

JIHĀT-UL-ISLĀM Vol: 17, Issue: 01, Jul – Dec 2023

OPEN ACCESS

pISSN: 1998-4472 eISSN: 2521-425X www.jihat-ul-islam.com.pk

Convergence of Creation: Exploring the Parallels between Islamic Descriptions and Modern Medical Insights on Human Fetal Development

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ABSTRACT

In the realm of abstract symbolism, humanity stands as a revered creation in the eyes of Allah (SWT), elevated above all other life forms and bestowed with the stewardship of the natural world. The verses of the Holy Qur'an resonate with the proclamation that the entirety of the cosmos has been crafted for the benefit of humankind. The genesis of human lineage traces back to the wondrous emergence of Adam (A.S), a miraculous event that signifies the divine commitment to the perpetuation of human existence through the fusion of male and female reproductive elements within the sanctuary of the maternal womb. This sacred fusion ushers in the genesis of new life, a journey encompassing a multitude of transformative stages. The Holy Our'an intricately chronicles these transformative stages, portraying the inception of humanity as an evolution from dust to seminal fluid, then to a clinging entity, and further into the formation of flesh¹. Remarkably, contemporary medical advancements echo these ancient descriptions, as the field of medical science meticulously expounds on the intricate metamorphosis of the fetus. This discourse delves into the convergence between the portrayal of the "Fetus" within Islamic sources and the annals of modern medical sciences, unraveling the intriguing parallels that bind these two distinct realms of knowledge.

Keywords: Human Fetal Development, Quran and Hadith, Medical Science, Human Creation, Embryology, Islamic Bioethics



1. Section I: Introduction: The Status and Role of Man in the Creation and Development of Life

Man is a unique and honoured creature among all the creations of Allah the Exalted, who has bestowed upon him many favours and blessings, and has made him a vicegerent on earth. Allah says:

"He it is Who created for you all that there is on the Earth."²

Man's origin is traced back to the miraculous creation of Prophet Adam (peace be upon him) from clay, as a sign of Allah's power and wisdom. Allah also endowed man with a remarkable biological system, in which the fusion of male and female reproductive cells results in the formation of a new individual, who passes through various stages of development in the mother's womb. Allah says:

"Human beings, we created you all from a male and a female."³

The Noble Quran has revealed the details of the creation and development of Adam (peace be upon him) and his progeny, and has shown how they are related to the same principle of life that Allah has ordained for all living beings. The Quran also clarifies that man's form and shape are not the outcome of an evolutionary process from another animal, but rather a deliberate design by Allah, who has fashioned him in the best and most beautiful way. The Quran says:

"Who shaped you -- and shaped you exceedingly well."⁴ And also:

"Surely We created man in the best mould."⁵

The section discusses the creation and development of man according to the Quran, which affirms that man is a unique and honoured creature among all the creations of Allah. The Quran also states that man's origin is from Prophet Adam (peace be upon him), who was created from clay by Allah's power and wisdom. The Quran further explains that man's biological system is based on the fusion of male and female reproductive cells, and that man's form and shape are not the result of evolution, but rather a deliberate design by Allah, who has made him in the best and most beautiful way.

The main question that this research paper seeks to answer is

How does the Quran and Sunnah, the primary sources of Islamic knowledge, describe the "embryo" and its development?

How does this description compare with the scientific understanding of the "embryo" and its development in modern medical science?

What are the points of agreement and disagreement between the Islamic and scientific perspectives on the "embryo"?

Methodology

A descriptive data analysis technique will be applied to study the problem.

Section II: The Research on the Word "Janin" (Embryo)

The word "Janin" (embryo) is derived from the Arabic, which means to hide or cover something from sight. According to Imam ibn Manzur, the word "embryo" refers to the child as long as it is in the mother's womb, because it is concealed in it. He also mentions that its plural forms are "ajna" and "ajnan". He further states that the word "embryo" is also used for the corpse that is buried in the grave, while "jannan" is used for the dead person. The author of Mu'jam al-Wasit defines the word "embryo" as grave, hidden thing, and the child that is in the womb until it comes out. He also notes that according to the physicians, the word "embryo" is used for the fruit of pregnancy (thamara) in the womb until the end of the eighth week, after which it is called pregnancy (haml).⁶

The Noble Quran has revealed many verses that describe the creation and development of Hazrat Adam (A.S) and his progeny, and how they are related to the same principle of life that Allah has ordained for all living beings. The Quran also clarifies that man's form and shape are not the outcome of an evolutionary process from another animal, but rather a deliberate design by Allah, who has fashioned him in the best and most beautiful way. The Quran says:

"Who shaped you -- and shaped you exceedingly well."

"Surely We created man in the best mould."8

This section will discuss some of the aspects and implications of the word "embryo" in the Quran, and how it relates to the biological process of human creation and development. The section will also demonstrate how the Quranic verses are consistent with the scientific findings and provide a miraculous description of the complex and diverse nature of human creation.

Modern Embryology in the Light of the Quran and Hadith

Embryology is a branch of anatomy that studies the process of human creation and development, from the fusion of male and female reproductive cells that form a single cell (zygote), to the formation, growth, and differentiation of the embryo in the mother's womb, until the birth of the child.⁹

Before the revelation of the Quran, there was no scientific advancement in this field, and it seems that most of the knowledge was based on conjectures and opinions. Then the Quran presented a detailed discussion on this topic, and explained the stages of embryonic development in the womb with clarity and accuracy, which are in accordance with modern scientific research. An Arab researcher, Muhammad Nabil al-Shawkani, wrote that from the time of Aristotle (384-322 BC) until the revelation of the Quran, it was believed that the embryo was fully formed in the male sperm, but its body was very small and invisible. Then it grew in the womb like a seed grows. Later, Aristotle changed his theory and proposed that the embryo was present in the menstrual blood of women, and

then it was thickened by the male drops.¹⁰ The Quran has shed light on various stages of embryonic development in the mother's womb. Before the Quran, embryology was very limited and there were no means of information available as today. The Quran opened a unique door for embryology by accurately describing the stages of embryonic development. Allah says:

"We created man out of the extract of clay, then We made him into a drop of life-germ, then We placed it in a safe depository, then We made this drop into a clot, then We made the clot into a lump, then We made the lump into bones, then We clothed the bones with flesh, and then We caused it to grow into another creation. Thus, most blessed is Allah, the Best of all those that create."

The Quran describes the stages of human embryonic development in a concise and accurate way, according to modern medical science.¹²

The hadiths also provide detailed information on different stages of embryonic development, and there are many hadiths on this topic. It is narrated from Abdullah bin Mas'ud that Prophet Muhammad (peace be upon him) said:

"When the sperm settles in the womb, it remains as a sperm for forty nights, then it becomes an alaqah for forty nights, then it becomes a mudghah for forty nights, then bones are formed in it for forty nights. Then Allah covers these bones with flesh and then He creates it into another creature. Then an angel says: O Lord, will it be fortunate or unfortunate? So, Allah decrees it and the angel write it down. Then he says: O Lord, what will be its lifespan, its sustenance, and its deeds? So, Allah decrees it and the angel write it down."¹³

The Meaning and Implications of the Word "Nutfah" in the Quran

The word "nutfah" is a Quranic term that has various meanings and implications in the context of human creation and development. It is derived from the root word "natafa", which means to drop or drip. According to the dictionary, the word "nutfah" can apply to pure water, drops, drops of sweat dripping from the forehead, and semen (the substance of birth). However, in the Quran, the word "nutfah" is mainly used to refer to semen, i.e., reproductive germs, whether they are female or male. The Quran states:

"Verily We created man out of a drop of intermingled sperm so that We might try him, and We therefore endowed him with hearing and sight." He created man out of a mere drop of fluid, and lo! he turned into an open wrangler." ¹⁶

These verses indicate that human beings are created from a mixture of male and female reproductive fluids, which contain the genetic material that determines their physical and mental characteristics. The word "nutfah" also implies that human beings are created from a humble and insignificant origin, which should make them grateful to their Creator and humble towards their fellow creatures. In the biological term, the union of male and female reproductive germs is called fertilization or conception. In this process, the male reproductive germ (sperm)

fertilization or conception. In this process, the male reproductive germ (sperm) fertilizes the female reproductive germ (egg), which is the initial stage of becoming a child. The Quran also mentions this process as follows:

"Verily We created man out of a drop of intermingled sperm so that We might try him, and We therefore endowed him with hearing and sight." "Then He made his offspring from a clot of weak water (semen)." 18

These verses confirm that human creation is a result of a combination of male and female reproductive fluids, which form a zygote, the first cell of a new individual. The word "amshaj", which means mixture or combination, is used to describe this process. Imam Tabari (may Allah have mercy on him) explains this word as follows:

"Abdullah told us that Abu Ja'far told us from al-Rabi' bin Anas who said: When the water of the man and the water of the woman meet, it is amshaj." "When the sperm of the man and the woman meet, it is called amshaj." 20

Hafiz Ibn Hajar al-Asqalani (may Allah have mercy on him) writes:

"When a person's semen mixes with the woman's semen and Allah Almighty intends to create an embryo from it, He provides the causes for it. There are two powers in the uterus, one is the power of expansion (the ability to spread) which occurs when semen enters it, causing semen to spread in it. The second power is contraction (the power to hold) in the uterus, that when semen enters inside it, despite being upside down, it does not flow out. In addition to this, there is "active power" in male semen and "passive power" in female semen."²¹

Sheikh Shams al-Din Ibn al-Qayyim (may Allah have mercy on him) has mentioned that the inner part of the uterus is like a sponge (soft and absorbent) and it has the ability to accept semen, just as a thirsty person desires water and the uterus does not push it out but embraces it so that no corruption comes in it. Then Allah Almighty commands the angels of the womb to make and ripen it, then its creation is completed in forty days.²²

This section has summarized some of the meanings and implications of the word "nutfah" in the Quran, and how it relates to the biological process of human creation and development.

Human birth from mixed sperm

The term "Amshaj" denotes the intricate process of fertilization, encompassing the fusion of male sperm and female egg to establish a zygote, marking the inception of a new individual. The Quran references this term in Surah Al-Insan, verse 2, declaring:

"We have created the human from a (sperm) drop, a mixture, testing him; We made him to hear and see."²³

The interpretation of "mixed sperm" or "amshaj" has varied among Quranic commentators. While some posit it as the amalgamation of male and female fluids, others perceive it as a blend of diverse components or attributes within the sperm. Certain interpretations also associate it with distinct stages or qualities of the sperm. However, contemporary scientific insights affirm that sperm is, indeed, a composite amalgam of diverse elements such as chromosomes, genes, proteins, and enzymes, governing the hereditary traits of progeny. Additionally, scientific understanding underscores that sperm can bear either an X or a Y chromosome, determining the offspring's gender. Thus, the phrase "mixed sperm" may be regarded as an awe-inspiring expression that encapsulates the intricate and multifaceted nature of human creation.²⁴

The Development of the Human Embryo in the First Three Weeks

The human embryo undergoes a series of complex and dynamic changes in the first three weeks of its existence, starting from the fertilization of the egg by the sperm to the formation of the main organs and systems. We will describe the main stages and events that occur in the embryonic development during this period, based on the latest scientific research and the Quranic verses.²⁵

The first week of embryonic development is characterized by the process of blastulation, which is the formation of a hollow ball of cells called the blastocyst from the zygote, which is the fertilized egg. The blastocyst consists of an outer layer of cells called the trophoblast, which helps to implant the embryo into the uterus, and an inner cell mass, which gives rise to the embryo and its associated structures. The blastocyst implants into the endometrium, which is the inner lining of the uterus, around six to seven days after fertilization. The Quran refers to this stage as follows:

"We created the human from an essence of clay, then We made him, a drop, in a secure receptacle (the womb)."²⁶

These verses indicate that human beings are created from an extract of clay, which is a metaphor for their earthly and humble origin. Then they are placed as a sperm-drop in a firm and safe lodging, which is the uterus of the mother, where they are protected and nourished until they are ready to be born.

The second week of embryonic development is marked by the process of gastrulation, which is the formation of three germ layers from the inner cell mass. The germ layers are the ectoderm, which forms the skin and nervous system, the mesoderm, which forms the muscles and other internal organs, and the endoderm, which forms the digestive and respiratory systems. The germ layers are arranged in a disc-shaped structure called the embryonic disc, which is attached to the trophoblast by a connecting stalk. The trophoblast develops into a membrane called the chorion, which surrounds the embryo and forms part of the placenta. Bernard of the placenta.

The third week of embryonic development is characterized by the appearance of two major organs: the nervous system and the heart. The nervous system develops from a thickening of the ectoderm along the midline of the embryonic disc, called the neural plate. The neural plate folds inward to form a groove, then a tube, called the neural tube. The neural tube gives rise to the brain and spinal cord. The heart develops from a pair of tubes that fuse together and start to beat around day 22. The heart tubes are connected to a network of blood vessels that form from mesodermal cells called angioblasts. The blood vessels carry blood between the embryo and its associated structures, such as the yolk sac and allantois. 29

The Quran describes this stage as follows:

"Verily We created man out of a drop of intermingled sperm so that We might try him, and We therefore endowed him with hearing and sight." ³⁰

By day 40, the embryo has distinct features such as ears, nose, and eyes. The embryo is about 8 mm long and its heart beats 100 to 130 times per minute. Its brain waves can also be detected.³¹ Imam Ibn Hajar al-Asqalani (may Allah have mercy on him) explains this stage based on the saying of Prophet Muhammad ## "He gathers his creation in forty days":

"They (the physicians) say that when semen enters the uterus and it (the uterus) does not expel it out, then it (the sperm) makes a circle by itself and becomes hard. At the end of six days, three points appear in it for the places of the heart, brain, and liver. At the end of the next three days, blood vessels infiltrate into it and the three organs become distinct. Then in the next twelve days, the brain's moisture extends into its tail, from which in the next nine days both horns separate from the head and likewise ribs, abdomen, etc.,

also become distinct. In the next four days, these distinctions are completed and this is what is meant by the saying of Prophet Muhammad #"He gathers his creation in forty days"³²

This section has summarized some of the main stages and events that occur in the embryonic development during the first three weeks. The section has also shown how the Quranic verses are consistent with the scientific findings and provide a miraculous description of the complex and diverse nature of human creation.

The Role of the Y chromosome in Human Sex Determination

Recent research in embryology has shown that the sex of an offspring is determined by the type of sex chromosome carried by the sperm of the male parent. The sperm can carry either an X or a Y chromosome, while the egg of the female parent always carries an X chromosome. The Y chromosome is responsible for the development of male characteristics, while the X chromosome is essential for the development of female characteristics. Therefore, if the sperm carries an X chromosome, it will combine with the egg's X chromosome to form an XX zygote, which will develop into a female offspring. If the sperm carries a Y chromosome, it will combine with the egg's X chromosome to form an XY zygote, which will develop into a male offspring.³³

Section III: The Quranic description of the "Alaqah stage" of human embryonic development: A comparison with modern science:

The Quran, the holy book of Islam, contains several verses that describe the stages of human embryonic development. One of these verses is:

"Read (Prophet Muhammad) in the Name of your Lord who created, created the human from a (blood) clot."³⁴

The Arabic word "alaqah" in this verse has been translated as "a clinging substance", "a clot of blood", or "a leech-like thing". Professor Keith Moore, a prominent embryologist, conducted a study on the Quranic and hadithic accounts of human embryology, and concluded that they are mostly consistent with modern scientific knowledge, and do not contain any errors or contradictions.³⁵ He also observed that the human embryo resembles a leech in the alaqah stage, both in appearance and in function. The embryo attaches itself to the uterine wall and obtains its nourishment from the maternal blood, just like a leech does to its host.³⁶

Imam Raghb al-Isfahani, a classical Quranic commentator, explained the meaning of alaqah as follows:

"The meaning of 'alaqah' is to be stuck to something, as it is said:

'The prey was stuck in the net.' 'Alaqah' (leech) is a kind of worm

that attaches itself to the throat, and also a kind of blood clot or lump that forms the child. And 'al-ilq' (with kasrah on the 'ayn) means that excellent thing that is attached to the heart of the owner and its love does not leave the heart."³⁷

According to these definitions, alaqah implies a strong attachment between two entities, and this is also true for the embryo and the uterus in the alaqah stage. The third stage of pregnancy lasts from forty days to that day when the embryo grows from 12 millimeters to 6 centimeters. In this stage, various organs such as lungs, trachea, fingernails, teeth buds, etc., are formed. The embryo's head is very large at the beginning of this stage, but it becomes smaller by the end. In short, by the end of this stage, all organs are almost complete. The embryo can also urinate, kick, and suck its thumb. ³⁸, ³⁹

The Development of the Embryo in the Non-Formed Chewed Substance Stage (Mudghah Ghayr Mukhallaqah Stag)

The third stage of human creation and development in the mother's womb is the non-formed chewed substance stage (Mudghah ghayr mukhallaqah Stag). Allah says:

"Then We created of the drop, a clot (of congealed blood) and We created the clot into bitesize tissue, then We created the bitesize tissue into bones, then We clothed the bones with flesh, and then produced it an other creation. Blessed is Allah, the Best of creators!"

The word "mudghah" means a small piece of flesh that can be chewed, as explained by al-Qurtubi. The word "mukhallaqah" means "created in a form" and "ghayr mukhallaqah" means "not complete in form", as stated by al-Maturidi. Some scholars interpret these terms as referring to whether the embryo's creation is predetermined or not, while others interpret them as referring to whether the embryo's organs and limbs are complete or not.⁴¹

The conclusion is that the non-formed chewed substance stage is the stage in which the embryo's creation is not complete and all the organs and limbs are not fully formed. This stage lasts from forty days to another forty days, i.e., those (80) days, according to a hadith narrated by Abdullah bin Mas'ud . At the end of this stage, the embryo becomes a formed chewed substance. In addition, a defective embryo is also considered to be in the non-formed chewed substance stage. 42

By analyzing the Quranic verses, commentaries and hadiths, it becomes clear that the non-formed chewed substance stage is an intermediate stage between alaqah and formed chewed substance, which corresponds to the biological process of human creation and development. The Quran provides a miraculous description of

this complex and diverse process, which is consistent with modern scientific findings.

The Stage of Formed Lump of Flesh (Mudghah Mukhallaqah)

The fourth stage of human creation in the mother's womb is the stage of formed lump of flesh (Mudghah Mukhallaqah). Some details of the lump of flesh have been mentioned in the previous lines. More light will be shed on it below. Imam Raghib al-Isfahani (died 445 AH) writes:

"Lump of flesh is a small piece of meat that is put in the mouth to chew. The poet (Zuhayr) has a verse: "He chews a lump of flesh in it that is tender" meaning he chews a tender piece of meat. Then the state of the fetus that occurs after the clot is called a lump of flesh. "Al-Madhgha" is what remains in the mouth after chewing."

Imam Ibn Hajar al-Asqalani (may Allah have mercy on him) writes:

"And lump of flesh is a piece of meat and it is called so because (it is such in size) that the eater (chews) it in his mouth."⁴⁴

The third forty days begin after 80 days and last until 120 days. In this stage, the fetus grows from 8 centimeters to 18 centimeters. It moves but it is so small that the pregnant woman does not feel its movement. It breathes oxygen through the umbilical cord. Its bones are hardening and hair starts to grow on its skin. In this stage, the heart of the pregnant woman works 40 to 50 times more than normal.⁴⁵

Types of soul, embryonic development and the infusion of soul

The embryo reaches completion in the fourth month (120 days), and the child grows considerably in size.⁴⁶ The organs also become complete and the child becomes capable of moving and performing all functions. Imam Ibn Hajar al-Asqalani said:

"The physicians say that in this period (80 days) the embryo starts to move, then it becomes a lump of flesh like that, i.e., a small piece of meat that moves in the third month. The scholars agree that the soul is infused into the embryo in the fourth month, not before."⁴⁷

In Tafsir al-Qurtubi it is stated:

"It is narrated in the sahih from Abdullah ibn Mas'ud that he said: The Messenger of Allah, who is the truthful and the trustworthy, told us that one of you is created in his mother's womb for forty days, then he becomes like that a clot of blood for a similar period, then he becomes a lump of flesh for a similar period, then an angel is sent and he breathes the soul into him."⁴⁸

Imam Sanai narrates:

"This hadith indicates that each of the stages of nutfah, alaqah and mudghah lasts for forty days, which makes a total of 120 days, then the soul is breathed into him."

From those hadiths it is known that after forty days the external organs of the embryo start to form and life is infused into them and the embryo moves. But the thing that causes movement in the embryo is not the real soul (which is called the Rabbani soul, the divine soul, the holy soul, the transcendent soul or the rational soul), and this is the highest degree of soul.

Shah Wali Allah said that there is a subtle vapor in the body that is produced by mixing in the heart, which possesses powers (abilities) of sensation, movement and regulation of food. The rules of medical science apply to this vapor. This vapor is the soul and this is the lowest degree of soul. This soul is called nasmah, air-like soul or animal soul. According to Shah Sahib, the real soul is not this subtle vapor or nasmah, but it is the vehicle of communication for the soul. And it connects it to the body. In short, a human being is not called by the name of body and flesh, nor by the name of nasmah or animal soul, but he will be called a human being when the real soul (Rabbani soul) connects with the body through the animal soul (nasmah). And this connection of the real soul with the body takes place after 120 days according to traditions.⁵⁰

The weekly development of the embryo after infusion of soul

At this stage, the embryo grows from 19 centimeters to 51 centimeters and at birth children have an average weight of 3.36 kilograms. At this stage, the child's five senses are very sensitive. He feels taste, recognizes sounds, has brain activity and his learning ability improves. At this time mothers feel more movement and kicking of children. Now he has become a human being with 200 million cells. At the end of pregnancy 3 to 4 percent children are in breech position and only 50 percent children are born on expected date while four out of five children are born late but this is not a matter of concern.⁵¹

Childbirth (Parturition) and twins:

When the child completes the stages of creation and becomes capable of coming out of the mother's womb, then Allah, the Lord of Glory, appoints a time for his arrival in the world. The divine guidance is:

"We establish in the wombs whatever We will for an appointed term."⁵²

Another verse states:

"From a (sperm) drop He created him and then determined him, then eased his path for him." ⁵³

The commentators explain two meanings of "then He eased the way for him": He endowed him with intellect and understanding and made easy for him the path of good and evil. Allah made easy for him the way of coming out of the mother's womb. Sometimes a woman gives birth to more than one child. This is called (Multiple Birth). Twins born are of two types.

Fraternal Twins are those that sometimes the woman's ovary releases two eggs and two twins are formed from them. Each of them has their own separate system. For example, separate anols and separate sacs (Amnion) for both. These types of children can also be of the same gender and different genders and their shapes are not very similar. Maternal Twins are those that occur when only one egg is fertilized, but during the first cell division it splits into two complete cells called (Blastomers). In this way, a single sperm fertilizes two separate identical children with identical characteristics. They are called Identical Twins. Their gender and physical characteristics are similar.⁵⁴

Ultrasound test for diagnosis of pregnancy

Ultrasound is a prenatal test that uses sound waves to produce images of the developing fetus in the uterus. It is a safe and non-invasive procedure that can be used to confirm the expected date of delivery, detect pregnancies outside the uterus, and assess the number of fetuses. Ultrasound is also used to detect any abnormalities in the fetus, such as anencephaly, open spina bifida, cleft lip, diaphragmatic hernia, exomphalos, lethal skeletal dysplasia, Edwards syndrome, and Patau syndrome. Ultrasound is an important tool in prenatal care and can help healthcare providers determine the health and development of the fetus. It is usually performed in the first trimester to confirm and date the pregnancy, and during the third trimester to examine the growth of the baby, the level of amniotic fluid, and the position of the fetus. Ultrasound is widely used in obstetrics and is considered safe and effective in evaluating pregnant women.⁵⁵

Section IV: The Rights of the Fetus:

To be entitled to rights, one must have legal capacity, which is the basis for establishing rights for oneself or for others. Imam Sarakhsi writes:

"These legal capacities are of two kinds: the capacity of obligation and the capacity of performance. The capacity of obligation is the eligibility for the rule of obligation \dots and the minor does not have that."⁵⁶

There are two kinds of legal capacities:

"(1) the capacity of obligation (2) the capacity of performance. The capacity of obligation is the ability that is required for the rule of obligation. So, whoever has this ability, he will be eligible for the rules of obligation to be imposed on him, and whoever does not have this ability, he will not be obliged. The capacity of performance has two kinds: complete and incomplete. The complete capacity is the one that entails responsibility, while the incomplete capacity does not entail responsibility."⁵⁷

Below is a brief discussion on the rights of the fetus.

The issue of lineage is self-evident in its importance, because it determines the moral and educational structure of any society. The Shariah has given the child the right to have a known lineage and has tried its best to prevent the stigma of illegitimacy from being attached to the child. Allamah Zailai writes:

"And whoever says that if I marry her, she is divorced, and she gives birth to a child within six months of marriage, he is obliged to attribute him and pay her dowry. As for attribution, it is because she is his bedmate ... so the attachment will be accompanied by ejaculation." ⁵⁸

If a person says to a woman that if I marry you, you are divorced, and she gives birth to a child within six months of marriage, then in this case he will have to pay her dowry as well as attribute him as his son. As for attribution, it is because she is his bedmate and it is possible that when she gave birth to him within six months from the time of marriage, then he was born within less than that from the time of divorce. So the attachment occurred before divorce in the state of marriage.

As Islamic teachings have entitled other relatives to inheritance, so has the fetus in the mother's womb been entitled to it and a share should be reserved for it at the time of distribution of inheritance. Abu Huraira narrates that the Prophet (peace be upon him) said:

"When a child cries out, he will be given inheritance." ⁵⁹

However, it is necessary that at the time of death of the testator, his existence in the mother's womb should be confirmed and he should also be alive. If he does not show signs of life at birth, then he will not be an heir, because being alive is necessary for eligibility and a dead person is neither obliged to have rules such as inheritance etc. established for him nor is he responsible for fulfilling rights. If a man dies and his wife is pregnant, then in this case a share of one child will be reserved for him. This is Mufti bi al-Qawl. Allamah Istrooshi writes that the way

to recognize whether a child was born alive or not is that he cries out or his sneeze is heard or he breathes or some of his organs move or he does something similar to that. If he is born dead, he will not be an heir. If there is a dispute about whether he was born alive or dead and a midwife (daya) testifies to his live separation, then there is consensus on this matter that her testimony will be accepted for his funeral prayer, but according to Imam Abu Hanifah, her testimony will not be accepted for inheritance, while according to Sahibain it will be accepted. ⁶⁰

In the present era, if it becomes clear from a medical report that the child was separated alive from his mother at birth, then this will also be equivalent to the testimony of a midwife.

A gift for a fetus is not valid because possession is a condition in a gift and a fetus does not have the ability to possess nor does anyone have authority over him to possess on his behalf.⁶¹

A bequest for a fetus is permissible provided that it is certain that he existed at the time of making the bequest. The author of Hidayah says that a bequest for a fetus is permissible because a bequest is due to substitution, meaning that it is making someone his successor in some part of his wealth and as a fetus can become a successor in inheritance, so can he in bequest because bequest is like inheritance.⁶²

Funeral prayer is also a right of the child but for this it is necessary that he should die after being born alive and then he will also be given ablution and funeral prayer will also be offered for him. It has been narrated from Imam Abu Hanifah that when a child cries out, his name will be given, funeral prayer will be offered for him and if he does not cry out (meaning that he does not show signs of life), then neither his name will be given nor ablution will be given to him and nor will funeral prayer be offered for him.⁶³

If a woman becomes pregnant unintentionally and is sentenced to stoning for some reason, then she will not be stoned while she is pregnant because the fetus in her womb is a part of the mother in one respect but also an independent individual in another. Taking into account the rights and life of the fetus, the Shariah has postponed her punishment until delivery. Allamah Ibn Nujaim writes that if a pregnant woman's punishment is "lashes", then she will not be subjected to the limit until she gives birth and comes out of postpartum bleeding, because postpartum bleeding is also like an illness, so she will be delayed until she recovers. She will be imprisoned with the punishment of "lashes" because if her punishment is "stoning" i.e., stoning to death, then she will be stoned immediately after giving birth without any delay, because the delay was due to the child and he (the mother) separated. Imam Abu Hanifah's opinion is that if there is no one else

to nurture and educate the child, then stoning will be postponed until the child becomes independent of his mother, because in this case delaying will prevent the child from being lost.⁶⁴

If a pregnant woman dies and it is known that there is a living child in her womb, then in this case her abdomen will be operated on and the child will be taken out alive. Allamah Haskefi writes:

"If a pregnant woman dies and there is a living child in her womb who moves, then her abdomen will be cut from the left side and the child will be taken out." 65

A Legal Perspective on Abortion in Pakistan

Abortion is a matter of social and moral concern, and therefore it also has legal implications. Pakistani law deals with this issue under the title of "Section 338, Abortion". According to this section: Whoever causes a pregnant woman to miscarry, when the organs of the child in her womb have not yet been formed, if such miscarriage is not caused in good faith for the purpose of saving the life of the woman or providing necessary treatment to her, he is said to commit abortion. (Note: A woman who causes herself to miscarry is also guilty of abortion within the meaning of this section). This section is further subdivided into sub-sections A, B and C.⁶⁶, ⁶⁷

A Comparative Analysis of Abortion Laws across the World

The United Nations compiled and presented the laws on abortion of all the countries in the world in a survey conducted in 2013. These countries can be classified into five categories based on their legal frameworks. The first category comprises those countries where abortion is completely banned. Such countries regard it as a grave offense. This category has only six countries. The second category includes those countries whose legal principles permit abortion solely to save the life of the woman. There are twenty countries in this category. The third category encompasses those countries where there is clear authorization for abortion to save the life of the woman (pregnant). There are thirty countries in this category. The fourth category covers those countries where there is clear authorization for abortion on grounds of reasons. There are eighty-two countries in this category, among which Pakistan is also included. The fifth category consists of fifty-nine countries where permission is granted on request. 68

Section V: The Islamic Legal Rulings on Assaulting the Fetus:

Assaulting a pregnant woman's abdomen and harming the fetus is a punishable offense, but only if the fetus has some or all of its organs formed.⁶⁹

Imma Sarakhsi writes: "And if a man strikes the abdomen of a woman and she miscarries a dead fetus, then he owes a slave or a slave-girl equivalent to that worth five hundred dirhams."

"If a man hits a woman's abdomen and she gives birth to a dead child, then he owes one slave or slave-girl, i.e. equivalent to five hundred dirhams."⁷⁰

If a pregnant woman deliberately adopts a situation that causes the child to miscarry, then she will have to pay compensation, but the compensation will be the responsibility of her guardian. Imam Fakhr al-Din Qazi Khan writes: If a woman deliberately takes medicine or adopts another method of treatment that causes the miscarriage of the child, then the compensation will be obligatory on her guardian, but if she takes any medicine without intending to abort, then nothing will be obligatory on her. However, the condition of intention and deliberation is only for the pregnant woman (if someone else hits her, whether by mistake or deliberately, then the previous rules will apply to him), while the compensation will be for the husband. In our opinion, the amount of compensation is five hundred dirhams. And if (someone hits a pregnant woman and) the fetus comes out dead and the mother also dies, then only the blood money for the mother is obligatory on the killer, while nothing is obligatory for (the dead fetus).⁷¹

If an incomplete child or miscarriage is found in a locality but there is no sign of injury on it, then nothing will be obligatory on the people of that locality. ... And if the child is complete in formation and there is also a sign of injury on it, then oath and blood money will be obligatory on the people of that locality because a complete child usually separates from his mother alive, but if he is incomplete in formation, then nothing will be obligatory because an incomplete child separates from his dead mother, not alive.⁷²

Temporary Contraception or Coitus Interruptus: An Islamic Legal Perspective

Various hadiths and juristic sources indicate that coitus interruptus or temporary contraception are inherently permissible, but it should be noted that the ruling of performing a permissible act is determined by the cause and motive behind it. If the permissible act is performed for a valid reason, then it is valid, and if the reason is invalid, then according to the principle of "actions are judged by their intentions", the ruling of the permissible act itself becomes invalid. It is also possible that sometimes performing a permissible act becomes necessary due to social needs, but its scope is not wide, for which it is also necessary that it does not contradict any command of Shariah. However, keeping in view the valid reasons, it is permissible to use contraceptive medicines.⁷³

The jurists have mentioned some reasons for which temporary contraception is permissible in their presence. Allama Ibn Abidin writes, and it is possible that he intended to add such reasons to the excuse, such as being in a long journey or in a land of war and fearing for the child, or having a bad-tempered wife and wanting to divorce her and fearing that she might become pregnant. Ibn Wahban said: And among the excuses is that her milk may be cut off after the appearance of pregnancy.

"It is possible that he intended to add other reasons like this to the excuse, such as being in a long journey or in a land of war and being afraid for the child, or having a bad-tempered wife and wanting to separate from her (because of which) he fears that she will become pregnant. Ibn Wahban said: And among the excuses is that her milk may be cut off after the appearance of pregnancy." ⁷⁴

In light of juristic details, there is room for temporary contraception on the basis of an excuse, for example, if a woman's pregnancy has an unbearable effect on her health and due to not having a gap in children, she faces severe difficulties, such as either the risk of death or becoming a victim of an unbearable disease in the future. In such a case, either the woman herself has a dominant opinion or an expert and religious doctor advises her, then in such a case it is permissible to use contraceptive medicines. The divine guidance is:

"And do not kill yourselves. Allah is the Most Merciful to you."⁷⁵ Similarly, keeping in view the health of the child, it is appropriate to have some gap in the birth of children. For some children, it is difficult to survive on anything other than mother's milk, and early pregnancy can have negative effects on the health of the child in the womb. In such a case, there is room for adopting contraceptive measures or coitus interrupts for a suitable gap. Educational reference is also a valid excuse for having a gap. If due to some social compulsion, the upbringing of children does not remain in the control of the father or he cannot raise them and there is a risk that they will become irreligious and immoral after being born and become a source of evil, then in such a case there is permission to temporarily stop the chain of childbirth. ⁷⁶

If someone's wife is bad-tempered and he intends to divorce her after waiting for some time if his wife's behavior improves then fine otherwise he will get rid of her. In such a case, when children are born, it becomes difficult for the husband to get rid of his wife or in case of separation, there are bad effects on the future of the children. Therefore, in such a case there is permission to adopt contraceptive measures.

Similarly, sometimes due to searching for means of livelihood or some other reason, one has to live in such a country where one does not have to stay permanently. Therefore, it may be possible that due to necessity he marries

someone there. Therefore, in such a country it is also permissible to stop the chain of childbirth.

Allah Almighty has made husband and wife a source of peace for each other for which mutual love and affection between them is necessary. The Prophet also mentioned this among the qualities of a good wife that "if he looks at her he is pleased". So if due to frequent childbirths his wife becomes such that his attention and love are affected by it and there is a dominant probability for it then in such a case it is permissible to adopt measures for having an appropriate gap between childbirths. It is part of his duties as husband that his wife becomes his center of attention. This is why it is commendable for his wife to adorn herself in front of him, wear jewelry and beautiful clothes etc.

Unacceptable Reasons for Family Planning

It is impermissible to stop the chain of children for other irrational reasons besides the legal excuses. The most irrational excuse is poverty or lack of resources, which is the main concern of the family planning advocates. They assume that if the population is controlled, then poverty and famine will be avoided, which is not only inconsistent with the Shariah commands, but also provoking the anger of Allah. Furthermore, viewing children as a burden and confining marriage to only satisfying one's desires and living a free life are also unacceptable reasons for stopping the chain of childbirth.⁷⁸

Likewise, some professional women also avoid the burden of children because of their employment. Since the husband is responsible for the wife's expenses and her employment is not a valid excuse, it is also impermissible for her to stop the birth of children. Moreover, some men or women may be obsessed with being called young forever, that they do not want to be called "mom, dad" or later on "grandma, grandpa" or "nana, nani", this is also an unacceptable reason.

Abortion: An Islamic Legal Analysis of its Permissibility and Impermissibility

The jurists unanimously agree that aborting the pregnancy after the ensoulment is prohibited and tantamount to killing a soul.⁷⁹

Alama Ibn Abidin wrote: "If the fetus is alive and there is a fear for the mother's life, then it is not permissible to cut it (abort it) because the death of the mother by it is doubtful, so it is not permissible to kill a human being for a doubtful matter." 80

This statement clarifies that aborting the child after the ensoulment for a doubtful matter is unlawful and in this case the life of the child is certain and according to some rulings he is a complete individual, while the death of the mother is doubtful or probable, therefore it is not permissible to end a certain life for a doubtful

matter. There is a difference of opinion among the jurists regarding aborting the pregnancy before the ensoulment. Some allow it while others do not. Alama Ibn Nujaim wrote with reference to Fath al-Qadir that abortion before 120 days (ensoulment) is permissible. Similarly, Alama Qazi Khan, Fakih Ali bin Musa, Imam Ghazali and others do not allow abortion after implantation.⁸¹

Alama Ibn Abidin and Ibn Nujaim wrote with reference to Ibn Wahban:

"Ibn Wahban said that the permissibility of abortion is based on the condition of an excuse or that she does not incur the sin of killing."⁸²

It is appropriate to apply the opinions of permissibility and impermissibility in such a way that those jurists who are of the opinion of impermissibility mean that it is not permissible without an excuse and those who have said permissibility mean that it is based on an excuse. And Allah knows best.

If there is only a doubt that the mother's life will be lost due to the child, then abortion after ensoulment is not permissible, but if the mother's death is certain and a board of expert and reliable doctors reaches this conclusion that there is no other way to save the woman's life except aborting the pregnancy, then in such a case, deciding on "the lesser of two evils", there is room for abortion. The rule is The greater harm is removed by the lesser one... And the principle in this regard is that whoever is afflicted with two calamities and they are equal, he may take whichever he wishes, and if they differ, he should choose the lesser one.⁸³

According to the Islamic Fiqh Academy of Mecca, after deliberating and discussing on this topic in a session based on the opinions of expert doctors and members, the following decision was made by majority vote, If the pregnancy is 120 days old, then its abortion is not permissible, whether it is proven by medical diagnosis that the child has a defect or not. However, if it is proven by a report of an expert, reliable committee of doctors that continuing the pregnancy is certainly dangerous for the mother's life, then in such a case abortion is permissible.⁸⁴

In summary, saving the mother's life in this case is more important and her death causes more harm than that of the child who has not yet been born and his being born alive is also not certain and the mother's life is certain, therefore in this case the lesser harm is in aborting the child.

With modern means, if it is proven by a medical report that the child in the mother's womb suffers from a severe incurable disease and will be a burden on society after birth. For example, he will be disabled, insane or affected by AIDS after being born, then aborting him after ensoulment is not permissible but unlawful because after ensoulment, he has acquired his right to live as an individual.

Abortion of Illicit Pregnancy

If a woman becomes pregnant with an illicit sperm without her consent, then she may have the possibility of aborting it before 120 days to avoid disgrace, but after the ensoulment, the life of the pregnancy is more important than the disgrace, therefore abortion is not permissible but it will be equivalent to killing a soul.

It is not permissible to permanently terminate the reproductive organs. It is narrated by Sa'd bin Abi Waqqas in Sahih al-Bukhari that the Prophet did not give permission to Uthman bin Maz'un to abstain from marriage despite his ability. If he had given him permission, then he would have had the possibility of ending his manhood. This hadith proves that ending one's manhood is unlawful according to Sharia. Similarly, it is not permissible for a woman to permanently become barren by removing her ovaries through surgery or any other way as happened under contraception. If there is a situation where a woman needs permanent treatment for health reasons, contraceptives do not prevent pregnancy and due to some negligence, repeated pregnancies endanger the woman's life or result in the loss of an organ or fear of losing an organ after two or three births by abnormal means such as surgery, then in such a case it is permissible to have permanent surgery or other treatment to protect her life.

The art of medicine or doctoring is a sacred profession that is a manifestation of God's attribute "al-Shafi" (the Healer) and doctors are regarded with respect in custom. On this basis, it is the responsibility of doctors to avoid actions that are immoral and cause social disorder. The verse of guidance is:

"And cooperate in righteousness and warding off (evil), and do not cooperate in sinfulness and transgression." 86

Abortion of illicit pregnancy is not the duty of the doctor but rather he can treat it with permission, but if he knows that treating such people will promote adultery in society, then he should avoid it because in such a case when there is no facility for abortion treatment, people will not dare to commit adultery and thus the path of obscenity will also be blocked to some extent.⁸⁷

In Section V, the text examines Islamic legal rulings concerning various aspects of pregnancy, contraception, and abortion, offering insight into the permissible and impermissible elements within the context of Islamic jurisprudence.

Assault on a Fetus: This section elucidates the legal consequences of injuring a pregnant woman's abdomen and the resulting harm to the fetus. It delineates the specific conditions under which such actions may incur punishment and stipulates the compensatory measures required.

Temporary Contraception: The text delves into the Islamic perspective on temporary contraception methods, including coitus interruptus. It underscores the

significance of valid justifications and societal needs for the permissibility of such contraceptive practices.

Valid Reasons for Temporary Contraception: The section outlines a spectrum of valid rationales for temporary contraception, including considerations related to health, economic circumstances, and educational pursuits.

Unacceptable Reasons for Family Planning: The text scrutinizes irrational and unacceptable motivations for engaging in family planning, emphasizing that it should not be employed for frivolous purposes or to maintain a hedonistic lifestyle.

Abortion: The discourse on abortion expounds upon the circumstances under which it is permitted and when it is categorically prohibited, underscoring the paramount importance of preserving life and the imperative of weighing the ethical dimensions of each situation.

Abortion of Illicit Pregnancy: The text elucidates the conditions under which abortion of an illicit pregnancy is sanctioned, distinguishing between preensoulment and post-ensoulment scenarios.

Permanent Sterilization: This section touches upon permanent sterilization and underscores that it should exclusively be considered within the confines of specific medical exigencies. Additionally, it calls upon healthcare professionals to exercise their responsibilities prudently. In summary, this section underscores the nuanced and context-dependent nature of these issues within Islamic jurisprudence, emphasizing the importance of taking into account the well-being and ethical considerations of all individuals involved.

Section VI: Conclusion

The Quran and Hadith reveal that human creation occurs in five stages. These five stages are sperm (Nutfah), clot (Alaqah), lump of flesh (Mudghah Ghayr Mukhallaqah), unformed creation (Mudghah Mukhallaqah), and infusion of soul (Ruuh). Islam has established the rights of inheritance, lineage, will, and funeral prayer for the fetus before birth. There is a difference of opinion among the jurists regarding aborting the pregnancy before the ensoulment and formation of the fetus. Some allow it while others do not. Those jurists who are of the opinion of impermissibility mean that it is not permissible without an excuse and those who have said permissibility mean that it is based on an excuse. In the presence of a legal excuse, there is room for keeping a suitable gap between children as well as permanent treatment, while doing so without a legal excuse is a cause of sin. When the soul enters the fetus, then aborting it is equivalent to killing a soul. However, if a board of doctors reaches the conclusion that the death of the pregnant woman is certain if the pregnancy is not aborted, then there is permission for abortion to save her life.

References

- ¹ "Al-Hajj [22:5] Tanzil Quran Navigator," accessed October 11, 2023, https://tanzil.net/#22:5.
- ² "Al-Baqara [2:29] Tanzil Quran Navigator," accessed October 11, 2023, https://tanzil.net/#2:29.
- ³ "Al-Hujurat [49:13] Tanzil Quran Navigator," accessed October 12, 2023, https://tanzil.net/#49:13.
- ⁴ "Ghafir [40:64] Tanzil Quran Navigator," accessed October 11, 2023, https://tanzil.net/#40:64.
- ⁵ "At-Tin [95:4] Tanzil Quran Navigator," accessed October 11, 2023, https://tanzil.net/#95:4.
- ⁶ "Ibn Manzūr, Lisān Al-'Arab The Arabic Lexicon," accessed October 11, 2023, http://arabiclexicon.hawramani.com/ibn-manzur-lisan-al-arab/.
- ⁷ "Ghafir [40:64] Tanzil Quran Navigator."
- 8 "At-Tin [95:4] Tanzil Quran Navigator."
- ⁹ KL Moore, TVN Persaud, and MG Torchia, *The Developing Human-e-Book: Clinically Oriented Embryology*, 2018.
- Muhammad Nabil Al-Nashwati, I'jāz Al-Ilāhī Fī Khalq Al-Insān, 1st ed. (Bayrūt: Dār al-Maḥajjah al-Bayḍā' lil-Ṭibā'ah wa-al-Nashr wa-al-Tawzī, 2007), p. 19.
- ¹¹ "Al-Mu'minun [23:12-14] Tanzil Quran Navigator," accessed October 12, 2023, https://tanzil.net/#23:12.
- ¹² E Mahdi et al., "Developmental Biology in Holy Quran," *Academicjournals.OrgE Mahdi, F Abolfazl, S HamidJournal of Physiology and Pathophysiology, 2012•academicjournals.Org* 3, no. 1 (2012): 1–7, https://doi.org/10.5897/JPAP11.023.
- ¹³ "Al-Baqara [2:111] Tanzil Quran Navigator," accessed October 12, 2023, https://tanzil.net/#2:111.
- ¹⁴ Z Amin, SA Khan PalArch's Journal of Archaeology of Egypt, and undefined 2021, "BI-GENDER TRANSLATION OF QURANIC VERSE REGARDING HUMAN CREATION: LINGUISTIC &TRANSLATIONAL ANALYSIS," *Archives.Palarch.Nl* 18, no. 10: 1428, accessed October 12, 2023, https://archives.palarch.nl/index.php/jae/article/view/10028.
- ¹⁵ "Al-Insan [76:2] Tanzil Quran Navigator," accessed October 12, 2023, https://tanzil.net/#76:2.
- ¹⁶ "An-Nahl [16:14] Tanzil Quran Navigator," accessed October 12, 2023, https://tanzil.net/#16:14.
- ¹⁷ "Al-Insan [76:2] Tanzil Quran Navigator."
- 18 "As-Sajda [32:8] Tanzil Quran Navigator," accessed October 12, 2023, https://tanzil.net/#32:8.
- ¹⁹ Muhammad ibn Jarir Al-Tabari, *Tafsir Al Tabari: Jami Al Bayan An Ta'Wil Aayi Al Qur'an* (Beirut: Mo'assasah al-Risālah, 1997), 24:578.
- ²⁰ Karim Abd-El-Maeboud, "Human Life Cycle: Science and the Holy Qur'an," *Researchgate.Net*, accessed October 12, 2023, https://doi.org/10.13140/RG.2.1.4069.4806.
- ²¹ Ahmad bin Ali Ibn Hajar Al-Asqalani, *Fath Al-Bari Sharh Sahih Al-Bukhari* (Beirut: Dar al-Fikr, n.d.), 13:311.
- ²² Ibn Qayyim Al-Jawziyah, *Al-Tibyan Fi Aqsam Al-Quran* (Beirut: Mu'assasat al-Risalah, 1979).

- ²³ "Al-Insan [76:2] Tanzil Quran Navigator."
- ²⁴ G Kovacs Human embryos and preimplantation genetic and undefined 2019, "Elective Gender Selection of Human Embryos during IVF: Ethical and Public Policy Considerations," *Elsevier*, accessed October 12, 2023,

https://www.sciencedirect.com/science/article/pii/B9780128164686000047.

- ²⁵ JM Tanner, Foetus into Man: Physical Growth from Conception to Maturity, 1990.
- ²⁶ "Al-Mu'minun [23:12-13] Tanzil Quran Navigator."
- ²⁷ J Muhr and KM Ackerman, "Embryology, Gastrulation," 2020, https://europepmc.org/article/nbk/nbk554394.
- ²⁸ I Singh, *Human Embryology*, 2014.
- ²⁹ David C. Mundy and Gustavo Vilchez, "Overview of the Normal Development of the Human Embryo and Fetus," *The Diagnosis and Management of the Acute Abdomen in Pregnancy*, 2018, 25–39, https://doi.org/10.1007/978-3-319-62283-5_2.
- 30 "Al-Insan [76:2] Tanzil Quran Navigator."
- ³¹ Bruce M Carlson, *Human Embryology and Developmental Biology*, 2018.
- ³² Al-Asqalani, Fath Al-Bari Sharh Sahih Al-Bukhari, 13:317.
- ³³ D Bachtrog Current opinion in genetics & development and undefined 2006, "A Dynamic View of Sex Chromosome Evolution," *Elsevier*, 2006, https://doi.org/10.1016/j.gde.2006.10.007.
- ³⁴ "Al-Alaq [96:1-2] Tanzil Quran Navigator," accessed October 12, 2023, https://tanzil.net/#96:1.
- ³⁵ Moore, Persaud, and Torchia, *The Developing Human-e-Book: Clinically Oriented Embryology*.
- ³⁶ M Mohsen, M Esmaeilzadeh, and S Hamid, "Holy Quran, New Sciences and Development of Human Embryo," 2011, http://www.webmedcentral.co.uk/article_view/2260.
- ³⁷ Ḥ Rāghib Iṣfahānī, *Mufradāt Alfāz Al-Qur'ān*, ed. ṢA Dāwūdī (Beirut: Al-Dār al-Qalam, 1992) , p:579.
- ³⁸ LR Cochard, Netter's Atlas of Human Embryology: Updated Edition, 2012.
- ³⁹ "The Development in Vitro of the Blood of the Early Chick Embryo," *Proceedings of the Royal Society of London. Series B, Containing Papers of a Biological Character* 111, no. 773 (October 1932): 497–521, https://doi.org/10.1098/RSPB.1932.0070.
- ⁴⁰ "Al-Mu'minun [23:14] Tanzil Quran Navigator," accessed October 12, 2023, https://tanzil.net/#23:14.
- ⁴¹ MH Chohan, M Tahir Abha'th, and undefined 2016, "Islamic Approach to Human Embryology in Modern Scientific Perspectives," *Iri.Aiou.Edu.PkMH Chohan, M TahirAbha'th, 2016•iri.Aiou.Edu.Pk*, accessed October 12, 2023, https://iri.aiou.edu.pk/wp-content/uploads/2018/09/munawer-1.pdf.
- ⁴² HA TZORTZIS UK: Slamic Missionary Group and undefined 2012, "Embryology in the Qur'an," *Hizbululama.Org.Uk*, accessed October 12, 2023,

http://www.hizbululama.org.uk/articles/english/Embryology_in_the_Quran_v2.pdf.

- ⁴³ Rāghib Işfahānī, Mufradāt Alfāz Al-Qur'ān, p:770.
- ⁴⁴ Al-Asqalani, Fath Al-Bari Sharh Sahih Al-Bukhar, 13:316.

- ⁴⁵ RJ Swanson et al., "Conception and Pregnancy," *Elsevier*, accessed October 12, 2023, https://www.sciencedirect.com/science/article/pii/B9780128183090000113.
- ⁴⁶ Tanner, Foetus into Man: Physical Growth from Conception to Maturity.
- ⁴⁷ Al-Asqalani, Fath Al-Bari Sharh Sahih Al-Bukhari, 13:316.
- ⁴⁸ Muhammad bin Ahmad al-Qurtubi, *Al-Jami'li Ahkam Al-Qur'an* (Beirut: Muassasah al-Risalah, 2006), 6:6.
- ⁴⁹ Sanaullah Amritsari Imam Sanai, *TAFSEER-E-SANAI* (Hyderabad: Ghulam Yaseen, 1925).
- ⁵⁰ Shah Wali Ullah, *Hujja-t-Allah Al Baligha* (Lahore: Maktabah Salafiyyah, n.d.), p:18.
- ⁵¹ S Saadat International journal of health sciences and undefined 2009, "Human Embryology and the Holy Quran: An Overview," *Ncbi.Nlm.Nih.Gov*, accessed October 12, 2023, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3068791/.
- 52 "Al-Hajj [22:5] Tanzil Quran Navigator."
- ⁵³ "Abasa [80:19-20] Tanzil Quran Navigator," accessed October 12, 2023, https://tanzil.net/#80:19.
- ⁵⁴ Chana Palmer et al., "Development of the Human Infant Intestinal Microbiota," *PLoS Biology* 5, no. 7 (July 2007): 1556–73, https://doi.org/10.1371/JOURNAL.PBIO.0050177.
- ⁵⁵ E Garne et al., "Evaluation of Prenatal Diagnosis of Congenital Heart Diseases by Ultrasound: Experience from 20 European Registries," *Wiley Online LibraryE Garne, C Stoll, M ClementiUltrasound in Obstetrics and Gynecology: The Official Journal of, 2001•Wiley Online Library* 17, no. 5 (2001): 386–91, https://doi.org/10.1046/j.1469-0705.2001.00385.x.
- ⁵⁶ Muhammad ibn Ahmad Sarakhsī, *Usool Al-Sarakhsi* (Beirut: Dar al Kotob al ilmiyah, 1993), 2:240.
- Mahdi Jamalinezhad, Seyed Mohammadreza Talakesh, and Seyed Hassan Khalifeh Soltani, "Islamic Principles and Culture Applied to Improve Life Quality in Islamic Cities," *Procedia Social and Behavioral Sciences* 35 (January 1, 2012): 330–34, https://doi.org/10.1016/j.sbspro.2012.02.095.
- ⁵⁸ "Tabyīn Al-Ḥaqā'iq: Sharḥ Kanz Al-Daqā'iq Fakhr Al-Dīn 'Uthmān Ibn 'Alī Al-Zayla'ī Google Books," accessed October 12, 2023, 3:247
- ⁵⁹ Abū Dāwūd (Dā'ūd) Sulaymān ibn al-Ash'ath, *Sunan Abu Dawud* (Lahore: Maktabah Rahmaniah, n.d.), 2:56.
- 60 Muḥammad Maḥmūd Asrūshanī, $J\bar{a}mi$ ' $Ahk\bar{a}m$ $Al-Ṣigh\bar{a}r$ (al-Qāhirah: Dār al-Faḍīlah lil-Nashr wa-al-Tawzī', 1994), P:378.
- ⁶¹ Muḥammad Amīn Ibn 'Ābidīn, *Al-Dur Al-Mukhtār Wa Ḥāshiyah* (Multan: Maktabah Imdadiyyah, n.d.), 1:242.
- 62 Abū Dāwūd (Dā'ūd) Sulaymān ibn al-Ash'ath, Sunan Abu Dawud.
- ⁶³ Abū Bakr ibn Mas'ūd Kāsānī, *Badā'i' Al-Ṣanā'i' Fī Tartīb Al-Sharā'I'* (Bayrūt: Dār al-Kutub al-'Ilmīyah, 2008), 2:312.
- ⁶⁴ Zayn al-Dīn ibn Ibrāhīm Ibn Nujaym, Baḥr Al-Rā'iq Sharḥ Kanz Al-Daqā'iq, Wa-Bi-Hāmishih Al-Ḥawāshī Al-Musammāh Bi-Miḥnat Al-Khāliq 'Alá Al-Baḥr Al-Rā'Iq (Bayrūt: Dār al-Ma'rifah lil-Ṭibā'ah wa-al-Nashr wa-al-Tawzī', 1993), 5:18.
- 65 Muhammad ibn 'Alī Haskafī, Al-Durr Al-Mukhtār (Multan: Maktabah Imdadiyyah, n.d.), 3:45.

- ⁶⁶ N Rehan Consultant and undefined 2003, "Attitudes of Health Care Providers to Induced Abortion in Pakistan," *CiteseerN RehanConsultant, 2003•Citeseer*, accessed October 12, 2023.
- ⁶⁷ Sehrish Karim et al., "Abortion Law in Pakistan: Deficiencies and the Need for Reforms," *Ajdm.Altamash.Edu.Pk* 2, accessed October 12, 2023,

https://ajdm.altamash.edu.pk/index.php/ojs3/article/view/27.

- ⁶⁸ Stephanie A. Küng et al., "Access to Abortion under the Heath Exception: A Comparative Analysis in Three Countries," *Reproductive Health* 15, no. 1 (June 13, 2018), https://doi.org/10.1186/S12978-018-0548-X.
- ⁶⁹ Shuhrat Iqbal et al., "Right Of Fetus (Janīn) In Islam And Western Law A Comparative And Analytical Study," *Journalppw.ComZ Amin, M ZahidJournal of Positive School Psychology*, 2022•journalppw.Com 2022, no. 8: 5731–43, accessed October 12, 2023,

https://www.journalppw.com/index.php/jpsp/article/view/10842.

- ⁷⁰ Muḥammad ibn Aḥmad Sarakhsī, Usool Al-Sarakhsi, 26:78.
- ⁷¹ al-Hasan ibn Mansur al-Usjandi al-Farghani Qadi Khan, *Fatawa-i-Qazi Khan* (Beirut: Darul Kutubul Ilmiyyah, 2009), 3:355.
- ⁷² Burhan al-Din Al-Marghinani, *Al-Hidayah* (Lahore: Maktabah Raḥmaniah, n.d.), 4:625.
- ⁷³ Nujaym, Baḥr Al-Rā'iq Sharḥ Kanz Al-Daqā'iq, Wa-Bi-Hāmishih Al-Ḥawāshī Al-Musammāh Bi-Miḥnat Al-Khāliq 'Alá Al-Baḥr Al-Rā'Iq, p:12.
- ⁷⁴ Muḥammad Amīn Ibn 'Ābidīn, *Al-Dur Al-Mukhtār Wa ḤāshiyahMuḥammad Amīn Ibn 'Ābidīn. Al-Dur Al-Mukhtār Wa Ḥāshiyah. Multan: Maktabah Imdadiyyah, n.D, 4:335.*
- 75 "An-Nisa [4:29] Tanzil Quran Navigator," accessed October 12, 2023, https://tanzil.net/#4:29.
- ⁷⁶ World Health Organization, *The World Health Report 2005: Make Every Mother and Child Count*, 2005.
- ⁷⁷ "Sunan Ibn Majah 1857 The Chapters on Marriage Sunnah.Com Sayings and Teachings of Prophet Muhammad (صلى الله عليه و سلم)," accessed December 4, 2023,

https://sunnah.com/ibnmajah:1857.

- ⁷⁸ Bojana Pinter et al., "Religion and Family Planning," *European Journal of Contraception and Reproductive Health Care* 21, no. 6 (November 1, 2016): 486–95, https://doi.org/10.1080/13625187.2016.1237631.
- ⁷⁹ K.M. Hedayat, P. Shooshtarizadeh, and M. Raza, "Therapeutic Abortion in Islam: Contemporary Views of Muslim Shiite Scholars and Effect of Recent Iranian Legislation," *J Med Ethics* 32 (2006): 652–57.
- ⁸⁰ Muḥammad Amīn Ibn 'Ābidīn, Al-Dur Al-Mukhtār Wa ḤāshiyahMuḥammad Amīn Ibn 'Ābidīn. Al-Dur Al-Mukhtār Wa Hāshiyah. Multan: Maktabah Imdadiyyah, n.D, 4:335.
- ⁸¹ Nujaym, Baḥr Al-Rā'iq Sharḥ Kanz Al-Daqā'iq, Wa-Bi-Hāmishih Al-Ḥawāshī Al-Musammāh Bi-Miḥnat Al-Khāliq 'Alá Al-Baḥr Al-Rā'Iq, 3:349.
- ⁸² Muḥammad Amīn Ibn 'Ābidīn, Al-Dur Al-Mukhtār Wa ḤāshiyahMuḥammad Amīn Ibn 'Ābidīn. Al-Dur Al-Mukhtār Wa Ḥāshiyah. Multan: Maktabah Imdadiyyah, n.D, 4:335.
- 83 Khaled Al-Atassi, Sharh Al-Majallah (Quetta: Maktabah Habībiyyah, n.d.), p:26.
- 84 Karim et al., "Abortion Law in Pakistan: Deficiencies and the Need for Reforms."

⁸⁵ Muhammad ibn Ismail Al-Bukhari, *Al-Jami Al-Musnad Al-Sahih Al-Mukhtasar Min Umur Rasul Allah Sallá Allah Alayhi Wa-Sallam Wa-Sunanihi Wa-Ayyamihi* (Karachi: Qadīmī Kutub Khana, n.d.), 2:759.

^{86 &}quot;Al-Ma'ida [5:2] - Tanzil Quran Navigator," accessed October 12, 2023, https://tanzil.net/#5:2.

⁸⁷ S Demirel - International Journal of Business and Social Science and undefined 2011, "Abortion from an Islamic Ethical Point of View," *Academia.Edu*, accessed October 12, 2023, https://www.academia.edu/download/36274295/Abortion_from_an_Islamic_Ethical_Point_of_View.pdf.