Integration of Islamic Education And Science: A Study On Pig Cornea Transplantation Based On Al-Shatiby's Perspective

Zaldi¹, Asmuni², Dhiauddin Tanjung³

Universitas Islam Negeri Sumatera Utara zaldi@umsu.ac.id¹, asmuni@uinsu.ac.id², dhiauddintanjung@uinsu.ac.id³

ABSTRACT

This research focuses on seeing how the integration between Islamic education and science, by looking at the case of pig eye cornea transplantation based on Al-Shatiby's perspective. Islamic education is important to adjust Islamic law as a guide for every Muslim to be a reference in carrying out all the activities of his life both his relationship with Allah and his relationship with fellow human beings even towards himself and other creatures. The development of medical technology today requires health experts to transplant / replace human eye corneas that experience blindness due to corneal abnormalities to be overcome while corneal donors derived from human eye corneas are very rare to obtain, one of which is due to the unwillingness of humans to become corneal donors, so doctors replace human eye corneas that experience corneal blindness with corneas derived from pigs that have been genetically engineered. Islamic law comes from the Quran and the Sunnah of the Prophet, but if no clear text is found in a problem faced by humans, the scholars make ijtihad to determine the law through Ijmak and Qiyas. With the development of technology today, not all problems can be answered from existing sources and arguments of Islamic law, so other legal arguments are needed, such as Maslahah Mursalah. This also requires Islamic education in the medical field, so that patients and families understand the problems that exist, and understand the medical process. The integration of Islamic education in science, especially in the context of medical science can encourage the determination of Islamic law on pig corneal transplants as a substitute for human corneas, especially by using the Maslahah Mursalah Theory approach from Imam Al-Shatiby.

Keywords: Islamic education, science, Al-Shatiby

A. INTRODUCTION

Islamic education and Islamic thought have developed so rapidly that Islam is now the world's leading center of philosophy and science and has no equal throughout the world in terms of scientific progress (Dalimunthe et al, 2023; Indainanto et al, 2023). The Qur'an and al-Sunnah have provided a complete and perfect system that regulates every area of human life, including scientific activity or scientific research, so Islam does not approach scientific issues from that perspective. Therefore, science is a fundamental component (Desnelita et al, 203). From the perspective of Islamic law, corneal transplantation has been carried out by previous scholars, but until now, researchers know that the Islamic law that has been established is limited to corneal transplantation originating from human corneas that have expressed their willingness and consent from their heirs to become corneal donors to the Eye Bank in certain countries with a statement that if he dies later his corneas can be taken by the Eye Bank to be given to other people who need to overcome their blindness.

Based on this phenomenon, the components of Islamic education activities play a very important role (Budiyanto, 2010). Islamic education is tasked with maintaining, instilling and developing the continued functioning of Islamic values which in practice helps and encourages the development of science in general through the holy books Al-Qur'an and Al-Hadith (Arifin, 2003; Aly et al, 2023), in this case the development of medical science through pig corneal transplantation. Until now, humans who are willing to become donors are very rare compared to humans who need them. Medical experts have carried out cornea transplants that are very good in terms of surgical technique and from cornea donor sources which are not only from humans, even cornea donors come from animals (xenotransplantation), especially from pig eyes (Ali, 2009).

Data from the World Health Organization in 2018, worldwide, there were 216.6 million people suffering from blindness, of which around 4.5 million people suffered from blindness due to disease in the cornea. Corneal blindness is currently the fifth cause of blindness after cataracts, refractive errors, glaucoma and retinal disorders, but most of the population of corneal blindness sufferers are young and productive and live in developing countries, compared to other blindness sufferers (Priya M. Mathews et al , 2018).

Currently, the waiting period for a corneal organ recipient (donor recipient) is very long due to the shortage of donor corneal organs throughout the world. According to various international reports, the number of donors has decreased over the last ten years, while at the same time the number of patients requiring organ donation continues to increase so that it can no longer be met. The increasing need for donor organs is due to increasing life expectancy

and increasing sufferers of chronic diseases as well as the increasing incidence of eye trauma in the industrial world. Over the past few decades, scientists have researched alternative therapies and resources to address this. A very specific and researched alternative with social impact on society is the use of animal organs as potential donor organs for humans. This special type of organ transfer between two different species is known by the technical term xenotransplantation. Even though medical technology in the field of cornea transplantation is very fast, only 1 in 70 people who need a cornea can be treated by having a cornea transplant to overcome their blindness, this is due to several obstacles and problems in doing so, including human resources, social and cultural, political, economy, and the severe lack of human cornea donors in a country (Singh, & Gupta, 2019).

Research on the integration of Islamic education and science, such as medical science regarding corneal transplantation from the perspective of Islamic law, has begun to be carried out by previous researchers, but as far as the researchers know, previous researchers discussed according to the period of their research that corneas that were transplanted to people in need were obtained from human corneas. has expressed his agreement to become a cornea donor to the Eye Bank in a certain country with his statement, among other things, that if he dies, his corneas can be taken and given to other people who need them, while currently cornea transplantation is very advanced both in terms of surgical technology and medicine. In fact, it has even developed from cornea donors, not only from deceased humans, even cornea donors come from animals, especially from pig eyes (Rinendya Putri & Dany, 2016).

B. METHODS

The research method used in this study is qualitative research. Qualitative research is an approach in which researchers can discuss research openly. Meaning and interpretation are negotiated with human data sources because this is the reality of the subject that a qualitative researcher wants to reconstruct (Creswell, 2010). To obtain data, researchers used library research. This means library research in which the data is taken from written materials, whether in the form of books or other things related to the topic of discussion. The content of a literature study can take the form of a theoretical study whose discussion is focused on information about the problem to be solved through research (Sukardi, 2003). In analyzing the data that has been collected, the author uses descriptive analysis. The descriptive analysis approach is an analysis that is described using words or sentences separated by categories to reach conclusions. Meanwhile, data analysis from the results of this research was carried out based on descriptive

analysis. The analysis consists of three interacting analytical flows, namely data reduction, data presentation and conclusion drawing (Miles & Huberman, 1992).

C. RESULT AND DISCUSSION

Advances in science cause changes in human values. Advances in medical science with developed experiments - through the use of animals and plants can also provide incentives for science itself. This can be found with two approaches, namely the language approach and the legal purpose approach for which God created the law. Both approaches must be carried out simultaneously, synergistically and in harmony so that Islamic law can be established and applied in human life. Second

Ushul fiqh scholars state the aim of the law as Maqashid Syari'ah, which means the aim of establishing laws for humans. The purpose of law is known and understood from the ijtiha d of the ulama on the verses of Allah and the Sunnah of the Prophet as sources of law. The conclusion obtained from these scholars is that God's purpose in establishing laws is for the good (al-Mashlahah) of humans in this world and the hereafter (Al-Shatiby, 2019).

There are two limits to the meaning of al-Mashlalah, namely according to language ('urf) and syara'. According to language, al-Mashlahah is defined as "Causes that give birth to goodness and benefits", while according to syara', al-mashlahah is "Causes that bring and give birth to the aims (goals) of ash-Syari', which are related to worship and mu' amalah (Nawawi, 2020). On the other hand, Ushul experts have different opinions about Maslalah Murlah being a postulate for the determination of Islamic law, so there are four opinions on this matter: Al-Qadhi and a group of Ushul experts reject it. The meaning of Maslahah Murlah cannot be accommodated as long as it is not relied upon. on the sources of Islamic law.

The majority of scholars divide sharia provisions into two, namely: Worship and Mu'amalah. This division is based on differences in establishing laws regarding worship and muamalah. Imam Izzuddin bin Abdussalam (d. 660 H), stated that establishing laws in the field of worship is God's right, while establishing muamalah laws is a human right. He stated that all worship aims to glorify and glorify the greatness of Allah and surrender and submit to Him. So in relation to Al-mashlahah as an argument for the application of sharia law, the ulama agree that Al-Mashlahah is only limited to the field of mu'amalah and does not apply to the field of worship because the guidance in the field of worship is an-nashsh, namely the Koran and Hadith. The principles of Islamic law stipulate that situations of emergency or necessity, known as darurah, allow some prohibited things to become acceptable. This legal

maxim states that an emergency or a state of desperation can cause a person to commit acts that are prohibited by sharia law.

From the point of view of Islamic and Muslim medical experts, they have written about various forms of organ transplantation, including Ibn Sina in 1037 AD in his book Al-Kanoon about bone grafting both from one's own body (autograft) and from bone from another person's donor (allograft).) or bones derived from animals (xenografts). Likewise, in 1059 AD the muftis from Egypt and Tunisia allowed corneal transplants originating from the corneas of people who had died (Mohammed Albar, 2012; Muladi & Nawawi, 1984.).

Organ transplantation is a new treatment method that can save many human lives and improve the quality of life of many others. Islam encourages the search for a cure and urges Muslims not to despair, because there is definitely a cure for every disease, even though we may not know it at the moment. Organ donation is an act of charity, benevolence, altruism and love for humanity. Allah loves those who love their fellow human beings and tries to reduce the suffering and sorrow of others and alleviate their misfortunes. Every action carried out with good intentions and aimed at helping others is highly respected and indeed recommended, as long as no harm is caused (Arifin, 2003).

Aasim I. Padela and Jasser Auda as members of the Fiqh Council of North America (FCNA) in their fatwa on organ donation and transplantation stated that organ transplantation from pigs (xenotransplantation) is still controversial both in Islamic law and ethical issues, even though pig organs have benefits for replacing diseased human organs such as kidney transplants to avoid humans having to undergo dialysis for life (I. Padela & Auda, 2020). Sautermeister J, Mathieu R, Bogner V in their article at the anatrdisciplinary symposium on religion and ethics concluded that Judaism, Christianity and Islam that using animals for organ transplantation (xenotransplantation) does not provide a specific prohibition on replacing and treating serious illnesses in humans who need it. organ donation but still respects those who think that this is not permissible (Marlina, 2009). Professor Amine Nesir, a member of Egypt's fatwa commission, does not see the use of pig parts for medical purposes as a problem. He clarified that there is no doubt that eating pork is prohibited in Islam, but not the use of pig organs for human transplants

Egypt's Al-Azhar fatwa council has stated that xenotransplantation of pig kidneys to humans is not permitted except in emergencies with two conditions that must be met, namely that pig organs are only organs that are related to the life of the donor recipient, for example the heart and kidneys, and the risk of continuing the transplant is smaller. rather than not continuing. This is in accordance with two rules of Islamic law: (i) al-darar yuzal (difficulties

must be eliminated) and (ii) 'idha ta'radat mafsadatan ru'iy 'azamuhuma dhararan bi irtikab 'akhaffuhima (if two difficulties collide, then money difficulties larger ones must be eliminated by doing the lightest) (Abdul, 2008).

hard pig organ transplantation. The former secretary of Al-Azhar's fatwa council, Sheikh Jamal Qutb, explained his disagreement by stating that humans are the most noble creatures. According to Qutb, only pure components may enter or be used in the human body. In his view, medical experts must look for better alternatives and continue experimenting with other creatures from the animal world to replace pigs (Redaktionsteam, 2023).

In Indonesia, on March 8 2019 the Indonesian Ulema Council issued 3 (three) fatwas regarding organ transplantation, namely organ and/or tissue transplantation originating from one's own body (Fatwa no. 11) and originating from other people who have died (Fatwa number 12) and comes from other people who are still alive (Fatwa no. 13). All of these fatwas state that organ and/or tissue transplantation is permissible provided that there is no alternative to other treatment methods to treat disorders/diseases in a syar'i manner and will not cause harm to either the donor or the recipient of the organ and/or tissue donor. (MUI) Center, 2019). Likewise specifically related to human corneal transplantation, the MUI through the Fatwa Commission met on June 13 1979 to provide a written answer to PMI Central Java's question NO.:799/Sekr/79 regarding eye donation by issuing fatwa decision no.4 of 1979 which states that: "A person who has a will during his lifetime will revive his corneas after his death with the knowledge, approval and witness of his heirs, that will can be executed, and must be carried out by a surgeon" (Central MUI, 2019).

Maslahah Mursalah Al-Shatiby Perspective

Imam Al-Shatiby, whose full name is Abu Ishaq Ibrahim ibn Musa ibn Muhammad Al-Shatiby, is a leading Islamic scholar and legal expert. He was born in 757 AH (1356 AD) in the city of Shatiba, near Granada, in Al-Andalus (Islamic Spain). His life and contributions are primarily related to the Islamic legal tradition. Imam Al-Shatiby is known for his important work in the field of Islamic Law (Saleh, 1983). His most famous work is "Al-Muwafaqat fi Usul al-Shari'ah" (Agreement on the Principles of Islamic Law). In this book, he attempts to reconcile the various schools of Islamic Law and identify the general principles underlying them. The book is considered a masterpiece in the field of Ushul Fiqh and is widely studied by Islamic law students. Imam Al-Shatiby lived during a time of political and social upheaval in Al-Andalus, with the region facing internal conflict and external pressure from Christian powers. Despite the challenges of his time, he continued his scientific studies

and left a legacy that continues to influence Islamic legal scholarship. Imam Al-Shatiby died on Tuesday in the month of Sa'ban in 790 AH (1388 AD). His works continue to be studied and respected within the Islamic scholarly tradition, and his ideas have played an important role in shaping the understanding and application of Islamic law (Al-Maraghi, 2020).

All actions to maintain these five principles are al-Mashlahah, and vice versa, everything that is contrary to al-Mashlahah is al-Mafsadah and rejecting al-Mafsadah is al-Mashlahah and interpreting Maslahah Mursale as returning to something that is appropriate and in harmony with religion, but there is no text argument that supports it with another meaning that Maslahah Mursale does not have a specific Shari'a argument for this matter, and there is also no argument that shows its existence as something that is compatible, but when faced with rationality then reason can accept it (Al- Shatiby, 2019).

Imam Al-Shatiby developed the concept of maqasid al-Shariah as the main basis for establishing Islamic law. In Al-Shatiby's view, maslahah (interest or benefit) is closely related to maqasid al-Shariah. Maslahah is considered as a tool or means to achieve the goals (maqasid) of Islamic law. He paid special attention to the relationship between maslahah and maqasid al-Shariah in his work "Al-Muwafaqat fi Usul al-Shariah." He stated that Islamic laws were actually established to achieve goodness and benefit for individuals and society. Therefore, maslahah is seen as a principle that supports and complements maqasid al-Shariah. Although maslahah is recognized as an important principle, Al-Shatiby warned against abusing this concept to formulate laws that conflict with the core principles of Islam. Thus, in Imam Al-Shatiby's view, maslahah cannot be separated from maqasid al-Shariah, and the two are interrelated to form a comprehensive and balanced framework of Islamic legal thought (Al-Shatiby, 2019).

Imam Al-Shatiby in his work "Al-Muwafaqat fi Usul al-Shariah" pays special attention to the division of human needs based on hierarchy. He grouped these needs into three levels, namely: Daruriyat (Basic Needs) are very basic and basic needs for human survival which are directly related to religion, soul, mind, heredity and property where Islamic laws are established to ensure the maintenance and protection of this daruriyat (Rahardjo, 2008).

Hajiyyat (Basic Needs): are needs that are necessary to improve the welfare of human life, although they are not as vital as daruriyyat. for example the need for education, employment, transportation and justice. where Islamic laws help fulfill this hajiyyat by providing relevant guidelines and rules. Tahsiniyat (Needs for Improvement) are needs related to the desire to improve the quality of life and the pursuit of beauty, for example

involving the need for art, beauty, and activities that provide additional happiness and satisfaction where Islamic Laws also provide guidance related to this tahsiniyat by ensuring that these activities are in accordance with Islamic moral and ethical principles (Sutojdo, 2008; Sudarto, 1983).

By dividing human needs into these three levels, Imam Al-Shatiby wants to show that Islamic laws do not only aim to fulfill basic needs, but also to improve welfare and justice in society. The principles of maqasid al-Shariah, which include an understanding of these needs, provide the basis for establishing Islamic laws that are oriented towards human welfare (Al-Shatiby, 2019). Imam Al-Shatiby in his book "Al-Muwafaqat fi Usul al-Shariah" does not explicitly provide conditions that determine whether a need can be considered a daruriyah (basic need) or not. However, understanding this concept can be taken from the framework of thought and arguments in this work. Several factors can provide an indication that a particular need can be considered legally daruriyah if the need is related to the safety of individual human life and society both physically and mentally, or the continuity of the teachings of the Islamic religion, or if the need is related to human rights recognized in Islam, such as the right to life, freedom and justice, or if not fulfilling these needs can cause great harm, both individually and socially, these five things will strengthen the argument that It is a necessity that is daruriyah (Al-Shatiby, 2019).

Determining a need as daruriyah can also be influenced by the context and conditions of society at a certain time. Al-Shatiby acknowledged that conditions and needs may change over time, and interpretations of what is considered daruriyah may vary. In this case, the interpretation and assessment of whether a hajiyyah or tahsiniyah need can be considered daruriyah can vary and requires ethical and moral considerations in accordance with the principles of Islamic law (Al-Shatiby, 2019).

In establishing Maslahah Murrasa as a legal proposition, Imam Al-Shatiby outlined certain conditions or prerequisites aimed at ensuring that the concept is used wisely and consistently with the broader objectives of Islamic law, including the absence of clear and unambiguous legal texts from the Koran or hadith. which discusses a particular issue so that Maslahah Mursale is seen as a complementary principle that can be applied without specific legal guidelines, and unrestricted considerations of public interest can be accepted as long as there is no conflicting evidence in existing sources of Islamic law, and consistency with the objectives of Sharia (Maqasid) where the unrestricted public interest must be in line with the broader objectives of Islamic law, in line with Islamic ethical and moral principles and the

prevention of harm (Daf' al-Darar) where the unrestricted public interest must contribute to preventing harm or realizing benefits for society so that it does not cause greater harm or conflict with existing legal principles, and consideration of Customary practices (Urf) in society can be taken into account when assessing unrestricted public interests can reflect the importance of considering the cultural context in the application of Islamic law and is important to emphasize that the application of Maslahah Mursale requires a deep understanding of Islamic jurisprudence and must be carried out by competent ulama whose aim is to ensure that appeals to the public interest are in line with the ethical and moral framework of Islam and do not lead to arbitrary or unfair decisions(Al -Shatiby, 2019).

In this case the concept of Maslahah Mursale allows for flexibility in legal reasoning, because it allows scholars to consider the potential benefits and harms in different situations. This recognizes the dynamic nature of society and the need for legal principles that can adapt to changing circumstances. In short, Imam Al-Shatiby's treatment of Maslahah Mursale reflects his commitment to the broader goals of Islamic law and his recognition of the need for flexibility in legal reasoning to meet the needs of an ever-evolving society (Al-Shatiby, 2019).

Analysis Of Maslahah Murlah Al-Shatiby In Pig Corneal Transplantation.

This article will analyze Islamic law regarding pig cornea transplantation as a replacement for human corneas that suffer from corneal blindness using the Maslahah Theory put forward by Al-Shatiby, with several arguments related to this problem.

Pigs are the best hosts for humans in organ transplantation due to their similarity in organ size, simplicity of genetic editing, and short reproductive time. On the other hand, pork is prohibited from being consumed and used by Muslims as stated in the verses of the Koran and Sunnah, because it is classified as unclean mughallazah or seriously unclean. Several verses of the Koran forbid pork as Allah says in Surah al-Baqarah, verse 173, which means "Indeed, Allah has only forbidden you carrion, blood, pork flesh and animals which (when slaughtered) are called (names) other than Allah. But things "Whoever is forced to (eat it), and he is not (in a state of) rebellion and does not (also) exceed the limit, then there is no sin for him. Indeed, Allah is Forgiving, Most Merciful" and Surah al-Maidah verse 3 which means "It is forbidden for you (eat) carrion, blood, pork, (animal flesh) slaughtered in the name of other than Allah, strangled, beaten, fallen, gored and torn by wild animals, except those which you have had time to slaughter, and (it is forbidden for you) who were slaughtered for idols.

Imam Hanafy and Imam Syafi'i and their sect followers stated that Maslahah Mursale is not an independent legal proposition, but is part of qiyas, meaning that if a benefit is not found in the text as a basis for qiyas, then the benefit is invalid and not accepted (Zahrah, 2019; Octoberiyansah, 2011). Imam Al-Ghazali is of the opinion that Maslahah Mursaya can be accommodated if there are certain sources of Islamic law that strengthen it, especially if it occurs at the Daruriah level, but with several conditions. If the above requirements are met, Imam Malik and the Hanbaly School of thought argue that Al-Maslahat can be accepted and used as a legal argument, because in essence, the existence of Al-Maslahat is to realize magasid as-Shari' (Zahrah, 2019; Sudarto, 2012).

This approach is a necessity that must exist and be applied by an Islamic legal expert to establish a law. If the legal approach is only carried out from language alone then there will be an artificial legal product because there is no objective of the law itself, while if it is in terms of legal objectives Of course, it will be difficult to find the correct law because language is a medium from Allah in conveying His revelations to humans in a language that humans understand, so that the purpose of the law will be easily understood in the correct language (El-Muhtaj, 2007)

Today the disbelievers have given up hope of (defeating) your religion, so do not be afraid of them and fear Me. This day I have perfected your religion for you, and I have provided you with My Blessings. and Kuridai Islam has become a religion for you. So whoever is forced by hunger accidentally commits a sin. verily, Allah is Most Forgiving, Most Merciful" as well as Surah al-Nahl verse 115 which means "Indeed, Allah has only forbidden you (eating) carrion, blood, pork, and what is slaughtered using names other than Allah; but whoever is forced to eat it without wronging it or transgressing limits, then indeed Allah is Forgiving, Most Merciful" (Sambas, 2010).

Pig corneas that have been genetically engineered are an alternative that can replace damaged human corneas resulting in blindness in sufferers. Pig corneas have minimal tissue rejection effects so they really help the recipient's vision because they last longer with better vision than corneas. Pig eyes that have not been genetically engineered. Currently, the need for cornea transplants is very large, namely around 4.5 million people who need them, while only 1 in 70 donor recipients who can be transplanted comes from a human cornea donor due to several things that hinder transplantation, including socio-cultural, economic, and economic factors, politics and especially the lack of people who are willing to donate their eyes if they die (Singh & Gupta, 2019)

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A meta-analysis study from Joshua R. Ehrlich, on "The relationship between visual impairment and mortality rates" by conducting cohort, prospective and retrospective studies examining the association between visual impairment and all causes of death in people aged 40 years or older studied during over one year, concluded that the risk of death from all causes was higher in people with severe visual impairment (blindness) compared with those with normal vision or mild visual impairment, and the magnitude of this effect continued to increase as vision deteriorated.

From the argument above, transplantation of pig corneas as a replacement for human corneas is a problem found today, and was not encountered during the time of the Prophet, so there is no definite Islamic legal basis regarding this matter either from the Al-Quran, Sunnah or Ijma' and Qiyas. Therefore, Islamic law is needed as the basis for determining the law, namely Maslahah Mursaya, in this case the researcher carried out a legal analysis using the Maslahah Al-Shatiby Theory.

Al-Shatiby's perspective on Maslahah Murlah as the basis of Islamic law for transplanting pig corneas as a replacement for blind human corneas can be applied to this problem, because this is closely related to Maqasid Sharia, pig cornea transplantation is related to the preservation of the soul (Hifz -nafs) from potential recipients of eye cornea donors, according to the research above which states that there is a relationship between the increased risk of death of people who suffer from blindness compared to those who do not

experience blindness, as well as being related to the maintenance of assets (Hifz-mall) where blind sufferers will find it more difficult to meet their needs.

Likewise, Al-Shatiby divides the level of needs required by humans into the level of daruriyat needs (basic needs that are directly related to the maintenance of religion, soul, mind, lineage and property), hajiyyat (needs to improve the welfare of human life such as education and work) and tahsiniyat (increased needs related to the desire for a better life such as the need for art and beauty), in the case of transplantation of pig corneas as a replacement for blind human corneas, this is closely related to the emergency needs of potential cornea donor recipients, especially in terms of maintenance life and property, then in this case the level of need allows it to become a dauriyat need, so that the original legal basis for pig corneas is haram, so under this condition the law becomes permissible (Mubah).

D. CONCLUSION

Research on the integration of Islamic education and science in Indonesia, especially those related to pig cornea transplantation, can overcome the concerns of patients and doctors about using pig corneas in human eye transplantation. However, the next problem arises in terms of the law for Muslims because it comes from animals that are forbidden by Allah. In this simple article, the researcher examines the law by taking the Maslahah Murlahah approach from Al-Shatiby's perspective with the conclusion that transplanting pig corneas as a replacement for blind human corneas is permissible (Mubah) with the argument that up to now the need for pig cornea transplantation is overwhelming, emergency needs for donor recipients of pig corneas. Therefore, Islamic education is important to explain and facilitate these phenomena and problems, especially in the medical academic field. This is in order to emphasize the existence of pig eye transplants which are apparently permitted in the context of human needs, as long as they can help the human beings themselves. Through Islamic education, the existence of this opinion can also be strengthened, so that it can encourage the field of medical science which is considered incomplete without being supported by Islamic studies in the process of discussion, approach and implementation.

REFERENCES

- Abdul Qadir Audah. 2008. Ensiklopedi Hukum Pidana Islam. Jakarta: PT. Kharisma Ilmu.
- Ali, Achmad. 2009. Menguak Teori Hukum (Legal Theory) dan Teori Peradilan (Judicialprudence)." Jakarta: Kencana.
- Al-Maraghi, Ahmad Mustafa. 1993. Tafsir al-Maraghi, Jilid 12. Semarang: Toha Putra.
- Aly, H. N., Abdullah, S., Chamami, M. R., Fihris, Yahiji, K., Supiah, Damopolii, M., Ainiyah, N., & Ritonga, A. R. (2023). Reviewing the Colonial Period Islamic Education System in Indonesia: What is Still Relevant to Continue. *Journal of Namibian Studies*, *33*, 671–687. https://doi.org/10.59670/jns.v33i.531
- Arifin, Muzayyin. 2003. Filsafat Pendidikan Islam. Jakarta: Bumi Aksara.
- Budiyanto, Mangun. 2010. Ilmu Pendidikan Islam. Yogyakarta: Griya Santri.
- Creswell, Jhon. (2010). Research Design, Pendekatan Kualitatif, Kuantitatif Dan Mixed. Yogyakarta: Pustaka Pelajar.
- Dalimunthe, M.A., Pallathadka, H., Muda, I., Manoharmayum, D,D., Shah, A,H., Prodanova, N,A., Mamarajabov, M, E., & Singer, N. (2023). Challenges of Islamic Education in the New Era of Information and Communication Technologies. HTS Theological Studies. 79(1), 1-6.
- Desnelita, Y., Susanti, W., Rizal, F., & Ritonga, A. R. (2013). The Implementation of Collaborative Project Based Learning Model with Inquiry Process using E-Learning in Higher Education. *Educational Administration Theory and Practice*, 29(1), 90–101.
- El-Muhtaj, Majda. 2007. Hak Asasi Manusia Dalam Konstitusi Indonesia." Jakarta: Kencana Prenada Media Group.
- Indainanto, Y.I., Dalimunthe, M.A., Sazali, H., Rubino., & Kholil, S. (2023). Islamic Communication in Voicing Religious Moderation as an Effort to Prevent Conflicts of Differences in Beliefs. Pharos Journal of Theology. Volume 104 Issue 4 (2023)
- Lamintang, P.A.F. 1984. *Hukum Panitensier Indonesia*. Bandung: Armico.
- Marlina. 2009. Peradilan Pidana Anak di Indonesia." Bandung: Refika Aditama, 2009.
- Mathews, P. M., Lindsley, K., Aldave, A. J., & Akpek, E. K. (2018). Etiology of global corneal blindness and current practices of corneal transplantation: A focused review. *Cornea*, 37(9), 1198-1203
- Miles, B. M., & Huberman, A. M. (1992). *Analisis Data Kualitatif, Alih Bahasa: Tjejep Rohendi Rohidi*. Jakarta: UI Press.
- Muladi dan Barda Nawawi. 1984. Teori dan Kebijakan Pidana." Bandung: Alumni.
- Octoberiansyah. 2011. Tujuan Pemidanaan Dalam Islam." Jurnal In Right Jurnal.
- Rahardjo, Satjipto. 2008. "Membedah Hukum Progresif." Jakarta: PT. Kompas Media Nusantara.
- Rinendyaputri, Ratih, et al. "Pengaruh Fibronektin pada Kultur Sel Punca Limbal (SPL) Tikus." *Jurnal Biotek Medisiana Indonesia*, vol. 5, no. 2, 2016, pp. 113-120.\
- Sambas, Nandang. 2010. Pembaruan Sistem Pemidanaan Anak di Indonesia." Yogyakarta: Graha Ilmu.
- Saleh, Roeslan. 1983. Stelsel Pidana Indonesia. Jakarta: Aksara Baru.

- Singh R, Gupta N, Vanathi M, Tandon R. Corneal transplantation in the modern era. Indian J Med Res. 2019 Jul;150(1):7-22.
- Sudarto. 2012. Asas-asas Hukum Pidana Anak." Semarang: Badan Penerbit Undip, 2012.
- Sudarto. 1983. Hukum Pidana dan Perkembangan Masyarakat." Bandung: Sinar Baru, 1983.
- Sukardi. 2003. Metodologi Penelitian Pendidikan Kompetensi dan Prakteknya. Jakarta: Bumi Aksara.
- Sutojdo, Wagiati. 2008. Hukum Pidana Anak." Jakarta: Rajawali Pers.
- Yesmil Anwar & Adang. 2009. "Sistem Peradilan Pidana (Konsep, Komponen, & Pelaksanaannya Dalam Penegakan Hukum di Indonesia)." Bandung: Widya Padjadjaran,