



Integration Of Islamic Studies On Reproductive Physiology At UIN Syekh Ali Hasan Ahmad Addary Padangsidimpuan

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Abstract

The aim of this research is to analyze the integration of Islamic studies in the study of the biology of the human reproductive system at the Syekh Ali Hasan Ahmad Addary Padangsidimpuan National Islamic University. This research uses a qualitative descriptive approach through field research, using an integrated scientific and Islamic approach through verses from the Al-Qur'an about reproductive physiology. The results and discussion of this research show that the learning process implemented has not fully achieved the integration of science and Islam in biology learning. This can be seen from the results of a questionnaire conducted by the Whatss group of 20 students which was distributed to the 6th semester biology student group, that every sub-discussion of material related to the reproductive system previously had not fully integrated uluhayah learning. information contained in the Koran. The process has not been completely perfected. This research recommends the integration of science and Islam in Islamic higher education studies. The moral message instilled in students is not only about learning biology as a secular science, but can also increase awareness about the integration of scientific research in the world and the future.

Keywords: *Integration, Science, Islam, Reproduction, Humans*

INTRODUCTION

Religion and science are one unity of science that must have the integrity of the science. The knowledge of God is the knowledge of the world, and the knowledge that is in the world is the science of the universe. The application of science and religious science into human life, both in society and in educational institutions at all levels, is of paramount importance. The combination of these two sciences is known as the combination between science and Islam. This combination not only blends science with religion, but also makes religious science the source of science. But all this time science and religion have been seen as two things that are difficult to reconcile, because each has its own domain in terms of both formal objects, matter, methodology, standards of truth, and theory.

Based on the results of the search of Islamic studies speeches at the national university level in particular at UIN Sheikh Ali Hasan Ahmad Addary (SYAHADA) Padangsiduan, the Rector gave a speech that presents the vision and mission of UIN SYAHADA campus that the Holy Scriptures of the Law. The university adopted the Anthropocentric Paradigm of Deity, which means the unification of Qauliyah, insyanyiah and kauniyah. The term "theo-anthropocentrism" was first proposed by a professor. Ibrahim Siregar spoke on the sidelines of the proposal to transform IAIN Padangsidivun into a National Islamic University in Jakarta by the middle of 2020. The use of the term was then discussed in the focus group discussion of the IAIN Master Plan and Strategic Development Plan at the conclusion and subsequent leadership meetings. In the letter Fushshilat verse 53 is clearly mentioned that there are three sources of knowledge: God (wa), Ali Imran (190-191, dan sebagainya). Prof. Ibrahim said that the primary source of the term teoantropocentris is the Quran, especially verses related to the subject, such as the scientific paradigm of UIN Yogyakarta, namely the teoanthropocentris. For example, the sentence means:

شَهِيدٌ شَيْءٍ كُلِّ عَلَىٰ أَنَّهُ بِرَبِّكَ يَكْفِي أَوْلَمُ ۗ الْحَقُّ أَنَّهُ لَهُمْ يَنْبِئَنَّ حَتَّىٰ أَنفُسِهِمْ وَفِي قِ فَآ أَلْفِي أَيُّتِنَا سَنُرِيهِمْ

"So that they may know that the Qur'an is the truth, and We will show Our signs to them all over the world and to themselves. Isn't it enough for you that your Lord is a witness to all things???"

Our verses are in the book of Fushshilat above: afaq (universe), anfas (man), al-haq (wahyu). They are the signs of Allah. Therefore, this Fushshilat 53 is the basis of a solid argument that the object and the domain of science consists of divinity, humanity and nature (God, man, and nature=theos-anthropos-eicos). It is expected that this paradigm will transform the learning, research, and social devotion of teachers and students. Specifically, college lessons are focused only on science with no connection to Islam. The campus aims to produce students who are intelligent, capable, able, integrity, and solidarity. Students are expected not only to have good cognitive abilities, but also to have affective abilities. That means they should be able to change their behavior and have habits, with a high awareness that habits outweigh science.

Islamic studies state that humans originated from the soil grain, but some previous historical theoretical studies mention that human beings originate from monkeys. History also shows that science and religion are different; for example, the church rejects Galileo's Heliocentric theory, and Isaac Newton and the secular scientists place God as a temporary cover for things that cannot be solved by their science; however, God's intervention is no longer necessary once such things can be resolved by science. On the other hand, in the Eastern world, especially in Islamic countries, the teaching of religious sciences is diminishing and there is hardly any scientific and technological development that has affected human life and well-being. Nowadays is an age where technology and information are evolving very rapidly.

Indonesia also has differences in science and religion. The Ministry of National Education is responsible for science, whereas the Ministry for Religion is in charge of religious science. The institutions of general education teach more general science than religion, the religious education institutions balance religious and general science, and the colleges teach more religion than general science. In other words, this reference indicates that religious science and general science are different. It's also happening at universities in various regions, especially at UIN SAHADA Padangsidimuan. In Indonesia, the combination of science and religion has long been discussed. This is demonstrated by Article 30 of the Act No. 20 of 2003, which mandates religious education in all strata of education.

National educational content standards regulate the curriculum used at each level. The curriculum is defined as “a set of plans and arrangements concerning graduate learning access, study materials, processes, and assessments used as guidelines for the maintenance of the study programme” in the National Standards for Higher Education. (Permenristekdikti, No. 44 Tahun 2015). A learning model is a learning model that is described from the beginning to the end and presented specifically by the teacher responsible. In other words, a model of learning is a set or framework of methods, approaches, strategies, and learning techniques used. Understanding the integration of science and Islam not only means uniting the science of religion and science, but also makes the teaching of Islam as a paradigm of social science and humanity (Barizi, 2011).

The results of the survey conducted through the WhatsApp app will show the integration of science and religious science into the courses of reproductive physiology at UIN SYAHADA. Physiology is the branch of biology that studies the functions of organisms

and their parts. This course deals with the materials that drive the evolution of living creatures. Integration is expected not only in the teaching material, but also in the planning and learning process.

RESEARCH METHODS

Field research is a type of research that is carried out systematically using field data. (Suharsimi 1995:58). This research uses qualitative research methods. According to Bodgan and Taylor, qualitative methodology is a method of research that produces descriptive data from individual behavior and written or oral words. (Lexy 1991: 3). The results of 20 students in the biology class of the sixth semester were used as data samples. This research aims to find out how science and Islam are integrated into the learning of reproductive physiology material at UIN SYADA Padangsidempuan. The collection method is done through documentation, which is a virtual interview, distributed through the use of WhatsApp as a survey dissemination tool. Once the data is collected, qualitative analysis methods are used to analyze it. As a result, this study can produce descriptive data in the form of a written statement that agrees, attracts, or agrees with the survey results..

RESULTS AND DISCUSSION

The integration of Islam and science is essential to prove that Islam is the source or inspiration of all science. The purpose of integrating science and Islam is to eliminate the idea that IPTEKS and Islamic doctrine cannot be united, and to prove that Islam is not a religion that rejects the advancement of science and technology; on the contrary, Islamic teaching is the source or inspiration of all science. Special studies on ways to integrate science and Islam are needed to realize the integration of science and islam in educational institutions. Some characteristics of these methods are as follows:

1. Making the Quran and Hadith as a source of science;
2. Avoiding the dichotomy of science in the study of Islamic religion;
3. Cultivating the personality of the Albab;
4. Tracking the verses of the Qur'an that relate to science; and Developing the curriculum of education (Hamdan Husein Batubara 2016).

Initially, science consisted only of three branches: natural science, social science, and humanities. Then the Muslims added a new variant: the science of Islam. Ushuluddin, dakwah, shariah, adab, and tarbiyah are the terms used in Islamic educational institutions. The dichotomy in science actually comes from here. General science and religious science are different. General science is under the Ministry of National Education and Culture, while religious sciences are under the ministry of Religion. Muslims see the separation of science like this as one of the reasons why they are lagging behind in the era of computers and the Internet. Therefore, it is vital to undertake research and develop learning models that integrate science and Islam to pursue such lags. Several colleges in Indonesia have started the effort.

There are three groups of sciences: social sciences, natural sciences and humanities. It is in line with the vision of the mission of UIN SYAHADA Padangsidipuan, which integrates Islamic learning with science. The results of this survey show that students are interested and respond positively to learning methods that associate reproductive physiology with Islamic religious sciences derived from the Qur'an, although such paradigms have not been fully implemented in college tridarma such as integrating religious science with science. The survey results on the integration of Islamic studies with science were as follows: respondents gave interesting answers to the first and second instruments.

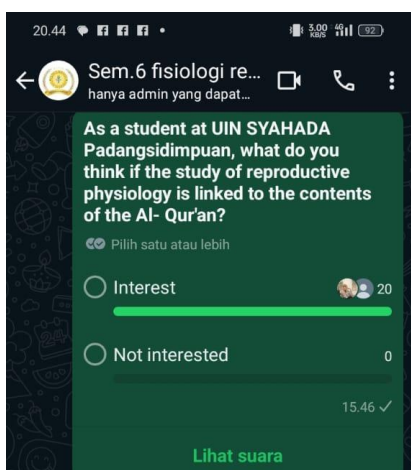


Figure 1.

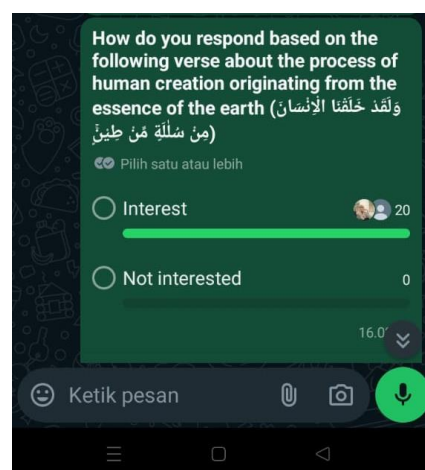


Figure 2.

It shows how the process of learning physiology is studied by students and how it relates to the teachings of Islam. The purpose of the study of physiology was to teach students about the concept of man according to science and to integrate it with the concept in the Qur'an as well as about how man originated from the soil grain. It explains how the period of ovum or spermatogenesis was studied further.

In the third and fourth instruments, the respondents answered that the theory of the creation of man comes from the sperm justifies the science theory. In the fourth instrument, the scholar also gives an easy-to-understand answer if the learning of science is associated with the teaching of the Qur'an. This indicates that the respondent has not been able to erase and analyze the theories of the origin of man created according to the Quran, especially those related to Q.S al-Mu'minin (23): 12. The Qur'an mentions that humans are made from the essence of soil (Raharusun, 2021).

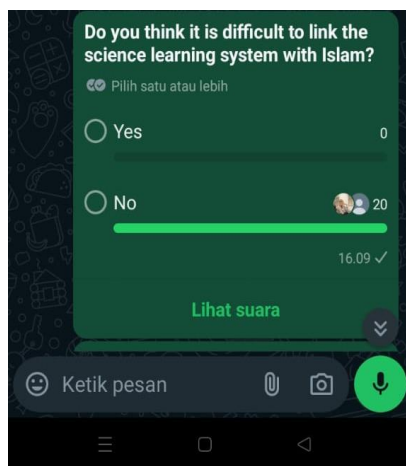


Figure 3.

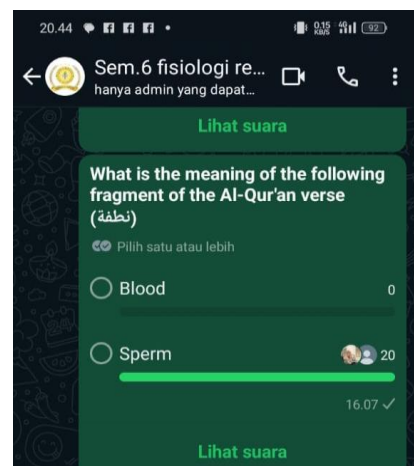


Figure 4.

Respondents did not answer instruments fifth and sixth. This suggests that respondents should understand the theory according to science, as demonstrated by the use of Campbell's theory by respondents. After that, if the lecturer integrates science with the Islamic study of the Qur'an, the theory will be strengthened and justified. The facts prove that humans did not come from apes, but there is a similar future cycle between humans and monkeys coming from sperm (Subagiya, 2018).



Figure 5.

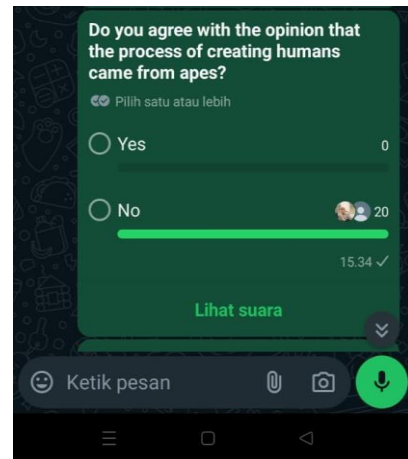


Figure 6.

In the seventh and eighth instruments, the integration of the Qur'an with science has a positive effect and student response and it is agreed that this learning integration has value for them in the future especially with regard to the mechanisms of human formation.



Figure 7.

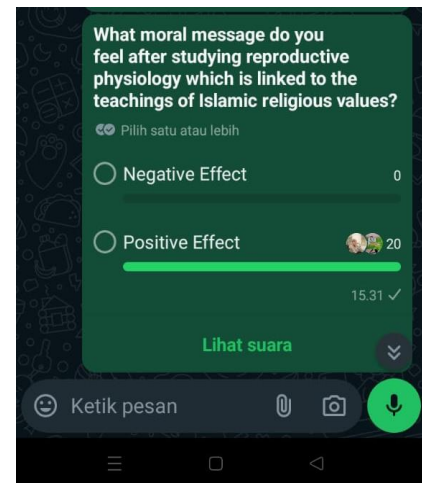


Figure 8.

In instruments ninth and tenth respondents gave answers of science learning associated with Islamic values more comprehensible and more effective in depth as a level of warning against the danger or disease that occurs if not literally reject the concepts of material physiology of reproduction and respondents also gave the answers agreed if the material of science should be associated to Islamic value, so that the purpose of learning can be achieved in the theory of the world and the theories of the hereafter.

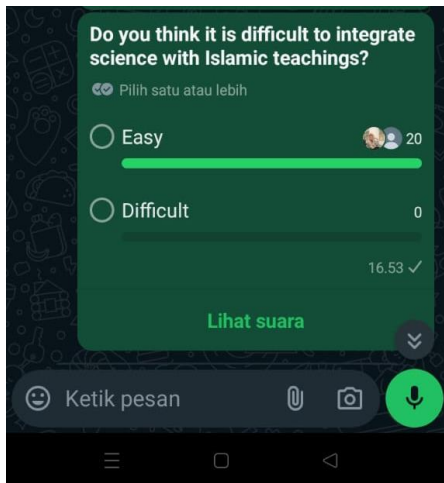


Figure 9

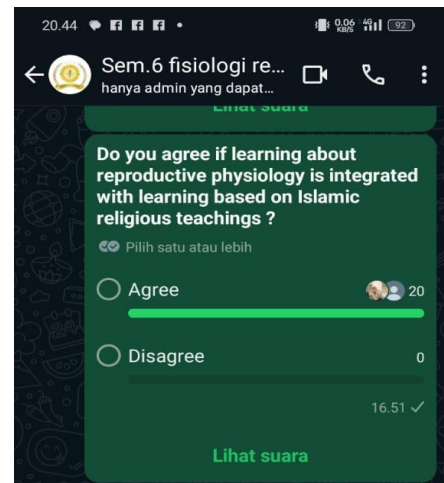


Figure 10

The verses relating to embryology, as found in Q.S al-Hajj (22): 5 and Q. S al-Mu'minun (23):14, indicate that man was created through various stages. According to Wahbah az-Zuhaili, as stated in Q.S al-Hajj (22): 5, the food and nutrients consumed by humans come from plants born from water and soil, which then form sperm. (Az-Zuhaili, 2013b). According to Al-Qurthubi (2007), the word "nutfah" has the meaning of a drop of semen because the origin of the word is " نطفة ", which means a drop.

Az-Zuhaili interprets the word نطفة in (Q.S al-Hajj (22): 5) as the process of reproduction through sperm made of human nutrients and food derived from the soil. In the interpretation (Q.S al-Mu'minun (23):13), Allah then inserts this notfah into the uterus that is strong, strong, calm, and awake from the time of pregnancy to the process of childbirth. (Az-Zuhaili, 2013). However, according to Qurthubi, علقة means very red blood or new blood (Al Qurthubi, 2007). Fourthly, the Mudghah is a blood clot that then turns into a clot, that is, a flesh clot which looks like a bite or a squid (Az-Zuhaili, 2013b), or a piece of chewed meat. (Al Qurthubi, 2007). According to Al Qurthubi (2007), the process of human formation lasted four months. By the fifth week, the heart is already starting to beat, and the placenta enters the wall of the uterus to provide food and oxygen to the fetus.

To be his cover, the flesh increases strength and strength. (Az Zuhaili, 2013b). At this stage, the embryonic body parts are already connected because the flesh and muscles cover the bones, allowing the fetus to move. According to Lajnah Pentashihan Mushaf Al-Qur'an (2016), this phase will end at the end of the eighth week. the seventh, which is softened with the anointing of the spirit. All fetal organs begin to function at the age of 16

weeks; nerves begin to work at week 22–26 and hearing begins to develop at week 24–28. After all the parts of the body were made perfect, God gave the soul to man to be perfect creatures.

The verses of the creation of man in (Q.S. al-Hajj (22): 5) describe the development of the fetus in the womb in general, while in (Q.S. al-Mu'minun (23): 14) is explained explicitly. Thus, the Qur'an is an indirect message to the Muslims in particular, because it shows the evolution of mankind from the time of creation. There is a possibility that the stage of human creation consists of soil, *nutfah*, "*alaqah*," *mudghah*, bone formation, muscle formation, and soul formation. From the description above, it can be concluded that man is the best form of man. According to Sadler, the phases in science consist of gametogenesis (ovulation to implantation), bilaminar germ disk, embryonic period, and delivery period. According to Dudek, organogenesis, prefertilisation, and weekly period.

According to two sources, the phase of fetal development consists of the ovum period, which is the encounter between the sperm and the egg, the embryonic period, that is the period of organ formation, and the fetal period, who is the development and perfection of the organ. There are some similarities between the description of Islam and the science of embryology as follows: the phase of *nutfah* and "*alaqah*" in the Qur'an is considered to be the period of the ovum, the stage of *mudghah* is regarded as the embryonic period, and the stages of bone formation until the covering of the flesh is considered as the fetal period. However, there is a difference between the two: science cannot discuss the basic essence of the creation of man, which God preserves in His book, so science cannot deal with embryology in depth. From this equation, we can say the integration of Islam with science.

Program the semester learning plan prepared by the faculty is a document of learning planning that is prepared as a guide for students in carrying out lecturing activities for one semester to the established learning access. Reproductive physiology is one of the specialty courses of Tadris Biology at UIN SYAHADA Padangsidempuan. The RPS on that course covers the curriculum. The discussion of the reproductive system encompasses sub-languages such as the structure and function of reproductive organs, spermatogenesis, menstrual cycles, fertilization and pregnancy, and diseases and disorders of the reproductive system. However, in the RPS is presented using the theory of Campbell and reinforced by the verse al-Qur'an letters Adz-Zariyat : 20-21 and Surah Al-Human 1-2.

Furthermore, there are sub-languages about the process of fertilization and pregnancy that deal with the process from the occurrence of pregnancies and fetal growth to delivery, or this process is called the embryonic period and the fetus. In Islam, the material relates to the process of growth of the nutfah into the 'alaqah, from the 'allaqah into the mudghah to the growth of bones and flesh. If you look at the RPS and the teaching materials used, the material used is only from Campbell's theory does not refer to the verses of the Qur'an. While many verses discuss the process of growth of the fetus to become new creatures like Q.S al-Hajj (22): 5, Q.S al-Mu'minun(23):14, Q.S al-Isra' (17): 85, Q.S at-Tin (96): 4)

Based on the analysis of the survey used, it can be concluded that although science and Islam are not fully integrated, especially in terms of physiological material that uses references from the Qur'an. Data from the survey is obtained through instruments consisting of indicators, namely: 1) the concept of man in science is integrated with concepts in the Quran, such as human understanding and purpose, 2) precedes concepts related to science. 3) refers to the Qur'an, like Q.S al-Furqon (25): 54, Q. S al-An'am (6): 2, Q.s al-Mu'minun (23): 12, Q.C. al-Hajjr(15):26, Q.Rahman (55): 14, 4) explains the phases of the development of the fetus in science, like Q.S Al-Hejj (22): 5.

Based on the mission vision of the UIN Syahada campus, the conclusion of the theoantropocentric curriculum should direct the objectives of the curricula to the achievement of the physical, mental and spiritual development of the pupils in a balanced way towards achieving the perfect human being. In general, the theoantropocentric curriculum must contain the charges of the religious sciences ('ulum ad-diniyah), the social sciences and humanities ('ulum al-insaniyah), and the scientific sciences of the experience ('um al-kauniyah). In operational terms, the curriculum structure of all compulsory study programmes has a load of three major fields of science. The emphasis on a particular field of science is made by considering access to competence knowledge and skills.

According to the theoantropocentist paradigm, educators are the most responsible for the learning process. His responsibility is to make learning scenarios interesting, effective, active, and enjoyable. Moreover, he is most responsible for learning material and lectures. A theoantropocentric teacher must have the ability to integrate or integrate religious sciences, social-humanities, and expertise into their curriculum. Educators are the most responsible for the learning process according to the theoanthropocentist paradigm. The task is to make learning scenarios active, effective, interesting, and enjoyable.

In addition, he is primarily responsible for ensuring that the learning material and the curriculum material are well organized. A theoantropocentric teacher must have the ability to integrate or link religious sciences, social-humanities, and experience into their curricular material.

In terms of research, a teacher or researcher makes an extraordinary educational effort. It is called so because the focus of research is to create new information or update existing information. Every teacher has to apply a transdisciplinary, multidisciplinary, or interdisciplinary approach in accordance with the theanthropocentric paradigm. These three approaches, especially in the fields of social sciences, science, and humanities, require the integration or interconnection of religious, social-humanitarian, and religious sciences.

In the field of devotion, the duty of prophet and caliphate is to use science and various abilities to enhance the dignity and dignity of society. According to theoantropocentric perspectives, this devotion can be defined as a good deed or the materialization of ipteks acquired during education, training, and research. Therefore, devotion should not focus on material values. However, it should be focused on *li ibtigha'i mardhatillah* (berusaha untuk mendapatkan keridaan Allah). Devotion must combine the principles of divinity, humanity, and beauty. Dedication is directed to enlightenment and empowerment of the community as a prophetic task (kenabian). According to Kuntowijoyo's prophetic social science, humanization, liberation, and transcendence are the basis of social devotion. The enlightenment of society with science and skills is called humanization. Liberation is the liberation of a society from the obstacles that hinder life.

The person most responsible for the course of learning is the teacher. The responsibility is to make learning scenarios interesting, effective, active, and enjoyable. Besides, he was most responsible for the learning material and lectures. Theoantropocentric teacher must have the ability to integrate or integrate religious science, social-humanities, and expertise.

CONCLUSION

Analysis of surveys used in physiology courses, those related to the topic of fetal growth, and how the learning process is described in the data of interviews conducted virtually through whatsapp groups, suggests that reproductive physiology learning has not fully integrated science and Islam. This research has its limitations, so further research needs to be done to formulate learning integration of science and Islam. Furthermore, this study

suggests teachers in Islamic colleges to use learning integrations of Science and Islam because the Islamic concept in the Qur'an is considered important as a treasure of science as science and technology develops in the millennial era.

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