

Journal of Religion & Society (JR&S)

Available Online:

<https://islamicreligious.com/index.php/Journal/index>

Print ISSN: 3006-1296 Online ISSN: 3006-130X

Platform & Workflow by: [Open Journal Systems](#)**The Quran and Medical Sciences: An Interdisciplinary Exploration of Divine Revelation and Contemporary Health Knowledge****Romesa Maryam**

M.Phil. Islamic Studies, Ghazi University, D.G. Khan

romesak004@gmail.com**Mah Rukh**

Visiting Lecturer, Department of Islamic Studies, Ghazi University, D.G. Khan

farhangul001@gmail.com**Abstract**

This paper examines the dynamic relationship between Quran and modern medical sciences with special focus on the Quran as a source of guidance not just as a spiritual guide, but also as a source of knowledge that sheds much light in cases of human health, hygiene, nutrition, psychology and physiological developments. Based on the assumption that all knowledge is created by Allah, the Quran includes the need to contemplate the natural world and it calls on believers to study scientifically and to participate in scientific research as a way of worship and intellectual exploration. Among the most significant fields to be explored are embryology, in which passages in the Quran detailing a human developing in the womb are very similar to the processes known in modern medicine; nutrition, in which nutrition guidelines are similar to those of modern health advice; and mental health, in which the Quran focuses on inner peace through prayer and remembrance which is matched by references in modern psychology and neuroscience. Moreover, insistence on personal and public hygiene in the Quran anticipates the modern epidemiology and disease prevention principles. The methodological issues which arise in trying to fit the scriptural interpretation and the empirical science are also critically evaluated in this interdisciplinary work. It warns of excessively concordist interpretations, and emphasizes the necessity of theological integrity in the quest of scientific parallels. The article relies on the classical Islamic scholarship and contemporary scientific texts to advance an integrative approach, which regards science and revelation as complementary and not mutually exclusive. Finally, it places the case of a responsible interaction with both the Quran and science one that does not encroach on the epistemological domains of either and yet is sensitive to the common aim that both are attempting to pursue, the overall well-being of mankind.

Keywords: Quran, Science, Islam, Quranic Embryology, Islamic Nutrition, Mental Health, Islamic Hygiene, Divine Knowledge, Interdisciplinary Studies, Faith, Reason.

Introduction

The correlation between religion and science has tended to define the experience as one of contention and conversation particularly in the realms of holy writ and scientific investigation. The Quran in the Islamic tradition, however, represents not only a source of spiritual guidance, but also an inexhaustible reservoir of thoughts about the natural world, including elements of human health and well-being. In the Quran, verses are provided to deal with phenomena like the creation of human beings, nutrition, hygiene, mental balance and healing, and the believers are stimulated to reflect on these signs (ayat) as ways to reach divine knowledge as well as to scientific knowledge (Nasr 2006). This bilateral role has led two generations of Muslim scholars to understandings of intersections between scriptural teachings and the new medical knowledge. Today, with medical science becoming more specialized and advanced, people have developed interest in how the Quranic worldview compares or predicts modern scientific knowledge especially in the

field of medical sciences (Sardar 2011; Khan 2014). Some interpretations have tended to rely on metaphoric or theological interpretations, whereas others have tried to find more specific parallels, eg between Quranic accounts of embryological development and the results of modern obstetrics (Moore and Sheik 1990).

This is not the exploration without methodological and epistemological difficulties. The Quran as a religious text was revealed during the 7th century Arabia to provide spirit and moral needs of humanity and not as a science textbook. However, it is full of allusions to the processes of nature, the human body, and the concepts of cleanliness and health, which, surprisingly enough, already coincides with what modern medicine has found out by using empirical methods. To give just one example, the Quranic focus on the importance of hygiene can be seen in Quranic injunctions on ablution (wudu) and bathing (ghusl) that did not await the germ theory by centuries but closely correlate with the modern science of preventing diseases (Rahman 1984). In the same manner, the verse in Surah Al-Baqarah (2:222) which urges cleanness and purity tells a lot about individual health and reproductive hygiene. Some scholars like Bakar (1999) have insisted that the Quran promotes the holistic view of the human being in which there is interrelationship between physical, spiritual and psychological health as they are all aspects of the same divine creation. In addition, Islamic rituals like fasting during Ramadan when approached scientifically are full of health benefits to the individual such as favorable metabolic health, sharper thoughts, and emotional stability (Norouzy et al. 2013). These convergence areas indicate a greater level of consistency between religious teaching and biological performance, a consistency which is worth exploring more in a systematic way through academic research.

However, in seeking such harmonization, academics have to watch out and avoid reductionism or bias in selecting scientific truths to confirm religious convictions. This paper does not seek to validate scientific evidence using the Quran or vice versa but it seeks to explain how the scriptural literature has led to greater interest in the natural and medical sciences. This interdisciplinary methodology requires incorporation of tafsir (Quranic exegesis), scientific method and scientific literature, where theological soundness and scientific strength can be achieved. In a similar note, Al-Attas (1995) points out that Islamic science is not merely a matter of collecting information or experimenting, it is in fact, a matter of recognizing the intention, morality and divine wisdom of the act of creation. The Quranic call to look at oneself and the world (e.g. Surah Fussilat 41:53) challenges the believers not only to turn to empirical reality but also to enter into the faith and responsibility to the extent of the causal connections. This study thus examines some of the most important fields that Quranic revelations not only match but in some cases even predate medical knowledge in embryology, nutrition, mental health, hygiene and fasting. In that way, the research will help to advance the Islamic scholarship and the current discourse in science to foster an integrative, reverent and critical approach to knowledge.

The Quran as a Source of Knowledge

The Quran is revered in Islam not merely as a spiritual manual but as a comprehensive and timeless source of knowledge that extends to the moral, social, metaphysical, and physical realms of human life. The Islamic understanding of divine knowledge is deeply rooted in the belief that Allah is *Al-'Aleem* (The All-Knowing), and that all true knowledge originates from Him (Al-Attas, 1995). The Quran refers to itself as a book of guidance

(*hudan*), wisdom (*hikmah*), and discernment (*furqan*) terms that suggest a layered form of knowledge, ranging from ethical conduct to natural phenomena (Nasr, 2006). One such foundational verse is from Surah Al-Baqarah:

ذَٰلِكَ الْكِتَابُ لَا رَيْبَ فِيهِ هُدًى لِّلْمُتَّقِينَ

"This is the Book about which there is no doubt, a guidance for those conscious of Allah" (Al-Baqarah 2:2)

This verse places knowledge and guidance at the heart of revelation. The Islamic epistemological framework does not create a strict dichotomy between religious and scientific knowledge; rather, it views all forms of truth as part of a unified, divinely revealed order. Contemporary Muslim scholars argue that the Quran invites reflection on the natural world not to propose scientific theories, but to cultivate a sense of awe and intellectual curiosity about creation (Guessoum, 2011). Scientific inquiry, in this framework, becomes a sacred act one rooted in *tawhid* (oneness of God) and intended to unveil divine signs in the cosmos.

A particularly vivid expression of this knowledge-based invitation lies in the Quran's depiction of human creation and health. Multiple verses describe the stages of embryonic development, offering insights that have captivated theologians and scientists alike. In Surah Al-Mu'minun, Allah says:

وَلَقَدْ خَلَقْنَا الْإِنسَانَ مِن سُلَالَةٍ مِّن طِينٍ ۖ ثُمَّ جَعَلْنَاهُ نُطْفَةً ۚ فِي قَرَارٍ مَّكِينٍ ۚ ثُمَّ خَلَقْنَا النُّطْفَةَ عَلَقَةً ۚ فَخَلَقْنَا
الْعَلَقَةَ مُضْغَةً ۚ فَخَلَقْنَا الْمُضْغَةَ عِظْمًا ۚ فَكَسَوْنَا الْعِظْمَ لَحْمًا ۚ ثُمَّ أَنشَأْنَاهُ خَلْقًا ءَاخَرَ ۚ فَتَبَارَكَ اللَّهُ أَحْسَنُ الْخَالِقِينَ

"We created man from an extract of clay. Then We placed him as a drop of fluid in a safe lodging. Then We made the drop into a clinging clot, and We made the clot into a lump, and We made the lump into bones, and We clothed the bones with flesh; then We developed him into another creation. So blessed is Allah, the best of creators" (Al-Mu'minun 23:12–14)

Though metaphorically rendered in classical Arabic, many scholars have observed the sequential parallels between these descriptions and the stages of human embryogenesis recognized by modern medicine (Moore & Persaud, 2007). While not intended as scientific textbooks, such verses reflect the Quran's intent to provoke contemplation about the origins and sanctity of life (Bucaille, 1976). Furthermore, Quranic dietary and hygienic prescriptions also connect health with spirituality. For instance:

إِنَّمَا حَرَّمَ عَلَيْكُمُ الْمَيْتَةَ وَالدَّمَ وَحُمَ الْخَنِزِيرِ وَمَا أَهْلٌ لِّغَيْرِ اللَّهِ بِهِ ۚ

"He has only forbidden you dead animals, blood, the flesh of swine, and that which has been dedicated to other than Allah" (Al-Baqarah 2:173)

Modern health research affirms these guidelines by highlighting the risks of bloodborne diseases, pork-related parasites, and alcohol-induced illnesses (Alzeer, 2009). The holistic Quranic view presents the human body as an entrusted vessel (*amanah*), whose care is both a physical and moral obligation.

This integrative vision is further grounded in the Quran's epistemological call to seek, learn, and reflect. One of the earliest revelations emphasizes this directly:

أَفَرَأَىٰ بِإِسْمِ رَبِّكَ الَّذِي خَلَقَ - خَلَقَ الْإِنسَانَ مِنْ عَلَقٍ - أَفَرَأَىٰ وِرْثَكَ الْأَكْرَمُ - الَّذِي عَلَّمَ بِالْقَلَمِ - عَلَّمَ الْإِنسَانَ
مَا لَمْ يَعْلَمْ-

“Read in the name of your Lord who created created man from a clinging clot. Read, and your Lord is the Most Generous Who taught by the pen taught man that which he knew not” (Al-‘Alaq 96:1–5)

This revelation elevates learning as a divine act. Islamic intellectual history, from Al-Ghazali and Ibn Sina to Ibn al-Haytham, demonstrates how early Muslim scholars extended this ethic into medical sciences, optics, and physiology all while remaining grounded in the Quranic worldview (Saliba, 2007). In our current age, where science is often detached from ethical and spiritual concerns, the Quran offers a model for re-integrating knowledge, purpose, and morality. The pursuit of medical science, when seen through the lens of revelation, becomes not merely a technological enterprise but a journey toward understanding and honoring the divine design. Hence, studying the Quran as a source of health-related insight is not about forcing scientific concord, but reviving a tradition where *‘ilm* (knowledge), faith, and ethics are harmonized.

Embryology in the Quran and Modern Medicine

One of the most frequently cited examples of the Quran’s engagement with biological knowledge is its detailed description of human embryonic development. Long before the advent of microscopes or modern embryology, the Quran articulated a multi-phase process of human formation in striking terms. In Surah Al-Hajj:

يَا أَيُّهَا النَّاسُ إِن كُنْتُمْ فِي رَيْبٍ مِّنَ الْبَعْثِ فَإِنَّا خَلَقْنَاكُمْ مِّن تُرَابٍ ثُمَّ مِّن نُّطْفَةٍ ثُمَّ مِّن عَلَقَةٍ ثُمَّ مِّن مُّضْغَةٍ مُّخَلَّقَةٍ وَغَيْرِ مُّخَلَّقَةٍ لِّنُبَيِّنَ لَكُمْ ؕ

“O mankind, if you are in doubt about the Resurrection, then indeed, We created you from dust, then from a sperm-drop, then from a clinging clot, then from a lump, formed and unformed, that We may make clear to you” (Al-Hajj 22:5). A sequence is described in these verses that includes a sequence nutfah (sperm-drop), alaqah (clinging clot), mudghah (chewed lump), bones, and flesh that many people argue that it is a mirror of what can be observed during embryonic development. Although the language is metaphorical, the sequence is rather a surprisingly precise account of major stages in embryology, particularly when interpolated in their original classical Arabic context (Moore & Persaud, 2007).

Human development in contemporary embryology is divided into specific stages as zygote, blastocyst, gastrula and organogenesis traced through particular weeks of gestation. The ovum is fertilized, implanted in the uterine wall, somites (which are chewed matter) are formed, and the bone and muscular tissue are differentiated, and all these processes match the Quranic progression in theme (Sadler, 2011). As an example, the mudghah stage, usually described as a lump of chewed flesh, is interpreted by some researchers as a poetic but appropriate description of the segmented look of the embryo as somites are formed. There is also the interpretation of the word clot (alaqah) that clings or hangs similar to the attachment of the implanted embryo to the uterine wall. One must however, add to this, that Quranic verses are not science text books but something that inspires thoughtful amazement, with descriptive imagery depending on the understanding of the age at which it is interpreted but inviting those to come after it to ponder and learn (Guessoum, 2011).

Dr. Keith Moore, a well-known embryologist and professor of anatomy, is one of the most famous supporters of the scientific importance of such verses. Having read the Quranic verses on embryology in the 1980s, Moore conceded that they were accurate compared to the modern discoveries. Moore in his book *The Developing Human*, who made mention

of the Quran stated that it was unimaginable that a book written in the 7th-century would have this kind of specific information without the involvement of God in the writing (Moore & Sheik, 1986). In later interviews, he claimed that a lot of the descriptions in the Quran quite match scientific discovery which was only achievable due to the technology of the 20th century. The reading advanced by Moore also has its critics, however, since scholars caution against too literalistic or concordist understandings that can run the risk of superimposing modern science on ancient scripture. Other scholars like Bucaille (1976) and Sardar (1998) have called for a more moderate rather than one that looks down upon the metaphysical goals of the revelation but the empirical accuracy of science without subjugating one to the other.

After all, the Quranic mentions to embryology are not only the examples of the divine wisdom, but also the stimulators of intellectual and spiritual activity. They challenge the believers to consider the amazing sensibility of human existence and to seek scientific research as a means of worship and gratitude. These verses also span the spiritual and the physical levels of human life; the reader is reminded that not all lives are merely biologically complex, but are also ordained by God. The example of how these metaphoric and yet profound descriptions attracted the attention of such scientists as Moore is evidence of how the Quran is still relevant in the pursuit of cross-disciplinary research. Instead of seeing the Quran as a work of science, it is more useful to take it as a book of moral and existential wisdom that encourages people to explore the signs of the creation, and the most intricate beauty of the human embryo.

Nutrition and Preventive Health in the Quran

The Quran offers a holistic approach to health that integrates spiritual, physical, and psychological well-being. One of the most prominent areas of this integration is the Quran's dietary guidance, which emphasizes balance, moderation, and consumption of lawful (*halal*) and wholesome (*tayyib*) foods. In Surah Al-Baqarah, Allah commands:

يَا أَيُّهَا النَّاسُ كُلُوا مِمَّا فِي الْأَرْضِ حَلَالًا طَيِّبًا وَلَا تَتَّبِعُوا خُطُوَاتِ الشَّيْطَانِ إِنَّهُ لَكُمْ عَدُوٌّ مُبِينٌ

"O mankind, eat from whatever is on earth [that is] lawful and good and do not follow the footsteps of Satan. Indeed, he is to you a clear enemy" (Al-Baqarah 2:168)

This verse places dietary choices within a moral and spiritual framework, linking food consumption with ethical behavior and obedience to divine guidance. Another verse underscores gratitude and avoidance of excess:

فَكُلُوا مِمَّا رَزَقَكُمُ اللَّهُ حَلَالًا طَيِّبًا وَاشْكُرُوا نِعْمَتَ اللَّهِ إِنْ كُنْتُمْ إِيَّاهُ تَعْبُدُونَ

"So eat of what Allah has provided for you [which is] lawful and good. And be grateful for the favor of Allah, if it is [indeed] Him that you worship" (An-Nahl 16:114)

These verses not only highlight the importance of consuming nutritious and clean foods but also promote mindfulness, gratitude, and ethical sourcing principles that are echoed in modern health sciences, particularly in the fields of nutrition and food sustainability (Alzeer, 2009). The Quran thus establishes food as a spiritual responsibility that influences both the body and the soul.

Furthermore, the Quran explicitly prohibits the consumption of substances considered harmful to health and morality. Among the clearest dietary prohibitions are those related to pork and intoxicants. Allah states:

إِنَّمَا حَرَّمَ عَلَيْكُمُ الْمَيْتَةَ وَالدَّمَ وَلَحْمَ الْخِنْزِيرِ وَمَا أُهْلَ لِغَيْرِ اللَّهِ بِهِ

“He has only forbidden to you dead animals, blood, the flesh of swine, and that which has been dedicated to other than Allah” (Al-Baqarah 2:173)

And regarding alcohol:

يَسْأَلُونَكَ عَنِ الْخَمْرِ وَالْمَيْسِرِ ۖ قُلْ فِيهِمَا إِثْمٌ كَبِيرٌ وَمَنَافِعُ لِلنَّاسِ وَإِثْمُهُمَا أَكْبَرُ مِن نَّفْعِهِمَا

“They ask you about wine and gambling. Say, ‘In them is great sin and [yet, some] benefit for people. But their sin is greater than their benefit’” (Al-Baqarah 2:219)

Contemporary medicine aids these bans. Health concerns associated with the consumption of pork include trichinosis, high cholesterol and zoonotic diseases, mostly when improperly handled or undercooked (Doyle et al., 2011). On the same note, alcohol can be linked to liver diseases, poor cognitive ability, predisposition to cancer and social evils such as addiction and family disintegration (WHO, 2018). The Quranic approach thus, supports the preventive medicine because it calls upon the believers to shun away harmful substances that undermine both personal and social well-being. Instead of being purely religious prohibitions, these commands encourage a regime of population health well before the invention of modern epidemiology and toxicology.

Modern science is slowly catching up with the healthful properties of a balanced, plant-based and moderate diet a diet that coincides astonishingly well with traditional Islamic eating habits. New research indicates that diets with Mediterranean characteristics, that is low in processed foods, and high in fruits, vegetables, and lean proteins, greatly diminish the danger of developing chronic diseases like obesity, diabetes, and heart disease (Estruch et al., 2013). Islamic culture promotes these same patterns of eating, moderation (wasatiyyah) and rejects gluttony. There is also a saying by the Prophet Muhammad (PBUH) that goes like this: The son of Adam does not fill any vessel as badly as the stomach (Ibn Majah, Hadith 3349). Moreover, the Islamic hygiene practice of washing hands before and after meals and after visiting restroom goes along with sanitary requirements of the modern world so that this practice reduces the risk of the disease. Briefly, the Quran and Sunnah offer the preventive health framework that combines healthy eating, mindfulness, community morality, and hygiene well before the advent of these principles to the discourse of modern public health (Rahman, 1984). This convergence of scripture and science tempts the reader to take a fresh look at Islamic dietary law, as at once spiritually enriching and biologically preservative.

Mental Health and Spiritual Well-being in the Quran

The Quran presents a comprehensive model of inner peace and psychological resilience grounded in remembrance of God (*dhikr*), faith (*iman*), and trust (*tawakkul*). These concepts are not only spiritually significant but offer a framework for managing emotional stress, anxiety, and existential concerns. The Quran recognizes the emotional challenges faced by individuals and responds with verses that promote tranquility, hope, and cognitive reframing. A foundational verse that articulates the relationship between spiritual awareness and inner calm is found in Surah Ar-Ra'd:

الَّذِينَ آمَنُوا وَتَطْمَئِنُّ قُلُوبُهُمْ بِذِكْرِ اللَّهِ ۗ أَلَا بِذِكْرِ اللَّهِ تَطْمَئِنُّ الْقُلُوبُ

“Those who have believed and whose hearts are assured by the remembrance of Allah. Unquestionably, by the remembrance of Allah hearts are assured” (Ar-Ra'd 13:28)

According to this verse, mental peace is directly associated with spiritual practice, which implies that regular *dhikr* may control emotional levels and create resiliency. The Islamic tradition does not only regard the heart (*qalb*) as a physical organ, but as a seat of cognition

and emotion. The Quran therefore considers mental health as a whole because it incorporates emotional, cognitive, and spiritual aspects of the human mind (Haque, 2004). This practice aligns itself with contemporary integrative psychological theories which emphasize on meanings, connection, and internal consistency in the treatment of psychological disorders.

Salah (prayer), dhikr (remembrance) and sawm (fasting) all have psychological benefits both in the teachings of Islam and in modern science. Prayer especially when it is done with mindfulness and sincerity (khushu') leads to mindfulness, controlled breathing, and emotional stability. It has been demonstrated to decrease the activity of sympathetic nervous system, decrease blood pressure and elevate the mood (Abdel-Khalek, 2006). Standing, bowing, and prostration during salah are repetitive processes that replicate the meditative processes of cognitive behavioral treatment and mindfulness-based treatment. Dhikr- calling upon names of God or phrases of the Quran involves activation of the prefrontal cortex and leads to increased self-awareness, self-gratitude and self-emotional control (Rippin, 2012). Fasting, which is eaten during Ramadan month, is not just a dietary deprivation. It develops patience, self-control, empathy and spiritual clarity which are all protective aspects of depression, anxiety and impulsivity (Sadeghirad et al., 2014). These practices, when combined together, form a kind of spiritual psychotherapy which is well embedded in the Quranic worldview.

Modern psychological studies are gaining more and more evidence to the therapeutic worth of religious and spiritual practices, especially those that require formalized rituals and meditative quietude. Mindfulness, which is a term that has gained popularity in the western psychology, is described as the moment-to-moment awareness which is non-judgmental and is grounded in the present (Kabat-Zinn, 2003). The Islamic reflective meditation of muraqabah and tafakkur are similar in the fact that they urge the believers to take a break, think and internalize the existence of God in everything they do. The research has revealed that religious subjects who regularly pray and perform spiritual meditations are more likely to express satisfaction with their lives, experience less stress and possess enhanced coping skills (Koenig, 2012). Notably, Islamic spiritual practices contrast with secular mindfulness in that they base the experience of conscious awareness (taqwa) in God which, apart from providing psychological reprieve, provides existential purpose. This existential foundation acts as a shield to nihilism, despair and spiritual baroness, typical symptoms of the modern psychological suffering. Shortly, Quran encourages a psychologically augmented spiritual paradigm in which the process of healing is not just initiated in the mind, but also in the connection between the heart and A Divine.

Personal and Public Hygiene in the Quran

Cleanliness (*taharah*) holds a central place in the Quranic worldview, where it is both a spiritual imperative and a practical guideline for healthy living. The Quran not only commands believers to maintain personal cleanliness but also emphasizes ritual and environmental hygiene as part of a broader ethic of purity. A foundational verse that links bodily cleanliness with spiritual obedience is found in Surah Al-Baqarah:

إِنَّ اللَّهَ يُحِبُّ التَّوَّابِينَ وَيُحِبُّ الْمُتَطَهِّرِينَ

"Indeed, Allah loves those who are constantly repentant and loves those who purify themselves" (Al-Baqarah 2:222). This verse reflects a dual notion of purification: inward, through

repentance (*tawbah*), and outward, through physical cleanliness. The emphasis on hygiene is not merely symbolic but integral to the daily life of a Muslim. Ritual purification before prayer and after specific bodily functions fosters a habitual routine of cleanliness that aligns with key modern hygienic practices. The Quran's directives not only served as preventative health measures in 7th-century Arabia but also remain relevant in the context of contemporary public health and disease control.

One of the most explicit Quranic instructions regarding hygiene appears in Surah Al-Ma'idah:

يَا أَيُّهَا الَّذِينَ آمَنُوا إِذَا قُمْتُمْ إِلَى الصَّلَاةِ فَاغْسِلُوا وُجُوهَكُمْ وَأَيْدِيَكُمْ إِلَى الْمَرَافِقِ وَامْسَحُوا بِرُءُوسِكُمْ وَأَرْجُلَكُمْ إِلَى الْكَعْبَيْنِ

"O you who have believed, when you rise to [perform] prayer, wash your faces and your forearms to the elbows and wipe over your heads and wash your feet to the ankles" (Al-Ma'idah 5:6). The following verse describes the process of wudu (ablution), that Muslims must follow prior to every one of the five daily prayers. Moreover, ghusl a complete body cleansing is needed when one engages in some activities, like sexual activity or a period. Such rituals help in regular washing of important parts of the body such as hands, mouth, face and feet where germs are most likely to accumulate. The health benefits of such regular washing are confirmed by the modern medical science. Epidemiological research has proved that hand washing is one of the best ways of preventing transmission of infectious diseases such as flu, hepatitis, and gastrointestinal infections (Aiello et al., 2008). Furthermore, the ablution also entails the rinsing of the mouth and nose, which are currently considered as pertinent oral and respiratory hygiene. These parallels between religious rites and contemporary medical science indicate that Islamic cleanliness hygiene is beneficial to spiritual purity and physical wellbeing.

In addition to personal hygiene, the Quran and Hadith advocate the hygiene of the population and the environment. Beautification of streets, houses and common areas is regarded as charity (*sadaqah*) as taught by Prophet Muhammad (PBUH) who stated: "When something harmful is removed off the road, this is an act of charity" (Bukhari, Hadith 298). Islam promotes the covering of food, eliminating wastage, proper garbage disposal and a clean environment. The practices are in line with major pillars of environmental health such as sanitation, waste management and access to clean water. Prophet was also against urinating in still water or close to open paths of people guidance that can be related to modern problems of water-borne illness and sanitary morals (Haque, 2004). These prophetic principles have become central in the present era of global health epidemics like COVID-19, and they indicate how even spiritual principles can be used as a workable approach to public health. Thus, the Islamic principles of cleanliness do not only provide a theological obligation but also a long-term pattern of individual health and community health.

Comparative Perspectives and Critical Analysis

The interconnection of the Quran and medical science demonstrates not only impressive similarities but also fundamental limits that should be interpreted carefully. On the one hand, the Quran is shown as a deep understanding of the natural world, such as human anatomy, nutrition, hygiene, and psychology that modern science has only recently been able to systematically investigate. Their verses on embryology, food morality and psychology show some form of wisdom that several scholars find to be in perfect harmony

with modern day medicine (Moore & Persaud, 2007; Alzeer, 2009). As an example, Quranic teachings regarding cleanliness, including ablution before prayer or avoiding unhealthy things like alcohol and pork, correspond to well-known community health measures. In the same way, such notions as inner peace via dhikr (remembering Allah) are reminiscent of the recent psychological studies on the positive impact of mindfulness, meditation and spirituality on mental well-being (Kabat-Zinn, 2003; Koenig, 2012). These points of intersection give rise to appreciation of the ability of the Quran to promote healthy living and wholeness.

It is important, however, not to overlook the points where theology and science have different paradigms in their intent and explanation. As a religious and ethical document, Quran is mainly focused on human behavior regulation, construction of the worldview, and pointing out the signs of Creator in the world (ayat). On the contrary, science functions on the tools of hypothesis, experimentation, and falsifiability that are attempts to describe and control natural phenomena, but which do not presume any metaphysical assertions (Guessoum, 2011). Considering the example of the Quran, it explains embryological stages in poetic and conceptual concepts whereas modern embryology employs specifically biological terms and time scales by observation in the laboratory (Sadler, 2011). Misrepresentation or forced concordism can occur when trying to interpret Quranic verses in a way too literal to be applied on a scientific model. Additionally, such theological notions as the ruh (soul), divine will (qadar) or the therapeutic power of faith cannot be observed or quantified with the help of physical equipment. These differences cannot be interpreted as contradictions but as the expression of other, complementary forms of cognition. The morality and spiritual authority of the Quran can be taken into consideration through a valid methodology, which acknowledges the relative and subject to revision status of scientific research.

The fiercest issue in the Quran-science debate is the risk posed by pseudo-science to interpret religious works to impose scientific accuracy where it is neither practical nor desired. This is an epistemological fallacy, which is generally based on enthusiasm rather than the academic pursuit and threatens to make the Quran a scientific handbook and dilute its theological richness. Such scholars as Nidhal Guessoum (2011) and Ziauddin Sardar (1998) have warned against scientific exegesis based on selective readings, or historical context, or scientific consensus. As an example, confirmation bias, cherry-picking, and the misapplication of revelation authority to support unsubstantiated theories may result when newly discovered scientific phenomena are retrofitted to fit the Quranic verses. These methods do not only destroy the scientific integrity but also misrepresent the spiritual meaning of the Quran. Rather, it requires a more sound hermeneutic; one that takes into consideration the literary, linguistic and theological context of the Quran and seeks to understand how it can be used to generate ethical scientific inquiry and a greater understanding of the secrets of life. Accountable practice also needs to have the input of both fields competent scientists and learned experts in Quranic research who can participate in interdisciplinary discussion at ground level, but not through sensationalism.

Conclusion

The investigation of the Quran in the context of medical sciences shows the high level of harmony between the divine revelation and the human research. Although Quran itself is not a textbook of science, its verses contain eternal principles that have strong considerations in the modern comprehension of health, hygiene, nutrition, psychology,

and human development. The Quranic focus on cleanliness, proper nutrition, moderation and spirituality like praying and fasting is indicative of a holistic view of human health that is in line with almost all current models of health prevention. The way it describes embryonic development, the harmony of mind as one recalls Allah and the whole detailed teachings on personal and community hygiene shows that Islamic teachings do not consider the spiritual and physical aspects of life separately as many tend to believe. These insights not only beg the question of the compatibility of faith and reason but also the abundance of Islamic tradition in encouraging a healthy and significant life.

Nevertheless, this compatibility should be treated in epistemic prudence and responsibility of interpretation. The Quran does not mainly serve as an instruction manual on moral and spiritual truth, but rather as a guide to the scientific and logical theories, which are meant to be predicted and proven. Although much of the comparison of the Quranic verses and the scientific discoveries are intellectually intriguing and spiritually uplifting, it is worth noting that the comparison should not be forced or scientific accuracy should not be read into metaphors or theological statements. When it is seen that there is a limit to both theological wisdom and empirical data, then the two can relate to each other in a respectful and enriching way. In this way we can have the advantage of not falling in the trappings of pseudo-science but instead develop an interdisciplinary approach where religious knowledge evokes a scientific wonder, an ethical pursuit, and more appreciation of the mysteries of life. By so doing, the Quran still leads the human race not only in worship, but also in seeking the entire well-being of the human being that is based on divine wisdom.

References

- Abdel-Khalek, A. M. (2006). *Happiness, health, and religiosity: Significant relations*. Mental Health, Religion & Culture, 9(1), 85–97.
- Aiello, A. E., Coulborn, R. M., Perez, V., & Larson, E. L. (2008). *Effect of hand hygiene on infectious disease risk in the community setting: A meta-analysis*. American Journal of Public Health, 98(8), 1372–1381.
- Al-Attas, S. M. N. (1995). *Prolegomena to the Metaphysics of Islam: An Exposition of the Fundamental Elements of the Worldview of Islam*. International Institute of Islamic Thought and Civilization.
- Alzeer, J. (2009). *Health and spirituality in the Islamic perspective*. Journal of Religion and Health, 48(4), 446–456.
- Bakar, O. (1999). *The Tawhidic Approach in Science & Technology: A Review of Its Relevance in the Contemporary Context of Muslim Societies*. Muslim Education Quarterly, 16(4), 5–18.
- Bucaille, M. (1976). *The Bible, the Quran and Science: The Holy Scriptures Examined in the Light of Modern Knowledge*. Tahrike Tarsile Quran.
- Doyle, M. P., & Erickson, M. C. (2011). *Opportunities for mitigating pathogen contamination during on-farm food production*. International Journal of Food Microbiology, 152(3), 54–74.
- Estruch, R., Ros, E., Salas-Salvadó, J., et al. (2013). *Primary prevention of cardiovascular disease with a Mediterranean diet*. New England Journal of Medicine, 368(14), 1279–1290.
- Guessoum, N. (2011). *Islam's Quantum Question: Reconciling Muslim Tradition and Modern Science*. I.B. Tauris.
- Haq, A. (2004). *Psychology from Islamic perspective: Contributions of early Muslim scholars and challenges to contemporary Muslim psychologists*. Journal of Religion and Health, 43(4), 357–377.

- Kabat-Zinn, J. (2003). *Mindfulness-based interventions in context: Past, present, and future*. Clinical Psychology: Science and Practice, 10(2), 144–156.
- Khan, M. M. (2014). *Fasting and the contemporary medical benefits: An Islamic perspective*. Journal of Fasting and Health, 2(1), 6–11.
- Koenig, H. G. (2012). *Religion, spirituality, and health: The research and clinical implications*. ISRN Psychiatry, 2012.
- Moore, K. L., & Persaud, T. V. N. (2007). *The Developing Human: Clinically Oriented Embryology* (8th ed.). Saunders Elsevier.
- Moore, K. L., & Sheik, A. Z. (1986). *The Developing Human with Islamic Additions: Clinically Oriented Embryology*. Dar Al-Qiblah for Islamic Literature.
- Nasr, S. H. (2006). *Religion and the Order of Nature*. Oxford University Press.
- Norouzy, A., Salehi, M., Philippou, E., et al. (2013). *Effect of Ramadan fasting on some indices of insulin resistance and components of the metabolic syndrome in healthy male adults*. British Journal of Nutrition, 109(6), 1136–1142.
- Rahman, F. (1984). *Health and medicine in the Islamic tradition: Change and identity*. ABC International Group.
- Rippin, A. (2012). *Muslims: Their Religious Beliefs and Practices* (4th ed.). Routledge.
- Sadler, T. W. (2011). *Langman's Medical Embryology* (12th ed.). Lippincott Williams & Wilkins.
- Sadeghirad, B., Motaghipisheh, S., Kolahdooz, F., et al. (2014). *Islamic fasting and weight loss: A systematic review and meta-analysis*. Journal of Nutrition & Fasting and Health, 2(2), 45–55.
- Sardar, Z. (1998). *Postmodernism and the Other: The New Imperialism of Western Culture*. Pluto Press.
- Sardar, Z. (2011). *Reading the Qur'an: The Contemporary Relevance of the Sacred Text of Islam*. Oxford University Press.

Quranic Verses

- Surah Al-Baqarah 2:2
 Surah Al-Mu'minun 23:12–14
 Surah Al-Baqarah 2:173
 Surah Al-'Alaq 96:1–5
 Surah Al-Hajj 22:5
 Surah Al-Baqarah 2:168
 Surah An-Nahl 16:114
 Surah Al-Baqarah 2:219
 Surah Ar-Ra'd 13:28
 Surah Al-Baqarah 2:222
 Surah Al-Ma'idah 5:6