadbir Hawamel*" based on the author's writing in "the auspicious year of the horoscope 1311 A.H./1893 A.D. according to the forty-seventh year of the sitting of Maimant, the servants of His Majesty, the power of the sky, the majesty, the sun, the majesty, and the sky, the glory of Shahriar Afkham, the great emperor, Al-Sultan bin Al-Sultan, and Al-Khaqan bin Al-Khaqan bin Al-Khaqan Al-Saheb Qeran Naseruddin Shah Qajar and the Ministry of Science and Education Ali Qali Khan Mukhbar al-Dawlah, and the attentions of Amir Al-Amra Nasr al-Sultaneh Amir Toman Muhammad Wali Khan, the Minister of Maskukate", were written in the year 1311 A.H./1893 A.D. (Javanshir Qarabaghi Hajilu, 1893, pp. 2-3) This work was written in one "Introduction" and two "Articles".

In the introduction of the book, the author of the treatise addresses issues such as es-





sential health issues, movement and rest, housing and air, clothing, food, washing, and sexual intercourse. In the first article, the effective side effects of pregnancy, Craving, vaginal discharge, saliva flow, vaginal moisture flow, constipation, hemorrhoids, have been discussed. In the second article, he talks about the complications of pregnancy, damage to the abdomen, abortion, and the effects of prenatal factors on the development of the fetus.

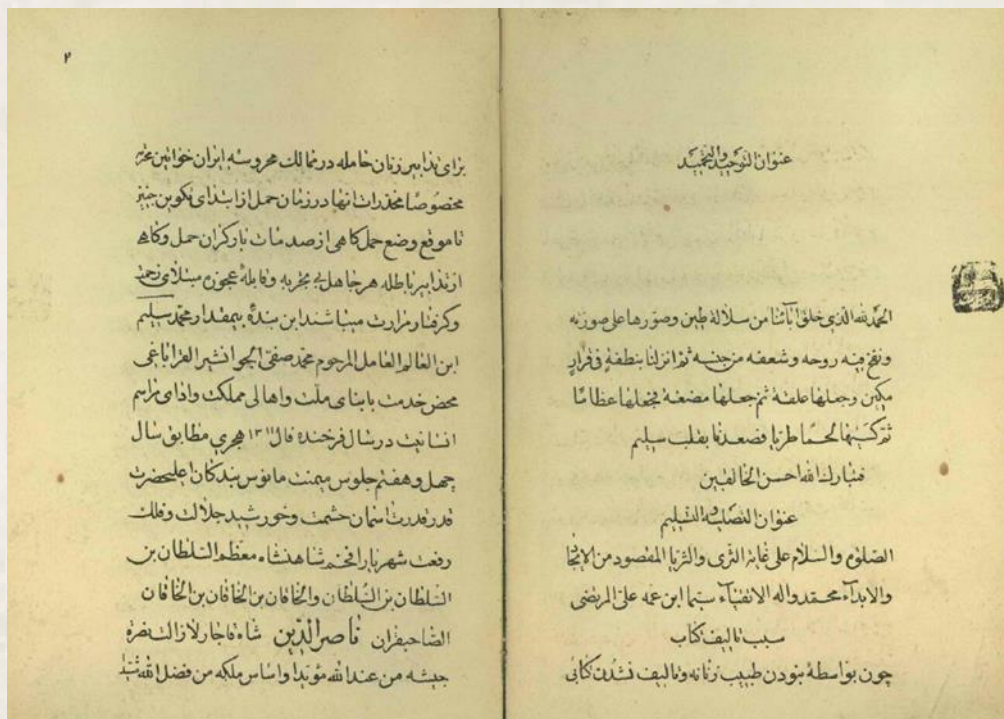


Figure 1. The Reason for Writing the Book (Javanshir Qarabaghi Hajilu, 1893)

In the concluding section, the author examines psychological disturbances during pregnancy (*Enfea'lat e Nafsani*), gestational insanity, and the impact of emotional states (*Enfea'lat*) on fetal development. Additionally, he discusses sensory disorders, the birth of infants with congenital abnormalities, and the perspectives of physiological scientists on these matters.

From the author's perspective, the primary motivation for composing *Tadbir-e Hawamel* was the absence of specialized gynecologists in matters of pregnancy health. At the time, this field was largely dominated by non-scientific practitioners, leading to misinformation and unsafe practices. The author of this treatise writes this issue like this: "Due to the lack of a gynecologist and the lack of written guidance on prenatal care in Iran, respectable women, especially during pregnancy from the beginning of the development of the fetus to the time of delivery, suffer harmful consequences. They endure unnecessary and often dangerous measures taken by an inexperienced person and old midwives, leading to hardship and bitter suffering." (Javanshir Qarabaghi Hajilu, 1893, pp. 1-2)

One of the key fields discussed in the Iranian medical school in the Islamic period was





maternal health and facilitating childbirth. Sages in Iranian medicine during the Islamic period presented simple and practical health instructions during pregnancy, focusing on safeguarding both the mother and the fetus. These principles, rooted in classical medical texts, served as foundational knowledge for generations and were widely applied in medical practice. For instance, Razi offered instructions to ease difficult childbirths in his book *Man La-Hazra Al-Tabib*. Also, Abu al-Qasim Zahrawi (in 404 A.H./1013 A.D.) provided detailed midwifery guidelines addressing themes such as the way the fetus is placed in the womb, the stages of pregnancy and delivery, the position of the midwife and the pregnant person, and suitable remedies for difficult childbirth. (Kadan, 2000, pp. 225-229.)

In the meantime, Sheikh Al-Rais Ibn Sina, in describing the types of childbirth, divides it into two parts, natural and unnatural childbirth, and writes like this: "While coming out, the baby's head is right in front of the cervix (*Zahdan*) and does not have a deviation to the other side of the uterus and both hands are spread on both sides, we consider this baby to be a normal baby and the state is a normal birth. Otherwise, it is considered unnatural." (Avicenna, 1998, p. 338)

Thus, it can be seen that all the necessary recommendations and warnings have been given to the people who were working in the gynecology and obstetrics department in the traditional medical sources. Cyril Elgood refers to this scientific history in the field of pregnancy health: "Ali Ibn Abbas Ahwazi Majusi stated that during his medical period, female doctors performed the most difficult surgeries related to childbirth without the help of male doctors." (Elgood, 1978, p. 240) Also, there are female surgeons in three miniature pictures in the Ilkhani surgery book written by Sharafuddin. This point is important. (Bagheri, 2010, p. 86)

The importance of childbirth was such that, in the words of many elders, female doctors are mentioned with respect. Ibn Khaldun, while respecting the medical class of women in society, mentions midwifery as an industry. (Ibn Khaldoun, 1996, p. 818)

This systematic approach to maternal care persisted across generations, consistently informed by medical scholarship. However, midwifery gradually lost its established scientific status as multiple historical factors led to its marginalization. Consequently, the practice became increasingly relegated to experimental or empirical approaches rather than evidence-based medicine.

Therefore, titles such as "*Glin Baji*", "*Khale Khanom Baji*", and women and *Bajis* who were experimental in midwifery became popular. (Dehghan, et al, 2012, p. 177) Therefore, referring to these sources can be considered a suitable guide for extracting useful and practical recommendations in the field of health. Health during pregnancy is no exception to this rule.

### Research Background

Iranian medicine during the Islamic period represents one of the most sophisticated medical traditions, demonstrating remarkable scientific expertise in both theoretical knowledge and practical applications. Iranian physicians adopted a comprehensive approach to maternal health, establishing scientific principles that safeguarded not only the mother's well-being but also ensured optimal fetal development throughout preg-





nancy.

In this regard, studies have been written, among which the following studies can be mentioned: Among the remaining texts of the works of Iranian sages, we can mention the book “*Kholasah al-Hekmah*”. In the second volume of this book, in the “*Tadbir Habali*” section, which provides guidelines on Prenatal health measures, Interventions for potential complications, and Protective strategies for both maternal and fetal well-being. (Aghili, 2010, pp. 110-111)

Also, Hakim Mohammad Akbar Arzani, in his commentary on the book “*Asbab va Al-amat fi Al-Teb*” (*Instruments and Signs in Medicine*) in the section on pregnant women’s management, points out significant points in this era, which can have a positive effect on the health of the mother and the fetus. (Arzani, 2018, p. 946)

“Healthy pregnancy from the perspective of traditional medicine and its brief comparison with modern medicine,” written by Makbari-Najad is one of the studies conducted in the field of pregnancy health. In this research, an attempt has been made to summarize historical prenatal care guidelines from classical medical texts, juxtaposing them with contemporary medical literature. (Mokabberi Nezhad, 2013, pp. 1-9)

Makbari-Najad’s study, “*Healthy Pregnancy from the Perspective of Traditional Medicine and Its Brief Comparison with Modern Medicine*” (2014), represents a significant contribution to the field of maternal health research.

Among other studies, we can refer to Hashem Dabaghian et al.’s research entitled “Pregnancy care from the perspective of traditional medicine”. In this research, the authors, referring to the perspective of traditional medicine, have discussed the issues of care during pregnancy and the way to deal with common problems during this period and manage them. (Hashem Dabaghian, et al., 2012, pp. 139-159) “Research on pregnancy health in traditional medicine,” written by Qavamipour is one of the studies written in the field of pregnancy health. In this research, the dos and don’ts during pregnancy have been discussed by referring to Avicenna’s *Canon of Medicine* book and other traditional medicine books, to preserve the health of the mother and the fetus. (Qavamipour Sereshke, 2015)

The *Resaleh Tadbir-e Hawamel* critically examines historical approaches to maternal healthcare, highlighting how this specialized knowledge had, by the author’s time, become dominated by unqualified practitioners. Through systematic analysis of classical medical texts, the treatise seeks to restore evidence-based prenatal care practices that ensure both maternal and fetal well-being.

### **The Purpose of Mohammad Salim Javanshir Qarabaghi in Writing the Treatise**

In the texts left by the sages and doctors of the past in traditional medicine, special attention has been given to maintaining the health of pregnant women, facilitating childbirth, as well as prescribing comprehensive prenatal regimens.

Considering that the majority of gynecological and obstetric issues was conducted by midwives lacking systematic medical education, Qarabaghi writes the treatise “*Tadbir Hawamel*”.

Two critical factors motivated Qarabaghi’s composition of this treatise: first, the complete absence of both female physicians and authoritative medical texts documenting





Iranian scholars' approaches to obstetrics; second, the prevalence of harmful practices by untrained midwives operating without evidence-based knowledge. *Tadbir-e Hawamel* thus represents a systematic effort to write a treatise that utilizes the wisdom of sages and the words of doctors to scientifically express the measures and necessities of pregnancy health. Also, warn about the diseases or injuries that happen to the mother and the fetus during pregnancy and explain the treatment. (Javanshir Qarabaghi Hajilu, 1893)

### **The Six Essentials in *Resaleh Tadbir Hawamel***

Folk and experimental medicine was one of the factors that gradually gained public acceptance and credibility among people in various sectors, including the field of pregnancy health before, during, and after pregnancy. This cultural shift led to the marginalization of evidence-based warnings documented in classical Persian medical texts by Islamic-era physicians. Consequently, midwifery practices became increasingly reliant on experimental approaches rather than the systematized medical knowledge preserved in traditional scholarly sources.

*Resaleh Tadbir Hawamel* seeks to introduce a new approach to pregnancy health, considering the modern era and the challenge of integrating medical knowledge with emerging scientific developments. One of the most notable features of ancient Iranian medicine and its significant advantages is its emphasis on a wise attitude towards medical knowledge. Meanwhile, issues related to health and the correct patterns for maintaining health and a healthy lifestyle, as discussed by the sages in traditional medical sources, are expressed through six essentials in traditional medical texts. These six requirements include measures such as "climate, eating habits and customs, exercise and rest, mental states, sleep and wakefulness, and specific hygiene practices like bathing and waste elimination through urine, feces, sweating, and other methods."

In the section on the six essentials, the author of the *Resaleh Tadbir Hawamel* emphasizes the importance of observing these principles, and considers them among the factors that follow the established medical laws, the health and safety of the mother, and as a result, the proper development of the fetus and the ease of the childbirth: "In this treatise, we state some of the laws of health and planning of pregnancy, the signs and symptoms of pregnancy diseases and their treatment, which actually lead to the health and well-being of the mother, as well as the completion of the fetus and an easier delivery" (Javanshir Qarabaghi Hajilu, 1893, p. 5)

### **1- Movement and Stillness**

Iranian sages have emphasized the balance of movement and stillness in maintaining health in their writings. From their perspective, exercise is a key principle for preserving health and helps to treat diseases. Additionally, exercise plays an important role in eliminating waste from food digestion in the body. On the other hand, excessive pressure and pushing beyond the capacity of any body part can cause serious injuries. Therefore, exercise is beneficial when it causes the body to sweat and increases blood flow to the organs more than usual.

Movement and stillness are among the six principles of health maintenance measures





in Iranian medicine.

The author of the “*Resaleh Tadbir Hawamel*” refers to this important issue and considers movement and stillness as the most important principles during pregnancy, and writes as follows: A pregnant woman should not stay at home for fear of miscarriage, but it is preferable to go out as much as possible for sightseeing, especially when the season is mild and the weather is pleasant and mild...” (Javanshir Qarabaghi Hajilu, 1893, p. 6) Of course, in the case of women who have a history of abortion, it is recommended to avoid vigorous movements and strenuous physical activity, and long-distance trips on fast horses, because these factors can have a significant impact on the risk of abortion.

## 2- Housing and air

### A. Housing

Undoubtedly, staying in a suitable residential environment is part of health measures to organize life. Based on this, in Iranian medical texts during the Islamic period, one of the components of human health is interaction and adaptation with the environment, relying on its structural adaptation to human’s *Mazaj*.

In fact, a person’s habitat has a deep connection with their body and soul. One of the characteristics of a suitable housing is that it is located in a climatically moderate region, far from marshes, sewers, cemeteries, and factories that cause air pollution and mental distress. Among other characteristics of suitable housing, we can mention its spaciousness, as open and expansive living environments foster a greater sense of tranquility, happiness, and vitality.

From the point of view of the author of the treatise, the housing suitable for pregnant women has the following characteristics: “Pregnant women should, to the greatest extent possible, dwell in lofty and cheerful dwellings where gentle breezes may caress their bodies and sunlight may bathe them in its warmth.” (Javanshir Qarabaghi Hajilu, 1893, pp. 7-8)

### B. Air

One of the health measures in the six essentials is the use of suitable weather. In the past, Iranian medical scholars considered the act of breathing as receiving clean and cool air through the pores of the body, especially the nostrils and mouth, and the result was the release of vapors containing excrement. They believed this purified air, upon entering the body, exerted profound effects on both the soul (*nafs*) and innate vital heat (*harārat-e gharīzī*), displacing the heated, noxious vapors containing bodily wastes.

The classical Persian medical tradition placed significant emphasis on atmospheric quality as a determinant of health. As articulated in *Hefz al-Sehah Naseri* regarding the physiological effects of air: “The optimal air for preserving health and fortifying the body is that which maintains perfect equilibrium between heat and cold. Such moderate air not only purifies and balances the spirit (*rūh*), but also actively aids the digestive process.” (Gilani, 2013, p. 79)

Based on this important issue, the author of *Resaleh Tadbir Hawamel* also advises pregnant women to live in “high-rise houses” or in “Delightful houses” if possible, so that they can breathe clean air and receive sunlight. This can have a significant impact





on the baby's *Mazaj* and the formation of a strong body.

"Because the mother has the status of a fruit tree, any tree exposed to air and sunlight will produce large, colorful, and high-quality fruit. In contrast, a tree located in the mountain gap or valley hollow, where wind doesn't reach and sunlight doesn't shine, will never bear good fruit." (Javanshir Qarabaghi Hajilu, 1893, p. 8).

### 3- Clothing Resourcefulness for Pregnant Women

Appropriate clothing is one of the most important factors during pregnancy. Since pregnant women face physical changes and transformations in their bodies during pregnancy, it is preferable to use clothes suitable for this period.

Pregnant women can typically continue wearing their regular clothing until the end of the fourth month of pregnancy. However, as the body undergoes significant physical changes beyond this stage, switching to maternity wear becomes necessary. The treatise *Tadbir Hawamel* highlights this as one of the most critical factors influencing fetal health. The author emphasizes that "pregnant women's clothing should be loose enough to avoid constricting the chest and torso during breathing" (Javanshir Qarabaghi Hajilu, 1893, p. 11). He warns against tight garments during pregnancy, associating them with potential health risks, and advises Iranian women against imitating foreign women's garments.

The prohibition of this covering may be so that pregnant women can easily put on and take off the clothes, and when wearing the clothes, they can sit down and get up easily, and not be cumbersome when walking. Given the hormonal changes during pregnancy, this could heighten the risk of infectious diseases, making looser, more breathable attire a safer choice.

### 4- Food

Maintaining health and treatment with suitable foods and drinks is of particular importance. Therefore, nutrition is considered one of the important principles in the health of the body. Humans should pay great attention to dietary habits in all stages of life. From the sages' point of view, food has both positive and negative effects on the whole body in addition to providing the necessary energy for movement and metabolism. These effects extend beyond physical health, affecting the mind and spirit as well.

In Iranian medicine during the Islamic period, foods, in terms of their physiological functions, were divided into various categories such as delicate, dirty, and moderate food, forming an eighteen-fold division: (Aghili, 2010, pp.60-80) (Table 1)

Therefore, the type of food and the timing of its consumption should also be adjusted in a way that helps maintain the body's stable conditions. In this treatise, the author has tried to explain this important principle and highlight key recommendations during pregnancy. Therefore, one of his recommendations is: "A pregnant woman should not change her normal diet except when weakness and disorder are found in the digestive organs due to transportation, such as *Ghey*, *Ghasyan*, *Vahm* (*Viyari*) (*Yirkalmak*)" (Javanshir Qarabaghi Hajilu, 1893, pp. 12)

On the other hand, he considers reducing food intake to be the best solution for pregnant women, who suffer from pelvic and penile (*Zahar*) arch space during pregnancy.





Therefore, the best strategy in this part of the six essentials is to reduce food intake and avoid oils and starchy foods.

**Table 1:** The form of a single food table, which is limited to eighteen types

لطيف صالح الكيموس متوسط الغذا	لطيف صالح الكيموس قليل الغذا	لطيف صالح الكيموس كثير الغذا
Like good clean wheat bread	Like pomegranate, apple and lettuce	Like semi-roasted egg yolk, meat broth, quail meat and wine
لطيف فاسد الكيموس متوسط الغذا	لطيف فاسد الكيموس قليل الغذا	لطيف فاسد الكيموس كثير الغذا
Like unleavened bread	Like radish and onion and whatever is spicy	Like the lungs of animals and baby pigeons
كثيف صالح الكيموس متوسط الغذا	كثيف صالح الكيموس قليل الغذا	كثيف صالح الكيموس كثير الغذا
Like baby beef and baby pigeon	like fresh cheese	Like eggs fried in oil, lamb and fattened sheep
كثيف ردى الكيموس معتدل الغذا	كثيف ردى الكيموس قليل الغذا	كثيف ردى الكيموس كثير الغذا
Like cabbage	Like eggplant	Like beef
معتدل صالح الكيموس معتدل الغذا	معتدل صالح الكيموس قليل الغذا	معتدل صالح الكيموس كثير الغذا
Like baby camel meat	Like turnips	Like one-year-old lamb
معتدل ردى الكيموس معتدل الغذا	معتدل ردى الكيموس قليل الغذا	معتدل ردى الكيموس كثير الغذا
like dried fish	like a yolk	Like cabbage and beets

## 5- Washing and Bathing

One of the important elements in the Iranian lifestyle during the Islamic period is to pay attention to the issue of cleanliness. Thus, in *hadiths*, personal hygiene and bathing have been emphasized a lot. In fact, bathing is an inseparable part of human life. The bath helps to clean and moisturize the body, open skin pores, and facilitate the elimination of bodily impurities through sweating.

The author of *Tadbir Hawamel* provides specific guidance regarding bathing habits during pregnancy. He advises that if a pregnant woman has a custom of washing her body early in the day, she should modify this practice by both altering the timing and reducing the duration of her baths. This recommendation appears to reflect concerns about maintaining proper body temperature and circulation during pregnancy.

Repeated bathing is especially important for pregnant women who are prone to miscarriage and weak moods. Hence, it is advised that “Women who are pregnant for the first time or who have a history of miscarriage and weak temperament (*Mazaj*) should avoid frequent bathing and prolonged sessions in the bathhouse; they should especially avoid high ambient temperature, hot water, and the confined space because these factors are among the strongest causes of abortion.” (Javanshir Qarabaghi Hajilu, 1893, p. 14)





## 6- Intercourse

God considered humans the best of creation. The purpose of this choice is to elevate the human spirit and reach a degree of closeness to God. Therefore, to achieve this goal, human survival is dependent on procreation, and this procreation can only be imagined through intercourse between a man and a woman. Aghili refers to this issue as follows: "In expressing the strategy of intercourse: one must know that the existence of the human species is based on procreation (being born from each other) and reproduction (giving birth to offspring). This divine design cannot be actualized or even conceived without the conjugal union (*taqrīb*) between male (*al-dhakar*) and female (*al-unthā*)."

(Aghili, 2010, p. 69)

Within the framework of traditional medicine, sexual intercourse occupies a unique position as both a natural bodily function and a vital physiological process. Regarded as one of the essential evacuations (*istifrāghāt*) required for maintaining bodily equilibrium, its proper regulation is considered crucial for health preservation. In his book, Hobaish-Al-Teflisi refers to this issue as follows: "Maserjuyeh says that it is better at that time to have a vigorous desire and have ample seminal fluid and not to be weak in intercourse... and that is the best time." It was that all the states of the body were moderate, that is, he was neither full nor hungry" (Hobaish-Al-Teflisi, 2019, p. 67). Therefore, sexual intercourse when needed and with proper precautions leads to beneficial effects such as purifying the body from excrement, vitality and cheerfulness, lightness in movements, increasing appetite, dispelling distress and thoughts and sadness, and suppressing anger and rage in the body. "...and the benefit of sexual intercourse is that it lightens the body and calms anger, and takes away sadness and thoughts, and it benefits melancholy and love, and it benefits the head and eyes." (Hobaish-Al-Teflisi, 2019, p. 67)

On the other hand, intercourse can affect the health of the fetus during pregnancy: "Intercourse is harmful to pregnant women; Especially if the husband is strong in intercourse and has a long penis, and whenever [he has intercourse], the tip of the penis reaches the uterus. (Arzani, 2018, p. 946) In fact, according to the sages, intercourse topics are determined based on the individual's *Mazaj*, age, season, and respecting the strength and weakness of the body and the desire for intercourse, without external stimuli. Therefore, as mentioned in this treatise, measures have been taken while a pregnant woman is concerned:

The treatise identifies abortion as one of the potential dangers of sexual intercourse during pregnancy. While the author exercises discretion in discussing this sensitive matter, he provides clear medical advice: "Any woman who has experienced one miscarriage must abstain from marital relations until the fifth month of pregnancy." (Javanshir Qarabaghi Hajilu, 1893, p. 15)

### Effective Side Effects in Pregnant Women

Among the things that have been discussed in this treatise is the statement of the complications that the author mentions in the two articles and how to deal with them and treat them. In the first article, he states the following points:



### 1- Lack of Lust and Hatred of Some Foods

*Taghaza*<sup>1</sup> in the word means hating something and not eating or drinking anything at will. (Dictionary of Dehkhoda, under the word *Taghazaz*<sup>2</sup>) Lack of appetite during pregnancy may occur at any time during this period; however, it can be said that in many women, anorexia will be more common in early pregnancy than in other months, and this can be considered as one of the first symptoms of pregnancy. Also, according to the report of a new study, most likely, pregnant women who experience food aversions can be related to the gender of the fetus. This research, published in the Journal of Behavioral Physiology, claims that male fetuses cause mothers to feel “food disgust” more than female fetuses in the first two trimesters of pregnancy. “food disgust”; But the results of this research are still inconclusive. Most of the time, after the fetus enters the abdominal area from the pelvic area (that is, after the 20<sup>th</sup> week of pregnancy), the aversion to food disappears. Of course, it is sometimes possible for this disgust to continue until the end of pregnancy. However, this case was one of the common cases among pregnant women at that time, which is mentioned in the treatise. Most pregnant women in this sector prefer foods that are acute and spicy, as well as pickles and fruits. The author while pointing out that although this desire is not in their usual food variety and habit, if it does not harm their health, they should not refrain from eating such foods: “In this case, they should eat whatever proves harmless to health, abstaining not.” (Javanshir Qarabaghi Hajilu, 1893, p. 16)

### 2- Corruption of Lust and Craving (*Viya*r)

One of the common complications during pregnancy is craving (*Viya*r). Craving in pregnancy is a complex physical and mental condition in which the mother suddenly craves food. Also, this condition may cause excessive hatred towards food or people. A pregnant woman sometimes suffers from Craving, a strong desire for certain food; In contrast, pregnancy may lead to strong aversions—extreme dislike of the smell of many foods, especially normal foods, people, or things, and even one’s husband. (Katirai, 1966, p. 146) Contemporary research also shows that food aversion is due to hormonal changes in women’s bodies. The level of human chorionic gonadotropin (HCG) increases in the first trimester of pregnancy, and this hormonal change is the main cause of nausea, craving, or food aversion in pregnant

1- (تَغْزَز) (اِبْرَئِيْمَك)  
2- تَغْزَز





women. After defining these diseases, pointing out that such diseases are not specific to pregnant women, but have a general aspect, he turns to the measures and, if they occur, to cure them.” “Some of the stomach related diseases are: corruption in taste, if pregnant women eat unusable substances out of desire, including food or non-food items that are not suitable for the body. The first one is called *Vahm*, the second one is the corruption of lust..... This disease is seen in pregnant women in the first two, three, and four months of pregnancy, and it may last until the time of conception. And this disease in women during Pregnancy is not a high-risk disease.” (Javanshir Qarabaghi Hajilu, 1893, p. 18)

Qarabaghi writes in the treatment section that: “As much as possible, the patient should be prohibited from eating non-food items, and also sometimes from ingesting spices that cause them to hate things such as indigestion. While these measures have shown general benefit, it remains exceedingly difficult to suppress the intense cravings that pregnant women experience and to prevent them from acting on these desires.” (Javanshir Qarabaghi Hajilu, 1893, p. 19)

### 3- Nausea (*Ghasyan*)

Another side effect of pregnancy is nausea and vomiting, which are described in traditional medicine texts under the titles of *Ghey*, *Ghasyan*, and vomiting of pregnancy. This complication exists in most pregnant women and occurs mostly in the second, third, and fourth months of pregnancy, and in some it continues until the end of pregnancy. (Ahmad, 2008, pp. 131-151) *Ghasyan* in the dictionary means nausea, which means that the body's natural demand is to vomit without movement. (Dictionary of Dehkhoda). Accordingly, *Ghasyan*, in the strict sense, is a state of nausea, not vomiting. (*Ghey*) Therefore, what is meant by *Ghasyan* is the request of the stomach to expel the material in it, without the movement of the stomach. Also, the modern equivalent of this word is “nausea”. In fact, nausea is the introduction and origin of vomiting, which includes two permanent and periodic states. According to the author of the treatise, this complication occurs in such a way that it causes constant pain and suffering for pregnant women, and when the doctor prescribes medicine or advises, the pregnant women face resistance. The treatment mentioned in this treatise is to “sweet and sour sherbets, mint juice, herbs, and carbonated waters such as lemonade, famous mineral waters, and sour and fresh lemon juice. Or he drinks four drops of *Tinture*<sup>3</sup>

3- It is a mixture of water and vinegar





every two hours (after the fourth month of pregnancy, the internal use of tincture is cautious) and two drops of Laudanum<sup>4</sup> in a cup of sugar syrup and gives a total discount.” (Javanshir Qarabaghi Hajilu, 1893, p. 20)

In traditional medicine, vomiting is considered a strong stimulant for the whole body, especially the stomach and its lower organs. Therefore, this function has been compared to an earthquake in the body. The sages caution against the use of emetic drugs during pregnancy, as they may pose risks to both mother and child. Additionally, overeating and consuming incompatible foods together are identified as contributing factors to stomach heaviness and indigestion, which can subsequently lead to vomiting (Javanshir Qarabaghi Hajilu, 1893, p. 19).

#### 4- Vomit (*Ghey*)

Vomiting (*Ghey*) is also one of the complications that pregnant women suffer from during pregnancy. *Ghey*, which is referred to as vomiting in modern medical knowledge, is the movement of the stomach to expel substances that have been placed in the stomach cavity, and with this action, those substances are expelled through the mouth. (Cheshti, 2005, p. 98)

The differences between *Ghey*, nausea, and *Ghasyan* in the text of traditional medicine are as follows:

- In terms of strength of movement: In *Ghey*, the movement is strong, in nausea, the movement is weak, and in *Ghasyan*, there is no movement.

- In terms of the location of the material in the stomach: In *Ghey*, its substance is inside the stomach, in nausea, its substance penetrates the stomach mass, and in *Ghasyan*, the substance in the stomach sticks to the villi of the stomach and tends to the opening of the stomach.

- In terms of movement type: In *Ghey*, both the repulsive force and the substance in the stomach move, but in nausea, the repulsive force moves, but the substance does not move, and in *Ghasyan*, neither the stomach nor the substance moves. (Jaafari Dehkordi, et al., 2013, p. 40)

The author of the treatise refers to the fact that most women suffer from this condition during pregnancy, and this condition mostly occurs in the first hours of pregnancy and lasts until the fourth month. This complication may, if it is aggravated and frequent and long, bring the possibility of weakness in strength and power in pregnant women. Therefore, in these situations, the doctor must ensure the health of the uterus and consider measures. Because it may be seen

4- Alcoholic solution





that.” If the fetus’s head is heavy and the uterus is not in its place, as soon as measures are taken and the uterus is placed in its natural place, the vomiting will stop immediately”. (Javanshir Qarabaghi Hajilu, 1893, p. 22) In this section, the treatise’s author provides essential warnings and recommendations regarding both the prescription of appropriate medications and necessary interventions when such side effects manifest. The text systematically addresses preventive measures while offering therapeutic guidance for managing these pregnancy-related conditions.

### 5- Salivation

Excessive salivation (ptyalism) is another common condition affecting pregnant women, often associated with pregnancy cravings (Viyar) and nausea. These physiological changes may reduce the frequency of swallowing, leading to increased saliva accumulation in the mouth. Because having nausea may cause some women to swallow their saliva less and this can lead to more saliva collecting in the mouth. In general, the body of an adult and healthy human produces 1500 milliliters of saliva daily, and this amount decreases drastically during sleep. In humans, the submandibular glands produce about 70-75% of saliva, and the parotid glands produce 20-25% of saliva, and the remaining small amount is produced by other salivary glands. Drooling is more common in women who suffer from craving during pregnancy or severe nausea.

The cause of this complication is a thin moisture that is odorless and has a musty taste (*Afese*)<sup>5</sup> and sometimes it has a stinky smell. Also, the appearance of this disease occurs mostly in the early months of pregnancy.” (Javanshir Qarabaghi Hajilu, 1893, pp. 45-46)

Another side effect of this condition is that during sleep, due to the closure of the mouth, some of this diluted water enters the stomach and causes congestion in the throat, thus causing a feeling of suffocation in pregnant women.

### 6- Behavior

This condition typically affects pregnant women for one to several weeks. In addition to its brief explanation, the author also mentions complications, such as digestion disorders, decreased urine and sweat, weakness in *Mazaj* and body. The treatise provides both a brief etiology of the condition and therapeutic interventions for its management (Javanshir Qarabaghi Hajilu, 1893, pp. 45-46).





### 7- Vaginal Wetness

This disease is also seen most of the time in pregnant women. In this treatise, in addition to the explanation of this disease, its solutions and measures are also mentioned: “Pregnant women frequently experience a physiological vaginal discharge, which in non-pregnant individuals is typically referred to as white discharge. This condition often presents with localized symptoms including: the excitation and itching of the member with difficulty and pain.” (Javanshir Qarabaghi Hajilu, 1893, pp. 26-27)

### 8- Abdominal Constipation

Constipation is one of the common digestive problems during pregnancy. During this period, with the growth of the fetus and the pressure of the uterus on the mother’s pelvis and intestines, it provides grounds for constipation. Most of these complications can be considered during the third trimester of pregnancy, as the fetus exerts the greatest pressure on the intestine during this period due to its rapid growth. In this treatise, the author describes the symptoms that occur in pregnant women due to this disease and also outlines its treatment measures and solutions. “Mostly, pregnant women suffer from constipation, but this condition does not occur in non-pregnant women. In this case, the cause is either paralysis and weakness caused by the intestines, or the pressure of the uterus on the intestines due to pregnancy. (Javanshir Qarabaghi Hajilu, 1893, pp. 27-28)

Hemorrhoids (Javanshir Qarabaghi Hajilu, 1893, p. 29), varicose veins (Javanshir Qarabaghi Hajilu, 1893, p. 32), *Emtala Al-Dam* (high blood pressure) (Javanshir Qarabaghi Hajilu, 1893, p. 33) are also among the diseases that the author has briefly described in the first article of this treatise. It also states the appropriate prescriptions to prevent such diseases and outlines the necessary measures.

### Topics Raised in the Second Article

In the second article of “*Resaleh Tadbir Hawamel*”, complications during pregnancy are discussed. In this section, the author refers to diseases that sometimes cause defects, abortion, or the death of the fetus. In the meantime, the author also states that these side effects are not specific to any pregnancy period and may occur at any time during pregnancy. “..... The subject of abortion is not specific to any time of pregnancy, it depends on the coincidence of the cause and *Mazaj*.” (Javanshir Qarabaghi Hajilu, 1893, p. 36)

Injury to the abdomen is one of the complications that can cause death and organ failure in the fetus.

The effect of intense filling (*Emtala*) in the mother causes it to affect the fetus. Therefore, the contracted uterus exerts a strong pressure on the fetus, which changes the normal state of the fetus’s organs and causes some defects in its organs. (Javanshir Qarabaghi Hajilu, 1893, p. 39) Also, side effects such as “toxicity” in the mother’s blood are among the causes of the death of the fetus during pregnancy: “The effects of harmful factors during pregnancy vary—some can even lead to fetal death. For example, if the mother’s blood becomes poisoned, it can result in the destruction of the fetus.” (Javanshir Qarabaghi Hajilu, 1893, p. 41)

Thus, in all cases, the soul and the body are closely connected. This means it is not possible for a person to have a healthy soul if their body is not in perfect health. In this





section, the author discusses conditions that may not exist in a pregnant woman before pregnancy. Among these are hatred and hostility that may develop toward her husband during pregnancy, as well as pregnancy madness. The author states: "There is a constant connection between the nerves of the mother and the fetus. I have heard pregnant women say that when we have an excessive desire for food, if luck favors us, we will get that desirable and good thing and eat it. I feel that the fetus has a gentle, joyful movement, and on the contrary, if we do not get it, the fetus will move violently in the same womb, and then it will be born with incomplete organs." (Javanshir Qarabaghi Hajilu, 1893, pp. 45-46) (Figure 2)



Figure 2. *The Birth of an incomplete Baby* (Javanshir Qarabaghi Hajilu, 1893)

Finally, the author of *Resaleh Tadbir Hawamel* describes an event that has led to the birth of a defective baby. After researching and examining the baby's mother, it is clear that the pregnancy has occurred during a religious day, which from the perspective of the mother and father, caused such a condition in the fetus. Following this, he depicts a child born as a result of such a belief. (Javanshir Qarabaghi Hajilu, 1893, p. 53)

The author of the *Tadbir Hawamel* treatise believes that such beliefs have never held a scientific basis. Instead, they argue that these events can be explained by the anxiety and stress experienced during the early months of pregnancy. Some historians have noted that research shows most pregnant women encounter incidents in the first months that trigger intense anxiety, causing significant mental distress, sadness, and frightening illusions. We can see a link between the fetus's incomplete development and these issues.

## Conclusion

Maintaining health during pregnancy is considered one of the most essential principles of medicine according to Iranian sages of the Islamic period. Among the works





dedicated to prenatal care and well-being, the treatise *Tadbir-e Hawamel* stands out as a notable example, composed during the reign of Naser al-Din Shah Qajar.

“In this treatise, the author presents scientific approaches and health measures for managing pregnancy. Additionally, he examines potential complications that may arise in pregnant women—ranging from general health issues to miscarriage—and proposes corresponding treatments. Through this work, the author introduces a novel scientific perspective, challenging the empirical practices traditionally employed by midwives and addressing the risks associated with experimental approaches to prenatal care.

On the other hand, considering the formation of the new scientific system in the Qajar era, this treatise considers the new achievements in the field of gynecology and obstetrics. He has entered into the discussion of this treatise, taking into account the fact that the sages have dealt with all medical issues, including maternal medicine, based on evidence and a rational framework.

Emphasizing the issue that in his time, there has been no female doctor who could be in charge of the gynecology and obstetrics department, the author scientifically writes this treatise. In its concluding sections, he confronts and refutes prevalent societal superstitions, systematically dismantling these beliefs while presenting his evidence-based perspective. This work appears to be among the earliest scholarly texts to methodically address critical aspects of prenatal health through a scientific lens.

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Dr. Askari confirmed that five of the six essentials for pregnancy health outlined in the treatise—*movement and rest, housing and air, clothing, nutrition, and bathing*—remain consistent with modern medical guidelines.

In *Resaleh Tadbir Hawamel*, it is recommended that sexual intercourse should not be performed for pregnant women, especially if they have a history of miscarriage, especially in the first five months of pregnancy. But modern medicine believes that it is better not to do this in the first trimester and the last month of pregnancy. Therefore, most of the opinions expressed in this treatise are approved by modern medicine.

### Authors’ Contribution

Lida Mavaddat, the first author, is responsible for data analysis and final writing of the text. Hojat Ebadimanesh, the second author collected the data. All authors read and approved the final version of the work.

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### Conflict of Interest

None.





## References

- Aghili, M.M.H.Kh. 2010. *Kholasa Al-Hokama*. Edited by Malek M. Vol. 2. Tehran: Hill.
- Ahmad, M. 2008. *Tadbir al-Habbali and al-Itaf and al-Sabiyan*. Tehran: Institute of Medical History of Islamic Medicine and Supplement, Tehran University of Medical Sciences.
- Arzani, M.A., 2018. *Mofarh al-Gholob*. Edited by Nazem E. and Baghbani M. Vol. 2. Tehran: Hekmat Sarai Tubi Institute.
- Avicenna, 1988. *Canon of Medicine*. Tehran: Soroush. [in Arabic]
- Bagheri, E., 2010. A research on the position of women in medical history with an approach to the Qajar period. *Medical History Quarterly*, 2(4), pp. 85-117.
- Cheshti, M.A., 2005. *Exir A'zam (Great Rarity)*. Tehran: Institute of Medical History of Islamic Medicine and Supplement, Tehran University of Medical Sciences.
- Dehghan, M., et al., 2012. Midwifery and Women in Islamic Civilization. *Medical History Studies*, 1(4), pp. 169-183.
- Elgood, C., 1978. *Medicine in the Safavid period*. Translated by Javidan M. Tehran: University of Tehran.
- Gilani, M.K., 2013. *Hefz Al- Seha Naseri (Keeping Naseri healthy)*. Tehran: Al-Ma'i.
- Hashem Dabaghian, F., et al., 2013. Pregnancy care from the perspective of traditional Iranian medicine. *Medical History Quarterly*, 12, pp. 139-159.
- Hobaish-Al-Teflisi, A., 2019. *Kefayat al- Teb (Sufficient Medicine)*. Edited Parsapour Z. Tehran: Research Institute of Humanities and Cultural Studies.
- Ibn Khaldoun, 1996. *Introduction by Ibn Khaldoun*. Tehran: Scientific and Cultural Publications.
- Jaafari Dehkordi, E., et al., 2013. Nausea and vomiting in pregnancy. *Medical History Quarterly*, 14, pp. 33-48.
- Javanshir Qarabaghi Hajilu, M.S.B.M.S., 1893. *Resaleh Tadbir Hawamel*. [Manuscript] No. 128015. Held at: Tehran: The library of the Islamic Council.
- Kadan, A.N., 2000. *Al Jeraha end al Zahravi*. Tehran: Moaseseh Tarikh Pezeshki va Ted Islami. [in Arabic]
- Katirai, M., 1966. *From brick to brick*. Tehran: Institute of Social Studies and Research.
- Mokabberi Nezhad, R., et al., 2013. Healthy pregnancy from the perspective of traditional medicine and its brief comparison with modern medicine. *Iranian Women's Journal (Midwifery and Infertility)*, 17(121), pp. 1-9.
- Qavamipour Sereshke, K., et al., 2015. *Pregnancy health in traditional medicine*. In: 7<sup>th</sup> Annual Student Research Congress, 12 May 2016. Ardabil, Iran.

