



ADDRESSING ISLAMIC INPUT IN MEDICAL
IMAGING

BY

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ABSTRACT

This thesis represents an effort by the author to overcome the dearth of Islamic discourses in Medical imaging, a sub-specialisation within the bigger field of Medicine. Driven by the concepts of Islamisation of Knowledge (IOK), integration of Islamic input in the professions, as well as his professional obligation as an academician in an Islamic university, the author posits himself to contribute towards the realisation of the above concepts and enriching the Islamic based literature. Efforts were made done to ascertain the state of affairs of the presence of Islamic perspectives in Medical imaging literature. The results showed a major void in Islamic perspectives in the literature. The term “perspective” and “perspectives” used in this thesis are seen within the definition of perspective; “a particular way of considering something”. The plural form does not suggest that Islam has differing opinions or views when confronted with a particular issue but represents the various sources and types of references. The essence of these individual perspectives remains embedded in *Tauhidic* (Oneness of Allah) principles and objectives. The thesis proposes a methodology in integrating Islamic perspectives into the theoretical domains within a typical Medical imaging curriculum. Existing knowledge from the predominantly secular environment that has dominated Medical imaging since its inception is not discriminately discarded unless those that is not in line with what Islam champions. Harmonisation and individual tailoring of the Islamic perspectives with the human sciences remain the core approaches in the integration process. The integration also identifies the teaching, learning and assessment considerations. The superficiality in the coverage over the wide dimensions in the discipline is seen within the context of future avenues for in-depth discourses to be made. Typically, the involvement of *Muslim* practitioners at all levels; the academicians, the practitioners, the leadership, the administration and the professional fraternity are required for promoting, internalising and sustaining Islamic perspectives in the discipline.

خلاصة البحث

ملخص

تمثل هذه الأطروحة محاولة من قبل المؤلف للتغلب على ندرة الخطابات الإسلامية في مجال التصوير الطبي، الذي هو تخصص فرعي في مجال طبي أكبر، وذلك انطلاقاً من مفاهيم أسلمة المعرفة، ودمج المعارف والقيم الإسلامية في المهنة، فضلاً عن الالتزامات المهنية كرجل أكاديمي في جامعة إسلامية. يلقي المؤلف على عاتقه المساهمة في تحقيق المفاهيم المذكورة أعلاه، وإثراء الأدب الإسلامي. وقد بذل الكاتب جهده للتعرف على وجود رؤية إسلامية في مجال علوم ومراجع التصوير الطبي. وأظهرت النتائج غياب دراسات علمية تتناول الموضوع من وجهة النظر الإسلامية في مراجع التصوير الطبي. وينظر إلى مصطلح "وجهة نظر" و"وجهات نظر" المستخدمة في هذه الأطروحة ضمن تعريف المنظور "طريقة معينة للنظر في شيء". لا توحى صيغة الجمع هنا أن الإسلام فيه إختلاف في الآراء أو وجهات نظر تجاه قضية معينة، لكنها تمثل تنوع الآراء أو تنوع المصادر والمراجع التي تمت مراجعتها خلال فترة إعداد هذا البحث. وجهات النظر الفردية هذه لا تزال جزءاً لا يتجزأ من مبادئ وأهداف الرؤية التوحيدية للكون والحياة. تقترح الأطروحة منهجية في دمج الرؤية الإسلامية في نظريات ومناهج التصوير الطبي التقليدية. المعارف القائمة المبنية على المصادر التي غلبت عليها الرؤية العلمانية والتي هيمنت على مجال التصوير الطبي منذ نشأتها ليست بصدد الإلغاء هنا، إلا تلك الآراء والقيم التي لا تتفق مع الرؤية الإسلامية. إن تخصيص الرؤية الإسلامية لكل مجال من مجالات العلوم الإنسانية يبقى الأساس في عملية الدمج. تحدد عملية الدمج أيضاً تدريس وتعليم وتقييم وجهات النظر. وينظر إلى سطحية التغطية للأبعاد الواسعة في هذا المجال في سياق السبل المستقبلية لخطابات أعمق في هذا الشأن، طبعاً من خلال إشراك الممارسين المسلمين على جميع المستويات؛ كالأكاديميين، والممارسين، والقيادة، والإدارة للتشجيع والحفاظ على وجود دراسات أكاديمية تتناول الموضوع من وجهة النظر الإسلامية.

APPROVAL PAGE

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DECLARATION

I hereby declare that this thesis is the result of my own investigations, except where otherwise stated. I also declare that it has not been previously or concurrently submitted as a whole for any other degrees at IIUM or other institutions.

Zainul Ibrahim bin Zainuddin

Signature

Date

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LIST OF ABBREVIATIONS

ASRT	-	American Society of Radiologic Technologist.
CSV	-	Comma Separated Value.
IET	-	Islamic Education Teacher.
IIT	-	International Institute of Islamic Thought.
IIUM	-	International Islamic University Malaysia.
IOK	-	Islamisation of Knowledge.
IS	-	Islamic Spirituality
MQA	-	Malaysian Qualification Agency.
Pbuh	-	Peace and Blessings be upon him.
RA	-	May Allah be pleased with him or her.

LIST OF ARABIC TERMS

<i>Adab</i>	- proper conduct and etiquette (The Oxford Dictionary of Islam) or Islamic mannerism
<i>Adl</i>	- justice
<i>Akhlaq</i>	- Islamic morals
<i>Amanah</i>	Encompassing, responsibility, trust
<i>Aqeedah</i>	- Islamic faith
<i>Awrah</i>	- Part of the body that needs to be covered
<i>Basmalah</i>	- (In the name of Allah, the Most Beneficent and the Most Merciful)
<i>Da'wah</i>	- Preaching of Islam
<i>Habluminallah</i>	- relationship with Allah
<i>Habluminannas</i>	- relationship with human beings
<i>Hadith</i>	- Report of the words and deeds of Muhammad and other early <i>Muslims</i> . (The Oxford Dictionary of Islam)
<i>Ibadah</i>	- Worship; acts of devotion; service. (The Oxford Dictionary of Islam)
<i>Iman</i>	- Faith or belief. (The Oxford Dictionary of Islam)
<i>Fard ain</i>	- refers to legal obligations that must be performed by each individual <i>Muslim</i> . (The Oxford Dictionary of Islam)
<i>Fard kifayah</i>	- communal obligation in <i>Muslim</i> legal doctrine. (The Oxford Dictionary of Islam)
<i>Fi'qh</i>	- Divine Law, used as such in the Qur'ān with legal, theological, and spiritual implications (The Oxford Dictionary of Islam)
<i>Kalimah Shahadah</i>	- Islamic proclamation of faith
<i>Maslahah</i>	- public interest
<i>Maqasid</i>	- Objectives of the <i>Shari'ah</i>
<i>Murabbi</i>	concept of a true teacher, beyond parenting, a mentor who combines a life of learning with a life of virtue, educating, caring, and teaching with loving (Norwina, 2014)
<i>Niyyah</i>	- noble intention that relates to Allah
<i>Qawa'id</i>	- Principles of the <i>Shari'ah</i>
<i>Shahadah</i>	- declaration of faith (The Oxford Dictionary of Islam)

<i>Shari'ah</i>	- Islamic Way of life, ideal Islamic law. (The Oxford Dictionary of Islam)
<i>Solat</i>	- prayer
<i>Taqwa</i>	- Piety, mindful of Allah
<i>Tauhid</i>	- the defining doctrine of Islam. Absolute monotheism, the unity and uniqueness of God as creator and sustainer of the universe. (The Oxford Dictionary of Islam)
<i>Ummah</i>	- <i>Muslim</i> community / communities
<i>Zakah</i>	- tithe.
<i>Haram</i>	- Unlawful
<i>Muslim</i>	- one who submits (to God)
<i>Pbuh</i>	- Peace be upon him.

**LIST OF ARTICLES / MANUSCRIPTS / PROCEEDINGS /
ABSTRACTS CONTRIBUTED TO THIS THESIS**

- a. **Zainul Ibrahim Zainuddin.** (2015). Aligning Islamic Spirituality to Medical imaging. *Journal of Religion and Health*. Published online 10 June 2015 DOI 10.1007/s10943-015-0074-x or <http://www.ncbi.nlm.nih.gov/pubmed/26058599> (Thomson-Reuters Indexed Journal)
- b. **Zainul, I. Z.** (2015). Aligning Islamic Inputs Into The Medical imaging Practice: A Conceptual Approach Using Professional Guidelines IN *Revelation And Science In The 21st Century*. Ibrahim, E. E. M and Yasin, R. F. F. (Eds). IIUM Press. pp 68- 82.
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CHAPTER ONE

INTRODUCTION

1.1 PREFACE

This thesis is grounded on the personal experiences of the author, who once served as a Radiographer and now an academic staff teaching Medical imaging or Radiography in a local Islamic university. The foundation studies in the field progressing from the certificate, diploma, Undergraduate and Masters programmes have all but being secular. Hardly was there any mention of the term “God”, what more the term “Allah” and His attributes mentioned in those studies. The occasional references to Islam were occasionally done by one or two *Muslim* lecturers, without going into details of the relationships of those references to the theoretical or practical components of the discipline. Perhaps this is an extension of the findings by Astin, Astin and Lindlom (2010) where students indicated that their professors never encourage discussions of religious/spiritual matters. Administrative and socio-political constrains from within the multiracial, multicultural and multi-religious settings in the institutions could be the domineering factor in impeding religious perspectives to be discussed in those academic sessions.

These situations apparently were the same during the student practical sessions. The author could not recall any particular instance worth mentioning of Clinical Supervisors relating practical aspects to Islamic practices or beliefs. This trend continued while the author was in the Medical imaging services for nearly 23 years before becoming an academic staff.

Having being exposed to the secular educational and professional environments, his inability to relate Islamic viewpoints in his teaching has been

viewed as injustice done upon his students, fellow academic and non-academic peers, his employers as well as his own self. The fact that being employed in an Islamic university, constant self-reminders of his obligations to integrate and Islamise the teaching and learning activities as outlined in the mission of the university were both disturbing and motivating. By attending various courses organised by the university, the author began to accept the concepts of “Islamisation” and “Integration” as espoused in the missions of the university. Not to be hampered by the lack of Islamic perspectives in the textbooks for which the author had accessed, he reinforces himself through self-realisation and self-assessment to overcome his limitations. Journal reading on Islamic perspectives forms the main activity to strengthen his beliefs and commitments towards those concepts.

Though the author might not earn the distinction of being an Islamic Education Teacher (IET), the determination to internalise the concept of the “*Murabbi*” in word, deed and thoughts is enough motivation. Taken as bearing a heavier responsibility than the *Ustaz* or *Ustazah* (*Muslim* preacher), the IET in the mould of a “*Murabbi*” possess self-efficacy “*that is a personal belief in the abilities and the capability to carry out teaching and educating students as enshrined in the philosophy of Islamic education*” (Noornajihan, Ab. Halim, Nurul Asiah, Norzulaili; Robiatul Adawiyah, Norakyairee & Syed Najihuddin, 2012). Thus, the present author is true to himself to conceptualise the ability to integrate Islamic beliefs, values and practices in the theoretical and practical components in Medical imaging.

This thesis aims to provide an overall understanding towards the drivers that are responsible to the introduction, promotion and sustenance in addressing Islamic viewpoints in the field of Medical imaging. The thesis distances itself from being too philosophical. The philosophies behind the concepts of Islamisation of Knowledge

(IOK) and the integration of Islamic viewpoints in the theory and practice of the disciplines that forms the foundations of this thesis have been discussed to great lengths by *Muslim* scholars. Rather, this thesis extracts the philosophies from these concepts as well as the lessons learnt from available integration processes. These are then aligned to Medical imaging theory and practice to appreciate their applications to components in this field of specialisation.

The methodology employed throughout the thesis consists of empirical, content analysis of Medical imaging related documents and literature reviews. In the opinion of the author the multi-faceted approaches are tailored to support the individual themes within the individual chapters. Furthermore the conceptualisation of themes in the Islamic perspective is more applicable in order to offer a wider coverage involving both the theory and practice of the profession. Far from being exhaustive, the thesis creates avenues for future work in the finer points of integrating the Islamic perspectives in the macro and micro aspects of the field.

It is to be outlined at this junction, while the thesis is directed to the field of Medical imaging generally; specific discussions are targeted to the group of Medical imaging practitioners who are commonly known as “Radiographers”, “Medical Radiation Technologist”, or those designations that share the same job specifications, responsibilities and expected competencies. The term practitioner is also inclusive those who are academicians in this sub-discipline of Medicine. Within the subsequent chapters of the thesis, the relevant characteristics of the profession and the practitioners applicable to this group are presented alongside the associated discussion.

As an important note, the author wishes to highlight the adoption of the approach by Sumer (2012, pg. x). Throughout this thesis, he intends to say “*Glory to*

be with Him, the Most Exalted” whenever Allah is mentioned. He intends to maintain to say “*Peace and Blessings be upon him*” (Pbuh) whenever Prophet Muhammad is mentioned. And he intends to say “*May Allah be pleased with him or her*” (RA) when a companion (contemporary) of the Prophet is mentioned. For practical purposes this thesis refers to *Qur’aanic* translations by Abdullah Yusuf Ali (2009) only.

1.2 BACKGROUND OF THE STUDY

The emphasis in delivering the knowledge for the various fields of specialisations is targeted to provide the body of knowledge that permits the graduate to be employed and practice the vocation. Currently the majority of the mainstream model of education is synonymous with the western concept of education that champions the dichotomy of education from spiritual or religious aspects. This separation is not only prominent in textbooks but is evident in most scientific writings in journals. The secularisation of religious aspects in this media of knowledge can be interpreted as an extension in the indoctrination of the secular agenda. Over dependence on this type of literature could cast a negative impact on *Muslim* would be professionals.

Medical imaging has its roots and its subsequent technological advancement and practice in the field has always been attributed to the West. Consequently, there is a heavy dependence on Western literature addressing the theory and practice of the discipline. Up to the present time, it is common to see the secularisation agenda being evident in the majority of textbooks used in this field. The influence of such literatures upon the mind of a *Muslim* Medical imaging practitioner and student is the dichotomy between professional knowledge and practice to the essence of the religion. This can effectively distance the *Muslim* practitioner in terms of the segregation of worldly professional matters to the principles and objectives of what Islam champions. The

need for initiatives to be undertaken to reconcile this state of affairs in order to bring back the *Muslim* practitioner into the folds of the religion would be an area that requires attention.

Literatures that portray Islamic perspectives to various contemporary aspects in the various areas of specialisation are gaining prominence. The user friendliness of internet searches can attest to this. Publications in various forms have attempted to present Islamic viewpoints that support, refute or simply provide understanding and directions in matters that need religious clarification. Alternatively, these discourses are seen as avenues to introduce, promote, enhance or sustain Islamic beliefs, values and practices. In short, this is the Islamic paradigm to overcome the dearth of literature that project Islam to those areas that had been dominated by Western thought, beliefs and practices. Suffice to say that the presence of the Islamic stance, either from the philosophical, conceptual or application dimensions would be instrumental in reshaping the *Muslim* minds in embracing the religion, Islam as it should be.

Muslims are reminded of the purpose of their existence on earth as a servant to the Creator within the framework of the concept of vicegerency. To submit to the Oneness of Allah, applying justice to mankind, to use the Allah given intellect to benefit self and others and to call others to the folds of Islam are among the foundations of the concept. Seen as a religious obligation to all *Muslims* the onus will be upon the *Muslim* individual to manifest those foundations in his daily activities. Distancing oneself from the religion in any aspect of one's life could give rise to any of the following interpretations. Firstly, it could denote the ignorance concerning the essence of the religion. Secondly, it could be seen as a transgression to the ideals of the religion. Thirdly, it manifests the successful extension of the Secular agenda.

Mohamed Aslam (1997) quotes Eliade who states that: “. . . *this dichotomy between the religious and the remainder of human life is a western product and concern. . . This distinction between the sacred and the profane, between religion and other aspects of human endeavour is a result of the process of secularisation that has been the experience of Christian/Western civilization especially since the 17th century.*”

Thus, efforts to reduce or even halt the negative consequences of the secularisation agenda have to be intensified.

There are two important concepts that form the background of this thesis. They are (1) the concept of Islamisation of Knowledge (IOK) and (2) the concept of integration of Islamic perspective. There is little to demarcate between these two concepts, such that their usage, in all practicalities for this thesis, are interchangeable. However, a thorough understanding of these two concepts would be the pre-requisites towards the identification and the directions to be taken in order to reduce the implications associated with the void of Islamic perspectives in discussion related to Medical imaging theory and practice.

1.3 STATEMENT OF RESEARCH PROBLEMS

The body of compartmentalised knowledge that is devoid of religious and spiritual perspectives merely results in individuals who are encased in the cocoon that dwells within the secularised professional expectations of a profession. The license to practice thus is based on standards set by the same people who separated science from religious values. Perspectives such as individualism, personal interest, and preference towards material gains assumed prominence. If left unchecked, spirituality and religiosity will be eliminated from the professional environment, hence, matters relating to *ibadah* or the alignment of religious obligation to the profession either from

the concept of *fard ain* (personal obligations) or *fard kifayah* (communal obligations) will be diluted. Contemporary issues that may arise with time will be dealt within the borders of secular dimension, thus, effectively diminishing the role of religion in providing a practical solution. From the Islamic perspective the quest to looking for the solutions relies heavily on revealed knowledge, namely the *Holy Qur'aan* and the *Hadith*. The segregation of the acquired science from the Islamic worldview for example, could not facilitate for an understanding of the association of the two systems, science and religion, in addressing contemporary issues (Solehah and Rahimah, 2008). The same applies if one were to associate the intricacies of the professions to the everyday life of a *Muslim* individual.

The present author, who used to be a practicing practitioner before becoming an academician in the field of Medical imaging, acknowledges the present dearth of references to spiritual matters in textbooks related to the field of Medical imaging. Several postulations can be derived from this state of affairs;

- i. The scarcity of Islamic perspective in the Medical imaging literature simply shows an enhancement and extension of the secular agenda in separating the religious aspects from the theory and practical components of the profession. This is attributed to the fact that the field of Medical imaging is highly associated with the discovery of X-radiation and the subsequent development of the field has been attributed to the West. Western practitioners are thus in the position to dictate the contents of the theoretical components along the secularisation agenda.
- ii. *Muslim* scholars who were brought up in a secular environment could be lacking in the Islamic exposure or level of Islamic knowledge. This may put them in an inconvenient position to inform, enhance, inspire, convince