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THE EFFECTS OF PRAYER  
ON MUSLIM PATIENTS' WELL-BEING

By

Salih Yucel

(B. Div., Ankara University, 1982; M.Th. University of Sydney 1996)

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By

Salih Yucel

APPROVED

by

First Reader \_\_\_\_\_

Dr. Carole Bohn  
Associate Professor of Pastoral Psychology

Second Reader \_\_\_\_\_

Professor Merlin Swartz  
Professor of Religion (Islamic Studies)

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# **THE EFFECTS OF PRAYER ON MUSLIM PATIENTS' WELL-BEING**

Salih Yucel

Doctor of Ministry  
Boston University School of Theology, 2007

Advisor: Dr. Carole Bohn, MTS, Ed.D., Associate Professor of Pastoral Psychology

## **ABSTRACT**

The purpose of this study is to investigate the effects of Islamic prayer (*du'a*, *dhikr*, and Qur'anic recitation) on Muslim patients. Relying on the Qur'an and *sunnah*, Islamic scholars state that prayer has positive effects on patients' psychological and physical well-being. To examine this, the principal investigator recruited 60 adult inpatients at Brigham and Women's Hospital. Patients completed questionnaires that were used to assess the respondents' psychological/emotional well being as well as determine the level of religiosity or spirituality (from an Islamic perspective). Vital sign recordings and self-report surveys were used before and after prayer sessions to measure effects of prayer. A non-religious text served as a control. Results support the hypothesis of the positive effects of prayer. A greater degree of religiosity/spirituality was associated with better psychological health. Physical changes were clinically insignificant but statistically meaningful.

## CHAPTER I

### INTRODUCTION

Religious practices such as prayer have served as alternative medical therapies since the beginning of Islam and continue to be a common practice in the Muslim world. When a Muslim is sick, he or she would not only seek medical treatment, but also spiritual care in order to get well, or to ask God to cure the sickness. In a research study in Turkey, 73% of patients reported feeling better after prayer (Dogan 1997, 52). According to one report, 80% of psychiatric patients in the Arabian Peninsula see traditional healers, healers who offer prayer alongside natural remedies, before they seek psychiatric help (Abdullah 1998, 99). In another survey in the Arab world, 90% indicate that they would encourage others to use Qur'anic services or prayers to improve health (Adib 2004, 106).

Healing practices involve prayer to God, the use of text from the Qur'an and *sunnah*, the practices and sayings, of Prophet Muhammad, peace be upon him. Forms of *dhikr*, invocations to God, saintly prayers, and blessed *Zamzam*, holy water, from Mecca are also used. Some healers devise various other methods, such as making amulets.

These practices have roots in the Qur'an and *sunnah*. In the Qur'an, God is referred to as *As-Shafi*, the Restorer of Health (Qur'an 41:44). Prophet Muhammad, peace be upon him, stated that for every illness, God created a cure (Jawziyyah 1999, 25). Verses related to healing in the Qur'an and health practices and related *hadith*, or sayings, of Prophet Muhammad, peace be upon him, have given birth to literature and research

called *Tibb Nabawi*, or Prophetic Medicine. Since the eighth century, Muslim scholars and doctors have been defining and interpreting the verses and *hadiths* according to the sciences of their time. Most scholars have supported that *du`a* does have positive effects on healing.

In pre-modern times, Muslims produced more literature on prayer and healing. Abu Bakr Muhammad ibn Zakariya al-Razi (865-925), Ibn al-Qayyim Al Jawziyyah (d.1351), and Jalal Ad-Din Al-Suyuti (1445-1505) were among the most prominent writers on religion and health. The decline of Islamic civilization led to fewer publications. In the last quarter century, however, interest in the field of alternative medicine has increased as part of the development of medicinal knowledge. This has, in turn, encouraged Muslim scholars to revisit the matter of healing in the light of spirituality.

The question of how religious healing practices benefit or detract from the well-being of humans has been an issue of concern since the rapid developments in the field of medicine in modern times. The amount of research on the religion-health connection has increased gradually in recent decades.

The technological advances of the past century tended to change the focus of medicine from a caring, service-oriented model to a technological, cure-oriented model.... However, in the past few decades, physicians have attempted to balance their care by reclaiming medicine's more spiritual roots, recognizing that until modern times, spirituality was often linked with health-care. (Puchalski 2001, 352-357)

Larry Dossey, Herbert Benson, Jeffrey Levin, and Harold Koenig are leading figures in field of research of religion and healing. Hundreds of articles have been written

for scholarly journals. Researchers at the Mayo Clinic have reviewed 350 studies of physical health and 850 studies of mental health indicate that religion plays a role in enhancing illness prevention, coping with illnesses, and recovering (Mueller, Plevak, and Rummans 2001, 1225).

Such works in the West have influenced the Muslim world as well. Contemporary interpretation of the verses of the Qur'an and *hadith* of Prophet Muhammad, peace be upon him, about healing have been examined in the light of modern findings. Fazlur Rahman (1987), Adnan Al-Tharshi (1992), Tariq bin Ali Al-Habib (1995), and Shahid Athar (1996) are among those who have found that prayer has a significant role in the recovery or coping with illness of Muslim patients. The results show that Islamic prayer can lead to reduced stress and lower blood-pressure, giving patients spiritual comfort and increasing their emotional ability to deal with their illness.

In this research, the focus is on how prayer, in particular, *salat*, *du`a*, recitation of Qur'an, and *dhikr* affects Muslim patients' well-being. This study was conducted through both a survey and empirical research. This study differs from prior studies for two reasons. First, a non-religious text was used as a control, allowing for comparisons with the religious texts. Second, the vital signs, body temperature, blood pressure, and respiratory rate, of the patient were recorded before and after the sessions.

The findings of this study can help patient-care staff better understand their Muslim patients' needs. Chaplains can make use of this information when serving Muslim patients and showing respect and understanding of Islamic prayer rituals.

Families of these patients may already know the patient's spiritual needs. However, this study can educate them in the connection between prayer and healing.

This study contributes to the existing prayer and healing studies and publications in three particular ways. First, vital signs are recorded and analyzed before and after religious (i.e. prayers) and non-religious readings. Second, it will add to the current literature empirical evidence on the effects of prayer on Muslim patients. Third, the study presents consequences for misunderstanding, misinterpreting, and improperly practicing Islamic prayer.

### **Statement of the Problem**

This study investigates how Islamic prayer (i.e., *du`a*, *dhikr*, and recitation of Qur'an) affects different aspects of patients' well-being. This research determines whether prayer contributes to or detracts from patients' well-being. The present study addresses the following issue: how does the patient respond, spiritually and physically, to prayer? The physical and spiritual condition of the patient before and after prayer will be monitored. The principal research objective of the present study is to determine whether prayer has a positive impact on physical and/or spiritual health.

## **Hypothesis**

The present study will test the following hypothesis: prayer will have positive effects on Muslim patients' well-being if it is performed according to certain criteria as set forth by Islamic texts and their interpretations by Muslim scholars.

This hypothesis is supported by traditional and contemporary scholars, both of which rely on Qur'anic verses and *Tibb Nabawi*, Prophetic medicine, peace be upon him. Based on interpretations of these religious texts, numerous scholars maintain that prayer has physical, psychological, emotional, and spiritual benefits. Among these scholars is Abu Bakr Muhammad ibn Zakariya al-Razi, Ibn Al-Qayyim Al-Jawziyyah, Al-Suyuti, Abu Hamid Muhammad ibn Muhammad Al-Ghazali. Said Nursi, Elmalili Hamdi Yazir, Sayyid Qutub, Adnan al-Tharshi, Tariq bin Ali Habib.

## **Limitations**

The principal limitation of this study involves issues regarding the sample population in research. First, the sample consists of only sixty adult Muslim patients. It was impossible to recruit a patient from each Muslim country; therefore, not all Islamic sects were represented or represented equally. Nevertheless, the principal investigator tried to be as pluralistic as possible. In terms of gender and ethnic background, the principal investigator could not get equal numbers because the sample depends on general hospital distribution.

Second, the study measures are limited to short-term effects. Patients were surveyed in a period of 2-5 days.

Third, the hospital setting is not always ideal for a concentrated prayer. There are distractions such as noises from other patients, staff, and equipment.

Fourth, some answers received for the questions in the questionnaire will not be unbiased. Respondents' answers are drawn from their experiences and are dependent on their current physical, psychological, and emotional conditions. It is questionable as to how much each respondent knows the performing guidelines of prayer. This may affect their measure of the accuracy of their empirical experience and performance. However, to overcome this limitation, the principal investigator relied on interwriter reliability. Imam Talal Eid, ThD, reviewed the responses independently.

Fifth, being not fully aware of all the patient's cultural backgrounds and traditions can limit the evaluation of the answers. Before the principal investigator conducted the survey, he sought knowledge from other sources regarding the patient's cultural background by reading about their culture and asking interpreters to explain cultural norms at hospitals.

Sixth, some patients are not native English speakers or may not completely understand the terms used but the principal investigator addressed this issue through the use of interpreters.

Finally, some Muslim patients may overstate their religiosity or spirituality. This observation is based on my professional experiences as a hospital chaplain for 20 years.

### Definition of Islamic Terms

The following Islamic terms are important for understanding the present study:

Al-Fatiha: The Opening (the first chapter of the Qur'an)

As-Shafi: The Healer. It is one of the 99 Divine Names in the Qur'an.

Ayat: Verse of Qur'an.

Dhikr: Literally means "remembrance" or "invocation". It is remembering God with certain invocations by tongue or by heart. It includes the repetition of Divine Names. Activities that maintain awareness of God in a Muslim is are considered *dhikr*.

Du`a: Verbal formal and informal supplication. An extensive explanation is provided later on in this section.

Fard: Literally means obligatory. It is performing the practices that were obliged onto Muslims by God in both the Qur'an and hadith.

Hadith: Sayings of the Prophet Muhammad, peace be upon him. It is a branch of *sunnah*. The hadith has been memorized or written, collected, and compiled by the Prophet's companions, family members, and scholars. When *hadith* are recorded, the chain of narrators (*isnad*), pious people who have memorized or written the *hadiths*, is also recorded for credibility purposes. The authenticity of a *hadith* is given strict consideration. There are six *hadith* compilations that are generally accepted by Sunni scholars as authentic. The first complete compilation was done by Muhammed ibn-Isma'il Al-Bukahri (810-870). The other five were by Imam Muslim (d.875), Ibn Maja (d.886), Abu Daud (d.888), At-Tirmidhi (d.892), and

An-Nasai (d.915). Shiites accept the hadith collection books of Mohammad Yaqub Al-Kulayni (d.950), Shaikh Saduq (d.1013), Abu Jafar al-Tusi (d.1274).

Masjid: Arabic word for mosque. It is the building where Muslims gather for congregational prayers.

Peace be upon him: It is a tradition in Islam to mention this after the name of any prophet. It is a sign of respect to say this phrase after Prophet Muhammad's name is mentioned.

Qu'ran: Literally means "recitation". It is the holy book of Muslims. Muslims consider this book to be a revelation from God. It is written and recited in the Arabic language, although translations have been made to many languages. The original Arabic text has been recorded and memorized by millions of Muslims. Most Muslims know at least a few chapters of the Qur'an. Practicing Muslims read or recite some chapters daily.

Sadaqa: Arabic word for charity.

Salat: The five daily obligatory prayers. An extensive explanation is provided later on in this section.

Sharia: the body of Islamic law. The term means "way" or "path"; it is the legal framework within which the public and some private aspects of life are regulated for those living in a legal system based on Islamic principles of jurisprudence. *Sharia* deals with every aspect of daily life, including politics, economics, banking, business law, contract law, sexuality, and social issues.

Shifa: Arabic word for healing or cure.

Surah: Chapter of the Qur'an.

Sunnah: Literally means "the way", therefore meaning the way of the Prophet, i.e., the actions and sayings (*hadiths*) of Prophet Muhammad, peace be upon him, and the actions of others approved by the Prophet. In Islamic jurisprudence, the *sunnah* is the second source of religion. Just like the hadith, the *sunnah* of Prophet Muhammad, peace be upon him, has been recorded, memorized, and transmitted from generation to generation with a chain of reliable narrators.

Tibb Nabawi: The medicine of Prophet Muhammad, peace be upon him. It includes how the Prophet treated patients, the objects he used, and his recommendations for treating patients.

Wudu (ablution): this is the physical preparation for the five daily ritual prayers. It begins with washing the hands, mouth, nose, face, and arms, followed by wiping the hair with a wet hand, cleaning the ears, rubbing the neck with a wet hand, and ends with washing the feet. This must be performed before the *salat*, Qur'anic reading, and other religious activities.

Zakat: Arabic word for alms, one of the five obligations of every financially able Muslim.

### The Definition of Prayer

Prayer may have different connotations and methods of performance. Because prayer has varying meanings in different religions, it is necessary to define for readers the meaning of prayer (i.e., a general definition and specific Islamic traditions).

The word "prayer" is derived from the Latin root *precare*, meaning "to ask for something" or "to beg." Webster's dictionary defines prayer as "entering into communion with God."

Prayer is an act of communication by humans with the sacred or holy-God, the gods, the transcendent realm, or supernatural powers. Found in all religions in all times, prayer may be a communal or personal act utilizing various forms and techniques.

Scholars define prayer in various ways. William James (1842-1910) defines prayer as "every kind of inward communion or conversation with the power recognized as divine." (James 1963, 5). Jean Daujat states that the Latin word for "to pray" is *orare*, which derives from the word for mouth, and it means not "to ask", but "to speak." Prayer is an address directed to God or to a superior power in which we reveal our needs and implore that they be fulfilled (1964, 8).

Karl Rahner, (1904-1984) an influential German theologian, describes prayer as adoration, thanksgiving, oblation, penitence, intercession, praise and petition, and views prayer as a response to God's call and a free act by a man or woman. Prayer has been defined as "any personal, impersonal or transpersonal way to express communion with the sacred" (DeLong 1998, 65-66).

From another point of view, "Prayer is the raising of one's mind and heart to God or the requesting of good things from God" (Ruland 1994, 13). This definition includes aspects of both emotion and cognition in the petition to God.

Dossey defines prayer as "communication with the Absolute" (1998, 10). This definition is more general due to the range of options of communication with God, such

as silent prayer from the heart, verbal prayer, or congregational prayers. This means that prayer does not need to be verbal only; even silence, contemplation, or meditation can be a form of talking to God.

### Prayer in Islam

Ritual prayer, known as *salat*, is one of the pillars of Islam. However, *salat* is different than the personal prayer or invocation associated with the Christian faith. In Islam, that is called the *du`a*, or supplication, formal and informal. Formal *du`as* are found in the Qur'an, *hadith*, and religious texts. Informal *du`as* are personally structured or spontaneous.

In the Qu'ran, the word *salat* can be applied to God, angels, and humans (33:56). For God, it means that He inclines towards being merciful to humans; for angels, it means that they ask forgiveness for humans; for humans, it means supplicating to God (Ghazali 2004, 4).

In Islamic texts, prayer is referred to as *salat* and *du`a*. Muslim scholars have observed that *salat*, a form of ritual prayer, has positive effects on the sick. *Salat* is a religious process involving specific movements and invocations. It begins with the takbir, raising hands to face level. A person stands straight, a position called the *qiyam*, and recites Qur'anic verses. He or she then bows with hands on the knees in the *ruku* position. After standing up straight again, he or she goes down to prostrate, *sujuud*. After two *sujuuds*, a person is in *julus*, a sitting position, and finally, ends with the *salam*, turning head to right then left shoulder. Each movement and position is accompanied by certain

praises to God, such as *Allahu akbar*, "God is great". It is about professing gratitude and glorifying and exalting God (Ghazali 2004, 4).

The word *du`a* comes from the roots of d-a-wa in Arabic. This word literally means "to call upon, to lead someone to something, to invite someone, or to grieve after a deceased person" (Soysaldi 1996, 13).

The word *du`a* is defined in several ways in the Qur'an: as a form of worship (10:106), a means of asking for aid (2:23), God's call to humans (17:52), and praise to God (17:101). The characteristic common to all four definitions is *du`a* as a form of communication between a person and God.

Some Islamic scholars categorized *du`a*. Said Nursi (1881-1960) suggested that there are three types of *du`as*: first, the request with one's condition, such as acting through causes to get the desired effect. If a student wishes to pass an exam, his or her act of studying leads to passing, thus making the act of studying an active form of *du`a*. The second type is to desire from the heart, and the third is the direct verbal request arising from desperate need at that time (Nursi 1994, 353-354).

The technical meaning of *du`a* has been defined by Prophet Muhammad, peace be upon him, as "the essence of worship" and "the essence of servitude" (Canan 1993, 487). *Du`a* is a symbol of servitude from the servant to God, and a mark of God's mercy to his servant (Canan 1993, 487). Another definition is to ask God earnestly from the heart in silence (Canan 1993, 488).

Although the precise definitions of *du`a* vary from scholar to scholar, it is generally viewed as a form of communication between a person and a higher power.

Traditional Muslim scholars view *du`a* as a form of worship and an asking from God. Contemporary Qur'anic commentator and a Turkish Muslim theologian Yazir (1877-1942) defined *du`a* as "the subject to appeal for in a manner that indicates his need to God by thanking and glorifying him" (1992, 2194). Muhammad Iqbal (1873-1938), a Pakistani theologian, philosopher, and poet, viewed *du`a* as a form of deep feeling of humankind towards the creator for their needs (Dogan 1997, 7). Nursi stated that *du`a* is "mighty mystery of worship; indeed, it is like the spirit of worship;" to ask God for that which they cannot grasp with their own power and will (1994, 353-354). Gulen states that *du`a* is asking God for something which the human cannot attain by his or her power (Dogan 1997, 15). Cilaci stated that the *du`a* flows "from the younger to the older, from the bottom to the top, from an inferior to a superior" (1965, 528). The first part of the definition applies to human-human relations and not human-God relations. Kayiklik views *du`a* as removing the obstacles between oneself and God, allowing them to reunite (1994, 23-24).

Sufis see *du`a* as mystical love of God, an act of a lover asking something from the beloved (Seraiti 1993, 51). According to Sufi scholars, *du`a* is the manifestation of God's love to humans (44). Abd al-Karim Hawazin Al-Qushayri (d.1072), one of the great mystic leaders who established the principles of Sufism, stated "Only the tongue of beginners speaks prayers. The prayer of Gnostic consists in deeds that of the perfect of mystical states" (Qushayri 1990, 11). For Al-Qushayri, individual verbal prayers constitute of the first levels of spirituality. This means that as the person advances spiritually, his or her form of prayer will be the actions instead of the verbal supplication,

like the aforementioned example of the student. Another definition by Sufis is that prayer is not petitioning or asking; it is, in essence, everlasting praise (Schimmel 1952, 112-125).

In light of the aforementioned definitions, *du`a* falls into either one of two categories: communication or supplication. Communication is when one calls upon or invites. This can further be divided into two subcategories. A person can ask from God either through silence or praying from the heart or action. Supplication is when *du`a* is in form of a verbal request.

### **Significance of the Study**

This study is significant in that it utilizes and extends an emerging research methodology in religious studies from an Islamic viewpoint. This methodology measures the effects of prayer by interviewing patients and monitoring patients' vital signs, then analyzing the data to find out whether there is a relationship between health and prayer.

This research traces its roots to the Qur'an, *Tibb Nabawi* (Prophetic medicine, i.e. the techniques and medicine that were applied and recommended by Prophet Muhammad, peace be upon him, contemporary research, and the perspectives of well-known Muslim scholars. However, more research studies about the application of *Tibb Nabawi* to the context of modern medicine are needed. Such a study has not been conducted from an Islamic viewpoint, but there have been studies on the effect of prayer

on members of other faiths by Dossey (1993), Chan (1994), Benson (1995), Stavros (1997), and others.

The research not only relies on theological, psychological and medical studies and sources, but also on my extensive experience dealing with patients in hospitals. In my professional experiences, the principal investigator has observed most patients and their families benefiting from prayer. Their morale increased, stress was reduced, and their coping process was better.

This thesis will contribute to an understanding of how prayer can be exercised with the healing practice. Second, the study can guide pastoral caregivers and healers working with Muslim patients, and, hopefully, enhance their effectiveness. Third, it will also present different techniques of approaching and comforting the patient for pastoral caregivers as well as medical staff. Fourth, the result of this study may encourage the Muslim community to educate more clergy for providing chaplaincy services in health institutions. Fifth, the research will stress the significance of prayer and the importance of performance in accordance to Islamic guidelines in order to avoid negative consequences. Sixth, this is the first study of its kind in the US. Prior studies have been conducted in Muslim countries (nations where Islam is the primary religion). Finally, if the hypothesis is supported by the findings, then Muslim patients can further understand the benefits of prayer if prayer is practiced properly.

## **CHAPTER II**

### **LITERATURE REVIEW**

#### **Introduction**

In this chapter, the principal investigator reviewed the literature and established a theoretical foundation for this study. First, the principal investigator described the contributions of early interpreters of Islamic texts and pioneers in the field of prayer and healing. This includes the views of traditional scholars, *hakeem*, or physician-scholars, and philosophers from the golden age of Islamic civilization as well as contemporary researchers. The principal investigator has divided the review into two subsections: 1) theological considerations; and 2) theoretical considerations.

#### **Theological Considerations**

##### Healing in the Qur'an

In order to understand the concept of prayer and healing in Islam, it is necessary to look to the definitions of healing found in the Qur'an and its exegesis, and the *sunnah* of Prophet Muhammad, peace be upon him, along with scholarly interpretations. It is a principle of Islamic faith to believe and accept the Qur'an as the word of God and follow the *sunnah*. As a result, Muslims have continued to employ the healing practices of Prophet Muhammad, peace be upon him, described in the *hadith* collections. However, the central aim of the Qur'an is to influence and provide guidance for human conduct (Rahman 1987, 11). It is, of course, not a scientific or medical text, but it is considered to

be a "restorer of health" (41:44) which has been taken by Muslims to mean that its guidance leads to spiritual, psychological, and physical health (Rahman 1987, 21). In Muslim society, individuals will commonly employ conventional medical treatment as well as spiritual remedies.

Healing in Islam has been described in the Qur'an and *sunnah* (the tradition of Prophet Muhammad, peace be upon him) and involves both physical and spiritual factors. Verses and *hadith* relating to both components are explained in the *hadith* and scholarly texts. Two verses in the Qur'an (9:14, 26:80) refer to God as *As-Shafi*, "The Healer." The word *shifa*, healing, occurs in different grammatical forms in six verses in the Qur'an.

In the following sections, the principal investigator briefly described the perspectives of at-Tabari (828-923) and Ibn Kathir (1301-1373), two highly influential Qur'anic commentators, along with those of Al-Razi (865-925), Qutb, and Yazir.

1. *And (Allah) shall heal the breast of the believers (9:14).*

At-Tabari, a notable Qur'anic scholar, viewed this *shifa* as a remedy for spiritual diseases of the heart (1995, 117). Ibn Kathir defines the word *shifa* in a similar manner (1995, 169).

2. *Mankind there has come to you as a guidance from your lord and a healing from the (diseases) in your hearts and for those who believe, a guidance and mercy (10:57).*

Ibn Kathir explains that the healing described in this verse should be interpreted as indicating that the Qur'an heals doubts of the heart (1995, 456). At-Tabari defines the

healing described in this verse as a way to heal spiritual diseases of the heart, such as greed, haughtiness, selfishness (1995, 160).

3. *And we sent down in the Qur'an such things that have healing and mercy for the believers (15:82).*

Al-Razi also suggested that healing involves both physical and spiritual processes (Canan 1993, 78). According to at-Tabari and Ibn Kathir, the Qur'an heals hypocrisy, doubts, and spiritual diseases of the heart (79). Nursi stated that the Qur'an is a healing force for those who believe in and practice its message (2005, 153).

4. *There issues from within the bodies of the bee a drink of varying colors wherein is healing for mankind (16:69).*

The drink mentioned in this verse is honey, making healing, in this context, physical, according to Qur'anic scholars, who parallel this verse with a related *hadith*.

5. *And when I am ill, it is (Allah) who cures me (26:80).*

In their commentary on this verse, At-Tabari (105) and Ibn Kathir interpret this as indicating a physical healing of the body (1995, 6-170).

6. *And declare (O Muhammad) that (the Qur'an) is guidance and healing for the believers (41:44).*

As in second verse (10:57), the Qur'an is the healer of spiritual diseases such as haughtiness, hypocrisy, and vanity (Tabari 1995, 159).

Qutb defines healing in these verses as spiritual healing (3:1799, 5:2602, 3127) except the verse 16:69, wherein the verse describing the healing powers of honey refers to a physical process (1976). It is said that the Qur'an can remove doubts, greed, temptation, and hopelessness from the hearts of the believers. It can give believers security, confidence, and patience in the face of adversities and illnesses (Qutb 1976).

Nursi stated that all forms of healing are manifestations of *As-Shafi*, the Healer, an attribute of God. This attribute will reflect on any person or creature that resorts to proper healing methods. Nursi did not make any distinction between religious and secular sciences. He viewed all sciences as manifestations of God (Nursi 2005, 351-355).

Two more verses in the Qur'an relate to health indirectly:

*... (A)nd make not your own hands contribute to (your) destruction; but do good; for Allah loves those who do good. (2:195)*

*...Nor kill (or destroy) yourselves: for verily Allah has been to you Most Merciful! (4:29)*

According to Qur'anic commentators, these verses ask the believer to take precaution against all diseases (spiritual, physical, or psychological) and not let the lack of preventative measures cause self-destruction. Spiritual precautions can include prayer in the face of stress, anxiety, and depression (Rahman1987, 125).

Throughout Islamic history, scholars have commented on which chapter or verse in the Qur'an and *du`as* can be used for physical, spiritual, or emotional healing (Canan 1993, 76). Prophet Muhammad, peace be upon him, had already mentioned some of these

chapters or verses, but commentators have expanded on these verses based on their knowledge and experiences. These books are referred to as *Khavass al-Qur'an* (Miraculous Properties of the Qur'an). The earliest of these belongs to ninth-century writer al-Hakim al-Tamimi. In this work, the "miraculous properties" including their curative properties for various diseases and mental illnesses, of virtually each passage of the Qur'an are discussed (Rahman 1987, 89) and include remedies for various diseases and mental illnesses.

The Islamic tradition of healing with prayer dates back to Prophet Muhammad, peace be upon him. Due to the presence of verses relating to healing in the Qur'an and the *hadiths* (sayings of Muhammad, peace be upon him), the science of Islamic healing has received much attention. The Qur'anic verses regarding healing have been interpreted literally and in the context of Muhammad's prophethood, which lasted about 23 years. The Qur'an was revealed in allotments over that period. The verses are directly related to the events, circumstances and needs of the period of Muhammad's prophethood.

In light of the Qur'anic verses and *hadiths*, books have been and are still being written on *Tibb Nabawi*, Prophetic Medicine. *Hadiths* about healing have been grouped into a separate section in *hadith* collections. There are many collections of the traditional sayings of Prophet Muhammed, peace be upon him, on the subject of medicine and healing by religious scholars and physicians. The following scholars are well known and their interpretations are often quoted by other scholars: Abu Bakr al-Razi (865-925), Shams-ul-Din al-Dhahabi (1274-1348), Abu Abdullah Mohamed Ibn al-Qayyim al-Jawziyyah (d.1351) and Jalal-ul-Din Abd-ul-Rahman ibn Abi Bakr Al-Suyuti (1445-

1505) (Suyuti 1962, 41). There are many *hakeem*, physicians and men of wisdom, who wrote about healing and medicine in Islam such as Abu Yusuf Ya'qub ibn Ishak al-Kindi (d.873), and Ibn Sina, or Avicenna (d.1037). Contemporary scholars include Elmalili Hamdi Yazir, Said Nursi, and Sayyid Qutb.

Scholars who view the Qur'an as the source of healing rely on the verses on shifa and an incident in the Prophet's life, narrated Abu Said Al-Khudri:

Some of the companions of the Prophet came across a tribe amongst the tribes of the Arabs, and that tribe did not entertain them. While they were in that state, the chief of that tribe was bitten by a snake (or stung by a scorpion). They said, (to the companions of the Prophet), "Have you got any medicine with you or anybody who can treat with *Ruqya*?" The Prophet's companions said, "You refuse to entertain us, so we will not treat (your chief) unless you pay us for it." So they agreed to pay them a flock of sheep. One of them (the Prophet's companions) started reciting Surat-al-Fatiha (Chapter of Opening) and gathering his saliva and spitting it (at the snake-bite). The patient got cured and his people presented the sheep to them, but they said, "We will not take it unless we ask the Prophet (whether it is lawful)." When they asked him, he smiled and said, "How do you know that Surat-al-Fatiha is a *ruqya*? Take it (flock of sheep) and assign a share for me (Bukhari).

In this hadith, *ruqya* means a charm, spell, or incantation. It has been used as a means of seeking a cure for any illness by reciting Qur'an and making *du`a* to God.

The Prophet taught that healing should be conducted only in accordance with Qur'anic teachings. In addition, Prophet Muhammad, peace be upon him, made supplications for the ill, including the mentally and spiritually ill. However, some scholars of Islam, such as Ibn Khaldun (1332-1406), maintained that the Prophet had been sent to teach only sacred law and not medicine. Such an interpretation is based on the following discourse between Muhammad, peace be upon him, and his companions.

Muhammad, peace be upon him, had advised his companions to artificially fertilize palm-trees. Later, some of the companions informed Muhammad, peace be upon him, that his advice led to a bad crop, to which the Prophet replied, "You know better than I matters pertaining to this world" (Rahman 1987, 33). Rahman and other Muslim scholars used this hadith to emphasize the Prophet's role as a messenger rather than a healer. Omar Kasule, deputy dean of the Faculty of Medicine at International Islamic University in Malaysia, states that *Tibb Nabawi* (Prophetic medicine) did not cover every conceivable disease at the time of the Prophet nor can it cover all illnesses today or in the future in various parts of the world. He supports Ibn Khaldun's view and states that hadith should not be viewed as the textbook of medicine, but should only be used for the diseases they dealt with (Barnes & Sered 2005, 410).

Healing the chief of the tribe by reciting the Chapter of *Al-Fatiha* (The Opening) might be a divine blessing, called *karama* in Islamic terminology. However, this particular action in the above *hadith* cannot be applied as a universal cure for every scorpion sting. Yet, a person who has been stung by a scorpion must seek both medical treatment and can recite from the Chapter of *Al-Fatiha*. This will be appropriate in regards to all the verses and *hadiths* related to healing.

Based on this comparison, it is incorrect to seek treatment only with the Qur'an or hadith. Furthermore, it is an established practice of Islamic interpretation to examine the context of the selected text. Some texts were directed to certain people or refer to specific occasions or events. Not researching the context can lead to much misunderstanding. If a Muslim understood this event literally, he or she would apply the same method if he or

she was stung and not apply to modern medicine. Due to such misunderstanding or ignorance, some Muslims do not seek medical treatment.

The *sunnah* of Prophet Muhammad, peace be upon him, is the first source for Qur'anic exegesis and the second source of Islam. It is necessary to review the relationship between prayer and healing in the *sunnah*.

### Healing in the Sunnah

Muslim scholars view the sunnah as the second source of religion, while the Qur'an is the primary source. Following the sunnah is ordered in the Qur'an (59:7, 4:80, 3:31, 33:21) as Prophet Muhammad, peace be upon him, is the ultimate role model for Muslims. The number of Prophetic sayings, or *hadith*, in the area of medicine, prayer, and health led to the development of an entire discipline known as *Tibb Nabawi* (Prophetic medicine). These *hadith* include both cures and preventative measures (Barnes & Sered 2005, 409). Imam Bukhari, the primary sources of Prophetic sayings, narrated 129 *hadiths* directly related to medicine, prayer, and healing, and has compiled two books on physical and spiritual healing (Suyuti 1962, 130-141). Other *hadith* collections also have chapters dedicated to healing.

Healing *hadith* can be divided into three categories. First, there are *hadiths* that encourage medical treatment and seek to give broad principles of health. Second are *hadiths* that are comprised of putative statements of Prophet Muhammad, peace be upon him, on particular diseases and health problems as well as techniques used to treat them,

both medical and spiritual. The third is the role of these *hadiths* in the literature of the Prophetic medicine (Rahman, 1987, 34).

The Prophet used three types of remedies for various ailments: natural, divine, and or a combination of both natural and divine cures (Jawziyyah 1999, 35). The spiritual techniques utilize the patient's energy and the power contained in the devotions and supplications as well as the meditations of Prophet Muhammad, peace be upon him, and saints. The focus of this section is on the *hadiths* related to both prayer and healing.

Listed below are some of the prominent *hadiths* about prayer and healing:

Every illness has a cure, and when the proper cure is applied, it ends Allah's willing (Jawziyyah 1999, 24).

Prophet Muhammad, peace be upon him, said, "Treatment is a part of destiny" (Canan 1993, 132).

When the Prophet heard that people in a certain village contracted a contagious disease, he ordered that the villagers stay in the village and outsiders stay outside, thus quarantining the sickness. The Prophet made seeking treatment obligatory on ill persons (Jawziyyah 1999, 25).

Usame bin Shuraik narrated that "I was with the Prophet when the Bedouins came to him and said 'O Messenger of Allah should we seek medicine?' He said, 'Yes, O slave of Allah, seek medicine, for Allah has not created a disease except that he has also created its cure, except for one illness.' They said 'What was that?' He said 'Old age' (Jawziyyah 1999, 25).

Allah has not sent down a disease except that He has also sent down its cure; Whoever knows it (the cure), knows it, and whoever is unaware of it (the cure), he is unaware of it (the medicine) while those who are ignorant of it are unaware of it (Nasai, Ibn Majah).

Make use of two cures: honey and the Qur'an (Ibn Majah).

A man came to the Prophet and said: O Messenger of God, you have forbidden the recitation of verses over the sick. Yet I can cure scorpion

bites by these recitations. The Prophet replied: He who among you is able to help his brother, let him do so (Suyuti 1962, 131).

Ali narrated that the Prophet said: The Qur'an is the best of all medicines (Suyuti 1962, 131).

Abu Huraira said: The Prophet saw me when I was asleep and I was writhing with my pain in the stomach. He said, "Does your stomach give you pain?" And I answered, "Yes, O Prophet." Then he said, "Arise and pray; for verily in prayer there is cure" (Suyuti 1962, 157).

Said Uthman ibn abi al- As: A man complained to the Prophet of a pain that he felt in his body ever since he had become Muslim. The Prophet replied to him: Put your right hand on place of the pain and seven times: I fly to the protection of God and His power from the evil which I find (Suyuti 1962, 159).

Khalid bin al-Walid said: O Prophet, I cannot sleep at night by reason of my insomnia. So the Prophet replied: When you go to your bed to sleep then say: O God, Lord of Seven Heavens and whatsoever is upon them and Lord of Devils and of those they have mislead, be for me a Helper against all the evils of creation if any of them oppresses me. May Your help stay long with me. Exalted be Your praise. There is no God other than You and no God excepting You (Suyuti 1962, 159).

A man should indeed pray God for good health. But if God bestows sickness, it should be receive with patience, with resignation and with thankfulness (Suyuti 1962, 162).

The Prophet said to Umar: If you go into the room of a sick man, beg him to pray to God for you. For the prayer of a sick person is like to the prayer of angels (162).

It was habit of the Prophet whenever he visited the sick or if a sick man was brought to him, to say: O Thou God of people, derive away all harm and cure the cure which leaves no sickness, which leaves behind no trace of diseases. Then the sick man should read to himself the opening chapter of the Qur'an (163).

Muslims have practiced spiritual healing alongside physical healing due to the Prophet's practices. However, because the *hadiths* are not a comprehensive book of

medicine, only some illnesses and methods of treatment in his time are covered. Therefore, it is important to understand these practices in their context. For this reason, many Muslim physicians, scholars, and *hakeem* have explored and written about the Prophetic healing practices in detail. As mentioned in the Healing in the Qur'an section, traditional scholars of hadith and Muslims physician-philosophers include Ibn Al-Qayyim Al-Jawziyyah, Al Dhahabi, Al-Ghazali, Ibn Sina (also known as Avicenna), and Al-Suyuti, while contemporary scholars and Muslim physicians include Said Nursi, Sayyid Kutub, Adnan At-Tahrshi, Tariq bin Ali Al-Habib, Ridwan Faqeeh, and Shahid Athar. Their theories are reviewed in the next section.

### **Theoretical Considerations**

I will discuss the theoretical literature regarding prayer and healing in two sections: first, through Islamic sources, and second, through Western sources. Islamic sources include historical and current research as my primary research is about Islamic prayer and healing. The discussion of Western sources includes only current empirical studies as secondary evidence.

#### Islamic sources

The relationship between prayer and healing has been discussed in the Islamic literature since the ninth century (Rahman 1987, 48). This discussion began with the collection of *hadiths* (Prophetic sayings) on the subject of medicine and healing, and was

later followed by works on *Tibb Nabawi* (Prophetic medicine). Three works are prominent and extensively quoted by other scholars. These were written by Abu Bakr Al-Razi (865-925), Shams-ul- Din al Dhahabi (1274-1348), and Ibn Al-Qayyim al-Jawziyyah (d.1351) (Suyuti, 1962, 41). Later scholars, such as Jalal-ul-Din al-Suyuti (1445-1505), based their works on the three aforementioned texts.

Early Muslim scholars did not distinguish between secular medicine and *Sharia* law. Imam As-Shafi (d. 819), founder of the Shafi Islamic school of thought, or *fiqh*, religious jurisprudence, posited that medicine is one third of human knowledge and Muslims should acquire an understanding of medical science (Rahman 1987, 48). Al-Dhahabi stated that all Muslims agree that it is meritorious to seek healing when one is sick because of the Prophet's comment "get medical treatment," making such treatment obligatory (Al-Dhahabi 1996, 103-104). Imam al-Ghazali viewed the study of both medicine and religion-based healing practices as obligatory (Rahman 1987, 38). This clearly establishes that medicine is a religious service (Rahman 1987, 39). Abu Bakr Al-Razi stated that students must pursue medical studies after mastering the Sacred Law, which includes *Sharia* and Islamic ethics (Rahman 1987, 39). This worldview led scholars to pursue both Islamic legal training and medical studies, and religious scholars functioned as both doctors and jurists. It is interesting to note that the term for physician is *hakim*, meaning wise man or philosopher. The term clearly reflected the aforementioned worldview, and such people were regarded as natural leaders, charismatic people who are influential (Dols 1984, 37). They attempted to spiritualize medicine and to set a high religious value on the practice of medicine. Moreover, they were motivated

by a desire to focus the attention of Muslims on medicine (Rahman 1987, 42). These physicians applied both physical and spiritual treatments, such as prayer, Qur'anic recitation, and spiritual music, to their patients. Medicine was part of the curriculum of *madrasas* where religion and secular sciences were generally taught for a great period of Islamic history.

Towards the nineteenth century, less emphasis was placed on medical knowledge due to the influence of positivism, specialization of medicinal sciences, absence of large hospitals, and decay of Muslim civilization (Rahman 1987, 75).

### *Muslim Scholars on Healing*

Muslim scholars maintained that healing involved physical, psychological, and spiritual processes. In order to overcome illness, a person must apply both physical treatment and spiritual strengthening.

The different forms of worship in Islam (*salat*, *du`a*, recitation of Qur'an, *dhikr*) develop a mentality which leads to spiritual healing and well-being, along with physical healing and the alleviation of physical suffering (i.e., overcoming illness).

Al-Razi, "undoubtedly the greatest physician of the Islamic world," states that the Creator bestowed reason on man so that people can achieve contentment in this world and happiness in the Hereafter (Razi 1950, 20). By applying reason, a person can reduce grief caused by illnesses or other hardships and can take certain stipulations. One of the precautions prescribed by Islam is contemplating about death and the afterlife and praying for protection from hardships, thereby training the soul to bear grief and

difficulties more effectively. If an ill Muslim knows the purpose of life and believes in the existence of an afterlife, then the pains encountered during his or her earthly existence would seem insignificant compared to the greater joys awaiting him or her in the next world. The purpose of our earthly existence is to worship God (51:56-58) and attain Paradise through a life of virtue. Therefore, suffering in this transient life can be tolerated because an eternal life will follow. Some Muslims misunderstand this as a reason not to seek treatment. However, seeking treatment is an obligation as mentioned in the Theological Considerations section.

Second, after misfortunes such as illnesses and calamities have occurred, it is important to reduce or repel negative feelings like sorrow, anguish, and grief completely or to the greatest possible extent (70).

Ibn Sina supported the view of the benefits of prayer; however, Ibn Sina maintained that the faithful must seek proper medical treatment as well as seeking spiritual remedies (Dogan 1997, 7). In this sense, making *du`a* without seeking medical treatment does not validate the *du`a*. It is obligatory for Muslims to seek medical treatment (Rahman 1987, 48). *Du`a* is a strong recommendation by Prophet Muhammad, peace be upon him. If a Muslim makes *du`a* without seeking or intending to seek medical treatment, he or she is practicing dualism, attending to the spiritual dimension of his or her being but not the physical dimension.

Ibn Sina also recognized the value of overcoming fears and using willpower in the healing process:

Ibn Sina states that there are physically sick people who get well through sheer willpower, and conversely, there are healthy persons who

become obsessed with the idea that they are sick, so that they really become physically sick. From this he concludes that the mind, which belongs to the realm of higher metaphysical principles, “exercises lordship over matter.” He illustrates this by saying that if a plank of wood is put across a street and someone is asked to walk on it, he will be able to do so quite easily. But if the same plank of wood is placed across a gorge, the same person will probably be able to walk on it and may well fall if he tries. (Rahman 1987, 36)

In Islam, when a Muslim performs prayer, he or she relies on a higher and powerful being, Allah. Muslims believe that Allah is the *As-Shafi*, The Healer, and will ease the pain of the patient (if that is what is best for him or her). This decreases the patient’s worry and fear of his or her illness and related problems. Anxiety reduction increases psychological comfort and enhances coping skills.

Al-Dhahabi, an influential *hakim* and a traditional Islamic scholar and historian, purports the benefits of Islamic ritual prayers are fourfold: 1) spiritual; 2) psychological; 3) physical; and 4) moral. He gave three reasons for this. First, ritual prayer is a form of worship commanded by God. Second, prayer has a psychological benefit. Concentrating on prayers diverts the mind from pain. In the physical sense, prayer allows for full bodily movements which cause some organs such as the muscles to relax. Al-Dhahabi also asserted that prayers often produce happiness and satisfaction; they suppress anxiety and extinguish anger (Dhahabi 1996, 140; Rahman 1987, 44).

Al-Jawziyyah supported this view. He supported the common idea among Muslims that the strong spirit of an ill person will assist the body in overcoming illness (Rahman 1987, 42). He relies on the following *hadith*, “Saying good words to a patient for the sake of God, although it does not prevent any harm, still brings relief to the patient’s heart” (Canan 1993). Good words can include prayer, words of hope, good

news, or advice and will relieve the anxiety of the sick person and bring relief to his or her heart. It can add strength to the spirit of the sick person, further encouraging the body to fight disease (Jawziyyah 1999, 109).

Al-Jawziyyah recommended quoting from the Qur'an and *hadiths* to psychologically prepare the sick person for the worst:

*...give glad tidings to the patient... (2:155).*

*And seek help in patience and the prayer (2:45).*

*...But it is possible that you dislike a thing which is good for you (2:116).*

*So verily, with every difficulty, there is relief. Verily, with every difficulty, there is relief (94:5-6).*

Abu Yahya Suhaib bin Sinan (may Allah be pleased with him) reported that: The Messenger of Allah said, "How wonderful is the case of a believer; there is good for him in everything and this applies only to a believer. If prosperity attends him, he expresses gratitude to Allah and that is good for him; and if adversity befalls him, he endures it patiently and that is better for him" (Muslim).

In these and other related verses and *hadiths*, there is a psychological and spiritual comfort for two reasons. First, the slave of Allah, his family and wealth are Allah's exclusive property that Allah has loaned to the slave. When Allah takes back some of what he has loaned the slave, He is the Owner who takes back what belongs to Him. (Jawziyyah 1999, 170-171). The term slave in Islamic texts is similar in meaning to the word "subject." Second, "the anguish caused by the calamity will be relieved when the slave thinks deeply about what Allah has bestowed on them as compared to what they have lost" (Jawziyyah, 171) and what others have lost. If a person compared his or her state to others who are worse off, he or she will realize that his or her situation is not that

bad and feel some relief. He finishes resting on the belief of the Hereafter where all anguish persons can find ease.

Al-Suyuti indicated prayer also enhances psychological well-being since it brings pleasure and comfort because prayer contains “the excellencies of this world and of the next” (1962, 159). It heals spiritual illnesses like greed, avarice, arrogance, and envy in this world and is an act honored by God.

After the 15<sup>th</sup> century, many of the works that were written on this issue were adding detail to the works that were already written. The foundation of Islamic healing was essentially established by the end of the 15<sup>th</sup> century; subsequent scholarly works explored these concepts in greater detail.

Recently, Muslims intellectuals have been inspired by Western scientific studies examining the efficacy of prayer and have begun to apply modern research methods to the field of Islamic healing.

#### *Current Research on Prayer and Healing*

Five hundred university students in Konya (Turkey) completed a survey and majority (55%) reported that they performed the five daily *salat*, 27.2% reported that they performed *salat* occasionally, 8.2% reported praying once a week, and 8.4% never performed *salat*. Moreover, 40% of those who performed *salat* reported feeling happiness and comfort after the *salat* and 25.8% felt relieved because they felt their sins were forgiven (Sayin 2003, 96). In another research study (n = 150), a substantial number of patients (48.6%) reported that they experienced a positive emotional response (i.e.,

happiness) when they fulfill their religious obligations, and a number of patients (16.7%) reported that they felt happiness when supplicating (Kizmaz 1998, 45). Kizmaz noted that 200 verses in the Qur'an are about or related to *du`a*. Both studies were conducted in cities where larger segments of the population in the cities are practicing Muslims in comparison to other regions in Turkey. If they had been conducted in cities where the secular population was higher, results might have been different, though the degrees of difference have not been determined.

In another survey conducted in Turkey with 271 people, 95.4% of women and 94.3% of men expressed that they believed that *du`a* had positive effects. 86.2% of women and 85.1% of men stated that *du`a* was very important to them. 28% made *du`a* after prayer. 49.4% did not have a specific time for *du`as*. 15.6% prayed when they felt they needed it. 39.9% reported feeling closer to God when making *du`a*. 44.6% reported feeling peace and comfort when making *du`a*. 68.5% of women and 61.7% of men reported to have benefited from *du`a*. 16.2% of women and 11.4% of men said they occasionally benefited from *du`a*. 70.3% made *du`a* during depression. 17.9% would sometimes make *du`a* when depressed. 11.8% never made *du`a* during depression. 75.6% reported benefiting from *du`a* during depression. 20.9% reported to be uncertain. 3.5% reported not seeing its benefits. 47.6% would make *du`a* often to relieve stress. 33.9% made *du`a* sometimes to relieve stress. 8.9% reported making *du`a* rarely to relieve stress. 8.5% reported never making *du`a* during stress. 78.9% benefited from making *du`a* during difficult times. 19.2% reported to be undecided. 73.8% reported benefiting

physically from *du`a* during illnesses. 22.3% reported not benefiting physically from *du`a* (Dogan 1997, 55-97).

Some scholars of Islam deemed congregational *salat* as group exercise and asserted that they benefit a person's morale and well-being. Al-Dhahabi posited that *salat* positively affects the body and soul (Rahman 1987, 44). According to Al-Jawziyyah, if a person is spiritually strong, *salat* will have a positive effect on that person's psyche. He viewed *salat* as an exercise for the body and soul because it moves most parts of the body and decreases depression (1999, 109).

Adnan al-Tharshi investigated the relationship between prayer and healing and employed empirical methods. He found that prayer, which includes *salat*, *du`a*, recitation of Qur'an, *dhikr*, has physical, psychological and spiritual benefits (Tharshi 1992, 6). For example, a person who performs the five daily *salat* performs around 280 varied body movements, including standing, bowing 36 times, prostrating 72 times, deep breathing, neck movements, raising the hands, moving the digits, and sitting (97-123). This can be considered as light exercise, which improves blood flow, works out the muscles, and decreases calcification. He quotes from Stirk and Balaskas (1979), pointing out that the movements of *salat* are similar to the yoga movements and exercises recommended to pregnant women (67-70).

In the last few decades, spiritual healing and physical exercises like yoga and reiki have attracted many enthusiasts and become one of the fastest growing health trends. In the *Journal of the Royal Society of Medicine*, yoga was found to have health benefits that "encompass body, mind, and spirit" (Wood 1993, 254-258). Al-Tharshi compares yoga

positions to *salat* positions, showing that five positions in Islamic prayer, each having a corresponding position to yoga (1992, 116-142).

The Islamic prayer can provide the similar benefits of yoga to Muslims. Each position in prayer activates all seven *chakras*, energy fields, in the body. These correlate to the five major nerve ganglia in the spine. Because the different organs in the body are connected, moving one can affect the other. Studies point out that certain body movements can evoke emotional and physical responses, such as increased circulation after smiling. The *takbir*, raising hands to the level of the head, and *qiyam*, standing upright, together parallel the mountain pose in yoga, found to improve posture, balance, and self-awareness. Such movements help asthma and heart patients as it stabilizes blood pressure and breathing. *Ruku*, bending at ninety degree with the hands on the knees, is like the forward bend position in yoga; it stretches the muscles of the lower back, thighs, leg, calves, and allows for free circulation to the upper torso. It increases blood flow to the brain and lungs, improving brain function. The *julus*, sitting on both legs, firms the thighs, knees, and toes. Furthermore, it aids digestion, detoxification of the liver, and stimulates action in the intestine. This makes it necessary to perform the movements correctly (Tharshi 1992, 116-142).

He also mentions the work of cardiologist Ali Sabri Sayrafi at Al-Azhar University who attributes a long period of little or no exercise as one of the causal factors of heart attacks. *Salat*, he states, decreases the chances of heart attacks and benefits the circulatory system (Tharshi 1992, 220). He cited research conducted by Tawfiq Alawan, who found fewer orthopedic problems in those who pray in comparison to those who

don't pray. Also, those who pray have around 90% less calcification, the accumulation of calcium salts on body tissue which can lead to difficulty in moving joints (Tharshi 1992, 239). Because of the frequency and regularity of prayer throughout one's life, prayer's influences on the body remain strong and consistent.

### *Sufism and Healing*

Sufism, the spiritual aspect of Islam dedicated to divine love, focuses on healing through dhikr, remembrance of God, and meditation. The Sufi method of healing uses spiritual power and has been practiced by Sufis for centuries, sometimes as a daily ritual. Their methods include meditation, *dhikr*, *tefekkur*, contemplation about the universe and the life hereafter, and other modes of disciplining the heart.

Sufism focuses on a person's inner dimension, including the emotions and spiritual strengths and weaknesses. Sufis see true healing as existential, attaining a state where the human body, mind, and heart functions harmoniously with the universe (Arasteh and Sheikh 1989, 166). This is based on the Sufi concept of connectedness to the universe and the entities within due to having the same Creator. This bridges the existence of all entities and put them into a relationship of coexistence and cooperation instead of conflict.

*Dhikr* is essential for Sufi healing. Under the supervision of a Sufi master, a person would invoke certain names of God on a daily basis. This can be done by oneself or with a group. The group or person should make *dhikr* in a quiet and uncluttered room. The person would close his or her eyes, relax the body, and breathe deeply. First, he or she would think about death, then being in God's presence with his or her Sufi master.

The person would then choose a certain name or names of God mentioned in the Qur'an and repeat them over. The length of this session depends on the individual or group.

Some last as short as fifteen minutes while others can last over an hour.

Sufi thinker and philosopher, Al-Ghazali posits that healing requires a person to decrease or eliminate unhealthy passions and impressions on the psyche. Through this type of activity, a person creates healthy diversion from discomforting matters of the mind and heart (Araseth and Sheikh 1989, 173). Jalal-ad-Din Muhammad Balkhi (1207-1273), known as Rumi in the West, a Persian Muslim poet and Sufi leader, highlights inner conflicts as the source of all maladies; therefore, the cure must occur from within the individual (Nasr 1991, 174). The human psyche can remain healthy only when it is in quest of beloved God with whom is the goal of all mystical romances (32).

A similar method to the Sufi practice is recommended under current Western alternative healing by Herbert Benson, MD, Director Emeritus of Benson-Henry Institute, Mind-Body Medical Institute and Associate Professor of Medicine at Harvard Medical School. In *Timeless Healing* (1996), Benson states, "The brain seems to use the quiet time to wipe the slate clean so that new ideas and beliefs can present themselves.... a period of brain focusing to the exclusion of everyday thoughts can actually increase mental productivity" (138). His nine-step relaxation method also involves choosing a quiet room, breathing deeply, closing the eyes, repeating a word or phrase "firmly rooted in your belief system" for twenty minutes, and assuming a passive attitude by ignoring other thoughts that come (136).

In my study, I asked the participant how often he or she contemplates about the universe, death, and the life Hereafter. *Dhikr* is a part of the prayer in my research, so I also employed *dhikr* in the sessions with the participants, although it is a much shorter session than the Sufi practice. The results of the short *dhikr* sessions with the other prayers are reviewed in the Research Findings section.

### Western Sources

The relationship between health and healing has been receiving more attention in the last four decades. It is not uncommon to find an article about prayer and healing in a medical journal. It is usually approached as an alternative therapy or a supplement to medical or psychological treatment. Most studies support the contention that prayer has positive effects. There have also been other studies that found that prayer had little or no effect (even negative effects) on physical well-being. I reviewed these studies. First, the principal investigator focused on the research describing positive effects.

Spirituality has become a subject of interest in the healthcare field since it was recognized to have the potential to heal. Scientific studies over the last four decades have examined the role of both public and private religious expression on health and longevity. As of 2003, "2,200 published reports, including books, articles, dissertations, abstracts, and other works on spiritual healing, energy medicine, and intentionality. This included 121 laboratory studies; 75 randomized, controlled trials; 128 summaries or reviews; 96 reports of observational studies and non-randomized trials; 276 descriptive studies, case reports, and surveys, 1,273 other writings including opinions, claims, anecdotes, letters to

editors, commentaries, critiques, and meeting reports, and 264 selected books" (Jonas and Cawford 2003, 57).

Recently, the psychiatric profession has begun to explore the relation between spirituality and well-being; however this topic has been neglected because of a tendency toward materialistic reductionism (Cloninger 2006, 2).

Prayer and healing concern not only individual practitioners, but has been given attention at prominent organizations and research institutions. The Joint Commission on Accreditation of Healthcare Organizations (JCAHO) stated, "For many patients, pastoral care and other spiritual services are an integral part of health care and daily life. The hospital is able to provide for pastoral care and other spiritual services for patients who request them" (Puchalski 2001, 353). JCAHO requires that patients undergo spiritual assessment (Hodge 2006, 158). Other umbrella organizations of medical institutions and physicians support research exploring the relation between spirituality and health. Such institutions include the Association of American Medical Colleges, American College of Physicians, Harvard Medical School, Mayo Clinic, and Duke Clinical Research Institute.

Laboratories at Harvard Medical School established that when a person engages in repetitive prayer, word, sounds or phrases, and when intrusive thoughts are disregarded, a set of specific physiological changes ensue. There is decreased metabolism, heart rate, rate of breathing and slower brain waves (Benson 1996, 63-64).

Over five thousand members of an organization received surveys and a substantial subset (86 %) completed the survey. Almost half (47.5%) of those responding reported that they pray for their health and a substantial number of individuals (90.3%) employing

prayer to achieve good health reported that they believed that prayer improved their health.

The subset reporting that they use prayer to achieve good health, more favorable health-related behaviors, preventive service use, and satisfaction with care (O'Connor et al. 2005, 369-75).

Conducted by Ferraro and Albretch-Jensen, a national sample of non-institutionalized adults showed that respondents with frequent religious practices were associated with better health, regardless of age (1991). In an analysis of 42 different studies and examination of 125, 826 people, McCullough found a correlation between participation in religion and increased life expectancy (Kandari 2003, 465).

Jeff Levin, another leading figure in the study of spirituality and medicine, covered the topic of healing and faith in several books and articles. He concluded that prayer has positive effects on health and summarizes them in seven principles:

1. Religious affiliation and membership benefit health by promoting healthy behavior and lifestyle.
2. Regular religious fellowship benefits health by offering support that buffers the effects of stress and isolation.
3. Participation in worship and prayer benefits health through the psychological effects of positive emotions.
4. Religious beliefs benefit health by their similarity to health-promoting beliefs and personality styles.

5. Simple faith benefits health by leading to thoughts of hope, optimism, and positive expectation.
6. Mystical experiences benefit health by activating a healing bioenergy or life force or altered state of consciousness.
7. Absent prayer for others is capable of healing by paranormal or by divine intervention. (Levin 2001, 13)

Levin uses the term "theosomatic medicine"- literally, a model or view of the determinants of health based on the apparent connections between God, or spirit, and the body (2001, 163).

Another study reported a link between health and attendance of religious services. Those who did not attend religious services on a regular basis had 1.87 times the risk of death compared to those who did attend (Hummer et al. 1999, 273-285). An inverse relationship between the number of years of attending religious services and smoking was discovered in a study of 3,968 persons age 65 and older in North Carolina. Higher participation in religious activities at one wave predicted lower rates of smoking at future waves (Koenig 1998, 210). Since smoking is highly detrimental to health, a relationship between religious activity and better physical health may be associated with altered patterns of smoking behavior. In a similar study, frequent church attendees were noted to have stronger immune systems than less frequent attendees (1997, 246). Members in religious kibbutzim lived longer than those in secular kibbutzims, in spite of social support and conventional health behaviors (Kark et al. 1996, 345).

There are many studies supporting the benefits of prayer. However, there are no clear regulations as to how to administer tests regarding prayer.

### Insignificant Negative Effects

Although research efforts are much more likely to focus on the positive effects of prayer, negative effects have been observed, although they are fewer in comparison to the heavily researched positive effects.

Misunderstanding or ignorance of religious practices in healing can sometimes lead to negative consequences. Fatalistic thinking, use of amulets, and superstitious practices by individuals, including charlatans and some faith healers, carry a large potential for adverse psychological and physical consequences. For example, a person may use risky remedies or not seek medical treatment, and may associate their sicknesses with guilt and punishment (Ismail et al. 2005, 26). However, it is not prayer per se, but rather theological misunderstanding of illness that causes health risks, such as not seeking medical treatment or relying on charlatans.

#### *Fatalistic Thinking*

The doctrine of fatalism denies free will and leads to inaction and passive acceptance of events. Research has confirmed that fatalism is correlated with helplessness, hopelessness, anxious preoccupation, and cognitive avoidance (Cotton et al. 1999, 429). In the Muslim world, fatalism arose from the misinterpretation and

misunderstanding of the context of some Qur'anic verses, such as "*And you can not will (to do so) God will, the Lord of worlds*" (81:29). In order to correctly interpret a verse like this one, a person must have a deep understanding of Qur'an and Qur'anic sciences. Furthermore, without investigating the causes of their misfortunes, some Muslims accept whatever occurs as God's will. In the case of illnesses, they ignore preventive care and jeopardize their health, relying on prayers alone while denying the role of free will. Belief in God's will is a core principle of Islamic faith. However, "to assume this equates with fatalism and a passive attitude towards illness and health is oversimplistic" as research shows that such a belief did not prevent people from searching for causes for their illness or taking steps to seek a cure (Ismail et al. 2005, 30).

Fatalistic thinking is contradictory to the Qur'anic verses and the *sunnah*, the tradition of Prophet Muhammad, peace be upon him, peace be upon him. In the Qur'an, it says, "... *and make not your own hands contribute to (your) destruction, but do good; for Allah loves those who do good*" (2:195). There are many *hadiths* regarding this topic. A few are written below:

Prophet Muhammad, peace be upon him, was walking with his companions. Upon coming to an insecure wall, he sped past it. The companions told the Prophet, "Whatever is predestined will happen, so why are you running?" To which the Prophet replied, "It is my responsibility to save myself from hazard." (Canan 1993, 133)  
Treatment is also a part of predestination (132).

When the Prophet heard that people in a certain village contracted a contagious disease, he ordered that the villagers stay in the village and outsiders stay outside, thus quarantining the sickness. The Prophet made seeking treatment obligatory on ill persons (Jawziyyah 1999, 25)

Based on these verses and traditions of Prophet Muhammad, peace be upon him, Islamic scholars regard seeking treatment as an obligation physically and *sunnah* spiritually (Rahman 1987, 48).

Usame bin Shuraik narrated that "I was with the Prophet when the Bedouins came to him and said 'O Messenger of Allah, should we seek medicine?' He said, 'Yes, O slave of Allah, seek medicine, for Allah has not created a disease except that he has also created its cure, except for one illness.' They said 'What was that?' He said 'Old age'" (Jawziyyah 1999, 25).

Al-Dhahabi points out the command of Prophet Muhammad, peace be upon him, "Get medical treatment" as proof that seeking treatment is meritorious (Dhahabi 1996, 103).

Fatalistic thinking is more common among the illiterate and less educated in Muslim communities. Yet it is not prayers in itself that causes harm, but the misunderstanding of predetermination that keeps the people from seeking proper medical treatment.

#### *Amulets (Ruqya) and Talismans*

Amulets and talismans are objects meant to bring protection and good luck. They can be found in many faith traditions and cultures. In the Muslim world, people who are uneducated or less educated about religion use amulets that may contain Qur'anic verses, prayers, and symbols. Some people will not seek out modern therapeutic interventions; rather, they will rely on the amulets as a source of healing and protection from the evil powers that cause harm.

Prophet Muhammad, peace be upon him, had, at first, forbidden all amulets for fear that they contained certain words that compromised the rigorous monotheism of Islam by invoking spirits and other powers besides God (Rahman 1987, 88). Subsequently, he allowed their use but only if their contents were verses or hadiths and the person expected healing from God and not from the amulet itself (Jawziyyah 1999, 29). The verses or hadiths on the amulets can then be read as prayers. Again, the prayers in the amulets are not the source of negative results, but rather it is the reliance on amulets as possessing curative power that may lead to an adverse outcome.

### *Superstition and Folk Culture*

Believing illnesses to be inflicted spiritually (e.g., through black magic, ill omens, and curses), some people turn to *du`a* as the only method of healing, rather than seeking physical treatment. An alternative method is seeking assistance and advice from charlatans, *pirs* (respected and knowledgeable elders residing in India), sheiks (Middle East), and hocas in Turkey and the Balkans (Adib 2004, 698). Unfortunately, most of these practitioners lack medical training, and some become involved in superstitious practices that contradict Islamic norms and values such as recommending the use of amulets. Some spiritual healing "experts" have used prayers and Qur'anic verses in their own healing practices, sometimes harming the patient physically. One example is the use of "blessed" water that contains printed Qur'anic verses or special prayers and may generate an intoxicating effect (701). Some healers even apply electric shocks to cure illness (Adib 2004, 699-701). There are a few secular Muslims, with little knowledge of

or regard for Qur'anic injunctions and Prophetic statements in the medical sphere, who also turn to superstitious practices alongside modern medicine.

In some Muslim countries, the tree nearest to a saint's grave is deemed to be sacred and holds the powers of the saint (Dafni 2006, 7). The ritual starts with a prayer to the saint, requesting spiritual intervention, and ends with tying a cloth to the tree. This practice does not benefit a person's health. Such practices are taken as Islamic. Muslim theologians and jurists classify these as *bid'ah*, innovation, while others go as far as calling them *shirk*, polytheism. In the Qur'an, some trees are used for God's oaths (Chapter 95), but this does not indicate that trees are sacred.

Another similar practice includes ascribing illness to the power of the evil eye, ill omens, and dark magic ranging from fortune-telling, *zar* ceremonies, and *sihr al-mahabba*, or love sorcery (Sengers 2003, 259-265). These are usually carried out with the use of *du`as* and other prayers.

Due to lack of healthcare and ignorance, some uneducated Muslims turn to charlatans or folk culture to cure the illness. Sengers *Women and Demons* (2003) provides ample detail about this choice of healing. Some of these alternative healers recommend the ill person to seek physical treatment, while others only offer prayers or make amulets.

At the other end of the spectrum, there are some secular Muslims who prefer to rely completely on modern medicine. The vast majority of Muslims, however, fall somewhere between these two extremes. They believe that prayer, supplications, Qur'anic

recitation, and *dhikr* (remembrance of Allah) play an important role in healing and recovery, but they also recognize the benefits of modern medicine (Yousif 2002, 5).

If modern medical treatments become more available and accessible to the poor and uneducated in the Muslim world, the reliance on cures through folk culture will decrease greatly.

### Summary

In this section, the principal investigator reviewed the literature focusing on the relation between prayer and healing theologically and empirically. I summarized the literature: the Qur'an and *sunnah* of Prophet Muhammad, peace be upon him, and historical and current Islamic sources. The themes important to this study from this review are:

- 1) it is *fard*, a religious obligation, for Muslims to seek proper medical treatment;
- 2) prayer is strongly recommended alongside physical treatment;
- 3) prayer has spiritual, physical, psychological, and emotional benefits;
- 4) prayer generally gives comfort and reduces fears and anxieties;
- 5) some people misunderstand the concept of prayer and healing in Islam and harm themselves through avoiding medical treatment or using uneducated and uncontrolled charlatans healing methods.

The relationship between prayer and healing needs further study. There are few empirical studies, specifically in the area of medicine. The physical effects of regular

prayer are touched upon, but need further research in order to develop a strong theory.

Further studies should use scientific methods to examine the effects of prayer on healing.

## **CHAPTER III**

### **METHODOLOGY**

#### **Introduction**

This chapter explains the methodology used for this research study. This research was conducted at Brigham and Women's Hospital, a Harvard Medical School-affiliated institution in Boston, Massachusetts. The chapter includes the following subsections: 1) Research Design; 2) Participants; 3) Description of Sessions; 4) Data Analysis; and 5) Chapter Summary.

#### **Research Design**

The goal of this research study is to investigate the physical and spiritual effects of prayer on Muslim patients. This was done by a preliminary (Appendix C) and post-test survey (Appendix F) and recording of vital signs by the principal investigator. The data was analyzed by a team, which includes the principal investigator, as well as Imam Talal Eid, ThD, Wayne M. Dinn, neuropsychological researcher, Burak Alptekin, MD.

Sixty adult Muslim inpatients were recruited from the patient population at Brigham and Women's Hospital (BWH). The principal investigator administered a demographic and preliminary self-assessment survey before the prayers and a post-test survey was completed after the prayers. The questions on the surveys were asked by the principal investigator.

The pre-test survey includes five demographic questions and 25 questions that assess the spiritual level of the patients. This was completed at the beginning of the first session. The post-test survey contains 19 questions and was completed after the prayers in each session. Both surveys were used to compare the patient's emotional and spiritual state before and after the prayer and control conditions.

The surveys were developed by the principal investigator in the light of Islamic sources. The Qur'an and *hadith* mention the attributes of a strong believer and spiritual person. These are general aspects of Islamic practices such as *salat* (prayer), *du`a* (supplication), *dhikr* (remembrance), fasting, congregational prayer, pursuit of religious knowledge, reading and recitation of Qur'an, contemplation of the Hereafter, and charity.

In the first session, the patient recited or read certain short chapters and verses of Qur'an, invocation, and supplication of Prophet Muhammad to the patient. If the patients desired or were unable to recite, the principle investigator recited the certain verses and prayers by their side. In the second session, a non-religious text was read to serve as a control to determine if the *du`as* were affecting the patient. The non-religious text was in Arabic, just like the *du`as* and invocations, but did not contain religious references. The selected texts were short stories written in a simpler Arabic meant for learners of the Arabic language.

These general aspects were chosen based on the books of Ibn al-Qayyim al-Jawziyyah (1291-1350), *Healing with the Medicine of the Prophet* (1999), Abu Hamid Muhammad ibn Muhammad Al-Ghazali (1050-1111), *Ihyay-I Ulumuddin* (The Revival of Religious Science 1976), Said Nursi (1880-1960), *The Letters*, Fethullah Gulen,

*Questions and Answers about Faith* (1993), and George S. Stavros, *An Empirical Study of the Impact of Contemplative Prayer on Psychological, Relational and Spiritual Wellbeing* (1997).

The patients' answers on the surveys were used to measure their level of religiosity and spirituality and emotional conditions before and after the test. The preliminary and post-test surveys have questions that can be separated into two categories: first; those that ask about open religious practices like *salat* (daily prayers), *sadaqah* (almsgiving), *sawm* (fasting), and other practices; second, those that ask about beliefs and emotions. Wayne M. Dinn, neuropsychological researcher, assisted with data analysis.

The spiritual condition of the patients was assessed by their responses to the survey questions and evaluated at the end of data collection by Imam Talal Eid, ThD., and by the principal investigator, independently of Imam Eid. Each patient's spiritual conditions before the recitation or readings of prayers and nonreligious texts were compared. The principal investigator finalized the spiritual evaluation based on both assessments and assigned each patient a number between zero and ten, with ten being the highest level of spirituality.

The surveys were used to determine the level of religiosity and spirituality, the effects of prayer, and the theological approach of the patient to spirituality and religion. The purpose of recording vital signs is to compare the patient's physical state before and after the prayer and control conditions, and determine whether there was an association between prayer and changes in the patient's physical state

The physical conditions of patients were monitored and recorded before and immediately after the prayer sessions by the principal investigator. The vital signs from the pre-test recording and post-test recording were compared. The recorded and compared vital signs were then examined by Burak Alptekin, M.D., at Beth Israel Deaconess Medical Center (BIDMC). He explained the significance of the differences in the comparisons.

This research followed the Health Insurance Portability and Accountability Act (HIPAA) regulations. The study was approved by the Institutional Review Board (IRB) of Boston University and by Partners Human Research Committee, an umbrella organization of thirteen health institutions in Massachusetts, including BWH. Potential participants were asked to read and sign the informed consent statement (Appendix A). To protect the privacy of participants, a numerical identification code was used for surveys and questionnaires.

### **Participants**

The study was initiated after obtaining patient consent and permission from the health institution. Sixty adult Muslim inpatients ages 18-85 were recruited at Brigham and Women's Hospital (BWH). The participants who were recruited were part of my chaplain rounds at BWH. As the Muslim chaplain, the principal investigator has access to the list of patients who were recorded as Muslims patients upon their admission to the hospital. The principal investigator visited these patients, and at the end of the visit, the

principal investigator told the patient about the study. Patients who agreed to participate were asked to read and sign the informed consent statement. The informed consent statement provides a description of the study design and how the principal investigator used information acquired during interactions with the participant.

### **Description of Sessions**

After the patient read and signed the consent statement, she or he answered the demographics questions on the surveys that asked for the patient's name, gender, age, marital status, and education. In addition, the patient answered the survey questions designed to assess the patient's level of religiosity and spirituality.

Before engaging in the prayer, vital signs were recorded by the nurse or principal investigator. Vital signs included body temperature, blood pressure, and respiratory rate. The principal investigator was trained to read and record vital signs by BWH staff.

The patient recited or read certain verses of Qur'an, invocation, and supplication of Prophet Muhammad, peace be upon him, when he or she desired. These verses, invocations, and supplications were selected from the *sunnah* of the Prophet related to healing. If the patient did not want to or was not able to recite or read the Arabic prayers, the principal investigator recited or read to the patient at the bedside. The selection of verses, invocation, and supplication are listed below and full texts are in Appendix D:

- The verses from the Qur'an are the entire chapters of *Al-Fatiha*, the Opening (1:1-7), *Ayatul Kursi*, the Verses of the Throne (2:256), *Al-Falaq*, the Daybreak (113:1-5), *An-Naas*, Mankind (114:1-6).
- Invocations include *La ilaha illallah* (there is no God but God) 33 times. *Ya Shafi ya Allah* (O Healer, O God) will be said 33 times.
- The supplication of Prophet Muhammad, peace be upon him, for this study is *Allahumma inni asalukal afwa wal afiyata fid-dunya wal akhira. Allahumma inni asalukal afwa wal afiyata fii deeni wa dunyaya wa ahli wa mali. Allahumma ashfii bi jahin nabiyyika salla Allahu alayhi wasallam.*

"O our Lord, I ask from you forgiveness and good health in this world and the Hereafter. O our Lord, I ask forgiveness and safety in my religion and my life and my family and my possessions. O our Lord, heal me for the sake of Your Messenger, may God bless him."

After these prayers, vital signs were recorded again in each session. The first session lasted about 20 minutes in total.

The second session was conducted a few hours after the first session. In the second session, the patient read a non-religious text (see Appendix E) or let the principal investigator read if he or she wished. The text is a two-page story that does not consist of religious or spiritual references or religious teachings. This is the control condition that allowed the team to compare the patient's response to the religious and non-religious texts.

Two tests were performed daily for two to five days with several hours between each. Because the times of the sessions were dependant on the condition of the patient, there was no certain time for the sessions in general. If the prayer test was performed first, and the reading test was performed second on one day, then the next day, the reading test would be conducted first, and prayer test would be second.

### **Data Analysis**

The recordings of vital signs were examined by Burak Alptekin, M.D. By comparing the pre-test and post-test vital signs recordings, he wrote whether the differences, if any, between pre-test and post-test conditions, were "positive", "negative", or "neutral".

Wayne M. Dinn, neuropsychological researcher, assisted with data analysis. He looked at the answers given to questions that did not ask about religious practice or spirituality. He compared patients' pre-test emotional conditions to post-test emotional conditions.

The patients' answers to survey questions were used to measure their level of religiosity and spirituality. At the end of the data collection, Imam Talal Eid, evaluated the responses and rated the patient's religious level based on the degree in which the patient fulfilled the *fard*, obligatory practices, *sunnah* of Prophet Muhammad, which are recommended practices, and the frequency of performing both practices. Since *fard* practices are a priority in Islam, they are given more importance in rating. Both Imam Eid

and the principal investigator evaluated the survey. However, each of the evaluations was independently completed. After Imam Eid completed his evaluations, as the principal investigator, the principal investigator finalized the spiritual evaluation based on both assessments. When there was a difference in the ratings, the mean number was chosen. The principal investigator used the results from the team's analysis of the vital signs and surveys to write the results of his study on the effects of prayer on Muslim patients' well-being.

### **Summary**

This chapter explained the rationale behind the research design and survey questions. The questions that measured religiosity and spirituality were devised in light of the Qur'an, hadith, and scholarly books. The selected prayers were chosen by the recommendations of Prophet Muhammad and later influential scholars. Vital signs were employed to assess physical reactions. Three professionals were part of the research team to further investigate and understand the patient's conditions and the effects of prayer. This increases the accuracy of the research.

## **CHAPTER IV**

### **RESEARCH FINDINGS**

#### **Introduction**

The fundamental question that guided this study was how prayer affected Muslim patients' well-being. In this chapter, the principal investigator presented the empirical findings, which include the results of preliminary surveys, post-test surveys, and vital sign recordings in detail. The Findings section has been split into two parts. The first part consists of graphs and percentages to display results for the surveys. This part is a basic data presentation geared towards ministers and divinity students. The second part consists of organized data, such as average ratings and standard deviation, and includes the vital signs, which are not included in the first part, presented in tables and histograms for the organized data. For this section, Statistical Package for the Social Sciences (SSPS) was used to organize and measure data for statistical purposes.

#### **Part I**

##### **The Participants**

The principal investigator proposed participation to 68 adult Muslim in-patients to different units at Brigham and Women's Hospital in Boston, Massachusetts. 65 in-patients accepted to participate and signed the consent form (Appendix A). Three patients turned down participation. Five in-patients were discharged from the hospital before the

minimum four trials were conducted. Coincidentally, there were an equal number of men and women. The patients' ages ranged from 18-84 with a mean age of 40.15.

76.6% (n=46) of patients were married, 11.6% (n=7) were single, 6.6% (n=4) were divorced, and 5% (n=3) were widowed.

One respondent had a PhD. 10% of participants (n=6) had a masters degree. 41.6% (n=25) had undergraduate degrees. 36.6% (n=22) had high school diplomas. 3.3% (n=2) completed up to middle school alone. 5% (n=3) completed elementary school alone. One respondent was illiterate. The mean educational level of the sample was 13.8 years (SD = 3.6).

Respondents comprised 25 nationalities. There were six Americans, six Pakistanis, six Somalians, five Turks, four Saudi Arabians, four Sudanese, and three Indians. The remaining 18 nationalities comprised of two or one person(s) each. Out of 60 participants, 28.3% (n=17) were professionals, 15% (n=9) were blue collar workers, 11.6% (n=7) were retired, 8.3% (n=5) were students, and 36.6% (n=22) were housewives or women on maternity leave.

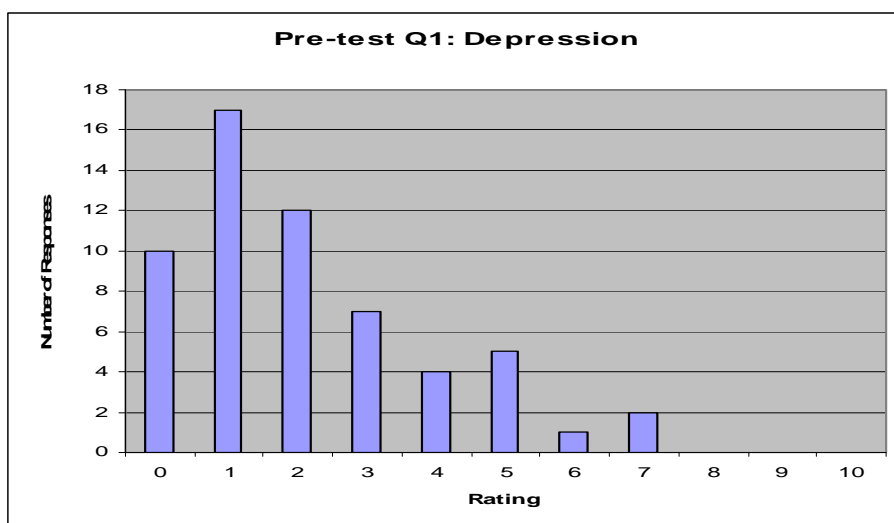
Patients were afflicted with a broad spectrum of conditions including cancer, cardiac disease, obstetrical conditions, orthopedic disease, and patients undergoing surgical procedures. A preliminary survey was used to determine the patients' level of religiosity or spirituality (from an Islamic perspective). The preliminary survey was also used to assess the intensity of depressive and anxiety symptoms as well as related variables reflecting the patient's emotional well-being (such as the degree of despair and loneliness).

All patients provided written informed consent. The Institutional Review Board at Boston University and the Partners Human Research Committee approved the study.

### Results of the Preliminary Surveys

The purpose of the preliminary survey was to evaluate the religious, spiritual, and emotional conditions of the participant. It consisted of 25 questions: 17 asked the participant to respond in terms of a rating of zero through ten, five required a "yes" or "no" answer, and three were multiple-choice. Answers are based on verbal responses to the principal investigator who asked the questions.

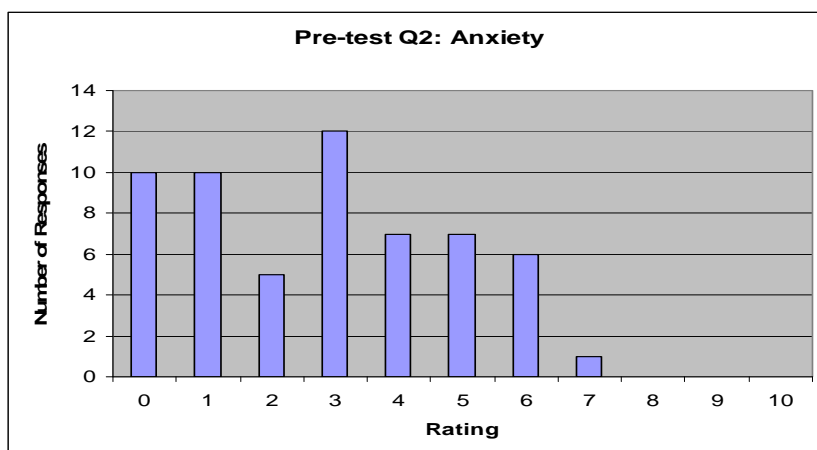
1. Rate your level of depression (0 is not depressed and 10 is most depressed)



Out of 60 patients, 28.3% gave a rating of 1 for depression, 20% gave a rating of 2, 16.6% gave a rating of 0, 11.6% gave a rating of 3, 8.3% gave a rating of 5, 6.6% gave a

rating of 4, 3.3% gave a rating of 7, 1.6% gave a rating of 6, and 3.3% did not respond to the question.

2. Rate your level of anxiousness (0 is not anxious and 10 is most anxious)

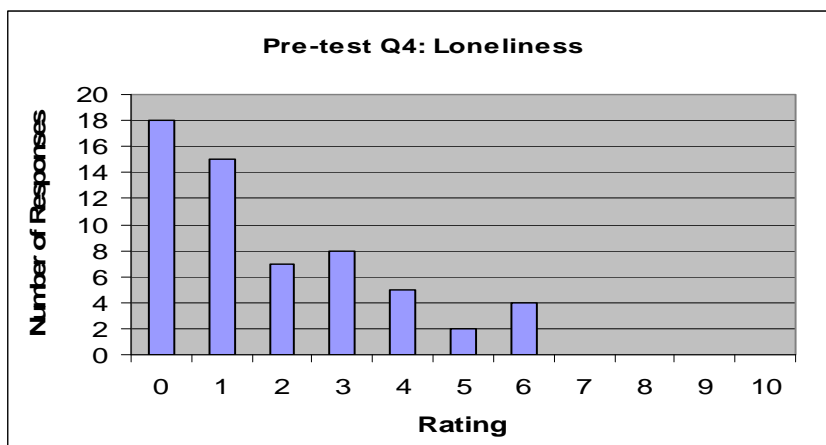


Out of 60 respondents, 20% gave a rating of 3, 16.6% gave a rating of 1, 15% gave a rating of 0, 13.3% gave a rating of 4, 11.6% gave rating of 5, 10% gave a rating of 6, 8.3% gave a rating of 2, 3.3% gave a rating of 7, 1.6% did not respond to the question/

3. Rate your level of anger towards God (Yes or No)

85% responded “No”, 8.3% responded “Yes”, and 6.6% did not respond. The high percentage of “No” responses may result from the Islamic principle of constant gratitude towards God.

4. Rate your level of loneliness (0 is not lonely and 10 is extremely lonely)

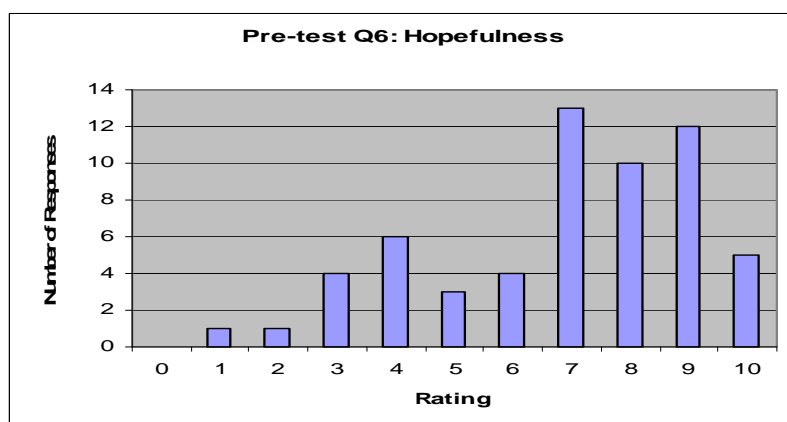


30% gave a rating of 0, 25% gave a rating of 1, 13.3% gave a rating of 3, 11.6% gave a rating of 2, 8.3% gave a rating of 4, 6.6% gave a rating of 6, 3.3% gave a rating of 5, and 1.3% did not respond.

5. Do you see yourself as submissive to the will of God? (Yes or No)

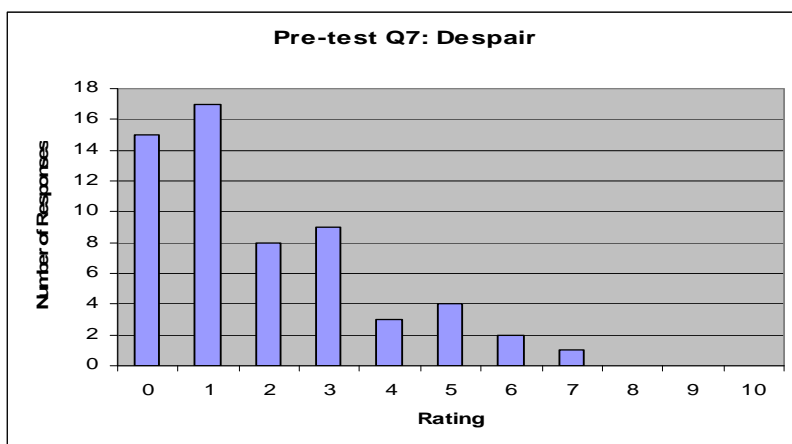
85% responded “Yes”, 11.6% said “No”, and 3.3% did not respond.

6. Rate your level of hopefulness (0 is not hopeful and 10 is extremely hopeful)



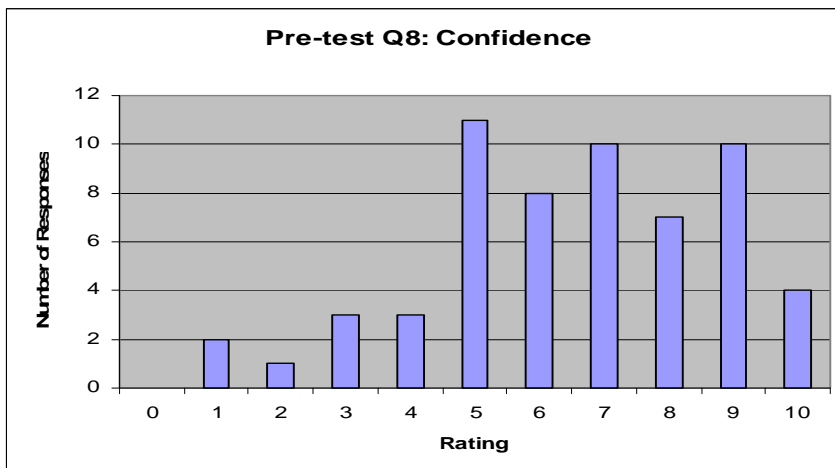
21.6% gave a rating of 7, 20% gave a rating of 9, 16.6% gave a rating of 8, 10% gave a rating of 4, 8.3% gave a rating of 10, 6.6% gave a rating of 6, 6.6% gave a rating of 3, 5% gave a rating of 5, 1.6% gave a rating 2, 1.6% gave a rating of 1, and 6.6% did not respond.

7. Rate your level of despair (0 is not despairing and 10 is having extreme despair).



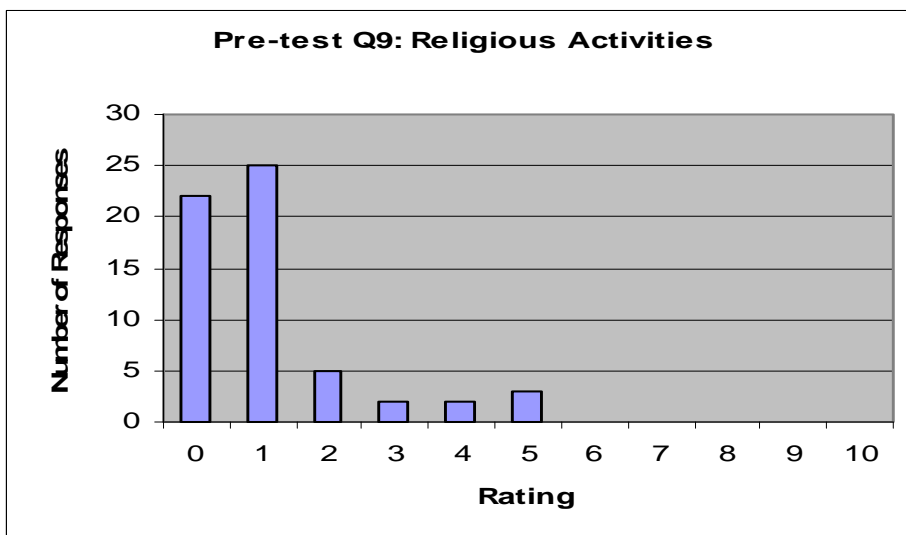
28.3% gave a rating of 1, 25% gave a rating of 0, 15% gave a rating of 3, 13.3% gave a rating of 2, 6.6% gave a rating of 5, 5% gave a rating of 4, 3.3% gave a rating of 6, 1.3% gave a rating of 9, and 1.3% did not respond.

8. Rate your level of confidence (0 is not confident and 10 is extremely confident).



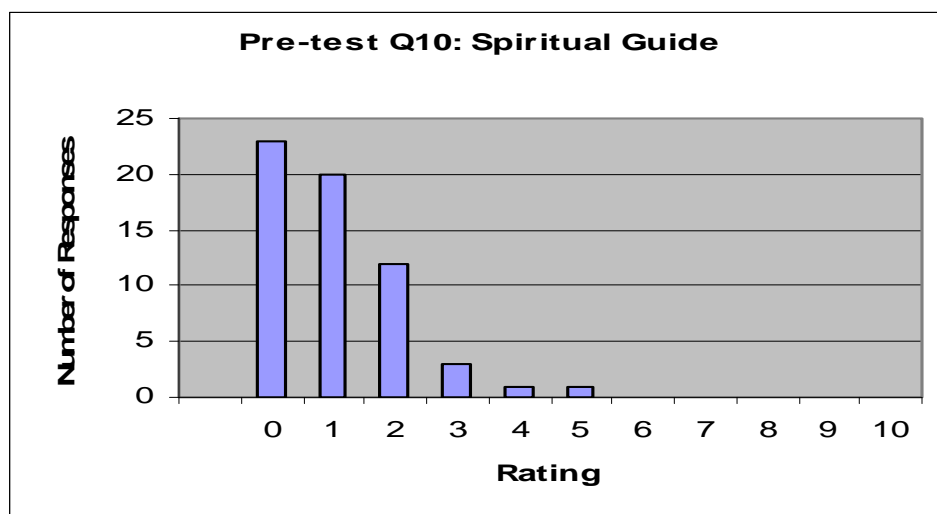
18.3% gave a rating of 5, 16.6% gave a rating of 9, 16.6% gave a rating of 7, 13.3% gave a rating of 6, 11.6% gave a rating of 8, 6.6% gave a rating of 10, 5% gave a rating of 4, 5% gave a rating of 3, 3.3% gave a rating of 1, 1.3% gave a rating of 2.

9. Rate your level of participation in religious activities in a week (0 is no participation and 10 is very active participation)



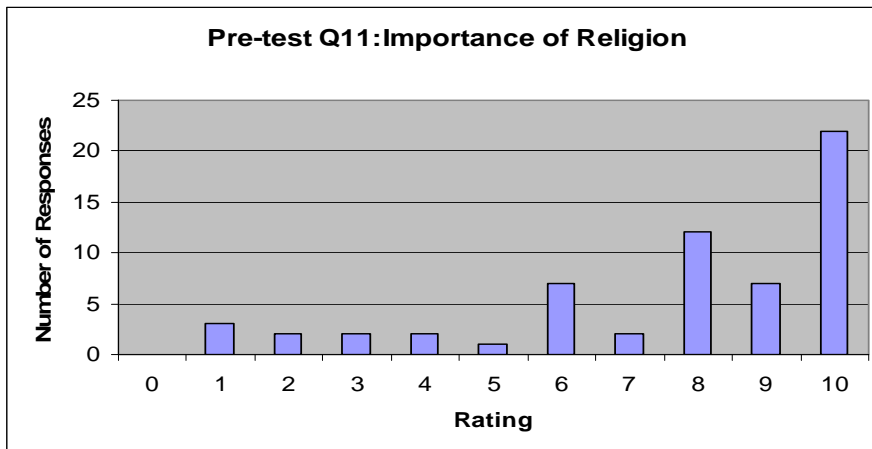
41.5% gave a rating of 1, 36.6% gave a rating of 0, 8.3% gave a rating of 2, 5% gave a rating of 5, 3.3% gave a rating of 4, 3.3% gave a rating of 3, and 1.6% did not respond.

10. Rate how often you consult a spiritual guide or mentor in a month (0 is no consulting and 10 is often consulting)



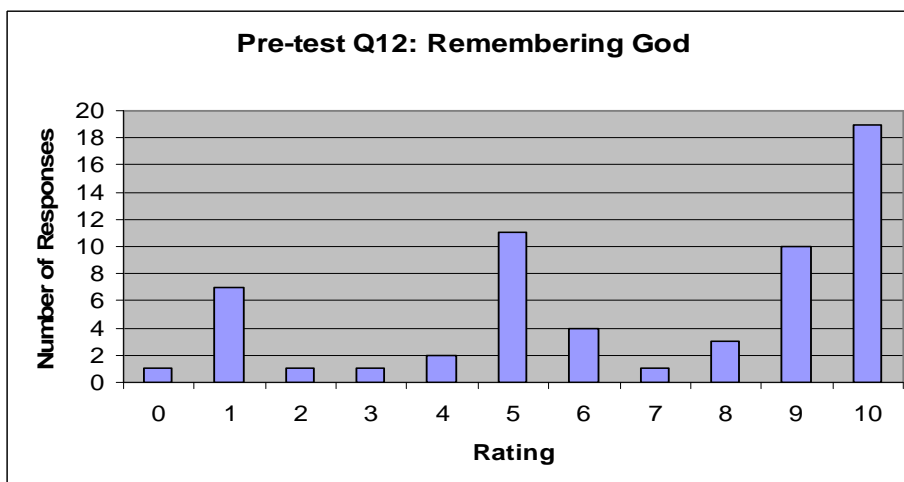
38.3% gave a rating of 0, 33.3% gave a rating of 1, 20% gave a rating of 2, 5% gave a rating of 3, 1.3% gave a rating of 4, and 1.3% gave a rating of 5.

11. Rate how important religion is to your life (0 is not important and 10 is extremely important)



36.6% gave a rating of 10, 20% gave a rating of 8, 15% gave a rating of 9, 11.6% gave a rating of 6, 5% gave a rating of 1, 3.3% gave a rating of 7, 3.3% gave a rating of 4, 3.3% gave a rating of 3, 3.3% gave a rating of 2, and 1.3% gave a rating of 1.

12. Rate how often you remember God (0 is never remembering God and 10 is always remembering God)

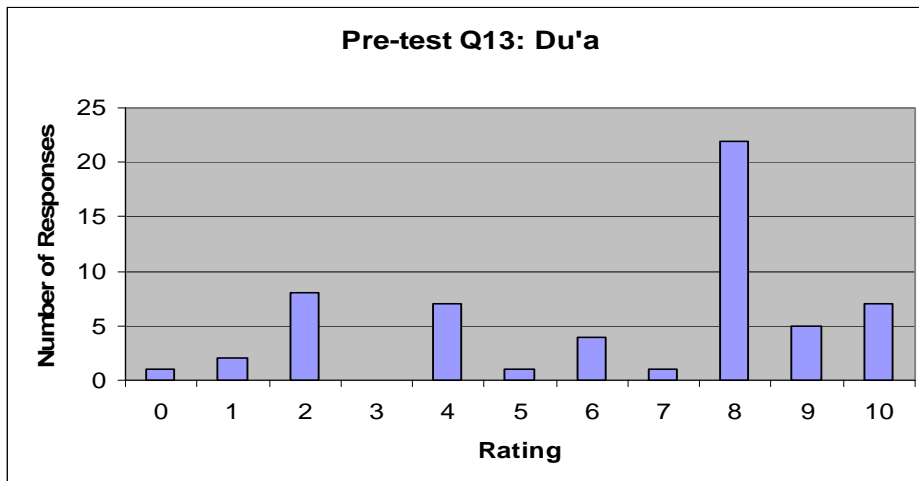


31.6% gave a rating of 10, 18.3% gave a rating of 5, 16.6% gave a rating of 9, 11.6% gave a rating of 1, 6.6% gave a rating of 6, 5% gave a rating of 8, 3.3% gave a rating of 4,

1.3% gave a rating of 3, 1.3% gave a rating of 7, 1.3% gave a rating of 2, and 1.3% did not respond.

13. When do you pray (du'a)? (Check all that apply)

- a) During difficult times
- b) To express gratitude
- c) During Ramadan
- d) Fridays
- e) A few times a day
- f) Never
- g) Other \_\_\_\_\_



Each selected answer is worth 2 points, with the exception of choice g, which equals one point. 36.6% had a total of 8, 13.3% had a total of 2, 11.6% had a total of 10, 11.6% had a total of 4, 8.3% had a total of 9, 6.6% had a total of 6, 3.3% had a rating of 1, 1.3% had a rating of 7, 1.3% had a rating of 0, and 3.3% did not respond.

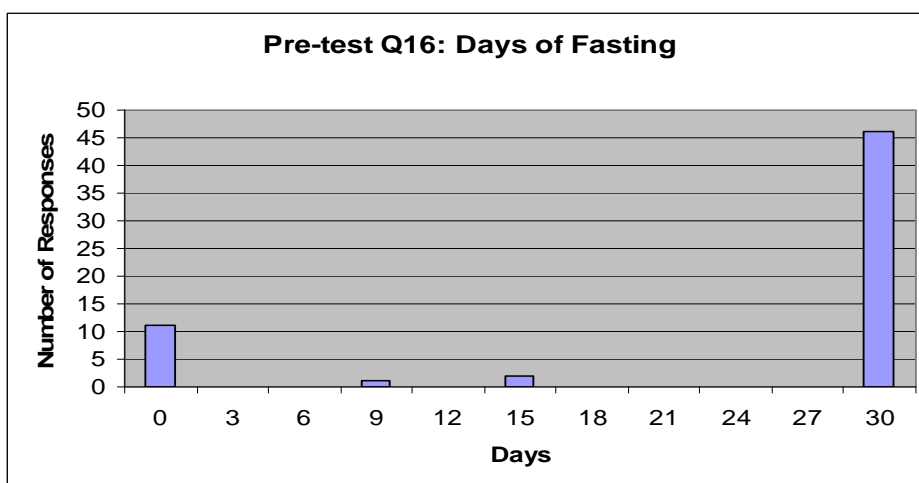
14. Do you pray (salat) five times a day? (Yes or No.)

51.6% responded “Yes” and 48.3% responded “No”.

15. Do you pray (salat) only during Ramadan? (Yes or No)

71.6% responded “Yes” and 28.3% gave a rating of “No”.

16. How many days do you fast in Ramadan? (Rate 1-30 days, or “can’t fast”)



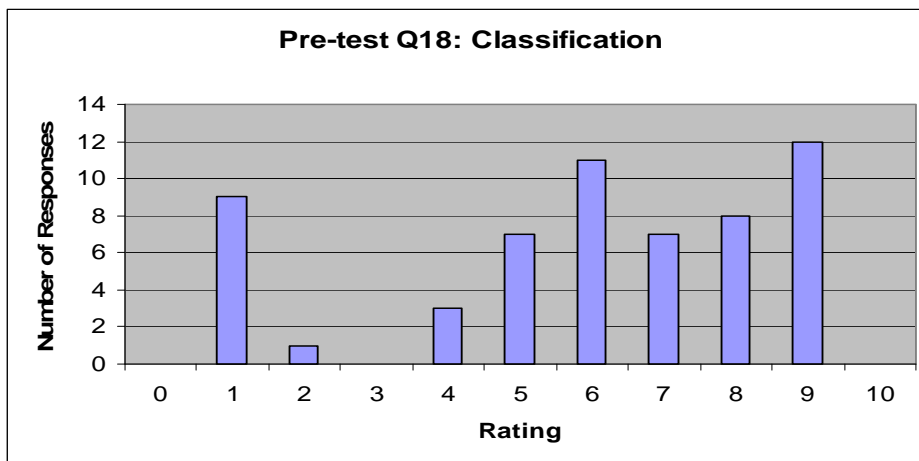
76.6% fasts for 30 days, 18.3% does not fast, 3.3% fasted for 15 days, and 1.3% fasted 9 days.

17. Do you go to mosque for prayer (salat) on a weekly basis (Yes or No)

53.3% responded “Yes” and 46.6% gave a response of “No”.

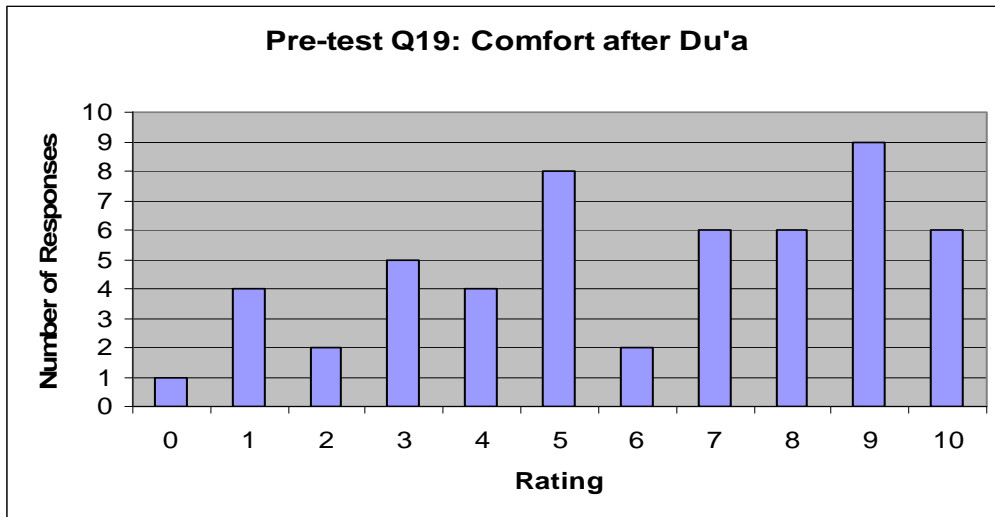
18. How do you classify yourself as a Muslim?

- a) Religious (8-10)
- b) Spiritual (6-7)
- c) Sometimes practicing (3-5)
- d) Non practicing (0-1)



20% gave a rating of 9, 18.3% gave a rating of 6, 15% gave a rating of 1, 13.3% gave a rating of 8, 11.6% gave a rating of 7, 11.6% gave a rating of 5, 5% gave a rating of 4, 5% gave a rating of 0, 3.3% did not respond, and 1.3% gave a rating of 3.

19. Rate how much comfort you feel when you pray and make dua (0 is no comfort and 10 is a lot of comfort)



15% gave a rating of 9, 13.3% gave a rating of 5, 10% gave a rating of 10, 10% gave a rating of 8, 10% gave a rating of 7, 10% did not respond, 8.3% gave a rating of 3, 6.6% gave a rating of 4, 6.6% gave a rating of 1, 3.3% gave a rating of 6, 3.3% gave a rating of 2, and 1.3% gave a rating of 0/

20. When you or someone from your family gets sick:

- a) You seek medical treatment only.
- b) You seek medical treatment and pray
- c) Pray only
- d) Neither seek medical treatment nor pray
- e) Other \_\_\_\_\_

85% responded b and 15% responded a.

21. Do you give zakat (alms)? (Yes or No)

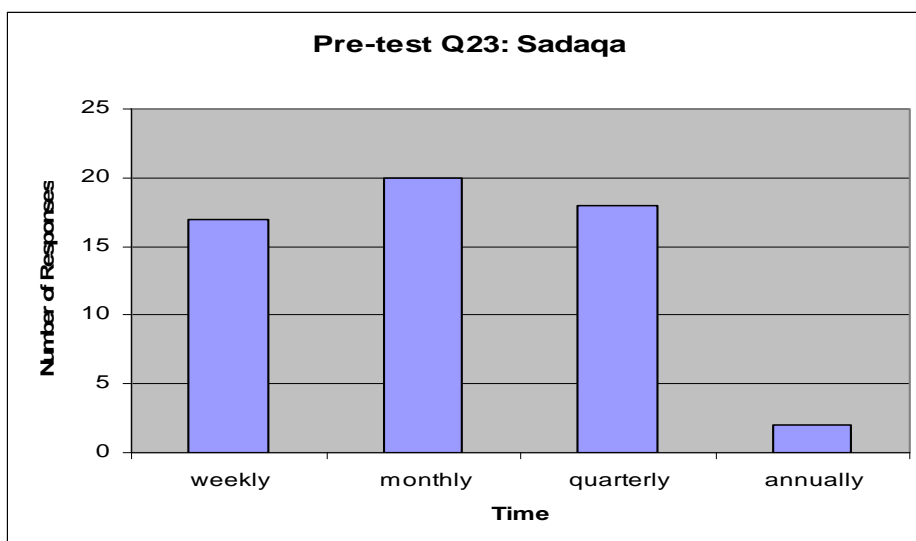
65% responded “Yes”, 33.3% responded “No”, and 1.3% did not respond.

22. So you give sadaqa (donations) (Yes or No)

95% responded “Yes”, 1.3% responded “No”, and 1.3% did not respond.

23. How often do you give sadaqa?

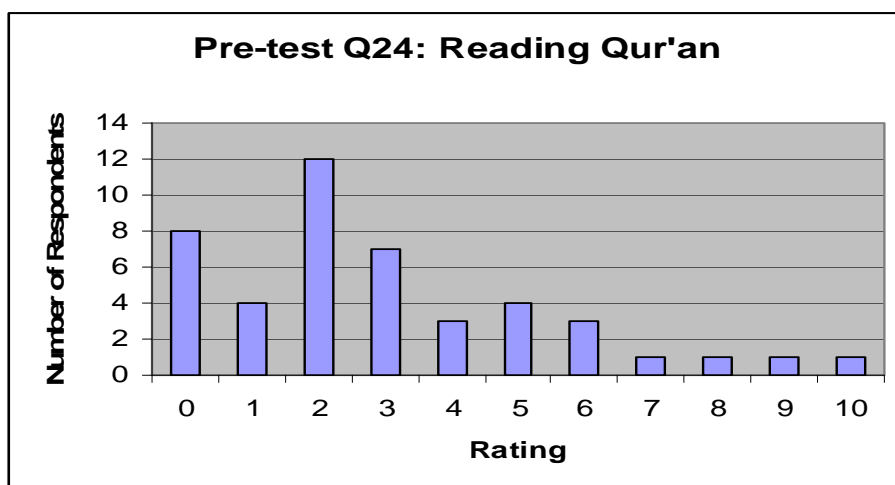
- a) once a week
- b) once a month
- c) quarterly
- d) other \_\_\_\_\_



33.3% answered b, 60% answered c, 56.6% answered a, 5% did not respond, 3.3% answered d.

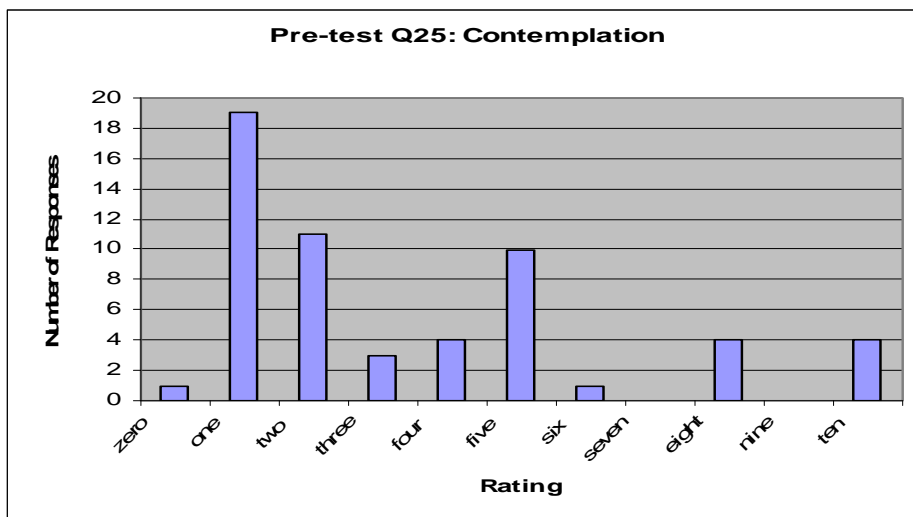
24. How often do you read the Qur'an or religious books? (0 is never and 10 is daily).

- a) Daily (8-10)
- b) Few times a week (5-7)
- c) Weekly (2-4)
- d) Monthly (1)
- e) Never (0)
- f) Other (i.e. can't read Arabic) \_\_\_\_\_



20% gave a rating of 2, 11.6% gave a rating of 3, 13.3% gave a rating of 0, 5% gave a rating of 4, 6.6% gave a rating of 5, 5% gave a rating of 6, 1.3% gave a rating of 7, 1.3% gave a rating of 8, 1.3% gave a rating of 9, 1.3% gave a rating of 10 and over, and 25% do not know how to read.

25. Rate how often you contemplate death and the Hereafter on a daily basis (0 is never and 10 is very often)



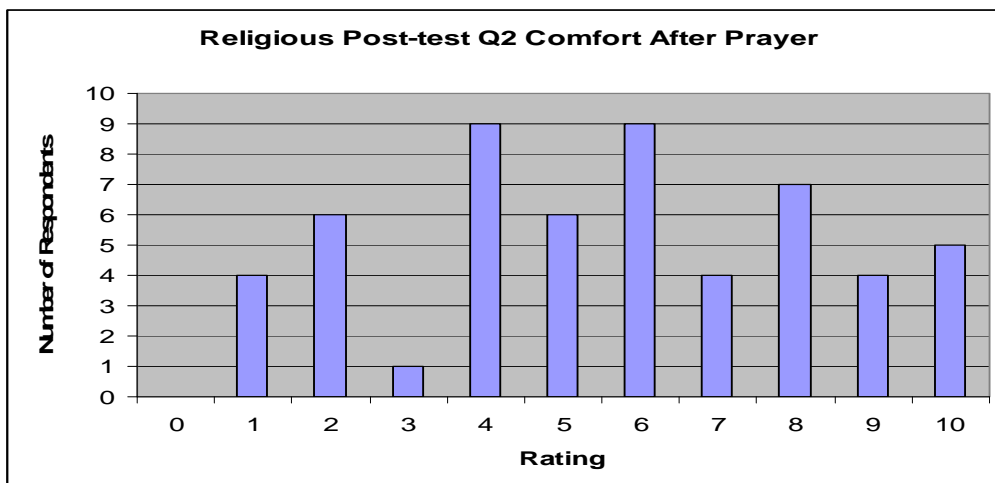
31.6% gave a rating of 1, 18.3% gave a rating of 2, 16.6% gave a rating of 5, 6.6% gave a rating of 10, 6.6% gave a rating of 8, 6.6% gave a rating of 4, 6.6% did not respond, 5% gave a rating of 3, and 1.3% gave a rating of 6.

#### Results of Religious Post-Test Surveys

1. Do you feel more comfort after the prayer? (Yes or No)

83.3% responded Yes, 6.6% responded No, and 10% did not respond.

2. How comfortable do you feel? (0 is not comfortable at all and 10 is very comfortable)

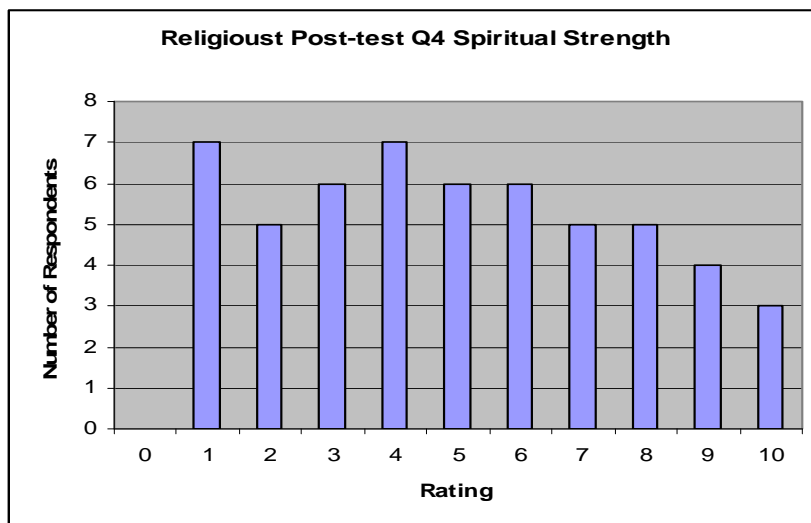


6% gave a rating of 1, 10% gave a rating of 2, 1.6 % gave a rating of 3, 15% gave a rating of 4, 10% gave a rating of 5, 15% gave a rating of 6, 6% gave a rating of 7, 11.6% gave a rating of 8, 6% gave a rating of 9, 8.3% gave a rating of 10, and 8.3% did not respond.

3. Do you feel spiritually stronger after the prayer? (Yes or No)

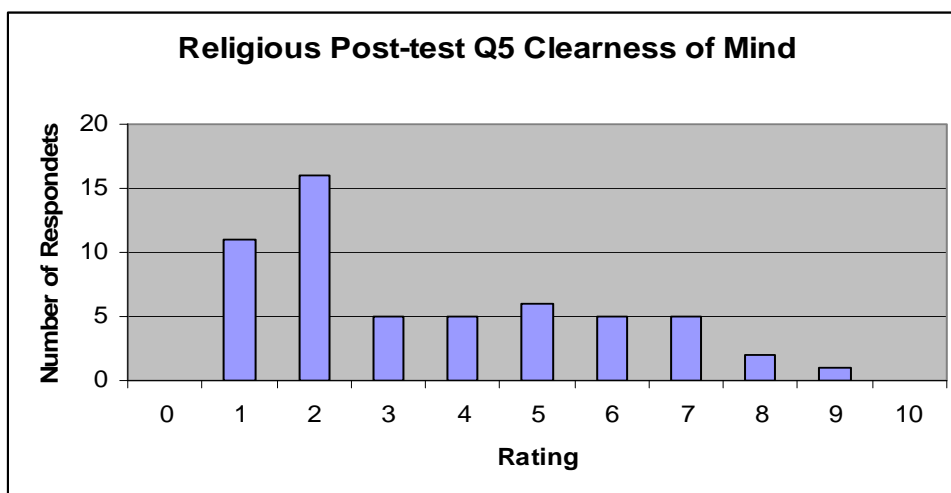
78.3% responded Yes, 16.6% responded No, and 5% did not respond.

4. How strong do you feel spiritually? (0 is not strong at all and 10 is very strong)



11.6% gave a rating of 1, 8.3% gave a rating of 2, 10% gave a rating of 3, 11.6% gave a rating of 4, 10% gave a rating of 5, 10% gave a rating of 6, 8.3% gave a rating of 7, 8.3% gave a rating of 8, 6% gave a rating of 9, 5% gave a rating of 10, and 10% did not respond.

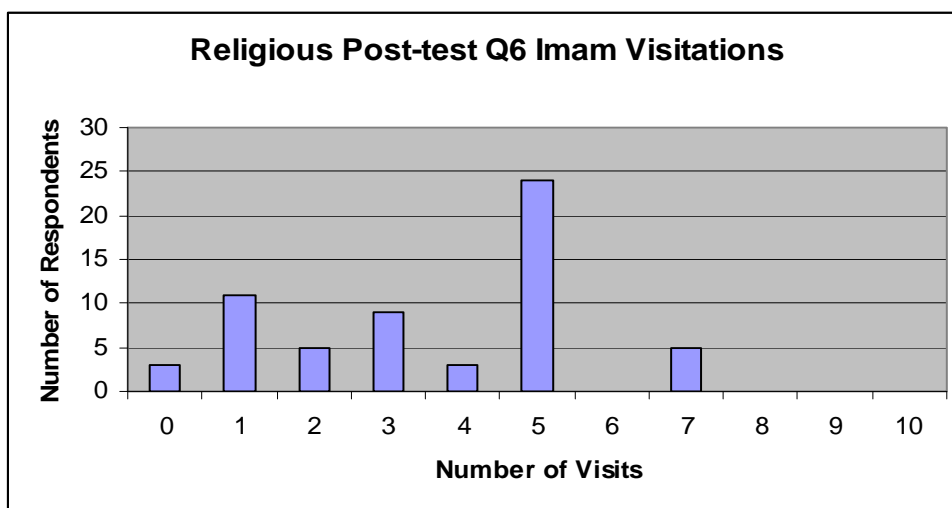
5. How clear is your mind? (0 is not clear at all and 10 is very clear)



18.3% gave a rating of 1, 26.6% gave a rating of 2, 8.3% gave a rating of 3, 8.3% gave a rating of 4, 10% gave a rating of 5, 8.3% gave a rating of 6, 8.3% gave a rating of 7, 3.3% gave a rating of 8, 1.6% gave a rating of 9, and 6% did not respond.

6. How often would you like an imam to come and pray for you on a weekly basis?

(0 is never, 1 is once, and 10 is ten times a week)



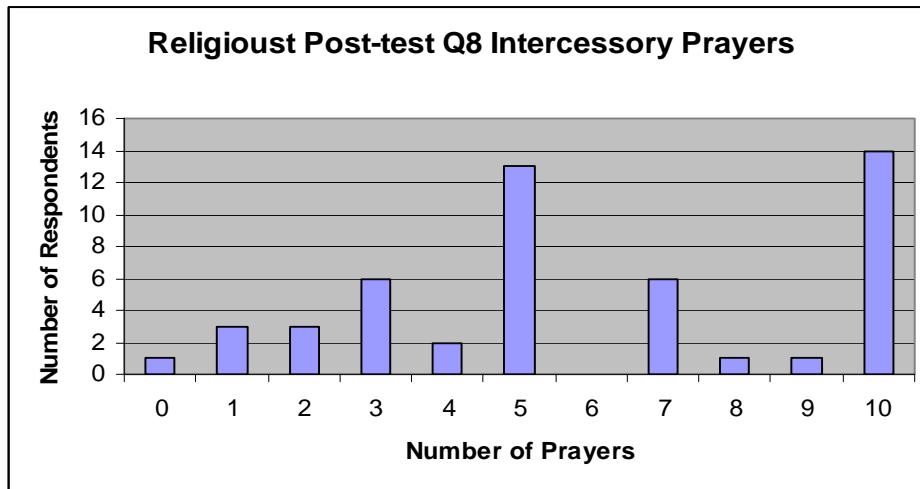
5% wanted no visits, 18.3% wanted one visit, 8.3% wanted two visits, 15% wanted three visits, 5% wanted four visits, 40% wanted five visits, and 8.3% wanted seven visits.

7. Would you like your family and friends to pray for you? (Yes or No)

90% responded Yes, 1.6% responded No, and 8.3% did not respond.

8. How often would you like your family and friends to pray for you? (0 is never, 1

is once a week, and 10 is ten times a week)



21.6% would like others to pray for them five times a day, 10% said seven times a day, 1.6% eight times a day, 1.6% nine times a day, 23.3% ten times a day, and 16% did not respond.

9. Do you feel closer to God after prayer? (Yes or No)

80% responded Yes, 13.3% responded No, and 8.3% did not respond.

10. Would you pray for people who you know are ill? (Yes or No)

88.3% responded Yes, 5% responded No, and 8.3% did not respond.

11. Do you feel God's presence after prayer? (Yes or No)

83.3% responded Yes, 8.3% responded No, and 8.3% did not respond.

12. Does *prayer affect* your physical condition? (Yes or No)

55% responded Yes, 33.3% responded No, and 11.6% did not respond.

13. Do you believe that prayer affects you positively? (Yes or No)

78.3% responded Yes, 15% responded No, and 6.6% did not respond.

14. Has praying increased your reliance upon God? (Yes or No)

80% responded Yes, 11.6% responded No, and 8.3% did not respond.

15. Would you recommend prayer to another patient? (Yes or No)

81.6% responded Yes, 11.6% responded No, and 8.3% did not respond.

16. If the imam does not come, will you pray or read Qur'an by yourself? (Yes or No)

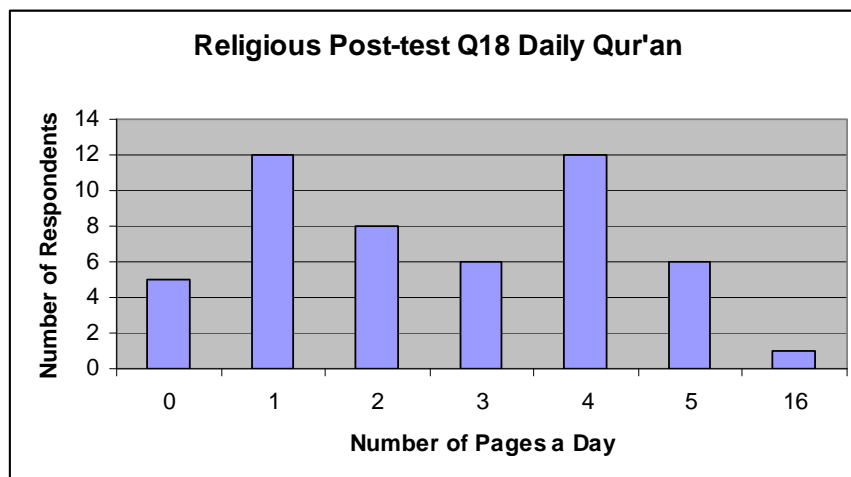
68.3% responded Yes, 6.6% responded No, 25% can not read the Arabic Qur'an, and 8.3% did not respond.

17. How often do you pray (salat) daily? (0 is never and 10 is ten times a day)

50% does not pray daily, 5% prays three times a day, 1.6% prays four times a day, and 43.3% prays five times a day.

18. How many pages of Qur'an do you read or recite in a day? (0 is never and 10 is

ten pages a day?)



8.3% do not read any Qur'an, 20% read one page a day, 13.3% read two pages a day, 10% read three pages a day, 20% read four pages a day, 10% read five pages a day, 1.6% reads 16 pages a day, and 10% did not respond.

19. Will you continue to pray and recite Qur'an after you are discharged? (Yes or No)

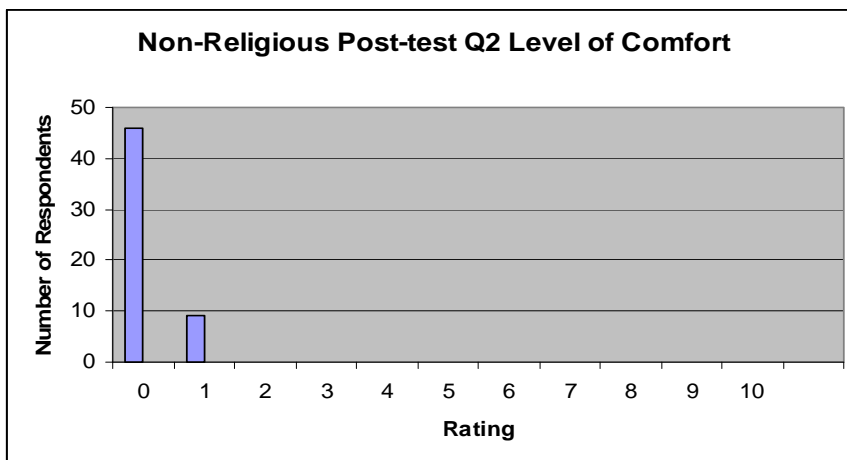
90% responded Yes, 3.3% responded No, and 6.6% did not respond.

#### Results of Non-Religious Post-Test Surveys

1. Do you feel more comfort after the non-religious text reading? (Yes or No)

86.6% said No, 1.6% said yes, 8.3% did not respond.

2. How comfortable do you feel? (0 is not comfortable at all and 10 is very comfortable)

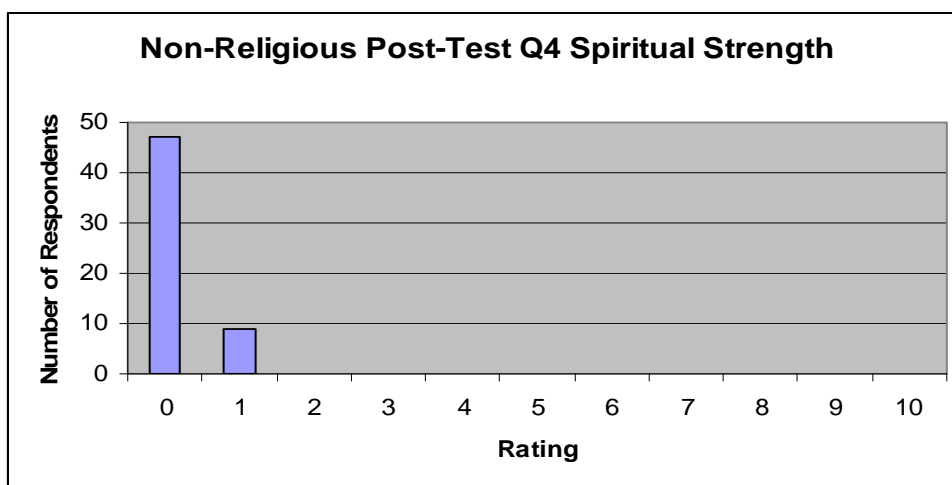


76.6% reported not feeling any difference after the reading, 15% reported feeling a little more comfortable and gave a rating of 1, and 3.3% did not respond.

3. Do you feel spiritually stronger after the non-religious text reading? (Yes or No)

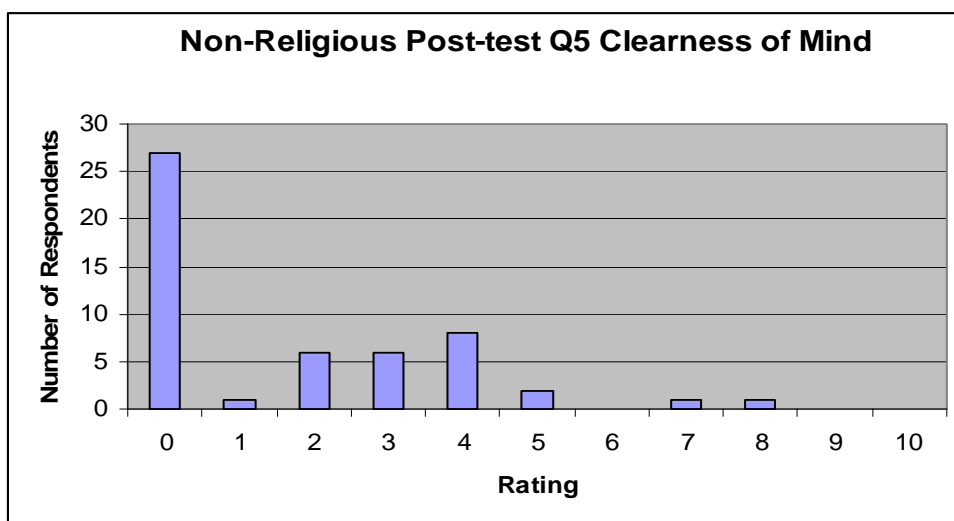
5% replied Yes, 85% replied No, and 10% were not responsive.

4. How strong do you feel spiritually? (0 is not any different spiritually at all and 10 is very spiritual)



78.3% said they did not feel any spiritually stronger and gave a rating of 0, 15% gave a rating of 1, and 6.6% did not respond.

5. How clear is your mind? (0 is not clear at all and 10 is very clear)



45% gave a rating of 0, indicating that nothing had changed, 1.6% gave a rating of 1, 10% gave a rating of 2, 10% gave a rating of 3, 13.3% gave a rating of 4, 3.3% gave a rating of 5, 1.6% gave a rating of 7, 1.6% gave a rating of 8, and 10% did not respond.

Questions 6-8, 10, 15-18 are already answered in the religious post-test survey and are not relevant to the non-religious reading.

9. Do you feel closer to God after non-religious text reading? (Yes or No)

3.6% responded Yes, 88.3% responded No, and 6.6% did not respond.

11. Did you feel God's presence after the non-religious text reading? (Yes or No)

13.3% responded Yes, 78.3% responded No, and 8.3% did not respond.

12. Does non-religious text reading affect your physical condition? (Yes or No)

0% responded Yes, 85% responded No, and 15% did not respond.

13. Do you believe that non-religious text reading affects you positively? (Yes or No)

3.3% responded Yes, 90% responded No, and 3.3% did not respond.

14. Has praying increased your reliance upon God? (Yes or No)

10% responded Yes, 85% responded No, and 5% did not respond.

19. Would you recommend non-religious text reading to another patient? (Yes or No)

1.3% responded Yes, 88.3% responded No, and 5% did not respond.

## **Part II**

### Descriptive Statistics for Preliminary and Post-Protocol Questionnaires

Descriptive statistics for questionnaire items administered before the patient participated in the experimental and control protocols are presented in Table 1 (i.e., the preliminary survey).

Table 1

*Demographic and Preliminary Survey Data*


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	Mean	Median	SD	Min. – Max.
<b>Age</b>	<b>40.1</b>	<b>35.0</b>	<b>16.2</b>	<b>18 - 84</b>
<b>Educational Level</b>	<b>13.8</b>	<b>16.0</b>	<b>3.6</b>	<b>0 - 22</b>
<b>Religiosity/Spirituality</b>	<b>52.1</b>	<b>58.0</b>	<b>19.1</b>	<b>2 - 69</b>
<b>Depression</b>	<b>2.01</b>	<b>1.5</b>	<b>1.8</b>	<b>0 - 7</b>
<b>Anxiety</b>	<b>2.81</b>	<b>3.0</b>	<b>2.0</b>	<b>0 - 7</b>
Loneliness	1.81	1.0	1.8	0 - 6
Hopefulness	6.89	7.0	2.26	1 - 10
<b>Despair</b>	<b>1.91</b>	<b>1.0</b>	<b>1.92</b>	<b>0 - 9</b>
<b>Confidence</b>	<b>6.50</b>	<b>7.0</b>	<b>2.24</b>	<b>1 - 10</b>
<b>Comfort</b>	<b>6.05</b>	<b>6.5</b>	<b>2.83</b>	<b>0 - 10</b>
<b>Dua</b>	<b>6.45</b>	<b>8.0</b>	<b>2.85</b>	<b>0 - 10</b>
<b>Fasting</b>	<b>24.4</b>	<b>30.0</b>	<b>11.25</b>	<b>0 - 30</b>
<b>Remembrance</b>	<b>6.76</b>	<b>8.0</b>	<b>3.21</b>	<b>0 - 10</b>
Importance	7.81	8.5	2.55	1 - 10
Classification	5.93	6.0	2.65	1 – 9

Descriptive statistics for questionnaire items administered after the patient participated in the prayer session or the control condition (i.e., non-religious text) are shown in Tables 2 (p.86) and 3 (p.92) (i.e., the post-experimental manipulation questionnaire).

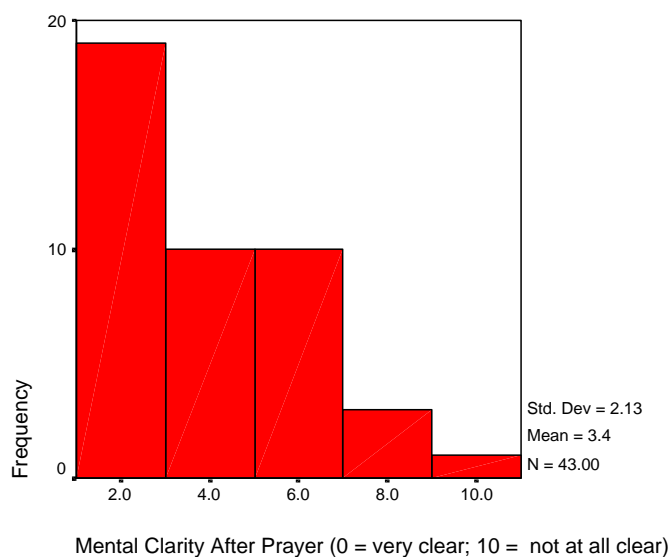
### Correlational Analysis

Since response patterns on both questionnaires were frequently skewed, a nonparametric test (Spearman's rho) was used. First, specific items from the preliminary survey were combined to create a composite religiosity score. Correlational analysis revealed that religiosity/spirituality index scores correlated negatively with scores on the depression and anxiety dimensions (Spearman's rho =  $-.38$ ,  $p < .003$  and Spearman's rho =  $-.55$ ,  $p < .000$ ). That is, higher scores on the religiosity/spirituality index were associated with lower depression and anxiety scores. Similarly, religiosity/spirituality index scores correlated negatively with scores on items assessing loneliness and despair, with Spearman's rho =  $-.37$ ,  $p < .004$  and Spearman's rho =  $-.23$ ,  $p = .08$ , respectively. Although, the latter association did not reach statistical significance, the relationship was in the expected direction. Elevated religiosity/spirituality (as determined by self-report) scores were associated with lower scores on items measuring the patient's sense of despair and loneliness. Moreover, a positive relationship between self-reported religiosity and hopefulness / confidence was noted (Spearman's rho =  $.35$ ,  $p < .007$ , and Spearman's rho =  $.42$ ,  $p < .001$ ). A greater degree of religiosity/spirituality was associated with hopefulness and confidence. All but the correlation between

religiosity/spirituality and loneliness/despair of the aforementioned relationships were statistically significant. Finally, patients were asked to quantify the amount of comfort they experience following prayer (*salat*), supplication (*du`a*), and remembrance (*dhikr*). Not surprisingly, religiosity/spirituality scores were strongly associated with the level of comfort derived from *salat*, *du`a*, and *dhikr* (Spearman's rho = .57,  $p < .000$ ).

### Prayer and Non-Religious Text Conditions

Since response patterns on both prayer and non-religious text conditions questionnaires were frequently skewed (see Figure 1 for example: clarity of mind following prayer session with 0 = “very clear” and 10 = “not clear at all”), a nonparametric equivalent (Wilcoxon Signed Ranks Test) of the paired t-test was used for continuous data (ratings). To analyze patients’ response patterns on dichotomous variables (yes/no responses), a nonparametric test (McNemar Test) was also employed.



### Continuous Variables

First, questions were combined to create a composite religiosity/spirituality score. Scores on the self-report measures were then compared (i.e., the post-experimental manipulation questionnaires administered after the patient participated in the prayer session and after the patient participated in the control session). Thus, each patient served as his or her own control. That is, each patient's score on the religiosity questionnaire administered after the prayer condition was compared to the patient's score on the questionnaire completed after the patient participated in the control non-religious reading. To eliminate order effects, patients were randomly assigned to prayer or non-religious control conditions. If the patients participated in the prayer protocol during session 1, he or she participated in the control protocol during session 2. If the patient participated in the control condition session 1, he or she listened to the reading of the non-religious text (control condition) during session 2. Note that two patients were discharged before completing the study and did not complete both questionnaires. Therefore, they were excluded from analyses that appear below.

#### *Level of Religiosity Following Prayer Session and Non-Religious Text Condition*

As shown in Table 2, after participating in the prayer session patients obtained significantly higher scores on a self-report measure of religiosity/spirituality in comparison to scores on the measure administered after the control condition (i.e., listening to the PI read from a non-religious text) ( $p < .000$ ). Test differences were

striking. As noted above, the Wilcoxon Signed Ranks Test was used to compare scores on the religiosity measure administered after the prayer session and the non-religious text control condition.

Table 2

*Prayer and non-religious text conditions*

*Continuous Data: Mean Score and Standard Deviation*

	<u>Prayer</u>	<u>Non-religious Text</u>
	Mean (SD)	Mean (SD)
<b>Religiosity/Spirituality Score</b>	<b>22.87 (8.82)</b>	<b>14.80 (6.35)</b>
<b>Degree of Comfort</b>	<b>5.10 (2.87)</b>	<b>0.17 (0.42)</b>
<b>Spiritual Strength</b>	<b>4.39 (2.75)</b>	<b>0.35 (0.58)</b>
<b>Mental Clarity</b>	<b>3.37 (2.12)</b>	<b>2.80 (1.30)</b>
<b>Visits from Imam</b>	<b>4.12 (2.16)</b>	<b>3.58 (2.07)</b>
<b>Prayer: Family/Friends</b>	<b>6.32 (2.83)</b>	<b>5.64 (2.94)</b>
<b>Daily Prayer</b>	<b>3.29 (2.45)</b>	<b>2.92 (2.24)</b>
<b>Qur'an</b>	<b>2.44 (2.78)</b>	<b>1.69 (1.36)</b>

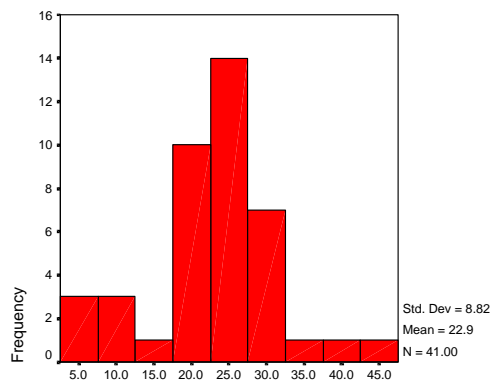
As Table 2 illustrates, patients participating in the prayer session reported that they experienced a greater degree of spiritual comfort and strength ( $ps < .000$ ).

Moreover, they indicate a greater willingness to meet with an Imam following the prayer session in comparison to their interest in meeting with a Muslim chaplain following the

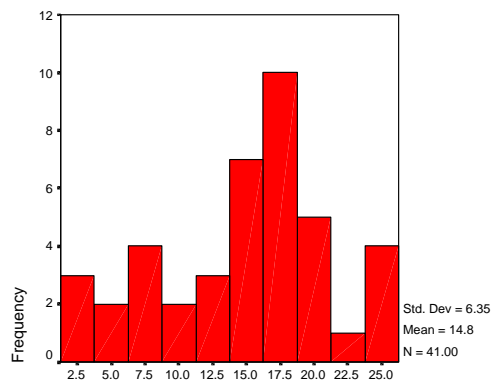
control condition ( $p < .01$ ) (i.e., “How often would you like an Imam to come and pray for you on a weekly basis? 0 is never; 1 is once a week; and 10 is ten times a week”). Interestingly, patients did not report a significantly greater degree of mental clarity following the prayer session in comparison to their level of clarity following the control condition ( $p = .165$ ). In fact, patients reported a greater degree of clarity following the control condition; of course, as noted above, this difference did not approach statistical significance. Similarly, the prayer condition was not associated with a significantly greater interest in having friends/family offer prayers ( $p = .46$ ) or an increase in the amount of recitation planned (i.e, reading the Qur’an) ( $p = .19$ ); although differences were in the expected direction. Moreover, the intended daily prayer rate did not vary as a function of the experimental condition (i.e., following exposure to prayer or non-religious text) ( $p = .27$ ). That is, patients reported that they were not significantly more likely to pray after participating in the prayer session in comparison to the non-prayer control condition.

### Histograms: Continuous Data

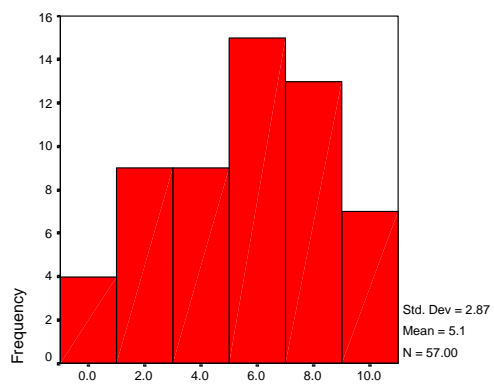
The following histograms chart the results of the questions with multiple answers. The left column has the results for the prayer sessions (religious), and the right column has the results for the non-religious text session. The scores can be found in Table 2 (p.86).



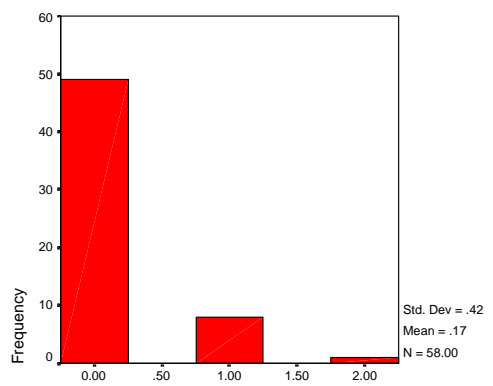
After Prayer: Religiosity/Spirituality Index



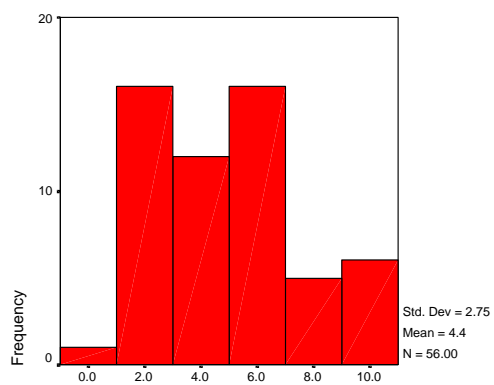
After Non-religious Text: Religiosity/Spirituality Index



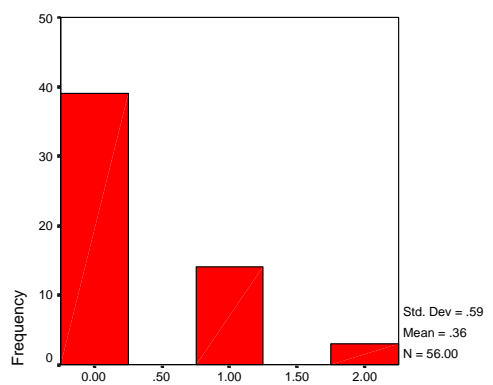
Comfort After Hearing Prayer



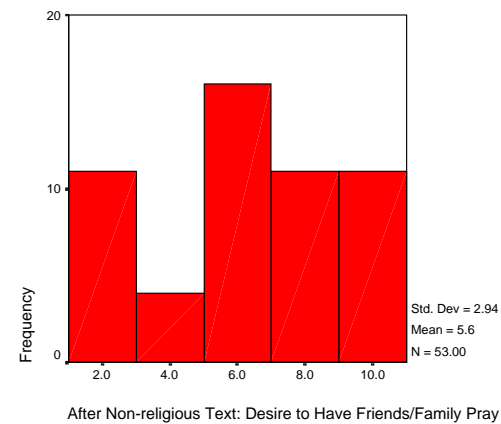
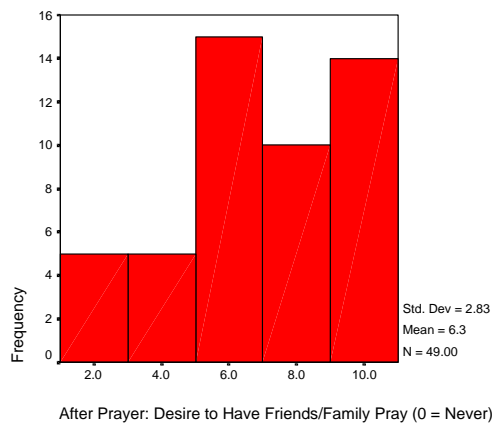
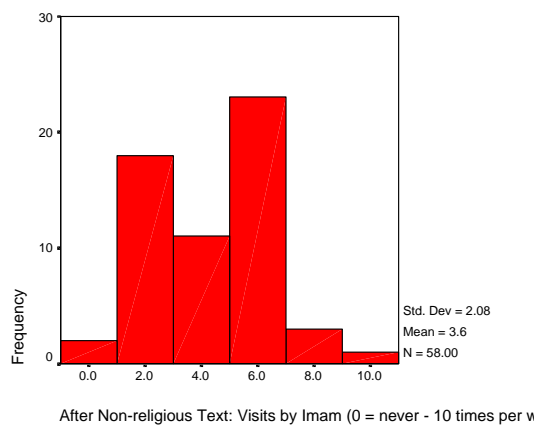
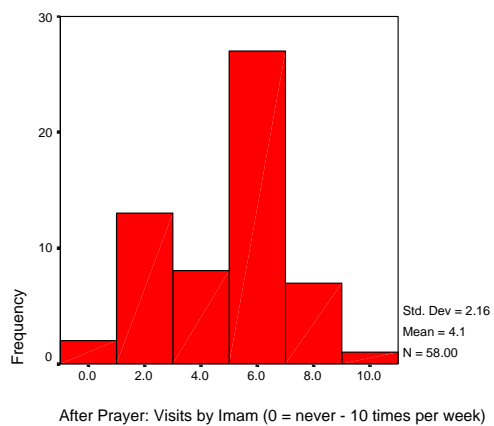
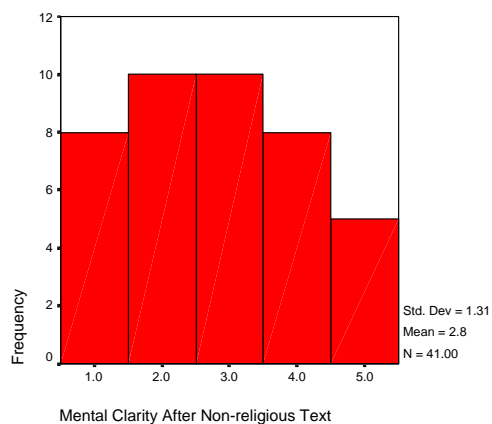
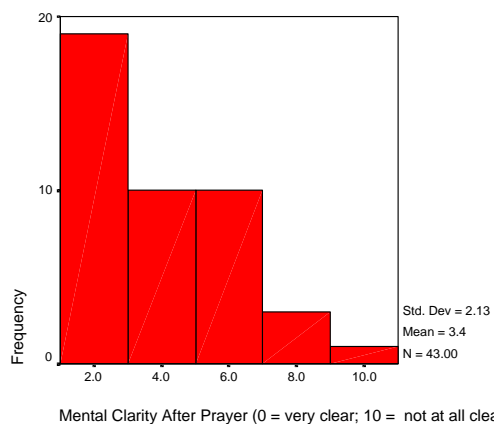
Comfort After Hearing Non-religious Text

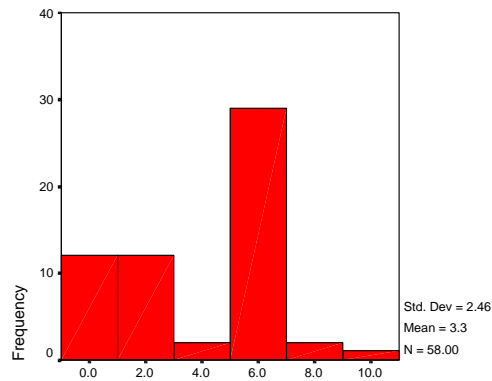


Spiritual Strength After Prayer

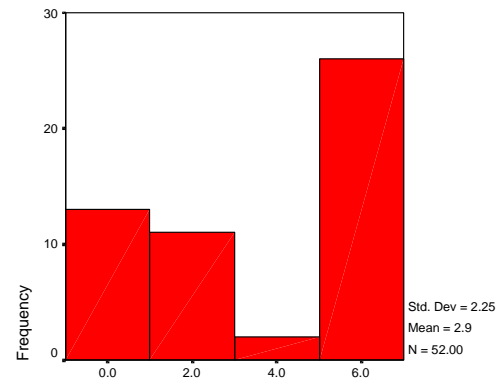


Spiritual Strength After Hearing Non-religious Text

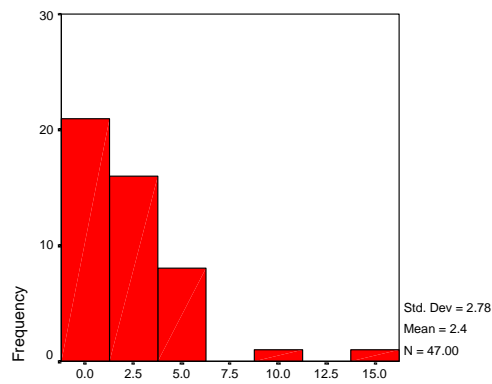




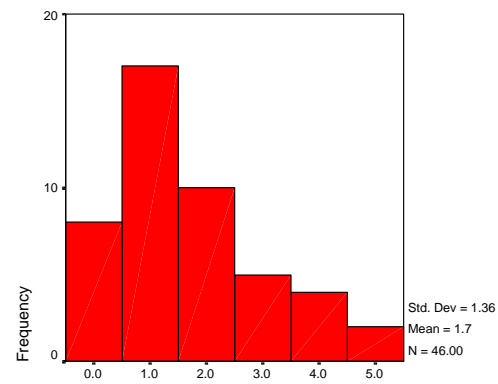
After Prayer: Frequency of Daily Prayer (intention) (0 = not at all)



After Non-Religious Text: Frequency of Daily Prayer (intention)



After Prayer: Pages of Koran Read Per Day (intention)



After Non-Religious Text: Pages of Koran Read Per Day (intention)

### Dichotomous Variables

A number of items produced dichotomous data (yes/no responses). As shown in Table 3, a significantly greater number of patients reported an alteration in their relationship to God (i.e., “felt closer to God”) following the prayer session. In contrast, few subjects reported that they experienced an alternation in their relationship with God after participating in the control condition (see Table 3) (McNemar Test,  $p < .000$ ).

Similarly, a significantly greater number of patients reported “feeling the presence of God” (McNemar Test,  $p < .000$ ) following the prayer session. Moreover, a substantially greater number of patients reported that prayer had a positive impact (McNemar Test,  $p < .000$ ), improved their physical condition ( $p < .000$ ), and that they had increased their reliance on God (McNemar Test,  $p < .000$ ) (in comparison to response patterns on the self-evaluation measure completed after participating in the control condition, i.e., listening to the PI read from a non-religious text). Patients were also more likely to recommend prayer to fellow patients following the prayer session (McNemar Test,  $p < .000$ ) (in comparison to response patterns on the self-evaluation measure completed after the control condition).

A substantial number of patients reported that they would continue to pray and read the Qur’an following the prayer session *and* following the nonreligious control condition (see Table 3). Indeed, all of the patients reported that they would continue to pray and/or read the Qur’an after hearing the nonreligious reading, while a substantial number of patients (approximately 96 %) reported that they would continue to pray and/or read the Qur’an after participating in the prayer session (condition differences did not approach significance since almost all of the patients reported a willingness to continue to pray/read the Qur’an following both conditions). Similarly, almost all of the patients reported that they will pray for others and would like others (i.e., family and friends) to pray for them after participating in the prayer and control conditions.

Table 3

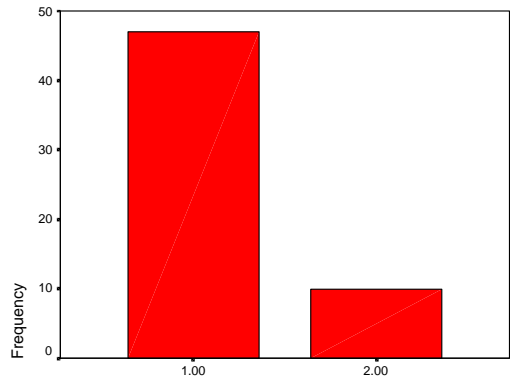
*Prayer and non-religious text conditions**Dichotomous Data: Yes/No Response*


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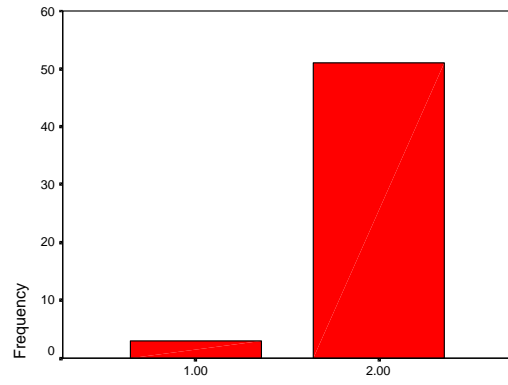
	<i>Prayer</i>	<i>Non-religious Text</i>
	<b>Yes / No</b>	<b>Yes / No</b>
<b>Comfort</b>	<b>50 / 4</b>	<b>1 / 52</b>
<b>Spiritual Strength</b>	<b>47 / 10</b>	<b>3 / 51</b>
<b>Closer to God</b>	<b>48 / 8</b>	<b>2 / 53</b>
<b>Family /Friends</b>	<b>54 / 1</b>	<b>54 / 0</b>
<b>Intercessory Prayer</b>	<b>53 / 3</b>	<b>48 / 7</b>
<b>Presence of God</b>	<b>50 / 5</b>	<b>8 / 47</b>
<b>Impact on Physical Condition</b>	<b>25 / 21</b>	<b>0 / 51</b>
<b>Positive Influence</b>	<b>47 / 9</b>	<b>6 / 51</b>
<b>Increased Reliance Upon God</b>	<b>48 / 7</b>	<b>4 / 50</b>
<b>Recommend Prayer or Text</b>	<b>49 / 7</b>	<b>23 / 33</b>
<b>Koran</b>	<b>41 / 4</b>	<b>35 / 7</b>
<b>Continue to Pray/Read Koran</b>	<b>54 / 2</b>	<b>51 / 0</b>

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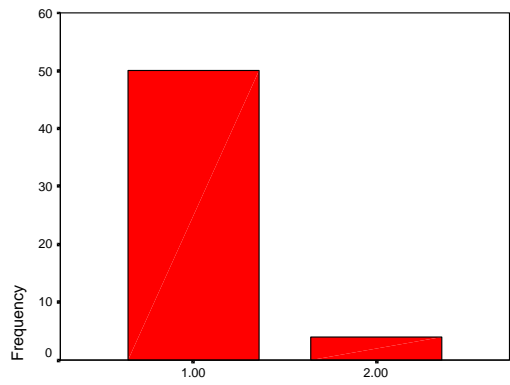
### Bar Charts: Dichotomous Data



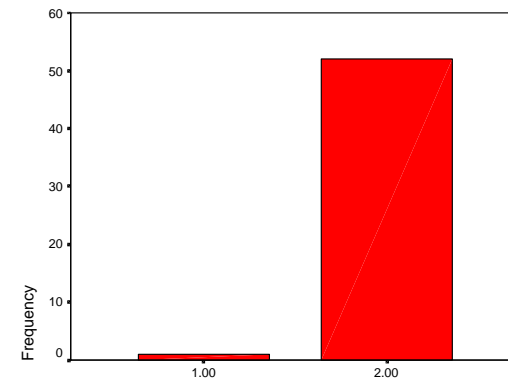
Spiritual Strength After Prayer: Yes = 1, No = 2



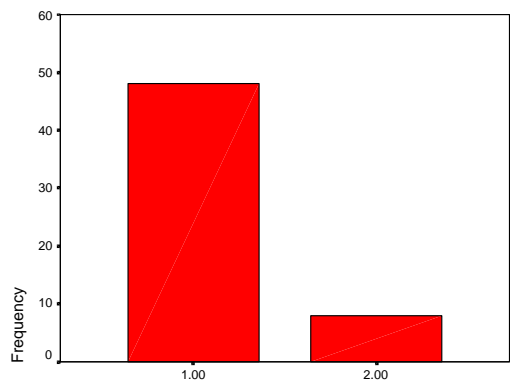
Spiritual Strength After Non-religious Text: Yes = 1; No = 2



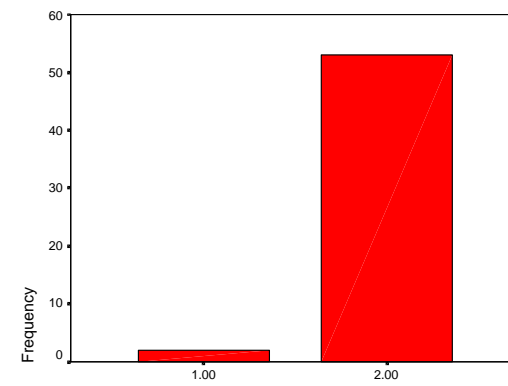
Comfort After Hearing Prayer: Yes = 1; No = 2



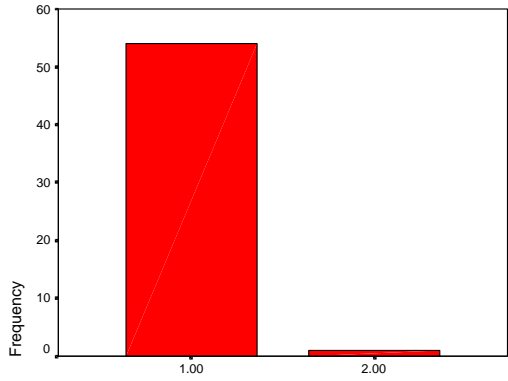
Comfort After Hearing Non-religious Text: Yes = 1; No = 2



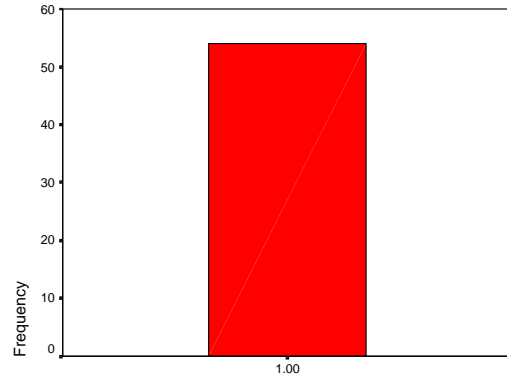
Closer to God After Prayer: Yes = 1; No = 2



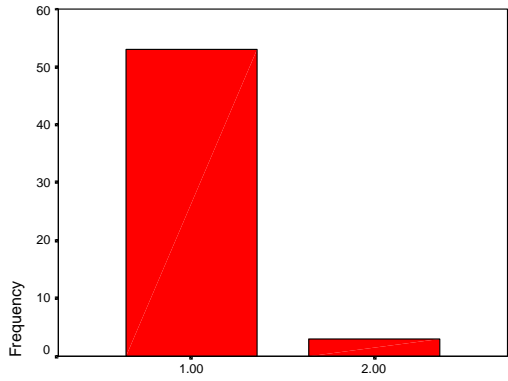
Closer to God After Non-religious Text: Yes = 1; No = 2



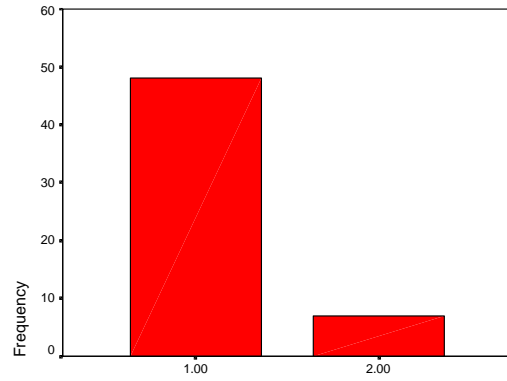
After Prayer: Family/Friends Pray for Patient: Yes = 1; No = 2



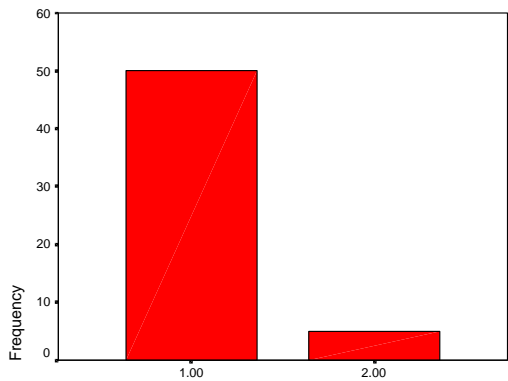
After Non-relig. Text: Family/Friends Pray for Patient: Yes = 1



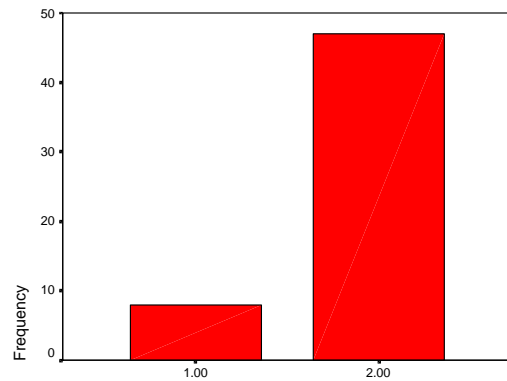
After Prayer Session: Intercessory Prayer: Yes = 1; No = 2



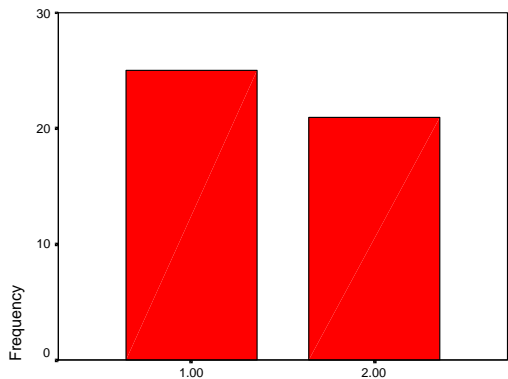
After Non-relig. Text--Intercessory Prayer: Yes = 1; No = 2



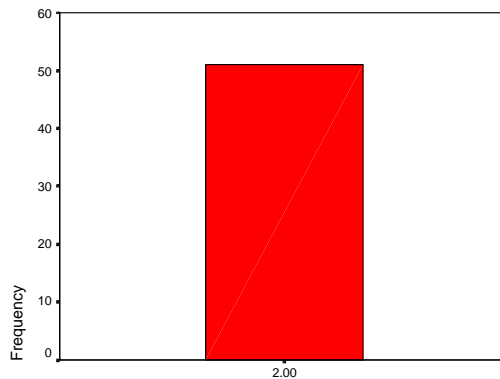
After Prayer--God's Presence: Yes = 1; No = 2



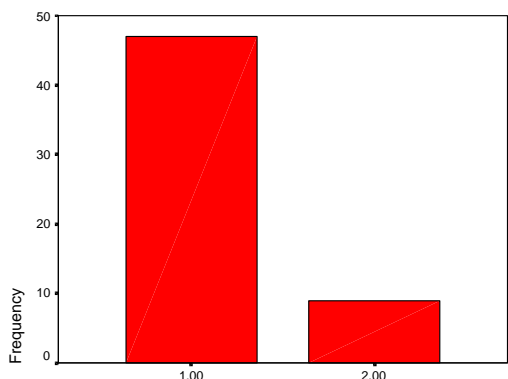
After Non-religious Text--God's Presence: Yes = 1; No = 2



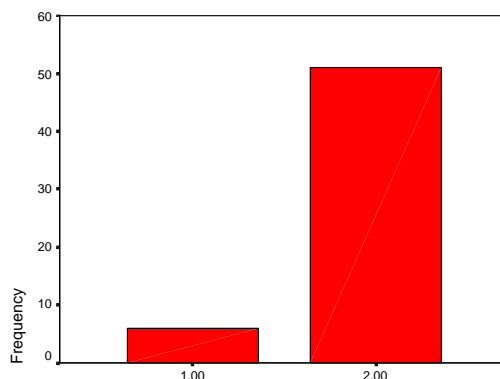
Prayer--Impact on Physical Health: Yes = 1; No = 2



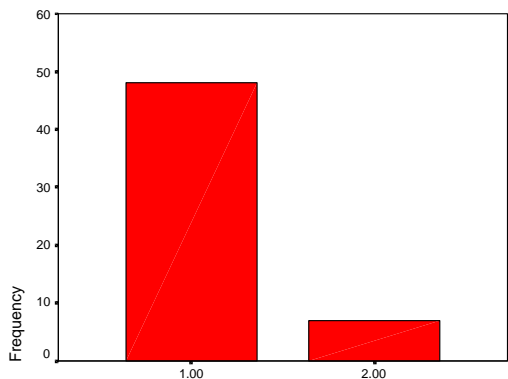
Non-Religious Text--Impact on Physical Health: No = 2



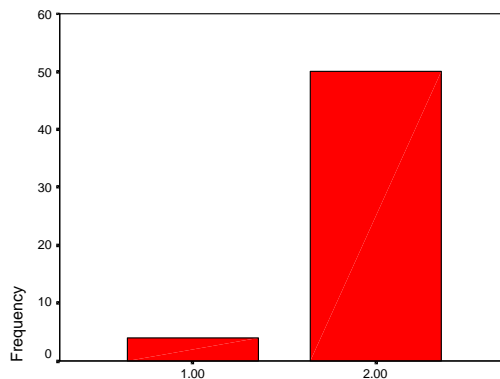
Positive Impact of Prayer: Yes = 1; No = 2



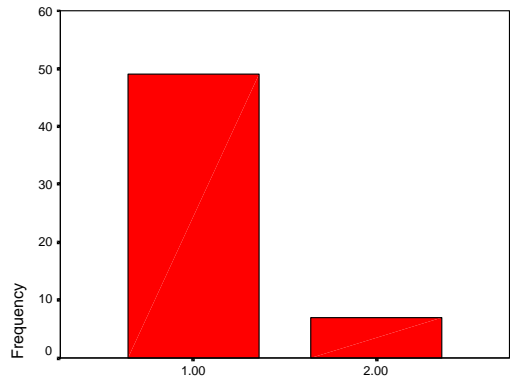
Positive Impact of Non-religious Text: Yes = 1; No = 2



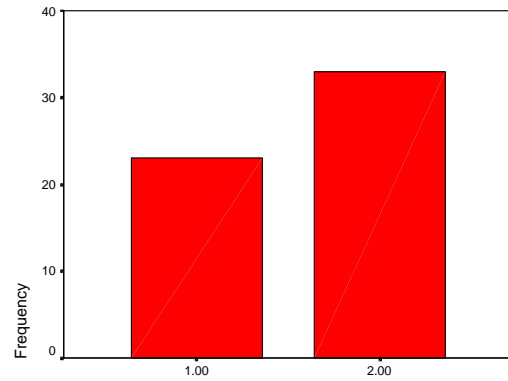
After Prayer--Increased Reliance Upon God: Yes = 1; No = 2



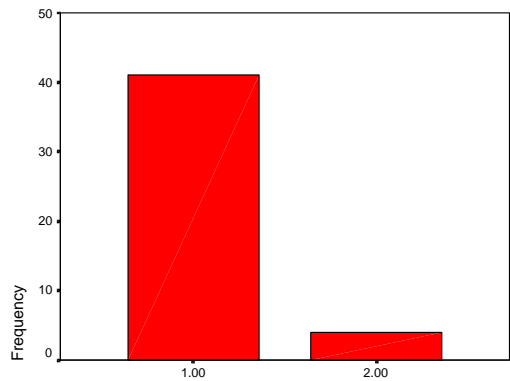
After Non-relig. Text--Reliance Upon God: Yes = 1; No = 2



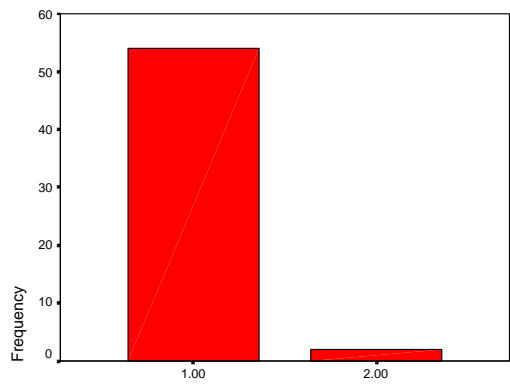
Recommend this Prayer: Yes = 1; No = 2



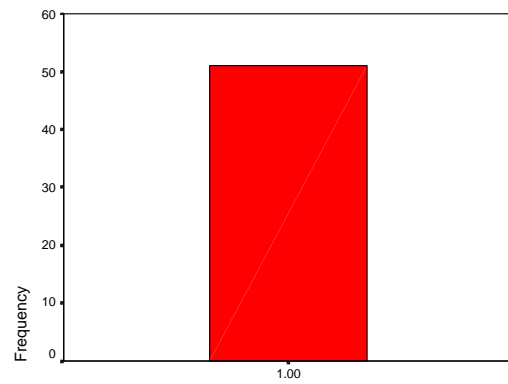
Recommend Non-religious Text: Yes = 1; No = 2



After Prayer--Continue to Read Koran: Yes = 1; No = 2



After Prayer--Continue to Pray and Recite: Yes = 1; No = 2



After Non-Relig. Text--Continue to Pray and Recite: Yes = 1

### Vital Signs Following Prayer and Control Conditions

It is important to bear in mind that patients obtained significantly higher scores on self-report measures of religiosity and well-being following the prayer session than to the control condition. It is important to note whether prayer is associated with favorable alterations in physiological activity. The Wilcoxon Signed Ranks Test was used to compare patients' vital signs (i.e, body temperature, blood pressure, and respiratory rate) before and after participating in the prayer and non-religious text sessions. As shown in Table 4, patients demonstrated a statistically significant increase in body temperature following participation in the prayer session ( $p < .004$ ); however, alterations were subtle and not clinically meaningful. Patients' did not demonstrate a significant change in body temperature before and after exposure to the non-religious text ( $p = .393$ ). Similarly, patients exhibited a statistically significant rise in respiratory rate following the prayer session ( $p < .01$ ). Again, pre- and post-prayer session differences were subtle and should not be considered clinically meaningful (see Table 4). Moreover, patients' did not demonstrate a significant change in respiratory rate before and after exposure to the non-religious text ( $p = .398$ ). Table 5 presents blood pressure data. Again, patients demonstrated a statistically significant rise in blood pressure following the prayer session ( $ps < .007$ ); however, patients also demonstrated a rise (systolic only) after exposure to the non-religious text ( $p < .019$ ) (diastolic,  $p = .876$ ).

Table 4

***Vital Signs: Prayer and non-religious text conditions******Mean (SD)***


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	Before Prayer	After Prayer	Before Non-rel. Text	After Non-rel. Text
Body Temp.	98.24 (1.23)	98.34 (1.14)	98.26 (1.05)	98.24 (1.05)
Respiratory Rate	18.56 (1.74)	18.94 (1.13)	18.62 (1.28)	18.53 (1.41)

---

Table 5

***Blood Pressure: Prayer and non-religious text conditions***


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	Before Prayer	After Prayer	Before Non-rel. Text	After Non-rel. Text
Blood Pressure	102.51 / 64.67	105.94 / 65.25	102.74 / 64.55	103.12 / 64.87

---

Across three dimensions, patients demonstrated statistically significant elevations in physiological function following participation in the prayer session. Findings suggest that participation in the prayer session was associated with physiological arousal.

However, it is important to emphasize that although condition differences achieved statistical significance; alterations in body function were quite subtle and should not be considered clinically significant. Nevertheless, differences were in the expected direction and consistent with the contention that prayer impacts on the patients physical state (Kandari 2003, Helm 2000 and Koenig et al., 1998); albeit, pre- post-prayer differences subtle.

### **Summary**

In this chapter, the principal investigator presented the results of the surveys and vital sign recordings for the 60 participants. The findings can be summarized as follows:

- 1) Religiosity/spirituality scores were associated with level of spiritual strength, comfort and hope felt from prayers. They felt a greater degree of mental clarity after the prayer session, although it was not statistically significant.
- 2) In regards with vital signs, prayer has a positive relationship with physical health. The results of vital signs analysis showed that prayer is not clinically significant, but does have a statistically significant effect on patients.

The significance of these findings is discussed in the next chapter.

## **CHAPTER V**

### **DISCUSSION OF FINDINGS**

#### **Introduction**

The purpose of this study was to investigate whether prayer has a positive effect on the well-being of Muslim patients. A review of the related literature supports the hypothesis that prayer has affected patients' well-being. The interpretation of quantitative data collected from the surveys and vital sign recordings during the present study is consistent with prior studies suggesting a beneficial impact on patients.

The result of this study suggests that prayer affects patients positively. It reduces stress and depression, gives comfort and hope, and alters blood pressure, respiratory rate, and body temperature. This study also draws attention to religion as holding a significant role in the lives of Muslim patients.

In the present study, patients completed three surveys: 1) pre-test survey; 2) religious reading post-test survey; and 3) non-religious reading post-test survey. Vital signs of sixty patients were also recorded and analyzed. The data reported in the previous chapter entitled Research Findings are analyzed and discussed under two sections: a) patients' response patterns on surveys, and b) physical effects of prayer on Muslim patients.

### **Patients' Response Patterns on Surveys**

The analysis of the surveys reveals that higher scores on religiosity and spirituality are associated with lower depression and anxiety, and correlated negatively with measure of loneliness and despair. Moreover, positive relationships between self-reported religiosity and hopefulness and confidence were observed. A greater degree of religiosity is associated with hopefulness and confidence.

Numerous studies in US, some which include studies on Muslim patients, demonstrated that prayer does have an effect on patients. In a survey of 5,000 individuals, the investigators found that participants who prayed achieved good health, exhibited more favorable health-related behaviors and preventive service use, and reported greater satisfaction with care (O'Connor et al. 2005, 369-75 and Puchalski 2001). Furthermore, 80% of published studies found religious commitment, including prayer, is related to better health outcomes (Mathews et al. 1998, 118). Religious commitment may help prevent many health problems, such as depression, substance abuse, and other illnesses (Levin and Vanderpool 1991, 41-64). Benson, Director Emeritus of the Mind-Body Medical Institute, in individual reporting found that those with strong religious beliefs were less likely to be depressed (1997, 173-174).

### **Analysis of Preliminary Survey Response Patterns**

A preliminary survey was used to determine the level of religiosity/spirituality (from an Islamic perspective). The preliminary survey was also used to assess the

intensity of depressive and anxiety symptoms as well as related variables reflecting the patient's emotional well-being (such as the degree of despair and loneliness).

The principal investigator compared the level of religiosity/spirituality with the scores on items assessing the intensity of depression, anxiety, loneliness, despair, hopefulness, and confidence. The influence of prayer on the patient's religiosity/spirituality and psychological well-being was investigated. The religiosity/spirituality score for the preliminary survey consisted of items assessing the degree or level of participation of submissiveness to the will of God (question 5), participation in religious activities per week (9), *salat*, five daily prayers (14), *zakat*, alms (21), *sadaqa*, charity (22), recitation of Qur'an (24), contemplation about death and the Hereafter (25).

### Religiosity/Spirituality

On a range from 0-69, patients averaged a religiosity/spirituality score of 52.1. On a scale of 0-10 (0 representing an absence of the variable), patients rated themselves as having an average depression level of 2.01, an anxiety level of 2.81, a loneliness level of 1.81, a despair level of 1.91, a hopefulness level of 6.89 and a confidence level of 6.50.

The data show a negative correlation between religiosity/spirituality and psychological discomfort. There is a positive relationship between religiosity/spirituality and hopefulness/confidence. Findings are consistent with prior studies on prayer-health relationship. Patients displaying anxiety symptoms and described as religious who received religious-cultural psychotherapy in Malaysia showed more rapid improvement

than those in the control group. Religious anxiety patients demonstrated greater symptoms in comparison to control patients (religious patients nor undergoing religious-cultural psychotherapy) (Razali 2002).

In this study, an overwhelming number of patients reported religiosity/spirituality scores of 75%, indicating that religion plays a great role in the participants' lives. Not every patient fulfills every obligation in religion; however, most fulfill some obligations. For example, a substantial number of respondents (76.6%) fast the full thirty days of Ramadan, while less than half (43.3%) perform the *salat*. The highest score of the seven questions for religiosity/spirituality was for *sadaqa*, where 95% of patients reported giving charity at least once a month, followed by a significant number of participants (93.3%) contemplated of death and the Hereafter on a weekly basis. More than half (65%) gave *zakat*, alms, read Qur'an weekly (63.3%), and participated in religious activities weekly (61.4%).

Islam affects many aspects of Muslim life. Therefore, most Muslims practice or participate in at least some religious and spiritual activity. The importance of religion in participants' lives is reflected by the fact that 71.6% rated religion as important. Some patients said that if they lived closer to a mosque or Islamic center, they would be able to participate in religious activities more often. In addition, they reported that their jobs sometimes conflict with their religious practices, such as attending the Friday congregational prayer.

The level of remembrance of God is also considerably high as Islamic practices involve invocation of God's name in almost any activity. A Muslim says *bismillah*, "In the Name of God" upon beginning any task, such as eating or working.

### **Analysis of Religious Post-Test Survey**

Religiosity/spirituality scores were positively correlated with hopefulness and confidence and negatively correlated with depression, anxiety, loneliness, and despair. When a person performs prayer, makes *dhikr* or recites Qur'an, he or she concentrates his or her mind and bodily movements on the performance of the prayer, and redirects his/her focus away from worldly thoughts (Rahman 1987, 44). Benson's idea supports this practice as an effective way to ignore distressing thoughts and relax (as mentioned earlier in the Theoretical Considerations section).

According to the Qur'an and *hadith* (sayings of Prophet Muhammad, peace be upon him), prayer, including *salat*, *du`a*, *dhikr*, and Qur'anic recitation, brings a person closer to God (Qur'an 2:152, Riyadhus Saliheen, 883). This leads to a decrease in loneliness as a supplicant feels that he or she is being heard. Moreover, participants who perform *salat* also attend mosques, socialize within the Muslim community, and receive emotional and spiritual support. For example, it is a custom in most Muslim communities to announce in the mosque the hospitalizations and deaths of other Muslim in the area and ask for the congregation to pray and visit those Muslims.

Prayer also reminds a Muslim that God is all powerful and the Healer, so he or she should rely on God. In the religious post-test survey, significant number of patients

(80%) affirmed their increased reliance on God after the prayer. The Qur'an orders believing Muslims to have hope and not despair at any time (3:139). Despair, cutting off hope from God's help and mercy, is even considered heresy (12:87). Muslims build spiritual strength results from faith and trust in God (Rahman 1987, 43). Prayers suppress anxiety and resentment or anger towards God (Rahman 1987, 44). Contemplating about the life Hereafter, hoping for eternal happiness, all while relying on God's help and seeking medical treatment gives Muslims confidence in overcoming their illness, reduces their fear of death and suffering, and increases their ability to cope with hardships. All of these factors decrease anxiety, depression, and despair.

Comments made by patients participating in the present study, particularly those with life-threatening illnesses, reflect the findings of the study. One patient said, "Prayer gives me strength to struggle [with illness]." In general, patients felt comfort after prayers. "Whenever I feel stressed, I feel better after I make *du`a*." Patients' religious activities varied, though many perform some type of prayer, make *dhikr* or *du`a* on a daily basis. One says, "I always pray before I go to sleep." This illustrates the role of prayer in dealing with illness and stress. One patient even said that "without faith and prayer, I would commit suicide." This patient was diagnosed with lung cancer and told by doctors that he could live for possibly two more years. He told the principal investigator that whenever he prays, he offers supplication afterwards and cries. Afterwards, he feels great comfort and a sense of lightness, like the burden is relieved from his shoulders. Another patient spoke of how anxious he had felt before surgery, but made *du`a* and felt less anxious.

### **A Comparison of Religious and Non-Religious Survey Data**

The principal investigator administered a demographic and preliminary self-assessment survey before the prayers and a post-test survey was completed after the prayers. In the second session, a non-religious text was read to serve as a control to determine if the *du'as* were affecting the patient. The non-religious text was in Arabic, just like the *du'as* and invocations, but did not contain religious references. In the Findings section, the questions were divided into continuous data, where patients gave a rating from 1-10 (see Table 2), and dichotomous data, where patients responded with "yes" or "no" (see Table 3). The scores from the religious post-test surveys were separate from the non-religious post-test survey results. Due to the difference in data measurement, continuous data and dichotomous data is analyzed separately.

In the continuous data, religious text scores were higher than non-religious text scores. Patients reported a greater degree of comfort and spiritual strength following the prayer session. A substantial number of patients (83.3%) reported that they felt God's presence after the religious text in contrast with the non-religious text when 13.3% responded that they felt God's presence. According to Islamic theology, God is always present, so these participants understood the question from this point of view.

In the dichotomous data, the differences between religious and non-religious surveys were greater (see Table 3). The non-religious text was used as a control to find out whether the principal investigator's presence or the religious text was affecting the participants' responses. Even though participants were less interested in the non-religious text, some patients expressed their pleasure in the chaplain's presence.

### Physical Effects

Healing with prayer in Islamic tradition dates back to the Prophet Muhammad. The Prophet would pray for ill persons then recommend certain prayers and *du`as* for comfort. To a man who felt stomach pains, he said, "Arise and pray; for verily in prayer there is cure" (Suyuti 1962, 157). Following this tradition, Muslim scholars throughout the centuries have maintained that healing involves physical, psychological, and spiritual processes. Al-Dhahabi wrote of how *salat*, ritual prayer, benefits both the body and soul (Rahman 1987, 44). Al-Jawziyyah viewed *salat* as an exercise for the body and a comfort to the soul (1999, 109).

Modern studies endeavored to explore the physical effects of prayer from a scientific standpoint. Hundreds of studies have explored the relationship between health and religiosity and spirituality. Researchers at the Mayo Clinic reviewed 350 studies examining the influence of religion on physical health and 850 studies investigating the impact of religion on mental health supported contenting hypothesis that religion enhances illness prevention, coping with illnesses, and recovery (Mueller et. al. 2001, 1225-1235). In another study, investigators reported that 80% of published research works on prayer and healing write that religious commitment is associated with better health status and outcomes (Matthews et. al, 1998).

In terms of the Islamic prayers, Al-Tharshi strongly supported the idea that prayer improves physical well-being through exercise. By studying the different movements in ritual prayer, he concluded that *salat* is similar to light exercises in aiding the upkeep of the body (1992, 97-123).

The present study did not examine the physical effects of the *salat*, ritual prayer, in the session. Patients who performed *salat* were asked about how they felt after they performed *salat*. On an item assessing the degree of comfort following *salat*, patients obtained a mean score of 6.05 (on a range of 0-10) in the pre-test survey. On the degree of comfort after the test session, patients scored 5.10 out of 10 in the post-test survey. The pre-test survey asked patients about the comfort they feel when they perform *salat* before admission while the post-test survey asked about the comfort they felt after the prayer session for the study. The discrepancy in these scores may be due to the different nature of worship of a non-hospitalized person compared to a hospitalized one. A Muslim performing *salat* recites the Qur'an, moves the body in various positions, and supplicates. A hospitalized patient does not have the ability to benefit from the physical movement of the *salat*. On the post-test surveys, when asked if they felt prayer affected their physical condition, 55% responded "Yes", 33.3% responded "No", and 11.6% were not sure or did not respond.

Patients gave different reasons as to why they felt prayer had a positive impact on their health. One patient pointed to the *wudu*, the ablution, before the prayer, as cleansing his body. Several patients noted that prayer reduces their stress, and one patient believed that prayer decreased his chances of stress-related illnesses. A middle-aged contractor reported that he finds prayer refreshing when he takes two or three breaks during his workday to perform *wudu*, ablution, and finds a quiet place to pray. One man stated that he has difficulty falling asleep and would read Qur'an to help him sleep in peace. An

elderly Muslim appreciated that *salat* exercised his body with light easy movements for a total of forty minutes a day.

Self-reports show that more than half of the study population held that prayer does have some positive effects on their physical conditions. Patients' views on the benefits of prayer reflect those of the studies mentioned in this section. Patients who pray on a regular basis find comfort in their daily lives as well.

### *Vital Signs*

#### Body temperature and respiratory rate

Based on the analysis of Dr. Burak Alptekin, there are no clinically significant changes in body temperature and respiratory rate before and after prayer and non-religious text (see Table 4). There are statistical changes, but those are also not significant enough to support the positive effects of prayer on physical well-being. These minor differences in pre-test and post-test conditions could have resulted from other factors, such as medication or intravenous therapy (IV). Dr. Alptekin mentioned that minor changes could result from possible fallibility of recordings. However, for the twelve patients who remained at the hospital for an extended period of time, post-test data show that prayer lowered their blood pressure.

## Blood pressure

In the present study, the results of the analysis of vital signs support the positive relationships other researchers have found between prayer and blood pressure. In a related study on Islamic prayer and blood pressure, Al-Kandari tested 223 Kuwaitis' blood pressure and compared the blood pressure of those who pray to those who do not. He concluded that those who pray were generally found with lower-blood pressure. Al-Kandari also documented the cultural and religious backgrounds of the participants and noted that involvement in religious activities seemed to be a factor in lowering blood pressure as it provided a social support network. Al-Kandari cites Byrne and Price (1979) who point out that two of the most important functions of religion for human health are providing sense of security and a source of strength from social support from the religious community. He suggests religiosity may be associated with a lower level of blood pressure because it improves one's ability to cope with stress and offers social support (2003, 12-13). Steffen (2003) also invoked as an explanatory hypothesis when his research results revealed that African Americans who engage in prayer and religious activities demonstrated lower blood pressure.

One other study looked at the movements of joints and muscles during *salat* and calculated blood pressure at different positions. Researchers found that during *salat*, movements increased cerebral blood flow and postural reflexes and helped the rehabilitation process of disabled geriatric patients by improving blood flow and increasing musculoskeletal fitness (Reza, Urakami and Mano 2002).

In my research, I observed a significant change in the blood pressure of some critically-ill patients and patients who remain hospitalized for an extended period of time. Dr. Alptekin reported that a blood pressure change of 10mmHg (millimeter of mercury) is medically significant. Twelve of the long-term patients, 20% of participants, were recorded with changes between 5-10 mmHg. When factored into the average of all participants, these changes are not clinically meaningful. However, there is a need for further studies on the effects of prayer on patients who are critically ill and are hospitalized for an extended period of time.

While patients stated that prayer was associated with a relaxed state, modifications in vital signs of many participants were not consistent with that claim. Although there was little evidence of modification in physiological state, participants reported substantial changes in their physical/emotional and spiritual condition after prayer. Al-Kandari stated that congregational prayer and commitment to a religious group provides social support and improves stress management (2003, 468).

Furthermore, some limitations in terms of research may have affected outcomes. First, it should be noted that the hospital environment is not always the most suitable environment for prayer due to distractions by machine sounds and other people, such as staff, family members, and room-mates. A more ideal environment would be a quiet, more private and relaxing room. Second, vital signs were recorded for only *du`a*, verbal supplications, *dhikr*, invocation, and Qur'anic recitation, but not for *salat*, which theologians hold the most important role of all Islamic prayers. It was not possible to ask patients to perform the *salat* as it requires making ablution, special clothing, and

bodily movements difficult for many patients. Also, special equipment would be required to measure the vital signs of praying patients. In their research, Reza, Urakami, and Mano (2002) reported that performing *salat* by geriatric patients was associated with positive outcomes, such as improving cerebral circulation and serving as a remedial action to depression. Further studies on *salat* and healing are necessary to understand the effects of *salat* on Muslim patients.

### Summary

In this chapter, the data were analyzed and discussed in two subsections: a) patients' response patterns on surveys; and b) physical effects of prayer on Muslim patients. The preliminary survey revealed that participants' level of religiosity/spirituality were already high as a result of the influence of Islamic practices on many aspects of Muslims' lives. Post-test surveys showed that prayer decreased anxiety, despair, depression, and loneliness through increased reliance on and hope in God.

Physiological data in the present study support previous studies, particularly those investigating the relationship between blood pressure and prayer. Other studies have pointed to the social support as a mediating factor in the positive relationship between prayer and health. The current study found statistically significant, yet clinically insignificant changes of physiological conditions. Unlike other studies, this study did not evaluate social support.

The present study supports the hypothesis that prayer does have positive effects on the patients based on participants' reports and recordings of vital signs. These effects

are only immediate religious/spiritual and physical effects. Also, the prayers used in this study do not include *salat* in the physical measurements.

To obtain more accurate results, each of the questions in the surveys deserves sole focus in research studies. There have been studies on only *salat*, *du`a*, intercessory prayer, and so on (refer to Literature Review). These studies give a more detailed picture of each Islamic practice. Long-term studies that use a larger participant group should provide more accurate data. Research can be carried out in different hospitals and hospices in the US and around the world. The findings may give us a better understanding of prayer's effect on Muslim patients who may practice religion differently. This research presents only a brief glimpse on the effects of these practices on well-being. A multi-disciplinary approach, in which involve psychologists, doctors, pastoral care staff work together in exploring this issue, may help us gain greater insight into the nature of the relationship between prayer and health.

## **CHAPTER VI**

### **CONCLUSION**

Contemporary research and empirical studies in the West and Muslim world point to the benefits of praying during illness. Praying during sickness produces physical benefits like reduced blood-pressure (Kandari 2003), psychological/emotional benefits such as a decrease in depression and fear, and spiritual benefits such as preparation for death.

The present study supports previous works with similar findings. Prayer holds an important role in the life and recovery process of the Muslim patients who were surveyed. Many stated that prayer became more important for them during their illness. Patients listed prayer as giving them comfort and believed that prayer had a positive effect on their recovery.

In the current study, the analysis by a team of professionals supports the hypothesis of the positive effect of prayer on the well-being of Muslim patients. Burak Alptekin, MD., concluded that prayer lowers blood-pressure, especially for patients with more serious and terminal diseases and requires extended hospitalization. Wayne Dinn, a neuropsychological researcher, assisted with the data analysis, which revealed that prayer was associated with higher scores on self-report measure of patients. Imam Talal Eid, Th.D., and the principal investigator found that prayer increases the religiosity and spirituality of Muslims during illness. The principal investigator observed during the test sessions that patients appear to be more relaxed after participating in the prayer session.

Based on the results of this research, other studies, and my personal experience as a chaplain, Muslim clergy should play a greater role in the healing process. Hospital staff in the West may have little or no knowledge of the needs of Muslim patients in terms of religion, spirituality, and culture. A Muslim chaplain can train hospital staff in these matters and provide for the Muslim patients, especially for Muslims who are not well educated or have little knowledge in matters of religion and thus may not know how to pray, read the Qur'an, and understand or know about the Hereafter. They may face greater psychological and emotional distress in the face of illness and possible death, and high levels of anxiety may worsen their physical condition. As described in the Literature Review, Islamic practices, including prayer, prepare a Muslim for the difficulties of sickness and death in three ways:

- 1) When healthy, a Muslim takes physical preventative measures against illness such as following the hygiene traditions of the Prophet Muhammad. Through Islamic practices, he or she maintains a healthy attitude and develops a positive way of thinking towards sickness and other difficulties through relying on God's power, mercy, which in turn decreases their fears and gives them hope.
- 2) When ill, a Muslim will seek medical treatment as a religious duty. A Muslim will think positively about illness instead of feeling guilty or fearful. Praying during illness will aid the healing process through physical and spiritual comfort, and increase his or her hope.
- 3) Islamic practices and prayer prepares Muslims psychologically and spiritually for death by contemplating about death and the afterlife, praying to God for a

peaceful death and eternal happiness. Thus, when facing a fatal illness, a Muslim belief in God's mercy and the Hereafter will comfort him or her by decreasing fear of nonexistence.

This research has added to thousands of prayer and health studies. This study, in particular, explored the effects of prayer in regards to the well-being of Muslim patients, and found many benefits. Alongside modern medicine, prayer can help improve health. Neglecting the spiritual and religious needs of the Muslim patients may not aid the healing process, and might even delay the process. It is sincerely hoped that this research will contribute to a greater understanding of the role of prayer in Muslim patients' well-being, and encourage non-Muslims, especially medical staff and other caretakers of Muslim patients to consider the healing power of prayer.

# APPENDIX A

## CONSENT FORM

### Partners HealthCare System Research Consent Form

Subject Identification
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General Template  
Version Date: November 2005

Protocol Title: The effects of prayer on Muslim patients' well-being  
Principal Investigator: Salih Yucel  
Site Principal Investigator:  
Description of Subject Population: adult Muslim in-patients At Brigham and Women's Hospital

#### About this consent form

Please read this form carefully. It tells you important information about a research study. A member of our research team will also talk to you about taking part in this research study. People who agree to take part in research studies are called "subjects." This term will be used throughout this consent form. If you have any questions about the research or about this form, please ask us. If you decide to take part in this research study, you must sign this form to show that you want to take part. We will give you a copy of this form to keep.

#### Why is this research study being done?

**This study will contribute to current knowledge about the effects of prayer on patients. This study also serves to complete the doctoral dissertation of the investigator. You are being asked to participate because you are a Muslim patient. We expect to enroll 60 subjects at Brigham and Womens' Hospital.**

#### How long will I take part in this research study?

Depending on your condition and length of stay, you will be asked to answer the questionnaire twice a day for three to five days. The interview, prayer, questions and other tasks will take about 15-20 minutes. Although it is hoped that you will answer all of the questions in the questionnaire, you may skip over any questions which you choose not to answer.

#### What will happen in this research study?

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**The procedure will be as follows: An imam, the principal investigator or the patient will recite or read about a page from the Kuran and the supplications of the Prophet Muhammad for healing.**

**Depending on the patient's condition and length of stay, he or she will be asked to answer the questionnaire twice a day for three to five days. Before and after the prayer, and before and after readings of non-religious texts, vital signs will be monitored and signed by a nurse or nurse's assistant who is on duty at the time in the hospital or by the investigator, who was trained to record vital signs, these include body temperature, blood pressure, respiratory rate.**

**The data collected from the questionnaire, vital signs, and principal investigator's observations will be evaluated by the team of professionals. The results of the study will be written as a thesis and reviewed by Boston University's School of Theology's Review Board. The thesis may or may not be published.**

**What are the risks and possible discomforts from being in this research study?**

**There are no known risks to participate in this study. However, if you feel uncomfortable at any point, we will stop and, if needed, provide counseling.**

**Can I still get medical care within Partners if I don't take part in this research study, or if I stop taking part?**

**Yes. Your decision won't change the medical care you get within Partners now or in the future. There will be no penalty, and you won't lose any benefits you receive now or have a right to receive.**

**Taking part in this research study is up to you. You can decide not to take part. If you decide to take part now, you can change your mind and drop out later. We will tell you if we learn new information that could make you change your mind about taking part in this research study.**

**If you take part in this research study, and want to drop out, you should tell us. We will make sure that you stop the study safely. We will also talk to you about follow-up care, if needed.**

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It is possible that we will have to ask you to drop out before you finish the study. If this happens, we will tell you why. We will also help arrange other care for you, if needed.

**Will I be paid to take part in this research study?**

**By participating in this research, you will be provided with a ten dollar gift card that can be used at Brigham and Women's Hospital's cafeteria as compensation for participation.**

**What will I have to pay for if I take part in this research study?**

No, there are no payments to take part in this study.

**What happens if I am injured as a result of taking part in this research study?**

We will offer you the care needed to treat any injury that directly results from taking part in this research study. We reserve the right to bill your insurance company or other third parties, if appropriate, for the care you get for the injury. We will try to have these costs paid for, but you may be responsible for some of them.

**There are no known risks in partaking in this study. However, if at any point you feel uncomfortable, counseling can be provided.**

Giving you care does not mean that Partners hospitals or researchers are at fault, or that there was any wrongdoing. There are no plans for Partners to pay you or give you other compensation for the injury. However, you are not giving up any of your legal rights by signing this form.

If you think you have been injured or have experienced a medical problem as a result of taking part in this research study, tell the person in charge of this study as soon as possible. The researcher's name and phone number are listed in the next section of this consent form.

**If I have questions or concerns about this research study, whom can I call?**

You can call us with your questions or concerns. Our telephone numbers are listed below. Ask questions as often as you want.

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**If you would like to have additional information about this project, please contact project advisor, Carole Bohn, at [cbohn@bu.edu](mailto:cbohn@bu.edu), 617-353-3047, or at the School of Theology, 745 Commonwealth Ave, Boston, MA 02215. If you have any questions about your rights about as a research subject, you can contact David Berndt, Director of Human Subject Protections through email at [dberndt@bu.edu](mailto:dberndt@bu.edu), or call 617-353-4365, or write to him at 25 Buick St, 2<sup>nd</sup> Floor, Boston, MA 02215.**

**If you have any questions concerning this study or your participation in it, either now or any time in the future, you may contact Salih Yucel, Brigham and Women's Hospital Chaplaincy Service, 75 Francis St. Boston, MA 02115 (Cell Ph: 617-331-1864; Office: 617-732-7480, E-mail: [svucel@partners.org](mailto:svucel@partners.org)**

If you want to speak with someone **not** directly involved in this research study, please contact the Partners Human Research Committee office. You can call them at 617-424-4100.

You can talk to them about:

- Your rights as a research subject
- Your concerns about the research
- A complaint about the research

Also, if you feel pressured to take part in this research study, or to continue with it, they want to know and can help.

**If I take part in this research study, how will you protect my privacy?**

Federal law requires Partners (Partners HealthCare System and its hospitals, health care providers and researchers) to protect the privacy of health information that identifies you. This information is called Protected Health Information. In the rest of this section, we refer to this simply as "health information."

If you decide to take part in this research study, your health information may be used within Partners and may be shared with others outside of Partners, as explained below.

**We have marked with a  how we plan to use and share your health information. If a box is not checked , it means that type of use or sharing is not planned for in this research study.**

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We will also give you the **Partners Notice for Use and Sharing of Protected Health Information**. The Notice gives more details about how we use and share your health information.

▪ **Health Information About You That Might be Used or Shared During This Research**

- Information from your hospital or office health records within Partners or elsewhere, that may be reasonably related to the conduct and oversight of the research study. If health information is needed from your doctors or hospitals outside Partners, you will be asked to give permission for these records to be sent to researchers within Partners.
- New health information from tests, procedures, visits, interviews, or forms filled out as part of this research study

▪ **Why Health Information About You Might be Used or Shared with Others**

The reasons we might use or share your health information are:

- To do the research described above
- To make sure we do the research according to certain standards - standards set by ethics and law, and by quality groups
- For public health and safety - for example, if we learn new health information that could mean harm to you or others, we may need to report this to a public health or a public safety authority
- For treatment, payment, or health care operations

▪ **People and Groups That May Use or Share Your Health Information**

**1. People or groups within Partners**

- Researchers and the staff involved in this research study
- The Partners review board that oversees the research
- Staff within Partners who need the information to do their jobs (such as billing, or for overseeing quality of care or research)

**2. People or groups outside Partners**

- People or groups that we hire to do certain work for us, such as data storage companies, our insurers, or our lawyers
- Federal and state agencies (such as the U.S. Department of Health and Human Services, the Food and Drug Administration, the National Institutes of Health,

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and/or the Office for Human Research Protections) and other U.S. or foreign government bodies, if required by law or involved in overseeing the research

- Organizations that make sure hospital standards are met
- The sponsor(s) of the research study, and people or groups it hires to help perform this research study
- Other researchers and medical centers that are part of this research study
- A group that oversees the data (study information) and safety of this research study
- Other:

Some people or groups who get your health information might not have to follow the same privacy rules that we follow. We share your health information only when we must, and we ask anyone who receives it from us to protect your privacy. However, once your information is shared outside Partners, we cannot promise that it will remain private.

▪ **Time Period During Which Your Health Information Might be Used or Shared With Others**

- Because research is an ongoing process, we cannot give you an exact date when we will either destroy or stop using or sharing your health information.

▪ **Your Privacy Rights**

- You have the right **not** to sign this form permitting us to use and share your health information for research. If you don't sign this form, you can't take part in this research study. This is because we need to use the health information of everyone who takes part in this research study.
- You have the right to withdraw your permission for us to use or share your health information for this research study. If you want to withdraw your permission, you must notify the person in charge of this research study in writing.

If you withdraw your permission, we will not be able to take back information that has already been used or shared with others. This includes information used or shared to carry out the research study or to be sure the research is safe and of high quality.

If you withdraw your permission, you cannot continue to take part in this research study.

- You have the right to see and get a copy of your health information that is used or shared for treatment or for payment. To ask for this information, please contact the person in charge of this research study.

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▪ **If Research Results Are Published or Used to Teach Others**

The results of this research study may be published in a medical book or journal, or used to teach others. However, your name or other identifying information **will not** be used for these purposes without your specific permission.

**Consent/Assent to take part in this research study, and authorization to use or share your health information for research**

**Statement of Subject or Person Giving Consent/Assent**

- I have read this consent form.
- This research study has been explained to me, including risks and possible benefits (if any), other options for treatments or procedures, and other important things about the study.
- I have had the opportunity to ask questions.

If you understand the information we have given you, and would like to take part in this research study, and also agree to allow your health information to be used and shared as described above, then please sign below:

**Signature of Subject:**

\_\_\_\_\_

Adults or Minors, ages 14-17

\_\_\_\_\_

Date/Time

**OR**

If you understand the information we have given you, and would like to give your permission for your child/the person you are authorized to represent to take part in this research study, and also agree to allow his/her health information to be used and shared as described above, then please sign below:

**Signature of Parent(s)/Guardian or Authorized Representative:**

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\_\_\_\_\_  
Parent(s)/Guardian of Minor

\_\_\_\_\_  
Date/Time

**OR**

\_\_\_\_\_  
Court-appointed Guardian or Health Care Proxy

\_\_\_\_\_  
Date/Time

**OR**

\_\_\_\_\_  
Family Member/Next-of-Kin

\_\_\_\_\_  
Date/Time

Relationship to Subject: \_\_\_\_\_

**Signature of a Witness:**

\_\_\_\_\_  
Witness (when required by the PHRC or sponsor)

\_\_\_\_\_  
Date/Time

**Statement of Study Doctor or Person Obtaining Consent**

- I have explained the research to the study subject, and
- I have answered all questions about this research study to the best of my ability.

\_\_\_\_\_  
Study Doctor or Person Obtaining Consent

\_\_\_\_\_  
Date/Time

In certain situations, the Partners Human Research Committee (PHRC) will require that a subject advocate also be involved in the consent process. The subject advocate is a person who looks out for the interests of the study subject. This person is not directly involved in carrying out the

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research. By signing below, the subject advocate represents (or “says”) that the subject has given meaningful consent to take part in the research study.

**Statement of Subject Advocate Witnessing the Consent Process**

- I represent that the subject or authorized individual signing above has given meaningful consent.

\_\_\_\_\_  
Subject Advocate (when required by the PHRC or sponsor)

\_\_\_\_\_  
Date/Time

Consent Form Version Date: January 9, 2007

## APPENDIX B

### DEMOGRAPHICS SURVEY

1. Gender a) male      b) female
2. Age \_\_\_\_\_
3. Marital status: a) single   b) married   c) divorced   d) widow   e) other
4. Level of education      a) Primary school  
   b) High school  
   c) College graduate  
   d) Master degree or above  
   e) Illiterate
5. Occupation \_\_\_\_\_
6. Nationality \_\_\_\_\_

**APPENDIX C**

**PREMINILARY SURVEY**

Patient No. \_\_\_\_\_ Trial no. \_\_\_\_\_ Date \_\_\_\_\_

1. Depressed (0 is not depressed and 10 is most depressed)

$\frac{1}{0} \frac{1}{1} \frac{1}{2} \frac{1}{3} \frac{1}{4} \frac{1}{5} \frac{1}{6} \frac{1}{7} \frac{1}{8} \frac{1}{9} \frac{1}{10}$

2. Anxious (0 is not anxious and 10 is most anxious)

$\frac{1}{0} \frac{1}{1} \frac{1}{2} \frac{1}{3} \frac{1}{4} \frac{1}{5} \frac{1}{6} \frac{1}{7} \frac{1}{8} \frac{1}{9} \frac{1}{10}$

3. Angry with God (0 is not angry at all and 10 is very angry)

$\frac{1}{0} \frac{1}{1} \frac{1}{2} \frac{1}{3} \frac{1}{4} \frac{1}{5} \frac{1}{6} \frac{1}{7} \frac{1}{8} \frac{1}{9} \frac{1}{10}$

4. Lonely (0 is not lonely at all and 10 is extremely lonely)

$\frac{1}{0} \frac{1}{1} \frac{1}{2} \frac{1}{3} \frac{1}{4} \frac{1}{5} \frac{1}{6} \frac{1}{7} \frac{1}{8} \frac{1}{9} \frac{1}{10}$

5. Submissive to the Will of God a) yes b) no

6. Hopeful (0 is not hopeful at all and 10 is extremely hopeful)

$\frac{1}{0} \frac{1}{1} \frac{1}{2} \frac{1}{3} \frac{1}{4} \frac{1}{5} \frac{1}{6} \frac{1}{7} \frac{1}{8} \frac{1}{9} \frac{1}{10}$

7. Despair (0 is not despairing at all and 10 is extreme despair)

$\frac{1}{0} \frac{1}{1} \frac{1}{2} \frac{1}{3} \frac{1}{4} \frac{1}{5} \frac{1}{6} \frac{1}{7} \frac{1}{8} \frac{1}{9} \frac{1}{10}$

8. Confident (0 is not confident at all and 10 is extremely confident)

1 1 1 1 1 1 1 1 1 1 1  
0 1 2 3 4 5 6 7 8 9 10

9. How often do you participate in a religious activity in a week?

1 1 1 1 1 1 1 1 1 1 1 1 1  
0 1 2 3 4 5 6 7 8 9 10

10. How often do you consult a spiritual guide or mentor in a month?

1 1 1 1 1 1 1 1 1 1 1 1 1  
0 1 2 3 4 5 6 7 8 9 10

11. What important is religion in your life? (0 is not important at all and 10 is extremely important)

1 1 1 1 1 1 1 1 1 1 1  
0 1 2 3 4 5 6 7 8 9 10

12. How often do you remember God? (0 is never, 1 is lowest, 10 is highest)

1 1 1 1 1 1 1 1 1 1 1 1 1  
0 1 2 3 4 5 6 7 8 9 10

13. When do you pray (dua)? a) During difficult times

b) To express gratitude

c) During Ramadan

d) Fridays

e) A few times a day

f) Never

g) Other \_\_\_\_\_

14. Do you pray (salaat) five times a day? a) yes b) no

(If the answer is no, then ask the next question. If yes, skip the next question and ask, “How many times do you pray?” and mark it on the line below.)

$\frac{1}{0}$   $\frac{1}{1}$   $\frac{1}{2}$   $\frac{1}{3}$   $\frac{1}{4}$   $\frac{1}{5}$   $\frac{1}{\quad}$   $\frac{1}{\quad}$   $\frac{1}{\quad}$

15. Do you pray only during Ramadan? a) yes b) no

16. How many days do you fast in Ramadan?

$\frac{1}{0}$   $\frac{1}{3}$   $\frac{1}{6}$   $\frac{1}{9}$   $\frac{1}{12}$   $\frac{1}{15}$   $\frac{1}{18}$   $\frac{1}{21}$   $\frac{1}{24}$   $\frac{1}{27}$   $\frac{1}{30}$

17. How often do you go to the mosque for prayer on a daily basis?(0 means never)

$\frac{1}{0}$   $\frac{1}{1}$   $\frac{1}{2}$   $\frac{1}{3}$   $\frac{1}{4}$   $\frac{1}{5}$   $\frac{1}{6}$   $\frac{1}{\quad}$

18. How do you classify yourself as a Muslim? a) Religious (8-10)

b) Sometimes practicing (3-5)

c) Spiritual (6-7)

d) Non practicing (0-1)

$\frac{1}{0}$   $\frac{1}{1}$   $\frac{1}{2}$   $\frac{1}{3}$   $\frac{1}{4}$   $\frac{1}{5}$   $\frac{1}{6}$   $\frac{1}{7}$   $\frac{1}{8}$   $\frac{1}{9}$   $\frac{1}{10}$

19. How much comfort does prayer and dua give you? (0 is no comfort and 10 is a lot of comfort)

$\frac{1}{0}$   $\frac{1}{1}$   $\frac{1}{2}$   $\frac{1}{3}$   $\frac{1}{4}$   $\frac{1}{5}$   $\frac{1}{6}$   $\frac{1}{7}$   $\frac{1}{8}$   $\frac{1}{9}$   $\frac{1}{10}$

20. When you or someone from your family gets sick:

a) Seek medical treatment only

b) Seek medical treatment and pray

c) Pray only

d) Never

e) Other \_\_\_\_\_

21. Do you give Zakat? a) yes b) no

22. Do you give sadaqa? a) yes b) no

23. How often do you give sadaqa? a) once a week b) once a month c) quarterly

d) other \_\_\_\_\_

24. How often do you read the Qur'an or religious books?

a) Daily (8-10) b) few times a week (5-7) c) weekly (2-4) d) monthly (1) d) never (0)

e) other \_\_\_\_\_

1	1	1	1	1	1	1	1	1	1	1	1
0	1	2	3	4	5	6	7	8	9	10	

25. How often to you contemplate?

1	1	1	1	1	1	1	1	1	1	1
0	1	2	3	4	5	6	7	8	9	10

## APPENDIX D

### RELIGIOUS TEXT

Chapter 1: *Al-Fatiha* (The Opening)

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ  
الْحَمْدُ لِلَّهِ رَبِّ الْعَالَمِينَ الرَّحْمَنِ الرَّحِيمِ مَالِكِ يَوْمِ الدِّينِ إِيَّاكَ  
نَعْبُدُ وَإِيَّاكَ نَسْتَعِينُ اهْدِنَا الصِّرَاطَ الْمُسْتَقِيمَ صِرَاطَ الَّذِينَ  
أَنْعَمْتَ عَلَيْهِمْ غَيْرِ الْمَغْضُوبِ عَلَيْهِمْ وَلَا الضَّالِّينَ

Chapter 2:256: *Ayatul Kursi* (Verse of the Throne)

اللَّهُ لَا إِلَهَ إِلَّا هُوَ الْحَيُّ الْقَيُّومُ لَا تَأْخُذُهُ سِنَّةٌ وَلَا نَوْمٌ لَهُ مَا  
فِي السَّمَاوَاتِ وَمَا فِي الْأَرْضِ مَنْ ذَا الَّذِي يَشْفَعُ عِنْدَهُ إِلَّا  
بِإِذْنِهِ يَعْلَمُ مَا بَيْنَ أَيْدِيهِمْ وَمَا خَلْفَهُمْ وَلَا يُحِيطُونَ بِشَيْءٍ مِّنْ  
عِلْمِهِ إِلَّا بِمَا شَاءَ وَسِعَ كُرْسِيُّهُ السَّمَاوَاتِ وَالْأَرْضَ وَلَا  
يَئُودُهُ حِفْظُهُمَا وَهُوَ الْعَلِيُّ الْعَظِيمُ

Chapter 113: *Al-Falaq* (The Daybreak)

قُلْ أَعُوذُ بِرَبِّ الْفَلَقِ مِنْ شَرِّ مَا خَلَقَ وَمِنْ شَرِّ غَاسِقٍ إِذَا  
وَقَبَ وَمِنْ شَرِّ غَاسِقٍ إِذَا وَقَبَ وَمِنْ شَرِّ النَّفَّاثَاتِ فِي الْعُقَدِ  
وَمِنْ شَرِّ حَاسِدٍ إِذَا حَسَدَ

Chapter 114: *An-Naas* (Humankind)

قُلْ أَعُوذُ بِرَبِّ النَّاسِ مَلِكِ النَّاسِ إِلَهِ النَّاسِ مِنْ شَرِّ  
الْوَسْوَاسِ الْخَنَّاسِ الَّذِي يُوَسْوِسُ فِي صُدُورِ النَّاسِ

## APPENDIX E

### NON-RELIGIOUS TEXT

#### السياسة على لسان الحيوان

"كليلة ودمنة" التي كتبها الحكيم الهندي ونقلها للعربية ابن المقفع منذ قرون طويلة تم إعدادها الآن كمسلسل كرتون للأطفال يحمل اسم "دنيا الغابة"، يتم عرضه في رمضان الحالي على عدة قنوات فضائية.

المسلسل يقع في 30 حلقة مدة كل حلقة 6 دقائق ، ويُذاع في دول الخليج العربي الست، وهو من إخراج الدكتورة تماضر محمد نجيب: الأستاذة بمعهد السينما بأكاديمية الفنون المصرية ، والتي شاركت أيضاً في إعداد السيناريو مع السينارست أحمد علام، وقد أخرجت قبل ذلك 120 فقرة حية من برنامج "افتح يا سمسم" الذي أنتجته مؤسسة الإنتاج البرامجي المشترك لدول الخليج العربي. ونسأل د. تماضر: لماذا وقع الاختيار على هذه القصص التراثية لتنفيذ في شكل مسلسل كرتوني للأطفال؟

تقول الدكتورة تماضر: قصص "كليلة ودمنة" هي عبارة عن مواظ ونصائح أخلاقية وسياسية وثقافية ودينية، تصلح لكل زمان ومكان، والأطفال لا يحبون النصائح المباشرة؛ ولهذا اخترنا أن تكون على لسان الحيوان تماماً كما هي القصة الأصلية؛ حيث كان الحكيم دايدبا (الهندي) يحكي للحاكم الظالم القصص على لسان الحيوانات؛ حتى يوصل إليه المعنى الذي يريد إيصاله له بشكل غير مباشر، وينتقل إلى عالم الحيوان من خلال الشخصيات الرئيسية في الغابة، وهي (كليلة) وهو ثعلب طيب القلب و (دمنة) وهو ثعلب أيضاً لئيم يدبر المؤمرات لبقية الحيوانات ويسعى دائماً للسلطة والسيطرة، وهناك أيضاً (الأسد) وهو ملك الغابة، والقرد (ميمون) طيب القلب، والفيل، والنمر والهدهد، والجمل والثور، وقد تحكي كل حلقة قصة كاملة أو قد تحتاج القصة الطويلة لأكثر من حلقة.

هل يمكن أن نعود في عصر الفضائيات إلى القصص التراثية؟

- الخير والشر موجود منذ بدء الخليقة وحتى الآن، لكن لا يمكن أن ننقل الواقع كما هو للأطفال، ولا حتى للكبار، بل من خلال شخصيات محببة إلى قلب الطفل كالحیوانات، وأطفالنا أذكيا جداً، ونحن الذين نتصور أنهم أغبياء وتظهر في برامج الكرتون الأجنبي عندما نترجم هذه المشاهد التي يراها الطفل ونحكها له، في حين أن الأطفال الآن لديهم ثقافة مرئية أو ما يسمى بثقافة الصورة، ويدرك الطفل لماذا يقفز هذا الشخص ويجري الآخر ويكي الثالث دون أن يكون الفيلم الكرتوني بلغته الأصلية، فبإمكانه اكتشاف الأحداث وربطها ببعضها بأفضل مما نتصور، ثم لماذا لا يثور التساؤل مع مسلسلات ديزني الكرتونية عن الغابة وحيواناتها ويثور حين نصوص نحن قصص الحيوان بما يتفق مع قيمنا لتصبح الغابة رمزا بدلاً من أفلام أمريكا التي تحمل قيم صراعية سافرة تجعل الدنيا غابة حقيقية؟!!

**APPENDIX F**  
**POST-SURVEY SURVEY**

Patient No. \_\_\_\_\_ Trial no. \_\_\_\_\_ Date \_\_\_\_\_

1. Do you feel more comfort than before you prayed? a) yes b) no

2. How comfortable do you feel? (0 is for not comfortable and 10 is for extremely comfortable)

1    1    1    1    1    1    1    1    1    1    1  
0    1    2    3    4    5    6    7    8    9    10

3. Do you feel stronger spiritually? a) yes b) no

4. How stronger do you feel spiritually? (0 is not stronger at all and 10 is very strong)

1    1    1    1    1    1    1    1    1    1    1  
0    1    2    3    4    5    6    7    8    9    10

5. What is the state of your mind? (0 is very clear and 10 is not clear at all)

1    1    1    1    1    1    1    1    1    1    1  
0    1    2    3    4    5    6    7    8    9    10

6. How often would you like an imam to come and pray for you on a weekly basis? (0 is never. 1 is once a week and 10 is ten times a week)

1    1    1    1    1    1    1    1    1    1    1  
0    1    2    3    4    5    6    7    8    9    10

7. Would you like family and friends to pray for you? a) yes b) no

8. How often would you like your family and friends to pray for you? (0 is never. 1 is once a week and 10 is ten times a week)

1    1    1    1    1    1    1    1    1    1    1  
0    1    2    3    4    5    6    7    8    9    10

9. Do you feel closer to God? a) yes b) no
10. Would you pray for people who you know are ill? a) yes b) no
11. Do you feel God's presence? a) yes b) no
12. Does prayer affect your physical condition? a) yes b) no
13. Do you believe that prayer affects you positively? a) yes b) no
14. Has praying increased your reliance upon God? a) yes b) no
15. Would you recommend prayer to another patient? a) yes b) no
16. If the imam does not come, will you pray or read Qur'an by yourself? a) yes b) no
17. How often will you pray daily? (0 is never and 10 is ten times a day)
- 1    1    1    1    1    1    1    1    1    1    1  
 0    1    2    3    4    5    6    7    8    9    10
18. How many pages of Qur'an will you read or recite in a day? (0 is never and 10 is ten pages a day)
- 1    1    1    1    1    1    1    1    1    1    1    1    1    1    1  
 0    1    2    3    4    5    6    7    8    9    10    12    14    16    18    20
19. Will you continue to pray and recite Qur'an after you are discharged? a) yes b) no

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