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RESEARCH ARTICLE

INFERTILITY CONCEPTS IN ANCIENT MESOPOTAMIA

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ABSTRACT

Fertility was a major concern for human beings at early stages of existence. The fundamental reason for this was both an increase in the race and the survival of the nation. According to their entrenched belief that all successful steps necessitate the God's blessing, fertility, similarly, was seen as a sign of blessing. In some other Mesopotamian and Mediterranean regions, the fertility goddess was represented by such symbols as the genital organs of the woman, such as rhombs, the obvious genital shapes, and pubic triangle. The data collection was based on archeological works carried out by teams from the Directorate of Antiquities in Duhok, a city in Iraq's Kurdistan Region in 2019. The discovery of numerous mother goddesses refers to the important role that God's blessing in fertility plays in the life of the people settled in this region until today. This belief is also present in Kurdistan Region of Iraq. In ancient Kurdistan region of Iraq, we observed a number of fertility goddesses and the God of desire, which reflects the importance of reproduction concept among those nations, who lived in this region.

KEYWORDS

History; Reproduction; Infertility; Kurdistan region; Iraq; Mother goddess.

1. INTRODUCTION

The mother goddess refers to a symbol of productivity where the man worked in the land and being able to get his bread by himself. At that time the man realized two facts: Fertility, and in contrary, infertility, were a major concern of the human beings when we went back to the very early beginnings of human beings. According to the concept that nothing can be undertaken successfully without God's blessings, fertility was considered as a sign of blessing and infertility as a sign of curse on the other hand, and according to their thoughts, one of the biggest curses was a failure to create posterity. Every culture and society had their own thoughts and folklore in the field of infertility and conception and what are the planes to overcome this big concern, for example in the ancient Hindu culture, Ireland culture, and many places of the ancient world, they were used to sanctify or even to worship an erected male organ or female genitalia for this purpose (Jacobsen, 1976; Johnston, 1963).

Later, some new beliefs developed among the people, some of them came from animal observation like the relation of fertility to the male and female urine or eating the afterbirth materials such as the placenta. They observe that some animals like chimpanzees ate their afterbirth materials after delivery, and because of this observation and in some places of middle Europe, the women at that time used to bite their own placenta after birth to improve their fertility and in some places in China the women are used to eat a dried placenta to improve their fertility (Johnston, 1963). Men fertility and especially with sons were regarded as a divine blessing for them and this kind of blessing was requested in their prayers to God, this was identified in the sculptures and the writings of the ancient civilizations all over the world (Van Rooy, 1986). The concept of fertility was so deeply present in the minds of ancient times that many of the myths and the rituals cannot be explained without understanding this concept (Van Rooy, 1986).

Ancient Mesopotamia owned many goddesses, many of them were concerned with conception and fertility (Black and Green, 1992). One of the well-known Sumerian goddesses of birthing was known as Dingir-Makh which means the exalted deity. Other names of the well-known goddesses of birth at the Sumerian times were Nin-khursag: Lady of the Mountainous Areas, Nin-makh: Exalted Lady, Nintu: Lady of Birth, Nin-mena: Lady of the Crown, and Nin-sikila: Pure Lady (Stuckey). Another well-known Babylonian god of birth was named Erua, this name came from the Semitic Akkadian language meaning "to be pregnant". The increased number of fertility goddesses reflects the importance of this concept among those nations (Table 1) (Stuckey). The Sumerians addressed goddess as Ama while the Babylonian named it as Mama which means the mother, and the Semitic Akkadian used the term eru which mean to be pregnant (Stuckey).

The birth goddess was represented by symbols which were known as the womb sign resembling the omega symbol (Ω), this was demonstrated on the clay plaques from the period between 2900-2350 B.C.E. In some other Mesopotamian lands, the fertility goddess was represented by symbols indicating the female genital organs such as the rhombs, or obvious genital shapes or pubic triangle were represented in some other parts of Mesopotamia and the Mediterranean region (Stuckey). The mother goddess represents a symbol of productivity based on which the man works in the field and gets his living himself. The two interrelated facts realized by him were the needs for food and reproduction in order to survive. Fertility and infertility emerged as the essential considerations for human beings in their early existence. For them, this linked with an increase in the race and the survival of the nation. Given the concept that God's blessing determined both success and failure in all aspects of life, fertility and infertility were perceived as signs of blessing and curse respectively. Failure to reproduce was thus believed to be a biggest curse (Stuckey).

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A variety of ideas related to the conceptual background of fertility and infertility existed in ancient worlds. In the Hindus and Irish cultures, methods of sanctification or even worship were used to erect a man's sexual organ and a woman's genitalia. For the Babylonian and Chaldean, certain dates as well as shapes of the moon were regarded favorable for conception (Stol, 2000). Further ideas developed at a later phase were taken from observations of animal behaviors. In accordance with the observation that animals ate their afterbirth material, women started biting or eating their placenta after delivery in order to improve the fertility function. In relation with the men's fertility and based on the dominant belief that it was a divine blessing a practice was that people asked for it when they were praying (van der Toorn, 1995).

The ancient world of Mesopotamia had its share of goddesses of fertility and conception. Some of the well-known examples are the goddesses of Dingir-Makh, Nin-Khursag, and Nin-Makh. They were represented by such symbols as the omega (Ω), the female genital organs and shapes. Their increased presence refers to the importance people accorded to the concept of fertility in the ancient Mesopotamia (Stuckey). The purpose of the study was to explore the history of reproduction in the ancient land of Kurdistan region of Iraq and add to the literature a few new pieces of art.

Table 1: Major Fertility Deities and Symbolic Representations in Ancient Mesopotamia.			
Deity / Symbol	Culture / Period	Meaning / Role	Representation / Symbolism
Dingir-Makh	Sumerian	Exalted birth goddess	Associated with creation and motherhood
Nin-khursag	Sumerian	Lady of the mountains; fertility goddess	Linked to earth, nurturing, and reproduction
Nintu	Sumerian	Lady of birth	Protector of childbirth
Nin-makh	Sumerian	Exalted lady	Symbol of maternal power
Erua	Babylonian	God associated with pregnancy	Name derived from "to be pregnant"
Mother goddess (Ama/Mama)	Sumerian/Babylonian	Universal mother figure	Represented in statues with feminine features
Omega symbol (Ω)	Mesopotamian	Womb symbol	Represents uterus and fertility
Genital symbols (rhombs, triangles)	Mesopotamian & Mediterranean	Fertility and reproduction	Stylized depiction of female reproductive organs

2. METHODS AND RESULTS

The data collection was carried out based on archeological works at the Directorate of Antiquities in Duhok in 2019, Kurdistan Region - Iraq. Some works refer to the symbol of mother goddess and have feminine characteristics (Figures 1 - 3). The god of desire (Figure 4) reflects the importance of sex and reproduction. Many statues of mother goddess are discovered during excavation works that refer to the symbol of the mother goddess. Therefore, most of these statues are drawn by the artists with feminine characteristics as shown in Figure 1-3. While another important piece of art, the God of desire, reflecting the importance of sex and reproduction in the life of those nations lived in this region as shown in Figure 4.



Figure 1: The front (A) and back (B) view of Statue mother goddess, from the Neolithic period (New Stone Age), 6000 B.C, classified as stone. Photo credit: Hasan Ahmed Qasim: Archaeologist, Director of Antiquities in Duhok in 2019, Duhok, Kurdistan region, Iraq.



Figure 2: The mother goddess statue. Classified as stone, it dates back to the Neolithic period (New Stone Age), 6000 B.C. Photo credits: Hasan Ahmed Qasim: Archaeologist, Director of Antiquities in Duhok in 2019, Duhok, Kurdistan region, Iraq.



Figure 3: Statue mother goddess, from Hellenistic period, 331-138 B.C, it is classified as pottery. Photo credits: Hasan Ahmed Qasim: Archaeologist, Director of Antiquities in Duhok in 2019, Duhok, Kurdistan region, Iraq.



Figure 4: Statue of the God of desire, from Hellenistic period, 331-138 B.C, it is classified as stone. Photo credits: Hasan Ahmed Qasim: Archaeologist, Director of Antiquities in Duhok in 2019, Duhok, Kurdistan region, Iraq.

The use of art by human beings for the purpose of the reproduction depiction emerged at the initial stages of the ice age, 25000 years B.C. Artistic works presented parts of the woman's body, such as breasts and pelvis, as indications to the concept of fertility. In the ancient region of Kurdistan – Iraq, several works of arts that share similar characteristics with the ones in the ice age have been found. The oldest of these works is a statue of mother goddess that dates back to the Neolithic period or New Stone Age, 6000 years B.C (Aiman, 1984). The obvious reason for the marriage, is to be of a strong bond is the reproduction and the expansion of the family. The archeological discoveries from the Assyrian period, 4000 years ago (in Kurdistan) have included samples of marriage contracts drawn on tablets of clay. The tradition of marriage and the respect of family constitute a cornerstone of the social fabric in Kurdistan (Aiman, 1984).

It is thus not surprising to say that the desire for production, especially for the female, becomes an important part of life since adulthood in Kurdistan Region. For the female in the ancient Kurdistan, the major concern was not only the marriage, it was also related to pregnancy, the delivery of healthy babies, and the ideal motherhood (Turp et al., 2018). Boys were taught to prioritize the fertility attribute in women. Other womanly attributes that could be used to satisfy the bodily and sexual desires of the male were thus to pale in comparison with the fertility attribute. This possibly explains the discovery of the god of desire from the Hellenistic period (331-138 B.C.) in the Kurdistan Region. The boys were encouraged to marry "hot limbed" women, thought to be able to give birth to many children. Giving birth to sons was preferred over daughters as they would provide security and help their family when the father passed away (De-Whyte, 2018).

One of the solutions of infertility in the ancient populations was surprisingly surrogacy (when a woman; the surrogate woman; agrees to be pregnant to give birth of a child for other persons who will be the parents) which was mentioned from the Assyrian period and documented on clay tablets 4000 years ago. Babylonians also attributed the healing to the healing power of some medicinal plants (Böck, 2013). In the Hammurabi Code, from the Babylon ancient world dating back to 2080 B.C., references to an awareness about the size of the population and its control were located. This kind of awareness is typical of the ancient people since the very early stages of the existence of human beings (Glass, 1942).

Infertility was associated with the female only at one point of time (ancient Mesopotamia, roughly 2000–1000 BCE). It was seen that "the water flows in the women and she takes it". If the women did not 'take it', she would not become pregnant. This thinking had increasingly taken roots as the writings on the clay tablets show that the women had to become strong and provide seeds to the men's water in order to reproduce (Glass, 1942). There were also some descriptions of the embryonal life and the way of giving birth (Nutton, 2013). Later on, the idea that the woman is not

passive in the process of conception and giving birth grew up, because the writing on the clay tablets said that the women should receive strength and give her seeds to the man's water to have children (Sasson and Law, 2008).

The ancient peoples had developed certain methods to diagnose the fertility of the woman. Wheat and barley were used by ancient obstetricians as pregnancy test. They used to put the wheat and barley in two separate pieces of clothes and asked the woman to urinate on it every other day, if both sprout this means that she will give rise to birth but if they don't that mean that she will never give birth at all. They further suggested that if the wheat sprout first the women will give birth to a boy and if the barely sprout first then the child will be a girl (Sasson and Law, 2008). Key beliefs and practices related to fertility and infertility in ancient Mesopotamia are summarized in Table 2. In ancient Kurdistan region, various forms of solution and treatments were tried to solve the problem of infertility such as the use of various forms of a plant which were thought to have a positive impact. The role of magicians was also evident in every aspect of their life including medical practice. Asking mother goddesses for their help was another part of solution in this region (Scurlock, 2005).

Table 2: Beliefs and Practices Related to Fertility and Infertility in Ancient Mesopotamia.		
Category	Description	Cultural Significance
Fertility as divine blessing	Fertility viewed as a sign of God's favor	Central to survival, lineage, and social stability
Infertility perception	Considered a curse, often attributed to women in certain periods	Led to social and psychological pressure on females
Fertility deities	Goddesses such as Dingir-Makh, Nintu, Nin-khursag	Reflect importance of reproduction in religion
Symbolism	Use of genital shapes, rhombs, pubic triangles, omega (Ω)	Visual representation of fertility concepts
Surrogacy	Documented in Assyrian clay tablets (~4000 years ago)	Early solution to infertility
Herbal medicine	Use of plants for fertility treatment	Early empirical medical practices
Magical/religious rituals	Involvement of magicians and prayers to deities	Integration of spirituality into healthcare
Pregnancy testing	Wheat and barley sprouting test	Primitive diagnostic method
Gender preference	Preference for male offspring	Social and economic reasons
Marriage and reproduction	Marriage linked strongly to procreation	Foundation of family and societal structure

3. CONCLUSION

The archaeological and textual evidence from the ancient Mesopotamian and Kurdistan region of Iraq reveals that fertility was not merely a biological phenomenon, but a central pillar of social, cultural, and spiritual life. The prevalence of mother goddess statues, the symbolic representation of reproductive organs, and the presence of the god of desire highlight the deep integration of reproduction into religious beliefs, societal norms, and personal aspirations. Infertility, often attributed solely to women in certain historical periods, was perceived as a curse requiring divine intervention, ritual practices, and herbal remedies. Methods such as

early diagnostic tests with wheat and barley, surrogacy arrangements recorded on clay tablets, and symbolic appeals to deities reflect a complex interplay between empirical observation, spiritual tradition, and societal pressures. The continuity of these beliefs, from the Neolithic period through the Hellenistic age, underscores the enduring importance of reproduction in ensuring lineage, social stability, and cultural identity in the ancient Kurdistan region of Iraq. These findings enrich our understanding of ancient reproductive concepts and demonstrate the deeply intertwined human survival with spiritual and cultural constructs of fertility.

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