

**ANALYSIS OF 'QIYFAH'
PERSPECTIVE OF IMAM SYAFI'I IN PROVIDING THE LINEAGE AND ITS
RELEVANCE WITH GENETICS.**

Abdul Hakim

Islamic University of North Sumatra, Indonesia
abdulhakim@gmail.com

Abstract, In the tradition of Arab and Islamic Scientifics, research on genetics has been done since thousands of years ago. However, the information is not found in the books of genetic history. This indicates the existence of historical distortion of genetic history writers to include Arabs or Muslims within the span of history. Therefore, the follow-up and dissemination of information from various parties, especially the parties associated with genetic studies explain that this science has been found in Arab society and Muslims. Qiyafah is a method term used to recognize a person's trace in determining lineage based on traits and likeness. While qa`if, is a person who has special skills to see other people in connecting, determine the lineage based on the signs and similarities between the parties studied. According to asy-Shafi'i, qa'if services in determining one's lineage can be accepted as a legal provision. Therefore, if a lineage dispute arises where there is no other evidence or the parties have strong evidence, then the matter is solved by qa'if research. In support of his opinion, the school of ash-Shafi'i argued with the hadith of the Prophet Muhammad and the opinions of his companions. Therefore qiyafah practice is believed to have syariah justification. Genetika is one of the branches of biological science that discusses the nature of hereditary inheritance and variations that may arise in it. The practice of qiyafah and genetics are both aimed to examine the hereditary traits that are passed down from generation to generation. Judging from the similarity of function and purpose, then qiyafah has relevance to the science of genetics in establishing one's nasab. And the provision of modern science based on DNA test results with the same legal force with the provision of qiyafah perspective priest Shafi`i.

Keywords: Qiyafah, Imam Syafi'i, Lineage, Genetics.

INTRODUCTION.

God has sent down the guidance and guidance of life to man perfectly. Guidance is the religion of Islam brought by the Prophet Muhammad Rasulullah saw. Simply put, Islamic teachings can be grouped into the field of worship and muamalah. This division is not a permanent diplomacy within Islam, but only as a categorization to facilitate the understanding of the dominant character of Islamic teachings.

In the treasury of Muslim intellectual works, the study of muamalah law includes an ever-evolving study that has been widely studied, and these reviews have

been held creatively, evaluatively and continuously from the first period to the millennium.

Qiyafah is the method used for qa`if deeds. Qa`if are: people who follow the trail and recognize who has a trail. And the person who can recognize someone's nasab is overwhelming his hunch and / or with his research on the limb of the child. From this information it can be understood that qa`if is a person who has special expertise given by Allah swt to him in paying attention, connecting and establishing someone's nasab with other people. This can be known based on the signs and similarities between a person with his child or his parents. Thus qiyafah means the method of a person who conducts careful research and examination on the basis of similarity or on the characteristics of the person is supported by the skill God has given him.

The researchs on the similarity or origin of descent (nasab) like this has developed modern science and is recognized as a form of science called the science of genetics. The science of genetics is also called the science of heredity. In the science developed a study of various traits (heredity) is derived or inherited to posterity, and variations that may arise in it

From the above description, the author sees the urgency of the Shafi'i school of thought to be deeply interested in qiyafah as an alternative to resolve around an unknown person's lineage.

LITERATURE REVIEW

1. Definition of qiyafah.

If translated into the Indonesian language, then qiyafah, etymologically meaningful: "one's expertise in recognizing the traces of others"¹ While the expert in this case is called qa`if. The plural of qa`if is called qaafah. The person who performs the qiyafah method is also said to be qaafah. To see the basis of the formation of the word qaafah, can be seen in the following tasrif namely; qafa-yaqufu-qaufan-qiyafatan-qaaifan, meaning special or professional skills.

According to Ar-Ramli, in his book Nihayah al-Muhtaj, says that etymologically, qiyafah is a method of research on the traces of a person based on

¹. Ahmad Warson Munawir, *al-Munawir*, 1984, Unit of Procurement of Religious Scientific Book of al-Munawir Islamic Boarding School, Yogyakarta, P. 1259.

Analysis of 'Qiyafah'
Perspective of imam syafi'i in providing the lineage and its relevance with genetics

similarity / similarity"². According to Muhammad Khatib al-Syrbaini, etymologically, qiyafah it is; "One's expertise in researching certain impressions"³ In terminology the meaning of qiyafah is; "A method by which a person obtains proof of a person's relationship with others based on similarity. Ar-Ramli, also gave his opinion that in terminology the meaning of qiyafah is; "Someone who can relate to others when there is disgust, based on the skill God has given him".⁴ According to Az-Zarkasi al-Ansari al-Shafi'iyah in his book "Fath al-Wahhab, in terms of defining qaif, is someone who is capable of connecting the nasab / offspring of others when there is disguise. Such abilities based on the skill God has given to a person are an advantage."⁵

Based on the description above, it can be understood that qa`if is someone who has the ability, special skills (professionalism) which Allah has given him can see, examine to connect and establish someone's nasab with others and is believed to be true. This he knows based on signs of similarity / similarity that exist in the person. Like the relationship between a child and his parents Thus qiyafah means a method for acting to conduct research and examination on the basis of one's expertise to see the similarity, similarity of signs they have.

2. History and basic qiyafah in Islam.

It is not found clearly in the Qur'an that explains the existence of qiyafah as the determination of nasab. In fact, the word qiyafah itself is not mentioned in the Qur'an, but the problem of kenasaban or descendants in human life since a long time ago, namely the ignorance of a child who his biological father, or a father doubt his son, and so on. So in this case requires a solution. Although at that time the development of knowledge science is not or not sepesat the present, but God provides privileges for humans have a special skill in setting nasab, derivative of a person based on research from the angle of similarity that they have .. And this can be recognized and trusted the community. So for those who doubt their children will be convinced, so also for those who do not know the nasabnya previously to know.

².Ar-Ramli, *Nihayah al-Muhtaj*, Juz, V, tt , Dar al-Kutub Ilmiah, Beirut, P. 464

³ . Muhammad Khatib al-Syrbaini, *Mughnil Muhtaj*, Juz II, 1978, Dar al-Fikri Berut, P. 488..

⁴. Ar-Ramli, *Nihayah al-Muhtaj*, h. 375

⁵.Zakariaya Al-Ansari, *Fath al-Wahhab*,II, tt, al-Ma`arif Bandung, P. 334

The basic law of qiyafah in Islam is the sunnah of the Prophet Muhammad (peace be upon him). and it is known that the Sunnah or hadith of the Prophet Muhammad SAW. is the basis of Islamic law after the Qur'an. So this qiyafah prihal can be seen and listened in one of the hadith of the Prophet Muhammad. which is narrated A'ishah (wife of the Messenger of Allah) quoted in the book of Al-Umm, (meaningful): From A'ishah ra. He said; Has come to me Messenger of Allah. with a face full of joy, then he said; do you not yet know that Mujazziz al-Mudlaji has come to me, and he saw Usama bin Zaid who both wears a headscarf over his head but looks at the soles of his feet, then after that the Mujazziz says: This is the sole of his foot partly from the others.

Mujazziz al-Mudlaji, as proposed by Muhammad Khatib Syarbaini, is a well-known qa'if of his skills among the Arabs.⁶ . He is always called to resolve problems when there is debate or disgust, doubts in the matter of a person or a person's descendants and needs a solution, then the stipulation he gives is acceptable to society, and this is his particular expertise.

The same thing ever Rasulullah feel happy when he (Mujazziz Mudlaji) said that the sole of this foot (meaning the sole of the foot of the Zaid) is the soles of Osama (his father). The joy of the Messenger of Allah. this is understood as an approval of the Messenger of Allah upon the determination of qa'if.

In another hadith narrated that: "From Qutaibah bin Sa'id, from al-Laist, from Abi Syihab, from Urwah, from A'isha ra. Saying; has come to me the Messenger of Allah. with excitement on his face, he said: Do not you know that Mujazziz has just examined Zaid bin Harisah and Usamah bin Zaid, and Mujazziz said that this is the sole of a foot part of the other."⁷

This method of qiyafah also finds the place of the heart of Umar bin Khattab, it can be seen in Mughni Muhtaj by Muhammad Khatib Syarbaini and Subulassalam by as-San'ani, which means: "From Abdurrahman bin Abi al-Zinad from Hisham:" Ever come two men to Umar bin Khattab who argued about the incident of a child who came from children from the time of ignorance. One of them said; this is my son, Likewise other people's pangakuan. So the debate was not completed, even the debate

⁶. Muhammad Khatib Syarbaini, P. 489

⁷. *Ibid*

Analysis of 'Qiyafah'
Perspective of imam syafi'i in providing the lineage and its relevance with genetics

added fierce. Seeing this Umar bin Khattab summoned qa`if from the tribe of Bani Mustaliq). "With the qa`if decision the debate was completed.

Likewise in other narrations it is argued that Anas bin Malik (the companion of the Messenger of Allah), ever used the services of qa`if in researching his son's case. The history reads as follows: "It tells us Ibn'Aliyah from Hamid, from Anas, that he (Anas) once doubted him about his son's (validity), then he called qa`if"⁸

From a number of information mentioned above shows that the Messenger Muhammad. and their companions with the cases they face in the life of the community, have legitimized the pursuit of cultivation based on qiyafah methods by first doing research, surveillance closely with the abilities they possess which are special advantages which Allah bestowed on them and at the same time be capable of establishing the results of his research. The results of their research that can be a guide for those interested in determining the validity of someone nasab well. By seeing and observing all these things, the scholars of al-Shafi'iyyah responded to the qiyafah service as a solution to the settlement of cases of human existence. Including asyl-Shafi` as pious Shafi`iyah support qiyafah method of perfidy.

After knowing the existence of qiyafah in Islamic law, it is worth a glance for a moment how pre Islamic see method qiyafah intended. Apparently Arabs at that time often use the services of qa`if as a medium in setting nasab when there is doubt or debate in determining who the parents of the child. And it is understood that at that time the development of science, especially with regard to the formation of nasab or descendants is not as it is now with the DNA method.

From the explanation above, it can be analyzed that qiyafah not only the historical reality of Jahiliyah, but also after Islam came, it became part of Islamic tradition and got legitimacy is taqrir (consent) of the Prophet Muhammad.

Human development and needs in terms of kenasaban, become the object of manusia thinking at that time. So the scientists began to wriggle steadily research on what the secret of God that can be used as a determinant of human relationships kenasaban it. Then came the science of genetics in the discussion of the science of biology / humanity..

⁸. *Ibid*

An Overview about Genetics

1. Definition of Genetic.

Genetics is derived from the word genos (Latin) which means ethnic or origin.⁹ Literically, genetics is understood as a biological discipline that studies heredity.¹⁰ In the study of genetics studied is how the nature of heredity (heredity) is inherited to posterity and variations that may arise in it.¹¹ Genetic studies are essentially related to genes that are understood to be part of a chromosome.¹² And the location of heredity, heredity, and heredity. The gene can duplicate itself at the time of mitosis.¹³ In this regard, genes are chemical compounds that contain genetic information that is very much helping medicine. It is ultranicroscopic that covers of ADN (*Asam Deoksiribonukleat*)¹⁴. Therefore, in essence ADN or DNA is the substance of the gene itself. "Some instances give indirect indications that the DNA contains the genetic information of living things, for example :

1. The experimental results suggest that most of the DNA is present in chromosomes, whereas ARN and protein are present in the cytoplasm
2. There is a precise correlation between the amount of DNA of each cell and the number of chromosome cells in each cell.
3. The molecular arrangement of DNA in all the different cells of an organism is the same. While the arrangement of ARN and protein varies from one cell type to another cell type both quality and quantity.¹⁵

⁹. Wildan Yatim, *Genetika* , 1991, Tarsito Bandung, p. 1

¹⁰. Ahmad AK Muda , *Kamus Lengkap Kedokteran* , 2003, Genetika Press, Bandung ,p. 69

¹¹. Wildan Yatim, *Ibid*. p.1

¹². Subtle objects (inside cells) that are shaped like stems (bent) and consist of substances that easily bind dyes. They are called chromosomes and the substances that make up them are called chromatins. (see Suryo, Human Genetics, 2003, Gajah Mada University Press Yogyakarta, p.6) By Ahmad A.K. Young, mentions that, the chromosome is the body within the cell nucleus. The yarn is derived from chromatin, consisting of DNA that serves to transfer genetic information,

¹³. Sexual breeding beings recognize two kinds of nuclear division. That is common division called mitosis. In mitosis, the cell nucleus material is divided in such a way that from one cell are produced two daughter cells each having the same genetic traits. Mitosis takes place on all the cells that will become se; sex. (Suryo, pp. 57-58)

¹⁴. Dalam bahasa Inggrin disebut DNA (Deoxyribonucleic Acid), yakni koponen penting pada gen yang mengatur sintesa protein. (Suryo, *Genetika Manusia*, h. 3.

¹⁵. Suryo, *Genetika Manusia*, 2003, Gajah Mada University Press, Yoyakarta, P. 25

Analysis of 'Qiyafah'
Perspective of imam syafi'i in providing the lineage and its relevance with genetics

The journey and the development of science have placed genetics as one of the biological disciplines that study derivatives called descendants and belong to the family of life who essentially learn about kenasaban or offspring, the nature of the parent (parents), to the descendants below. In humans if one wishes to investigate the genetics of self, it is usually necessary to rely on his observations about the way inheritance of that trait from one generation to the next.¹⁶

Based on the above description it can be understood that genetics is one of the biological disciplines that in-depth about the nature of hereditary inheritance and variations that may appear in it

2. Mankind and Genetics.

According to Wildam Orphan, humans as the object of genetic research slower its development compared with others.

The difficulty is likely to occur due to several things as follows:

- a. Rarely do people want to know the defect of a character's abnormalities in his body or to his family, therefore geneticists encounter barriers to collect data.¹⁷
- b. It is very difficult for a person to be advised by the investigator to marry someone who wants to be investigated, or otherwise not to marry someone. This is because marriage is related to a mate. It is therefore difficult to trace directly the genetic traits encountered in a person as the researcher desires, since it can not be chosen (arranged) with whom one will marry.

3. Urgency of genetics.

Genetics needs to be learned so that one can know the traits of human descendants as well as other living creatures that are in their environment.¹⁸ Man can

¹⁶. Alan E.H.Emery, *Dasar-dsar Genetika Kedokteran*, editor; Sumiati Ahmad Muhammad, 2003, Yayasan Essentia Medica, Yogyakarta, P. 102). Alan, also mentioned that Pierre Louis Moreau de Maupertuis, through his marvelous investigation of Bentley Glass. He studied certain traits in inherited humans, and from family genealogy studies shows that he strongly believes parents have the same contribution to determine the nature of their child.

¹⁷. Suryo (P.2), also acknowledged that the science of human genetics is slower in advance when compared to the science of plant and animal genetics. This is the cause of abnormalities that occur in humans are always hidden and covered for fear of embarrassment and so forth.

¹⁸. Wildan Yatim, P.1

not live alone and isolated from other beings, in accordance with the nature of social beings he always duties to humans and other creatures. Therefore it is necessary to know the siapt-declining properties in humans, in plants and animals for a variety of genetic engineering.

Charles Darwin, concluded that the offspring that exist from the marriage of organisms that do not have a family relationship (out breeding) is stronger than the offspring of marriage results between organisms that have a family relationship (inbreeding).¹⁹ Meniere, a neurologist from France, in 1856, showed that in humans, mute, deafness is more prevalent in children from inbreeding marriages. With this knowledge, then man can avoid the possibility of disability by not marrying the family.²⁰

Johannes was the first to explain the difference between the notion of genotype, which means the genetic constitution, with the phenotype sense, which means individual properties, is the result of the interaction between genotype and environment. Genotypes are essentially traits that have been attached to the individual, but are constant throughout life and are virtually unchanged due to environmental influences. Meanwhile, phenotypes generally change over the life of the individual with the direction of change as a function of the environmental influences experienced by the individual. In terms of genotypes and phenotypes, a genotype can produce various phenotypes depending on environmental influences. Instead a phenotype may be produced by various genotypes depending on the environment. In humans the distinction between natural eugenic influence and maintenance was first described in 1875 by the French Sir Galton. This means that knowledge of heredity is increasingly

Recent developments have been widely discussed in various scientific discussions. The wide range of corrections and advances in the field of genetics is due to genetics is a discipline that parts of it in many ways have the potential to touch people and society directly. His contribution was felt in solving various health problems such as: baby tube. With such a constitution, genetics is controlled even to affect human evolution.

Because of the enormous potential impacts of genetic studies, Anna C.Pai, states everyone absolutely has a basic knowledge of these scientific principles. Only in

¹⁹. Alan E.H.Emery, P. 8

²⁰. *Ibid.*

this way can the true meaning and usefulness of such knowledge be absorbed by humans as part of the natural environment of an endangered planet. Therefore, he concludes that humans in general must be given an understanding of genetic foundations.

Qiyafah in Asy-Syafi'iyah's Perspective.

One method of establishing the nasab according to the Shafi'i school is based on the determination of qiyafah. Qiyafah is a method term used for qa'if deeds, while qa`if itself is someone who can recognize the traces of others and at the same time can know, menentapkan who has these traces. The determination of who has the imprint is carried out qa`if based on the results of his research and his paraat-with the approach of seeing similarities, similarities-and can also know the person's identity based on the characteristics of the body of the person being studied.²¹

Based on this description, it can be understood that qa'if is someone who has expertise, the special abilities that God gives him are capable of seeing and establishing one's relationship with others. Provision given qa`if refers to the signs of similarity between a person with another person, ie between a child with his parents. Thus it is essentially qiyafah is a person's actions to conduct research, inspection of one's personality based on similarity in accordance with the characteristics owned by each other. And it can not be denied that qiyafah is the skill of the one whom Allah has bestowed upon him. This explanation can be seen in the literature of the ash-Shafi school as follows:

1. Muhammad Khatib asy-Syarbaini; talking about the terms qa'if and explanation of his determination to someone's nasab with other people. The authors of this book have mentioned some of the laws of qa'if in chapters `iddah and laqit (abandoned children). Qa'if is etymologically the person who follows (examines) the traces of others. And in terminology is someone who is capable, can connect one's nasab with other people based on the similarity, similarity that each person has.
2. Al-Bujairami, the ability of qa`if to know the relationship nasab is a special skill given by Allah swt. to anyone who wants to learn it. Therefore, qiyafah

²¹. Kamus Munjid Fi al-Lughah, Ibid, P. 662

practice can be grouped into one branch of science and the most appropriate is into the biological or biological disciplines. "For, qiyafah is a discipline; and who knows he will be able to apply it."

3. Ar-Ramli, said that "Qiyafah, is a branch of science, then anyone who can understand it, will be able to carry it out." Ramli's explanation further strengthens the position of the qiyafah method to be used in determining the person's nasab correctly.
4. Zakariya al-Ansari, affirms that the qa'if practice of connecting and determining one's nasab is a special science that one possesses, this is because God gives expertise to a person by His grace. "Qa`if, is a person who is capable of connecting the person's insanity when happening syubhat based on expertise possessed someone who God given him in the form of science about it"²²

From the explanations of the scholars of syafi`iyah mentioned above it can be understood that this sect thinks qiyafah is one of the science given by Allah specifically to someone. From this description it is understood that this science seems to be the science of ladunni (coming directly from God) to the one whom He wills. However, based on other information in the view of the Syafiiyah school that this science is considered ladunni science, but can be studied and can also be practiced by anyone who mastered this science properly and correctly. "Qiyafah is the science that talks about how to get proof (Istidalal) from the side of the posture of two persons of similarity or similarity of their properties to determine the origin of their cousin, their descendants. "" Qiyafah, is a science that discusses the way to prove (istidlal) to see in terms of one's posture to know the similarities of nature- the nature of connecting the cohesion, the offspring between two people (whose doubt is its curiosity)"²³

FINDINGS AND DISCUSSION

The Relevance of Qiyafah and Genetics in Lineage Determination

Genetics is one of the branches of biological science that discusses the inherited hereditary traits and variations that may arise in them. In this science is described there is a substance called cells. Living organisms are composed by units called cells, and all

²². Zakariya al-Anshari, *Fath al-Wahhab*, Juz.II. 1418, Dar Kutub al-Ilmiah, Beirut, P. 409

²³. Sidiq bin Hasan al-Qanuji, *Abjad al-Umm*, II, 1987, Dar Kutub al-Ilmiah Beirut, h. 436

Analysis of 'Qiyafah'
Perspective of imam syafi'i in providing the lineage and its relevance with genetics

cells come from existing cells ²⁴. The cells of an organism come from a single cell, a fertilized egg called Zigot (the zygote is the result of the union of the male and female gametes till it divides).

Inheritance of heredity through the gametes itself that contain the growth of tissues and devices that are understood as genes. Furthermore, the gene is inherited to the offspring through breeding.²⁵ Genetic human characters can be seen in aspects of genotype and phenotype. The terms genotype and phenotype appear to understand the existence of genes and environment against organisms. An organuma is said to resemble or resemble its parent because of some equations of visible traits, in this case called inheritance characteristics. From the angle of heredity, inherited traits are stored as genetic information in genes that are molecularly composed of DNA nucleic acids. The protein molecules that are formed will become visible traits, either in the form of the protein itself, or alternatively with other factors that represent a biochemical anatomical form, or even a particular behavior. Therefore, genetic traits and relationships can be demonstrated by DNA testing

Qiyafah as a medium for researching nasab is no exception from trying to see the anatomical similarity of a child with his father or mother. From here a qāfi can see the relationship. This practice is more focused on developing modern science and is recognized as a form of scientist called genetics. However, it appears that qiyafah practice is limited to external research or body anatomy. Indeed, genetics can recognize that the anatomical form of the body can be inherited by the father to his son. Like the morphology of anatomy (ie, examining the outer form of the body part of an organism, observing the relatives, experiments and cytology) fingerprints, palms and feet, head shape, eye color, and others. Can also be studied from the aspect of biochemical physiology (ie by examining urine, it can be known the nature of blood, chromosomal arrangement and gene pasagan.) By Weisman (1834-1914) said there are two kinds of body plasma, plasma Plasma and plasma body. which is hereditary through genital cells, the genital cells have the ability to grow the body plasma, in addition to the new plasma seeds. Thus, in the genital cells there is a carrier of hereditary properties and will form all kinds of tissues and body tools until adulthood.

²⁴.Anna, C.Pai, *Dasar-Dasar Genetika*, terj.Muchidin Apandi, 1992, Erlangga Jakarta, P.2.

²⁵.Wildan Yatim, *Op-Cit*, P. 18

Based on the above description, it can be understood that what is done by qa`if in nasab research has relevance to the science of genetics developed in this modern age, that is; an ilmi who studies the similarities and similarities derived from an individual individual to the individual he was born. However, recognized qiyafah only a knowledge of a simple nature, While genetics has come to tarap scientific reasearch, but this has proved the classical Arabic knowledge that has a tradition scholarship and research that can be accounted for.

CONCLUSION

1. Qiyafah, is a classical Arabic scientific term that is used as a method of determining a person's nasab doubt the relationship of his inheritance with others. Qa`if is a person who has a special skill in seeing, conjuring and defining someone's nasab with others based on.
2. According to imam ash-Shafi`, the service of qa`if in establishing a person's nasab can be accepted as a legal provision and has syariah justification.
3. Genetics is one of the branches of biological science that discusses inherited inherited traits and variations that may arise in them.
4. The practice of qiyafah and the science of genetics are both aimed to examine hereditary traits that are hereditary. The substance is to know how the nature of the offspring is inherited to posterity and variations that may arise in it ..
5. Judging from the similarity of functions, objectives and results achieved, the method of qiyafah has relevance to the method of genetic science in determining a person's nasab. Therefore, the provision of modern science based on DNA test results (deoxyribonucleic acid) is equal to its legal force with the provision of qiyafah perspective of Imam ash-Shafi'i.

BIBLIOGRAPHY

- Al-Ansari, Z, *Fath al-Wahhab*, II, tt, Bandung: al-Ma`arif
- Al-Qanuji, S. H, (1987). *Abjad al-Umm*, II, Beirut: Dar Kutub al-Ilmiah
- Al-Syarbaini, M. K, (1978). *Mughnil Muhtaj*, Juz II Berut: Dar al-Fikri.
- Anna, C. P. (1992). *Dasar-Dasar Genetika*, terj.Muchidin Apandi, Jakrat: Erlangga.
- Ar-Ramli, *Nihayah al-Muhtaj*, Juz, V, tt , Beirut: Dar al-Kutub Ilmiah.

Analysis of 'Qiyafah'

Perspective of imam syafi'i in providing the lineage and its relevance with genetics

- Emery, A. E.H. (2003). *Dasar-dsar Genetika Kedokteran*, editor; Sumiati Ahmad Muhammad, 2003, Yayasan Essentia Medica, Yogyakarta.,
- Muda, A. K. (2003). *Kamus Lengkap Kedokteran*, Bandung: Genetika Press
- Munawir, A.W. (1984). *al-Munawir*, Yogyakarta: Unit Pengadaan Buku Ilmiah Keagamaan Pondok Psantren al-Munawir
- Nasution, L. (1998). *Qawl Qadim dan Qawl Jadid Imam asy-Syafi'i Suatu studi Tentang Dinamika Hukum Dalam Mazhab asy-Syafi'i dan Relevansinya dengan Perubahan Hukum Islam*. Jakarta: IAIN Syarif Hidayatullah
- Suryo, (2003). *Genetika Manusia*, Yogakarta: Gajah Mmada University Press
- Yatim, W. (1991). *Genetika*. Bandung: Tarsito