Nursing in Islam

However all the Western literature relate the initiative step in nursing for the “Lady of the lamp” Florence Nightingale (Timby, 2007), the Islamic literature has a different view. Nursing, in Islam, started in the age of the Prophet Mohammed (PBUH); in the 8th century (Miller, 2007; Qasule, 1998). This happened when he made nursing care givers as an essential part of the Muslim Army body. Rufaidah Bint Sa'ad Al Ansareyah or sometimes called Koaiba is recognized as the first Muslim professional nurse (Miller, 2007; Qasule, 1998). As her father was a physician, she learned how to care for patients. Tracing her history showed that she expressed all attributes of a good nurse; kindness and empathy, capability of leading and organizing, and ability to inspire others to produce good work, besides having several very good clinical skills (Qasule, 1998). Not only Rufaidah was a practical nurse, but also she was a teacher. In her school, a lot of volunteer Muslim women learned nursing skills and how to care for ill and wounded Muslims. In the Arabic language, the word “Asiya” was used for the single female nurse, while the plural was “Awasi” (Miller, 2007). The translation of the word “Asiya” may involve the physical, emotional, social, and even spiritual care. History has recorded names of women who worked with Rufaidah: Om Senan Al Esla Mey (Om Ammara), Om Ayman, Safiyat, Om Sulaim, and Hind. Other Muslim women who were famous as nurses were: Nosaiib Bint Kaab Al Mazeneya, Aminiab bint Abi Qays al Ghifariyat, Om ’Atiyyah al Ansariyat, Om Matawea Al Aslameya, and Om Wareka Bint Hareth (Miller, 2007; Qasule, 1998).

After the establishment of the Islamic State in Madina, Rufaidah devoted herself to nurse the Muslim sick. The Prophet offered a tent, outside his mosque, for
nursing sick Muslims in the peace time. During war she used to guide groups of helper nurses who went to the battlefield and treated the wounded. Rufaidah had trained a group of women companions as nurses. When the Prophet's army was getting ready to go to the battle of Khaibar, Rufaidah and the group of volunteer nurses went to the Prophet Muhammad (PBUH). They asked him for permission "Oh messenger of Allah, we want to go out with you to the battle and treat the injured and help Muslims as much as we can". The Prophet gave them permission to go. Rufaidah and her team members of nurse volunteers did such a good job. They were able to keep several tasks during the war; provided water for the sick and wounded, caring for wounded and offering medicine for them, and taking care for the deed and transporting them to the Madinah (Miller, 2007) as postmortem care. As appreciation for her efforts, the Prophet assigned a share of the booty to Rufaidah. Her share was equivalent to that of the soldiers who had actually fought. Through other battles, Rufaidah’s field hospital tent became very famous. Not only the Prophet used to direct that the casualties be carried to Rufaidah’s tent, but also he used to visit some wounded soldiers there and appreciate her efforts.

A unique contribution of Rufaidah was acknowledging a community nursing. She did not limit nursing practice to the clinical situation, but went out to the community and tried to solve the social problems that lead to disease. “She was both a public health nurse and a social worker” (Qasule, 1998). Her assistance and support reached every Muslim in need including the poor, the orphans, and the handicapped. She used to take care of the orphans, foster them, and teach them. Further more, we can say that Rufaidah deserves to be called the “Mother of Nursing”. She is the first nurse, the founder of first nursing school, the establisher of the first code of conduct and ethics, and the first leader in the nursing field (Miller, 2007).
Since the age of the prophet Mohammed (PBUH) till the current days, nursing has been one of the most recommended professions for Muslim women. However Muslim women are allowed to work in general, there are several conditions or constraints on her work. However Muslim women are highly motivated to work in nursing and to offer nursing care for other Muslim and non Muslim women as well as for her family members. As with nearly every religion, Islamic practice and belief encompasses a wide spectrum of adherence, ritual, and tradition, which may vary by individual, family, community, or nation. Nurses must take care to ask patients and family about their specific beliefs and practices. However, a general familiarity with basic concepts of Islam allows nurses to deliver competent, compassionate, and respectful care that will meet spiritual needs as Muslim patients and families approach the end of life.

**Development of medicine and health care in Islam**

“Historically, Islam has made great contributions to the arts and sciences and civilization as a whole” (Stacy, 2001, p. 1). One of the major contributions was the establishment of hospitals as institutions for treating patients and training physicians. The history of Islamic hospitals goes back to before the 8th century. In the Islamic era, hospitals were established to provide medical and psychological care (Rassol, 2001). These early hospitals employed salaried medical staff and served as centers for medical education. Early Islamic hospitals provided health care to all people, regardless of their religious affiliation (Nanji, 1996).

The Islamic Empire extended from the Atlantic Ocean on the West to the borders of China on the East. Only 80 years after the death of the Prophet Mohammed (PBUH), the Muslims crossed to Europe to rule Spain for more than 700 years. In the
ninth century, Islamic medical practice had advanced from talisman and theology to hospitals with wards. The doctors had to pass tests to be considered professional and technical terminology began to be used (Syed, 2009). For more than 1000 years, the Islamic Empire remained the most advanced and civilized nation in the world. In the early ages of Islam, Muslims conquered the great university and hospital intact of the Persian City of Jundi-Shapur. Its pattern was the basic for later Islamic medical schools; the medical education was serious and systematic. Teaching was designed to include both of lectures and clinical sessions based on the apprentice system. One of the most famous advices given for medical students at that times offered by Ali ibnul-Abbas (Haly Abbas: -994 A.D.), who asserted that "And of those things which were incumbent on the student of this art (medicine) are that he should constantly attend the hospitals and sick houses; pay unremitting attention to the conditions and circumstances of their intimates, in company with the most astute professors of medicine, and inquire frequently as to the state of the patients and symptoms apparent in them, bearing in mind what he has read about these variations, and what they indicate of good or evil." On the other hand, Razi (Rhazes: 841-926 A.D.) advised them to bear in mind the classic symptoms of a disease, as in the text books, and compare them with what they found in the practice during diagnosing any disease. At that time, the pioneer physicians such as Razi (Al-Rhazes), Ibn-Sina (Avicenna: 980-1037 A.D.) and Ibn Zuhr (Avenzoar: 116 A.D.) performed the duties of both hospital directors and deans of medical schools simultaneously. They used to study the patients’ cases and prepare them for student presentation. Clinical reports of cases were written and preserved for teaching; registers were maintained.

Only Jundi-Shapur or Baghdad had separate schools for studying basic sciences. Medical students received basic preparation from private and self study. In
Baghdad, dissecting the apes, skeletal studies, and didactics were used for teaching anatomy. Other medical schools used lectures and illustrations for such goal. An essential requirement for enrollment in medical schools was Alchemy; studying herbs and pharmacology rounded out the basic training. After finishing the basic training, the students were admitted as an apprentice to a hospital. There was a great focus on the clinical practice; the students moved gradually from simple cases to the most difficult cases then they moved from the inpatient areas to the outpatient settings.

Regarding the curriculum, there was a difference in the clinical curriculum among various schools. The major focus was on internal medicine but also surgery was included. After completing the basic courses, some students specialized either under famous specialists or in clinical training. In orthopedics, the use of plaster of Paris for casts was widely taught, however it was rediscovered in the West in 1852. Although ophthalmology was practiced widely, it was not taught regularly in medical schools. Obstetrics was left to midwives. Ibn Sina and Razi both widely practiced and taught psychotherapy. Completing the training was not enough to allow the medical graduate to enter practice without passing the licensure examination. The idea of licensing exam was made by Caliph Al-Muqtadir in 931 A.D in Baghdad when he knew that several patients died as a result of physicians’ errors. Licensing Boards were set up under a government official called Muhtasib or inspector general. The Muhtasib also inspected weights and measures of traders and pharmacists. The current Food and Drug Administration (FDA), in America today, was done in Islamic medicine 1000 years ago. European medical schools followed the pattern set by the Islamic medical schools and even in the early nineteenth century, students at the Sorbonne could not graduate without reading Ibn Sina's Qanun (Cannon).
The development of efficient hospitals was an outstanding contribution of Islamic medicine. The hospitals were run by government and the directors of hospitals were physicians. Services were offered free to all citizens regardless of their color, religion, sex, age or socioeconomic status (Syed, 2009). There were hospitals and separate wards for male patients and female patients. Each ward was furnished with a nursing staff and gatekeeper from the same gender. Different diseases such as fever, wounds, infections, mania, eye conditions, cold diseases, diarrhea, and female disorders were allocated in different wards (Syed, 2009). Patients who were approaching healing had separate sections. Hospitals provided patients with unlimited water supply and with bathing facilities. They had housing for students and house-staff. They contained pharmacies dispensing free drugs to patients. Hospitals had their own conference room and libraries containing the most up-to-date books (Syed, 2009).

For the first time in history, these hospitals kept records of patients and their medical care. From the point of view of treatment the hospital was divided into an out-patient department and an inpatient department. The system of the in-patient department differed only slightly from that of today. At Tile Tulun hospital, on admission the patients were given special apparel while their clothes, money, and valuables were stored until the time of discharge. On discharge, each patient received five gold pieces to support himself until he could return to work. Healthy people are said to have pretend illness in order to enjoy its food. In the time where there was a separate hospital in Damascus for lepers, in Europe, up to six centuries later, condemned lepers were burned to death by royal decree.
The Qayrawan Hospital (built in 830 A.D. in Tunisia) was characterized by spacious separate wards, waiting rooms for visitors and patients, and female nurses from Sudan, an event representing the first use of nursing in Arabic history. The hospital also provided facilities for performing prayers. The Al-Adudi hospital (built in 981 A.D. in Baghdad) had interns, residents, and 24 consultants attending its professional activities. An Abbasid minister, Ali ibn Isa, requested the court physician, Sinan ibn Thabit, to organize regular visiting of prisons by medical officers. At a time when Paris and London were places of mud streets and hovels, Baghdad, Cairo, and Cordova had hospitals which incorporated innovations which sound amazingly modern.

In general, there were two types of hospitals - the fixed and the mobile. The mobile hospitals were transported from one place to another and were erected from time to time as required. The physicians in the mobile clinics were at the same level of those who served at fixed hospitals. Similar moving hospitals accompanied the armies in the battle fields. The field hospitals were well equipped with medical supplies, tents and a staff of doctors and nurses. The traveling clinics served the totally disabled, the disadvantaged and those in remote areas. These hospitals were also used by prisoners, and by the general public, particularly in times of epidemics.

Regarding surgeries and anesthesia, Ibn Sina originated the idea of the use of oral anesthetics. The Arabs invented the soporific sponge which was the precursor of modern anesthesia. It was a sponge soaked with aromatics and narcotics and held to the patient's nostrils. The use of anesthesia was one of the reasons for the rise of surgery in the Islamic world to the level of an admirable specialty, while in Europe, surgery was disparaged and practiced by barbers and quacks. Al-Razi is attributed to
be the first to use the seton in surgery and animal guts for sutures. Abu al-Qasim Khalaf Ibn Abbas Al-Zahrawi (930-1013 A.D.) known to the West as Abulcasis, Bucasis or Alzahravius is considered to be the most famous surgeon in Islamic medicine. In his book Al-Tasrif, he described about 200 surgical instruments many of which were devised by Zahrawi himself. Zahrawi stressed the importance of the studying anatomy which has been considered as a fundamental prerequisite to surgery. He advocated the re-implantation of a fallen tooth and the use of dental prosthesis carved from cow's bone, an improvement over the wooden dentures worn by the first President of America George Washington seven centuries later. Zahrawi was the first surgeon in history who used cotton in surgical dressings to control of hemorrhage, to serve as pads for splinting of fractures, as a vaginal padding of pubis fractures, and in dentistry. The surgeons of Islam practiced three types of surgery: vascular, general, and orthopedic. Ophthalmic surgery was a specialty which was quite distinct both from medicine and surgery. Surgeons all over the world practice today unknowingly several surgical procedures that Zahrawi introduced 1,000 years ago.

Ibn Sina in his masterpiece Al-Quanun (Canon), containing over a million words, described complete studies of physiology, pathology and hygiene. He specifically discoursed upon breast cancer, poisons, skin diseases, rabies, insomnia, childbirth and the use of obstetrical forceps, meningitis, amnesia, stomach ulcers, tuberculosis as a contagious disease, facial tics, phlebotomy, tumors, kidney diseases, and geriatric care. The doctors of Islam exhibited a high degree of proficiency and certainly were foremost in the treatment of eye diseases. Words such as retina and cataract are of Arabic origin. In ophthalmology and optics ibn al Haytham (965-1039 A.D.) known to the West as Alhazen wrote the Optical Thesaurus from which such
worthies as Roger Bacon, Leonardo da Vinci and Johannes Kepler drew theories for their own writings. The greatest contribution of Islamic medicine in practical ophthalmology was in the matter of cataract. The most significant development in the extraction of cataract was developed by Ammar bin Ali of Mosul, who introduced a hollow metallic needle through the sclerotic and extracted the lens by suction. Europe rediscovered this in the nineteenth century.

Pharmacology took roots in Islam during the 9th century. Yuhanna bin Masawayh (777-857 A.D.) started scientific and systematic applications of therapeutics at the Abbasids capital. In his book al-Masail Hunayn outlined methods for confirming the pharmacological effectiveness of drugs by experimenting with them on humans. He also explained the importance of prognosis and diagnosis of diseases for better and more effective treatment. As pharmacy became an independent and separate profession from medicine; regulations became necessary and imposed to maintain quality control." The Arabian apothecary shops were regularly inspected by a syndic (Muhtasib) who threatened the merchants with humiliating corporal punishments if they adulterated drugs." As early as the days of al-Mamun and al-Mutasim pharmacists had to pass examinations to become licensed professionals and were pledged to follow the physician's prescriptions. Also by this decree, restrictive measures were legally placed upon doctors, preventing them from owning or holding stock in a pharmacy.

The important role of the Muslims in developing modern pharmacy and chemistry is memorialized in the significant number of current pharmaceutical and chemical terms derived from Arabic: drug, alkali, alcohol, aldehydes, alembic, and elixir among others, not to mention syrups and juleps. They invented flavorings extracts made of rose water, orange blossom water, orange and lemon peel, tragacanth and other
attractive ingredients. Space does not permit me to list the contributions to pharmacology and therapeutics, made by Razi, Zahrawi, Biruni, Ibn Butlan, and Tamimi.

Additional important contribution of Muslims was related to the psychotherapy. From freckle lotion to psychotherapy—such was the range of treatment practiced by the physicians of Islam. Though freckles continue to sprinkle the skin of 20th century man, in the realm of psychosomatic disorders both al-Razi and Ibn Sina achieved dramatic results, antedating Freud and Jung by a thousand years. Razi made Baghdad Hospital first hospital to have a ward exclusively devoted to the mentally ill." Razi combined psychological methods and physiological explanations, and he used psychotherapy in a dynamic fashion. The Arabs brought a refreshing spirit of dispassionate clarity into psychiatry. They were free from the demonological theories which swept over the Christian world and were therefore able to make clear cut clinical observations on the mentally ill. Najab ud din Muhammad", a contemporary of Razi, left many excellent descriptions of various mental diseases. His carefully compiled observation on actual patients made up the most complete classification of mental diseases theretofore known.” Najab described agitated depression, obsessional types of neurosis, *Nafkhae Malikholia* (combined priapism and sexual impotence). *Kutrib* (a form of persecutory psychosis), *Dual-Kulb* (a form of mania). From the clinical perspective Ibn Sina developed a system for associating changes in the pulse rate with inner feelings which has been viewed as anticipating the word association test of Jung.

It is not surprising to know that at Fez, Morocco, an asylum for the mentally ill had been built early in the 8th century, and insane, asylums were built by the Arabs
also in Baghdad in 705 A.D., in Cairo in 800 A.D., and in Damascus and Aleppo in 1270 A.D. In addition to baths, drugs, kind and benevolent treatment given to the mentally ill, musico-therapy and occupational therapy were also employed. These therapies were highly developed. Special choirs and live music bands were brought daily to entertain the patients by providing singing and musical performances and comic performers as well. (Abuelaish, 1993).

**Method of Therapy in Islamic Medicine**

The approach of treating patients was depending on physiotherapy and diet first. If, these non-pharmacological methods, failed drugs can be used and finally surgery is the last choice. The physiotherapy included exercises and water baths. The Arabs had an elaborate system of dieting and were aware of food deficiencies. Proper nutrition was an important item of treatment. Drugs were divided into two groups: simple and compound drugs. They were aware of the interaction between drugs; thus, they used simple drugs first. If these failed, compound drugs were used which are made from two or more compounds. If these conservative measures failed, surgery was undertaken.

**Perception of Muslims towards health and illness**

Muslim patients’ perception of health and illness slots in the notion of accepting illness and death with patience, meditation and prayers. In the Muslim patients’ understanding, illness, suffering and dying are natural part of life and a test from Allah. ‘Be sure we shall test you with something of fear, hunger, some loss in wealth, lives or the produce (of your toil), but give glad tidings to those who patiently persevere (Ai-Baqarah 2:155) (Rasool, 2000). Consequently, seeking treatment for illness is not considered as a sign of conflict with confidence on Allah for a cure. The Prophet
Muhammad said that; "Seek treatment, because Allah did not create a sickness but has created a treatment for it except for old age" (Rasool, 2000).

According to Al-Jibaly (1998) a unwell Muslim should keep in mind that his sickness is a check from Allah which carries tidings of forgiveness and mercy for him. Thus, avoiding complaining of such suffering, accepting it with patience and satisfaction and asking Allah to reduce this distress, all are completely encouraged (from Rasool, 2000).