

PalArch's Journal of Archaeology of Egypt / Egyptology

DNA TEST: BETWEEN SCIENCE AND SHARIA

Shahla Reza Al – Ghanmi

University of Kerbala / College of Tourism Science

Shahlaa.r@uokerbala.edu.iq

Shahla Reza Al – Ghanmi, DNA Test: Between Science And Sharia-Palarch's Journal Of Archaeology Of Egypt/Egyptology 17 (10), 4381-4392. ISSN 1567-214x. Published October, 2020.

Keywords: Imprinting, DNA Test, Science, Legislation..

ABSTRACT

The paper assays to recognize the social position of DNA Test, which is one of the techniques of modern science, and one of the contemporary and emerging publications in Islamic jurisprudence in terms of evidence of paternity suit proof and the position of scholars on both sides. Thus; the paper aims to be inclusive of the opinion of the contemporaries in term of prohibition and/or permissibility in this issue. This can achieved by known the legal aptitude of DNA Test and the constitutional and doctrinal documents, then assign it to its rules.

INTRODUCTION

The third technique of medical engineering and genetics has had a portion of the scientific rebellion that has occurred recently, in various types of technical and medical sciences. Which began discovery of DNA spiral strands by two scientists: James Watson - and Frances Crick in 1953? In 1958, Alec Jeffery was authorized to enter the threshold of genomic age because of his discovery of the DNA Test of humans and knowledge of genetic sequences in treatment of many diseases such as: cancer, diabetes, and heart diseases. The significance of DNA Test in determining the specification of people has emerged by analyzing a part of the human of the person whose identity or derivation is to be proven, and contrast it with whom wants to belong. Therefore, it is possible to know whether there is a lineage correlation between the two fractions. According to specialists in the same field mentioned that genetic genes must be proceed on from a person to his association with. As a result, it is possible for a human body to be free of these genes.

Framework of research

Comprehension of the technique of DNA Test in Islamic jurisprudence.

Explaining the role of DNA in paternity suit proof and the position of scholars on both sides concerned with it.

Recognized the legal action, constitutional, and doctrinal documents of DNA Test that assign to its rules.

LITERATURE REVIEW

Genetic Fingerprint Discovery

In 1958, the British geneticist (Leicester University) Alec Jeffery published a research paper in which he explained that genetic material may repeat and repeat itself in unintelligible random sequences. After one year of continues searching, he discovered that these sequences are distinct and can't be similar between two person. These sequences are called DNA Test; As a result, he received a patent. Although, every rule has an exception where, as the geneticist made an exception for a case in which DNA Test applies, in particular the occurrence of identical Siamese twins only. The aforementioned scientist indicated that the probability of genetic similarity between one person and another is one: tln. , indicating the impossibility of resemblance (Al-Saidi, 2011). Also, he reveal that 99.5% of humans are similar in terms of the number of hands, feet, eyes, and internal organs, etc., since DNA in single cell be composed of a series of nitrogenous bases approximately 3.3 billion pairs. Whilst, 0.5 % all humans are contrast with blood strip, skin colour, eye shape, nose and hair (Al-Arahi, 2010) Due to the nitrogenous bases alteration along DNA, scientists have exploit this feature to manifest that all possible has their own DNA (Wajdi, 2000). Alec Jeffery was able to apply what he discovered. Where, a woman with a Ghanaian nationality to travel to British, but the references prevented her from joining her child with her on the pretext that he was not her son. Then the geneticist intervened and was able to prove the mother's motherhood to child based on DNA.

Characteristic of Fingerprint

DNA is characterized by its resistance to heat, dehydration, moisture, decomposition, and resistance to rotting for long periods. It can also be extracted from liquid and dry biological specimens, whether old and/or recent. This is because of its properties; it is possible to know the genetic imprint after death of its owner by analyzing the remains of dental bones (Ibrahim, 2007).

According to the skill of the apprentice, its ease of comparing and distinguishing between to genetic fingerprints. As well as, saving them in a computer as a database until demand and for an indeterminate period (Musleh, 2000).

It is possible to distinguish between the sex of samples (male or female) (Muhsin, 2007).

By DNA of genetic imprint, mixed samples in crimes and rape cases can be separated. Where, each sample can be traced back to its reference (Nafie, 2009).

Indifferently DNAs technique, the crime can be proven, and in case of disappearance of the body and the presence of traces left behind such as: blood and / or bone remains. These traces can be returned to the victim but; this procedure can be done if report missing persons was received (Omar, 2007).

The impossibility of similarity in the genetic imprint between two, even in case of Siamese twins the match is not completely. The probability that two people will have similar fingerprint is 1:64 billion people. Which makes the resemblance impossible (Arif, 2011).

Medical scientists confirmed that DNA Test provide with 100% definitive results in negation or verification. And, almost absolute proof of 99.99% (Nazar, 2006).

The DNA molecule is so small. Therefore, if the DNA of all the inhabitants of the earth were collected, it would not weight more than 36 mg. Also, it could be wrapped around the earth three times (Wajdi, 2007).

DND Imprinting Technology

To acquire a gene imprint that is a small sample of tissue from which DNA can be extracted: (blood, semen, hair root, nails, saliva, bone, urine, teeth, amniotic fluid, fertilized egg cell after its division, sweat, mucus, vaginal secretions, skin, kidney cells, etc.) (Al-Sabeel, 2002) Depending on the nature and quantity of the sample, the method of genetic imprint analysis is determined. As for the duration of the analysis, depending on the type of incident and classify the DNA, the duration of the examination ranges from two days to three weeks (Al-Najar, 2000).

Application of DNA Test

DNA fingerprinting is one of the expedients that can't be dispensed with recently. In circumstances where religious orders are incompetent to unravel them. There are multiplicity cases in which the legal procedures paused, such as: proving or denying parentage, rape, and kidnapping, also victims of calamity and wars. As a result, of importance of these circumstances that occupied the corridors of courts and attention of scientists. Due to the definitive repercussion of DNA examination, the work of DNA Test has propagation in scientific and judicial fields. Accordingly, it has been used as criminal evidence in many prosperous countries. Also, private companies were established in the mid-1980s, especially for DNA assaying in order to determine the specification of accused. Among these companies: Cel Mark Dea Gno Stakes / Maryland, Life Codes Corporation / New York (Al-Najar, 2000).Thence, the significance of DNA Test , which can be synopsized in two points. Firstly, since the genetic imprint is not shared by two humans, this property can be used to solve many issues, including: an unknown claim to individuals or a tribe, wars and disasters, recurrence of vanished or internee, wherewithal of proof in criminal crimes.

Secondly, by genetic fingerprint, it is possible to identify the relative ties of the family, which can be utilized in case of suspicion of IVF, and potential of

distinction between consort and spouse. In the case of substantiation of pedigree, DNA can be adopted in the following:

Conflict of evidence such as: lack of evidence or its equivalent, participation in intercourse (suspicious intercourse), two men claiming parentage or founding (Al-Qura, 2000).

Suspicion of newborns, n-vitro-Fertilization IVF babes, in incident of doubt, the newborn's imprint can be compared to the parents fingerprint to prove parentage (Al-Najar, 2000).

Loss of children and their vagabond with unknown children like them, due to accidents and disasters, lack of identification, unknown carcass in mass graves, shredders body scattered as a result of the explosion (Recognition) (Madaa,2007).

When the father's denial of his child, because of an illegal relationship such as: rape and fornication (Al-Qura, 2000).

Occurrence of woman claiming that her newborn belongs to particular man, rapacity of inheritance or alimony. The woman credibility can be known by occupying imprint specimen from both newborn and defendant (Al-Qura, 2011).

The case of a man's allegation that he lost his son. Or, a young man's claim that he was attributed to a man for the sake of money or being retreat of the defendant's incest (Al-Qura, 2011).

When two women dispute the motherhood of a child for them. They are equal in witnesses (Al-Qura, 2011).

When two men quarrel over the child who is the wife of one of them and divorced by the other in a revocable divorce, or she was divorced by an irrevocable divorce, and married another man. She gave birth in less than the specific period of pregnancy, or get married before the legal waiting period. In this case, the genetic imprint determines the biological father of newborn, not the judicial father (Mohammed, 2011).

Idiomatic Connotation of Genetic Imprint

Due to the juvenility of this matter and the lack developed technologies and devices in the past, there is no specific definition in Islamic jurisprudence of DNA. Presently, there is nothing to inhibit from developing a definition of genetic fingerprint after knowing its veracity scientifically, it has been known by several definitions, including: it is a determination of human identity by analyzing a portion of the DNA located in nucleus of any cell of the body. DNA analysis appears, each chain contains transverse lines that distinguish each human from another. Sequenced according to the sequence of amino bases on DNA, one of two series presents as genetic traits of father and the other one of the mother (Al-Hilali, 1999). The intron region, is a region in which genetic

structure differs, and characteristic of each individual, that is: the child obtains half of these contrasts from the mother and the other half from the father, to be a new genetic medley that combines the characteristics of the parents and characteristics of an extensive genetic repository of ancient ancestors (Al-Qura, 2002). The Islamic Organization for Medical Sciences indicated in symposium on genetics, genetic engineering and human genome, where they explained that genetic imprint: is the genetic structure relative to the elaborated inheritances that indicate the specification of each individual, and it is an almost flawless way to verify biological parenthood and verify personality (Al-Qura, 2002). Another definition, amino acids are sequenced in a specific sequence in the genetic material of a person, and this sequence is what gives the instruction to the gene to show a specific trait or function that changes in the event that sequence changes in only one position in the DNA. The first definition of DNA Test is one of the most comprehensive definitions.

Scientific Definition of DNA

Fingerprint is the genetic material that distinguishes each individual from the other, the material is established in all cells of animate organisms. The substance is symbolized by deoxyribonucleic acid or DNA, and genes are deemed the true carries of genes and are accountable for determining the genetic characteristics of every living organism. Watson and Crick have pointed out that DNA strand consists of two strands wrapped around each other in a spiral. The molecule comprises of phosphate and sugar sequences, also consists of four chemical bases bonding called (Adenine (A), Thiamin (T), Cytosine (C), and Guanine (G)) (Saad,2002) . These letters are called nucleotides and represent the alphabet of genetic code or genetic language that registers genetic information along the DNA. Nucleotides are closely connected to each other in all animate organisms (Horace, 1997).

Are Four Codes Enough to Form A Language?

Almost identical to the technique of telegraph deeds in terms of the basic principle of the work of nucleotides. Where, the language of the telegraph consists of four letters which are the point, bar, short and long distance, also this language is translated into them language spoken by humans. As well as nucleotides, which represent the genetic language in which words and genetic sentences are written. Genes that make up the nucleotides that come from specific regions on the DNA strand, these nucleotides have inception and an end that contain information for making protein and then it becomes in the cell. Animate organism has the characteristics of different cells combined that determine its characteristics, as well as proteins that distinguish it from others such as fingerprints and others. The types of proteins in the body are the ones that the organism has a nose, mouth, hair, skin...etc., and they are responsible for creativity such as playing and writing poetry and others. Therefore, it was called a genetic fingerprint to indicate the confirmation of a person's identity, by taking a sample of the DNA that a person carries from his parents. As every human being carries from his genetic cell (46) chromosomes, half of which he inherits from the mother and the other half from the father. Thus, the son inherits a chromosome that does not match the chromosomes of his parents, and from

this mixture he acquired the trait of independence from it while remaining comparable between them (Wahdi,2007).

DNA Designations

- 1) The Last Identity Detective.
- 2) The Holy Grail.
- 3) The Genetic Code.
- 4) The marvelous cosmic typography.
- 5) The stenography DNA (Arif, 2011).

Application Fields of DNA

The field of propinquity:

It is used to indicate the declaration of the Sharia of using DNA in proving parentage or not. Which, to prove or deny paternity of a person, or the case of a woman being accused of being pregnant from adultery or suspicion (Omar, 2000).

Criminal field:

to unearth the identity of criminals in cases of: murder, kidnapping, rape, impersonation etc...(Omar, 2000).

Medical field:

so that the doctor can prescribe medication or diagnose the possibility of genetic diseases, and thus take the necessary precaution (Al-Najar, 2000).

The propinquity filed:

The Islamic religion was attentive in this scope and did not leave it to people's inclinations and whims, because it made a sacred and regular pedigree and established its rules in order to preserve the true lineage and to preserve its sanctity and not to be lost. Based on that, Islam identified three ways to prove lineage. First: Intercourse: It is intended that the child be born through a project, but when it was not possible to prove this relationship, it was possible to prove it with an obvious indication to demonstrate intercourse and not to prove lineage. This is a common mistake because he considered it as evidence of lineage, because legal intercourse takes place within a legal configuration and you need evidence, and when the evidence is not dependent on the concealment of the spouses, and then the assumption of intercourse is sufficient as a polite reference to legal intercourse. Second evidence: attestation, third guide: ratification)Al-Qura, 2011).

All Muslim jurists agreed with mentioned evidences, and contrast with Qiyafah and contribution (Omar, 2007). Al-Sistani is one of the contemporary jurists who pointed out that it is not permissible to work with the evidence of Qayafah, as the fatwa was: Qayafah is forbidden, and it is the infliction of people to deny or prove based on peculiar indication that contradict the legal scales (Al-

Sistani,2000). As for the jurists of other schools in the aforementioned attestation, there are two well-known sayings: **firstly**: It is not correct to rule on the evidence of Qiyyafah to prove parentage. **secondly**: The evidence of Qayafah was adopted in the absence of evidence of intercourse, testimony and attestation, so the disputed newborn is presented to the Qayyfah and whoever joins the newborn from the disputes, the lineage is assigned to him) (Omar,2007).

The Attitude of Genetic Imprint amidst the Evidence of Parentage

The genetic fingerprint is a new verification appended to the evidence formerly mentioned, the jurists differed in determining its status as a method of proving parentage. Therefore, they bisected into two parts: **The first is that it is permissible**: The researcher refers to the opinion of the cleric Al-Sistani in this regard. The aforementioned was asked in the event that the DNA test contradicts the legal methods, and the rejoinder was: The correct science does not contradict the true Sharia. Likewise, the clergyman, Fadlallah, permitted the work of what was mentioned previously, and his answer was: It is evidence in the affirmation/negation of a party benefiting from knowledge. As for Sheikh Al-Asfi, his sentiment was corresponding to the previous one. The answer was: The DNA test is scientifically proven, and there is no opinion opposing this proof, because its results are definitive and unquestionable. Therefore, the judge works with the results of this examination in proving parentage or denying it as a science, and prefers it to all other evidence of proof in state of doubt. As for the absence of doubt, the mentioned examination does not prove anything. Sheikh Fadel Al-Saffar, also authorized this in the adoption of the examination to prove the parentage of the child and to know the perpetrator or the victim, provided that it is one of the validations of the questionnaire. Imam al-Sadiq, made the questionnaire a legitimate method in exchange for evidence in diagnosing the subject. While Kamal al-Haydari advised caution, while Muhammad Taqi al-Madrasi allowed it to be applied on the condition that it be inherited for information and that it does not violate a legal text: intercourse takes precedence over examination. As for Sadiq al-Shirazi, he only indicated that the genetic fingerprint does not contradict the marital bed (intercourse): that is, it is possible to adopt knowledge for reassurance without going beyond the legal limits.

Opponents: the opinion of jurists is satisfied with the aforementioned legitimate methods of proving parentage instead of genetic imprints, and they consider them to be a disruption or cancellation of the Sharia methods. One of the opponents of the DNA test is Sheikh Muhammad Al-Fayyad, who pointed out that the examination is not evidence in establishing parentage or not. And the wise man supported him with that, but he did not consider it as evidence that it was subject to forgery or error. Likewise, Al-Hairi recommended that it not be adopted as evidence, but if the means were to pass on knowledge to the judge to rely on it. As for Makarim Al-Shirazi and Muhammad Al-Rouhani, they only recommended not to adopt it as well and to work in the legitimate ways. Wherefore, result of what the researcher collected from the opinion of the jurists of the Shiite sect, they prefer the legal methods instead of the genetic fingerprint in establishing lineage.

There are diverse persuasions of **the jurists of other contemporary Islamic schools** about the genetic imprint. Some of them preferred legal parentage over biological lineage, and this was mentioned in the Muslim World League in their recommendations: (that is, it is not permissible to rely on genetic fingerprints in proving/denying parentage without legal evidence (Kahlifa,2006) . As for the few of them, they recommended the precedence of biological parentage over legal lineage (Al-Hilali,2002). As for others they pointed out, the adoption of genetic fingerprinting as a substitute for Qiyyafa, as it is primitive and inaccurate and rely on intuition and physiognomy. Consequently, the Islamic Organization for Medical Sciences adopted the last opinion that mentioned in its recommendations: The genetic imprint symbolizes a main evolution in the field of Qiyafa, which is adopted by the schools of jurisprudence (Al-Qura, 2000).

The Jurisprudential Origin of the DNA

The genetic imprint has become a subject of concern and study by concurrent jurists to determine and perceive its significance in proof or not. The genetic fingerprint is characterized as substantial evidence. Therefore, it can be legally adapted as a presumption (according to the legal terminology, it is every matter that refers to a requirement or indicates what is intended without being explicit in it). Evidence is classified into two categories: irrefutable: It is not subject to doubt or challenge as it represents an independent evidence of proof. While, supposition It does not represent independent evidence, and it is used to support the possibility that corresponds more to reality (Mohammed, 2011), (Al-Jeriani, 2000). Accordingly, the opinion of the jurists was divided into two groups, **the first**: supporting the genetic fingerprint and including it within the peremptory presumption to prove the identity of the human being. And scientific experiments have proven its accuracy by 100%. While, **the second group**, their perspective was different according to specialists, they indicated that genetic imprint no matter how accurate, It is remain questionable, and it cannot be included in the definitive companion. Justifying this is by the circumstances that wasted the value of the genetic imprint. Although, **the vacillate** they attribute to the intervention of the human and the complexity of analysis that decrease the credibility of test and made it a definitive partner from a scientific view while, a doubt according to practical view. As well as, they indicated that definitiveness of investigation results can be controlled by virtue of ensuring the efficiency of analysts, safety of the apparatus, and the correct procedure for conducting the examination. They justify their declaration that DNA testing can be used according to Sharia law, based on the fact that it is a presumption of evidence:

Almighty *said* "It was she who sought to seduce me." And a witness from her family testified, "If his shirt is torn from the front, then she has told the truth, and he is of the liars. But if his shirt is torn from the back, then she has lied, and he is of the truthful. So when he [i.e., her husband] saw his shirt torn from the back, he said, "Indeed, it is of your [i.e., women's] plan. Indeed, your plan is great [i.e., vehement]. God almighty pointed out, that shirt was ripped as a sign of veracity of one of them.

In another spot (And they brought upon his shirt false blood) God Almighty mentioned: A sign that contradicts the first evidence, which is the integrity of Yusuf's shirt from any tearing. While Yusuf's brothers wanted to make blood a proof of their sincerity, and this indicates that the Sharia did not cancel the clues and signs, but rather arranged on them the rulings.

Scientific area: The genetic fingerprint is an extension of the Qayafa because they depend on the similarities between the fathers and the sons. Therefore, it can be used to prove the parentage of those who authorized the work of Qayafa (Wahbi, 2002). Medical expertise in DNA has a great role in the history of jurisprudence issues; when two women contention, each of them posited a son and a girl. Each of them claimed that the son's parentage. The doctor decided to weight the milk of both women. It has been said that a son's milk is heavier than a girl's milk (Abd Al-Kareem, 1993). The problem proved the permissibility of resorting to expert judges, as results the jurists permitted resorting to blood analysis. They considered, blood analysis is a denial, not a proof of parentage, and its results are imprecise, obverse DNA test. New techniques were developed of identification were also accepted from all jurists such as: fingerprint, handwritten signature, official photo.

At two positions: (Soon will We show them our Signs in the (furthest) regions (of the earth), and in their own souls, until it becomes manifest to them that this is the Truth) and (As also in your own selves: Will ye not then see?), God's Almighty evidences oneness appear in the soul and contemplate it, as the Islamic religion is a science and a clarification and permits beneficial things and urges to act upon it. DNA is one of God's miracles in His creation, through which facts are known in a materialistic, scientific way. The Islamic religion is distinguished by the principle of innocence (the universal rule): (the original is in the permissibility of things), and that every new matter is not mentioned in the Scripture or the equivalent Prophetic rulings, it is ruled that it is permissible or prohibited. Based on the aforementioned rule, since DNA achieves a legitimate interest, then it is permissible according to its usefulness. And Abdul Karim Al-Erbili had pointed out: (If there is no testimony in the case or it contradicts another testimony). If the attention contains evidence and signs supporting knowledge, such as referring to specialists in distinguishing the fetus, blood analysis and other tests, and it is considered a scientific argument and not a legality of adoration). Sheikh Muhammad al-Qa'ini stated: It is not permissible to be certain that the evidence and documents as a finding of God, but rather a specific aim. Accordingly, the genetic fingerprint can be considered a definitive presumption, a definitive science, or a asserted version.

CONCLUSION

One gram of DNA contains the equivalent of 1,000 billion computer disks. And if the DNA strands of all human cells were collected, the circumference of the Earth could be wrapped 3.6 million times. This indicates that DNA is one of God's miracles (As also in your own selves: Will ye not then see?).

The genetic fingerprint is the detailed genetic structure that definitively determines the biological nature of every human being.

One of the characteristics of DNA is that it is not degradable and rotting.

Legally, there is no protestation to the use of DNA in issues of decomposing, charred bodies, victims of mass graves, disasters, and the exchange of newborn children.

Most of the Muslim jurists preferred the legal evidence (intercourse, testimony, and acknowledgment) when establishing parentage.

Most of the Muslim jurists instructed that it is not permissible to work with Qayyafa, as for other jurists on the lack of legal evidence.

Some Islamic jurists have stated that contribution does not prove parentage and working with it embody legal limits. As for the jurists of other schools, they adopt it when the methods of proof are not available.

A small group of jurists relied on DNA over all other evidence, and some of them were satisfied with preferring it over the evidence of Qayyafa.

DNA is one of the newly discovered evidence and needs to be legally compatible.

The genetic fingerprint was classified from definitive clues, or signs.

REFERENCES

- "Adaptation of Islamic Jurisprudence for Contemporary Banking Business - Its Concept - Importance - and Controller", Journal of Justice, Ministry of Justice, Kingdom of Saudi Arabia, Conference of Islamic Banks, Department of Islamic Affairs and Charitable Activities, Dubai, Magazine No. 28.
- Abdul Rashid Muhammad Amin Qassem, "genetic imprint and its evidence", Al-Adl Magazine, Ministry of Justice, The Kingdom of Saudi Arabia, General of Education Resources, No. 23, (2000).
- Al-Araji, Saad Marza, "The Instructor to Human Cytogenetics", Babylon University, Al-Arqam publisher, Al-Hilla, (2010).
- Al-Azdi, Muhammad Al-Basri, "The Squadron of language: 4th edition, Mustafa Al-Halabi publisher, Egypt, (1955).
- Al-Emadi, Nafeh Takleef, "Effect of DNA on Criminal Affirmation", University of Babylon, (2009).
- Al-Fayrouz Abadi, Muhammad bin Yaqoub, "Comprehensive Dictionary", 2nd edition, Al-Hussainiya publisher, Egypt, (1979).
- Al-Hilali, Saed Aldiyin Musead, "The correlation between imprinting and Sharia", Department of Jurisprudence, College of Sharia Islamic Studies, Kuwait University, Scientific Publisher, 1st. Edition, (1999).
- Al-Jarjani, Ali bin Muhammed, Tariffs by: Ibrahim Al-Anbari, Al-Bayan Patrimony publisher, (2000).
- Al-Loadami, Muhammad Tammam, "Human genes and their applications", 1st edition, International Institute of Islamic Thought, Arden - Virginia, USA, (2011).

- Al-Najjar Musleh," The Genetic Imprint in Islamic Jurisprudence", Journal of Contemporary Fiqh Research, Al- Fiqh, College of Education, Riyadh, No. 65, (2000).
- Al-Qara Aref Ali Daghi, " Islamic vision: The role of genes in criminal evidence", 1st edition, Al-Tajdeed publishing and translation – Malaysia, (2002)
- Al-Qara Mohieddin Daghi, "Islamic Jurisprudence view of DNA", Journal of the Islamic Fiqh Council, No. 16, (2000).
- Al-Saadi, "Effect of DNA Test on Negation Parentage in Islamic jurisprudence", Al-Mustafa International University, Higher Institute of Jurisprudence and Islamic Knowledge, (2011).
- Al-Saadi, Ali Hammoud, "Inception of Genetic Engineering Applications", Genetic Engineering , Babylon University, 1st edition, Al-Safa Publisher and Distribution, Amman - Jordan, (2011).
- Al-Sistani, Ali Al-Husseini, "Minhaj Al-Salihin", 3rd edition, Arab Historian publisher, Beirut, (2000).
- Al-Sudani, Muslim Abboud, "The Developed Issues in Jurisprudence , University of Kufa,(2011).
- Arif Ali Arif, Al-Qara Daghi, "Lawful Issues in Human Genes", 1st Edition, Journal of Islamic University, Malaysia, (2011).
- Center for Studies and Research, "Modern Scientific Methods and Criminal Investigation according to legal aspects", Naif Arab University for Security Sciences, (2007).
- Daniel Kevels and Leroy Hood, "The Genetic Code: (Scientific and Social Issues of the Human Genome scheme), translated by: Ahmad Mostajir, The World of Knowledge succession, Kuwait, No. 217, (1997).
- Ibn Manzoor: Muhammad Bin Makram," The Arab Cape", Knowledge Management, 3rdedition, (2000).
- Ibrahim Ahmed Othman," The First Arab Conference for Forensic Sciences and Forensic Medicine on (Rolling of DNA in demonstrate Parentage and Criminal Crimes", Naif Arab University for Security Sciences, Riyadh, (2007).
- Ibrahim Mustafa and others," the intermediary Lexicon", The Arabic Language Academy, 3rd edition, (1985).
- Islamic Organization for Medical Sciences, "Genetic Engineering and Human Genome", Kuwait, (1998).
- Kaabi, Kahlifa Ali, Review paper: "The effect of DNA Test on jurisprudence ruling", Al-Nafaes for publishing and distribution, Jordan, (2006).
- Moheb Al-Din Al-Hanafi, Al-Zubaidi," The bride crown from the dictionary jewels", Investigated by Ali Shiri, Intellect publisher, Beirut, (1994).
- Mohsen Al-Aboudi, " Judiciary and DNA technology ", The first Arab conference for forensic sciences and forensic medicine, Naif Arab University for Security Sciences, Riyadh, (2007).
- Mosbah, Abdel Hadi, "Medical Contemporary Advancements", Lebanese Egyptian publisher, Beirut, (1996).
- Mustafa, Mada Munajid, "The capacity of the genetic imprint at Criminal Evidence in Islamic Jurisprudence", Naif Arab University for Security Sciences, Riyadh, (2007).
- Nasir Farid Wasel, " Advantages of utilization DNA", Journal of the Islamic Fiqh Council, Mufti of the Republic of Egypt, No. 17, (2001).

- Omar Al-Assam, "The effect of DNA Test on jurisprudence ruling", King Fahd University, Riyadh, (2007).
- Omar Al-Sabil, "The legality of DNA Test in parentage and felony", Journal of the Islamic Fiqh Council, No. 15, (2000).
- Qalaat Ji., "Dictionary of Jurists language", Islamic Jurisprudence, King Saud University, Riyadh, Al-Nafaes publisher, (2000).
- Researchers, "Al-Munajjid in Language and Media", 33 Ed., Al-Mashreq Publisher, Beirut, (1992).
- Saad Al-Din Musaad Al-Hilali, "Area of Benefit from genetic imprint", The sixteenth session of Islamic Fiqh Academy Makkah Al-Mukarramah, (2002).
- Sabra, Nizar Raja Sebti, "Judgments of the Accused in Islamic Jurisprudence", An-Najah National University, Nablus – Palestine, (2006).
- Shabeer, Muhammad Othman, "The jurisprudential adaptation of new technique and its Jurisprudential Applications", 1st edition, Al-Qalam publisher, Damascus, (2000).
- The Arabic Language Academy, "Concise Thesaurus", Eastern Advertising Company Press, Al-Tahrir publisher, (1980).
- Wahba Al-Zuhaili, "Area of Benefit from genetic imprint", the sixteenth session of Islamic Fiqh Academy Makkah Al-Mukarramah, (2002).
- Wajdi Ad-Fattah Sahel, "Utilization of Genetic Engineering in the Field of Criminal Investigation", Seminar, (2000).
- Zaidan, Abdul Karim, "Comprehensive of the provisions of woman and the Muslim residence", 1st edition, Al-Resala establishment, (1993).