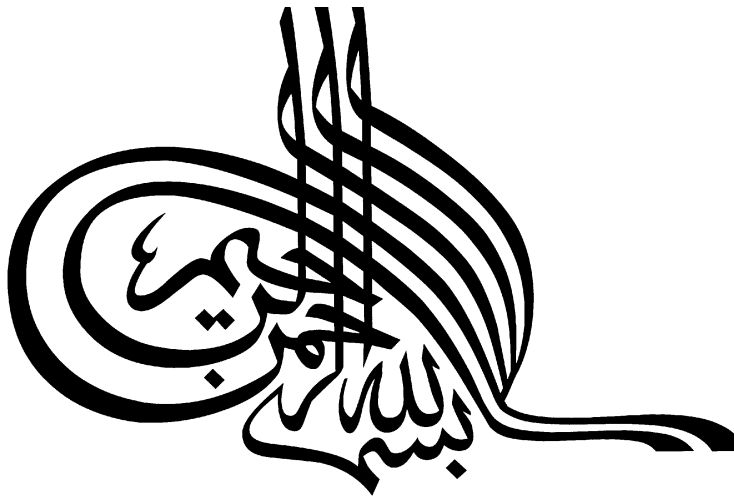
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Year Book 2005-2006

FEDERATION OF ISLAMIC MEDICAL ASSOCIATIONS

الاتحاد العالمي للجمعيات الطبية الإسلامية

GERIATRICS
AND END OF LIFE ISSUES:
Biomedical , Ethical And Islamic Horizons

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Editorial

Dear FIMA members,

Assalaamu alaykum

Bismillah al-Rahman al-Rahim

All praise is to Allah (SWT) the most Merciful, the most Beneficient. May Allah's blessings and peace be upon Prophet Muhammad (PBUH) and upon his family and companions.

I begin by thanking FIMA Executive Council for honoring me with the responsibility to be the Editor-in-Chief again for the FIMA Year Book. I thank Allah (SWT) that He gave me this opportunity and enabled me to accomplish this task. I pray to Allah (SWT) to accept this effort in His way and to give a reward for all who participated in this endeavor.

This issue of the FIMA Year Book is devoted to the ethical issues related to aging and end of life issues from an Islamic perspective. It is a very important topic, especially that modern medical care resulted in prolonging life and at the same time introduced technology that can keep a dying person technically alive for a prolonged period making the definition of death and specifically its timing a difficult and controversial matter. While it is true that in Muslim countries, at present, some deaths still occur at home, but with the gradual increase in the utilization of hospitals and specifically the intensive care units with life support technology, an increasing number of deaths are occuring in the hospital setting where these dilemmas are more commonplace. So it behooves physicians practicing in Muslim countries, especially Muslim physicians treating Muslim patients to be aware of all these issues.

Dr. Aly Mishal addresses the constructive role that the aging population can play in society and advocates helping them to achieve their role by providing adequate care for their physical as well as mental health. He specifically

stresses the Islamic guidance that help achieve these goals. He then delineates their responsibilities and those of the society in this regard.

While traditionally a will was something only old people thought of, the changing circumstances of dying and death now makes it important that all of us young and old think of the concept of the "living will" wherein each individual can express his/her wishes in regards to the provision of medical care in case of accidents, terminal illness, cancer, etc. This is important from different aspects : first, one has to be certain that treating physicians follow the Islamic principles as best as the person understands them from jurisprudence opinion, and second to avoid any conflict between family members as to the extent of medical intervention in these situations when the person can not make decisions for him or herself. The topic of the living will is being addressed in detail by Dr. Abul Fadl Ebrahim of Durban, South Africa. He critiques a prototype of a living will used in his native country from an Islamic perspective while presenting another prototype produced by the Islamic Medical Association of North America (IMANA).

Defining the moment of death is a very critical concept as it will indicate the time to withdraw life support if it has been initiated, allows the organs of the dead person to be harvested for donation (if that is the dead person's wish)and also from the Islamic point of view, because of the special rites that should be performed and the rulings of Shariah that apply once a person is declared dead. The latter is discussed in detail in Dr. Abul Fadl Ebrahim's article entitled "End of Life Issues……." . Muslim specialist physicians in the disciplines of neurology, neurosurgery and critical care medicine along with Islamic scholars had convened conferences to discuss this issue and the conclusion was to consider brain death as the criterion for defining death. The definition of brain death, its diagnosis and its time is discussed in detail by Drs. Farah and Kurdi in another article in this volume.

The topic of a living will and its importance was made very prominent as a national issue in the United States of America with the case of Terri Schiavo in which a legal battle continued for more than a decade because there was no documented living will and the husband's claim that he was fulfilling his wife's

wishes while she was in a Persistent Vegetative State (PVS), while her parents rejected his claim. Finally the court sided with the husband. This case is being discussed in detail by Dr. Faroque Khan. The case apparently got not only national attention, but also generated discussion worldwide, as exemplified by Dr.Aly Mishal's commentary which has been published in the Jordan Medical Journal last year, that we elected to include it in this volume along with Dr Khan's article. This case also brought to the forefront another important question that is to what extent care should be provided to a terminally ill patient. Specifically whether feeding or hydration is part of medical care or hospice care and whether it is ethically permissible to withhold (artificial) feeding or(intravenous fluids) hydration from a dying or a terminally-ill patient who has no chance of recovery, whether this was this person's wish or, in its absence, the wish of family members, the attending physicians or even the courts and what is the Islamic point of view in this regard. These issues were discussed in Dr. Faroque Khan's article and Dr. Mishal's commentary but also the whole subject of "Making Use of Extraordinary Means to Sustain Life" is discussed in greater detail-under various clinical situations, in an article by Dr. Abul Fadl Ebrahim with the Islamic perspective in each case. In this article, he also discusses the right to refuse treatment if there is no hope of cure or if its side effects are significant with little benefit.

One has to understand that there are differences in the approach to these clinical scenarios depending on the level of medical care available in different societies. For example, while in South Africa Dr. Abul Fadl cites a neonatal/ infant mortality of a 27 week preterm neonate to be 30-40%, in the United States of America it may be only 5% with a significantly lower incidence of "brain damage", lung disease, blindness and deafness. So, in the USA, it will be unethical, and I believe Islamically unacceptable to withhold aggressive treatment to this 27 week neonate. It will be perfectly acceptable to put this baby on the ventilator. While there is no guarantee but it is very probable that the use of the ventilator and other treatment will allow this neonate, by the will of Allah (SWT), to survive with reasonably good neurologic development. However, I agree that when the resources are limited it may be acceptable to

limit the use of such treatment to the ones who would benefit from it and this will vary with each institution, society, etc.While financial constraints do play a role, ideally governments should be in a position to fund such care if at all possible but this is another topic.

In Dr Ebrahim' example of the asphyxiated infant, I do not believe that removing the ventilator from that infant is Islamically prohibited. I believe that the use of the ventilator in this case is only prolonging the dying process.

The question of terminating the pregnancy for antenatally diagnosed trisomy 18 is controversial. Whereas Dr. Ebrahim allows it in the first trimester, some scholars believe that the ensoulment occurs as early as 40-45 days , or as late as 120 days after fertilization, and would allow termination of pregnancy for certain medical reasons, upto 8 or 19 menstrual weeks respectively. The case of the infant with thoraco-lumbar meningomyelocele merits further discussion. This neonate with modern medical care should have a high survival rate with a high probability of a reasonable quality of life and should not have been left to die of meningitis secondary to not performing the corrective surgery. Obviously Termination of Pregnancy (TOP) after 28 weeks for fetal malformation is not permissible but the real question is that with modern diagnostic techniques, i.e. chorionic villous sampling, multiple marker screening, amniocentesis and targeted ultrasound, many fetal malformations can be detected in the first trimester. Would it then be permissible to terminate the pregnancy because of antenatally diagnosed fetal malformations? The topic of TOP has been discussed previously in the FIMA 2002 year Book(1,2) and in IMANA position paper(3).

All the clinical scenarios given by Dr Ebrahim are very pertinent and raise ethical questions that were partly addressed in the article but unfortunately each needs more detailed discussion than is possible at this juncture.

Euthanasia is prohibited in Islam. Dr. Kasule discusses why it is so, based on both the purposes and the principles of the Islamic law (Shariah). The result of his analysis indicates that while it is acceptable to not undertake any heroic measures for a terminally ill patient, it is forbidden to stop ordinary medical (palliative) care and nutrition. Dr. Dayeh in addition, gives historical background

of euthanasia and its current status in Western societies. He also lists the arguments for the proponents of euthanasia and addresses the dangers of legalizing euthanasia on the society and the medical profession.

Dr. Badri discusses the psycho-spiritual aspects of death and dying from both an Islamic as well as the medical viewpoints. He addresses the psychological and spiritual responsibility of the Muslim physicians towards the very sick and dying patients as well as their responsibility in helping the bereaved family members.

I hope that our members and readers will enjoy this issue and that it will help them understand the complex topics it discusses. Readers may or may not agree with each statement made but at least it will start a process of dialogue and discussion of these topics that affect every one of us both as a physician and as an individual who will ultimately face death. Some questions were unanswered and some of these answers may be incorrect. One has to say Allah (SWT) knows best.

Finally, I want to thank the authors who submitted their valuable work, Dr. Mishal and Dr. M.A.A. Khan of the Editorial Board for their help and guidance. I sicerely appreciate the work of the staff of Dr. Mishal's office for proofreading and the publishers of the book.

I pray that Allah (SWT) accept and bless our efforts in His service . May Allah (SWT) guide us to the right path, have mercy on us and admit us to His paradise after the end of our short sojourn on this earth.

Wassalam

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Federation Of Islamic Medical Associations (FIMA) in Brief

- Established at the outset of the 15th Hijrah century, December 1981, in Orlando, Florida, USA, where senior leading medical figures representing ten Islamic medical organizations, form various parts of the world, convened and laid down the foundation of the Federation.
- Subsequently FIMA was incorporated in the State of Illinois as a non-profit organization, then acquired the special consultative status with the United Nations Economic and Social Council (ECOSOC).
- Since that time, FIMA membership progressively expanded to include 25 full members, 6 associate members, and more than 15 prospective and collaborating organizations from all over the world.
- Most FIMA activities and achievements are based on the endeavors of its member Islamic Medical Associations, in constructive mutual cooperation, and harmonious understanding.
- These activities include, but are not limited to:
  1- Cooperation in medical relief work, where and when needed in disaster stricken countries. The last endeavor was the "Save Vision Campaign in Africa", where more than 9000 cataract and intra-ocular lense surgeries were performed in Darfur-Sudan, Chad and Somalia, by ophthalmology teams volunteering from several countries.
  2- Scientific, professional and ethical-jurisprudence related conferences, seminars and publications.
  3- Establishment of the Consortium of Islamic Medical Colleges (CIMCO), to foster cooperation in improvement of curriculum, training, research, administration, and up-bringing of model medical practitioners.
  4- Establishment of the Islamic Hospitals Consortium (IHC), to pursue cooperation and coordination among medical professionals and hospital administrators in areas of experience exchange, improvement of health care delivery, ethical, administrative and operational activities, to meet the most advanced international standards, in the context of Islamic principles.
  5- Medical students activities, including conferences, seminars, publications, camps, Umrah & Ziarah programs.

6- Collaboration to extend a helping hand to Muslim medical practitioners in underprivileged countries, to work together and organize professional medical societies.
7- CME programs, and establishment of a Council of highly qualified professionals for development, improvement and supervision of these activities.
8- Recently, FIMA embarked on establishment of Resource Centers, such as the HIV/AIDS Resource Center, Islamic Biomedical Ethics Resource Center, and in the planning, is the Women's Affairs Resource Center.

- Islamic medical activities of FIMA have a holistic nature. Leadership, mutual cooperation and innovation are prerequisites for the welfare of our communities, our Ummah and humanity at large.

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AGING:
Scientific and Islamic perspectives

Aly A. Misha'l

Introduction

Life expectancy has been on the increase over the past several decades in most populations of the world, together with increasing frequency of age-related diseases.

In most Western countries, nearly a fifth of the population is older than 65 years. The situation may be somewhat different in other populations, including many Muslim countries.

Aging can be healthy or pathological. Human aging is a complex and irreversible process, manifested at different rates in different individuals, with significant genetic and environmental influences.

Biological age may be different from chronolgoical age. There is a changing view of aging, not as a disease, but as another stage of life, with its own challenges and satisfactions.

The concept of successful aging is related to the opportunities for continued activity and productivity of older people. Until recently, most attention was directed to the various needs of the older people, with neglect to the roles they can play in society. It is the duty of individuals and society to establish avenues to benefit from the talents of older adults, and, at the same time, to maintain their physical, intellectual and psychological functions.

The Islamic view of aging provides an extremely constructive way of elderly life, which ensures individual and society harmonious relationships.

This paper is directed to physicians who themselves may reach the stage of aging and/or frailty. Hopefully the paper will help in positively modifying the outlook of individuals, families and society at large to this issue.

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Aging and society:

In most Western societies, nearly a fifth of the population is older than 65 years, and people will be living a third of their lives after retirement [1].

In the so-called third world populations, including most Arab and Muslim countries, the picture could be somewhat different, but the medical, social and ethical implications are identical in all human societies.

Very few efforts were made to open organized avenues for old people to play meaningful roles as they age [1].

The experiences, abilities and time of older adults are largely not harnessed, and most efforts are limited to the variable needs of the elderly, without making use of their contributions to their societies. Some workers in this area describe the older generations as the only increasing natural resource, but the least used one! [1].

In most countries, the retirement age is considered 65 years and above. This is an arbitrary estimation, not supported by evidence.

In the post retirement years, more then half of people aged 65 and older are without significant disabilities, although 80% of them have one or more chronic disease [1]. Such chronic diseases are usually managed successfully, and most affected people lead near normal life. Most of them are, however, marginalized from productivity, while having plenty of time and experience.

Aging: what does it mean?

It is known that chronological age fails to provide an accurate indicator of the aging process. Human aging is a complex and irreversible process, which is manifested at different rates in different individuals [2]. The aging process is genetically determined, and influenced by environment.

The concept of (biological age) was introduced by many workers in gerontology [1]. Biological age is synonymous with functional and physiological age, and it is an indicator of the general health status of individuals, their remaining healthy life span and active life expectancy.

Biological age may help in identifying individuals at risk for age-related disorders, serve as a measure of relative fitness, and predict disability in later life and mortality, independent of chronological age [1].

People who function poorly are looked upon as being "biologically older" than their chronological age. Conversely, people who function well are deemed as "biologically younger".

This concept may be best represented by construction of an index derived from biological markers (called biomarkers of aging) [2]. Different researchers have developed several types of biomarkers. But because different tissues and organs age at different rates, there is need to obtain different biomarkers for different body systems.

Some of the newly developed biomarkers include:

- Changes in telomere length.
- Cross-linking of collagen.
- Glycosylation and glycoxidation.

- Pulse wave velocity.
- Sarcopenia (changes in muscles).
- Inflammatory markers.
- Clotting markers.
- Immune function tests.

Such biomarkers may be looked upon as only predictors of more relevant regulatory mechanisms and systems, which need time and effort to elucidate [2].

Moreover, most biomarkers are under substantial genetic influence, which strengthens the concept that longevity is heritable. This concept does not negate the important environmental influences.

The development of biological age estimate using a combination of reliable biomarkers, together with the search for genes which contribute to aging, will benefit in extending a healthy life span, and maintaining the well-being of the individual, both physical and psychological.

Biology of aging:

From the physiological view, human aging is characterized by progressive constriction of the homeostatic reserve of every organ system.

This decline is evident by the third decade of life, and is gradual and progressive. There is variability in the rate and extent of decline, which occurs independently of other organ systems, and is influenced by life style, environment, personal habits, diet, as well as genetic factors.

Alterations of aging include oxidation of proteins and tissues by free radicals[3], non enzymatic glycoxidation[4], and epigenic changes such as DNA methylation and histone acetylation[5].

The extent to which differentiated cells are affected by aging determines physiological function, while the extent to which stem cells are affected determines the capacity to replace damaged cells and repair tissues [6]. The accumulation of altered, unrepaired proteins and tissue, seems to start early in life, probably in the late twenties or early thirties.

Individuals become gradually less fit to repair, reproduce and survive. At first, this deterioration of function is detectable in the form of loss of reserve capacity and ability to repair and restore homeostasis under stress. Later on, altered function at rest sets in. Multiple organs and systems manifest variable changes in a heterogeneous manner among various systems.

These biological changes are more clear than the mechanisms that mediate them! Such basic mechanisms underlying aging are largely unknown.

Theories of aging:

Many theories of aging were proposed, but non is completely convincing. Theories differ in the emphasis placed on increased damage, versus deficient repair, and the mechanisms that mediate each.

One of the problems which decrease the accuracy of these theories is whether the changes described are the cause or the result of senescence.

It has been observed that a typical feature

of the aging process is a general increase of pro-inflammatory cytokines, creating a chronic pro-inflammatory status. Examples of these cytokines include, but not limited to, IL-6, TNF-a, C-reactive protein and others. Serum levels of TNF-a are considered a strong predictor of mortality [7].

It is likely that altered inflammatory response can be the result of a life-long exposure to stresses, such as antigens, chemical and physical agents. The inflammatory response could be looked upon as an attempt of the organism to cope with stressing agents, and a trial to restore homeostasis, usually unsuccessfully.

At this current level of knowledge, there are many inconsistencies between clinical and genetic studies, to explain the aging processes. There is general agreement that both genetic and environmental variables, have variable roles. Chronic, sub-clinical inflammatory processes are believed to be under genetic control, and it is detrimental for longevity.

The other concept of oxidative stress has causative links with the pro-inflammatory status. As people age, a gradual and steady state of tissue oxidation, glycosylation, advanced glycation end products (AGE^S) formation, and other age related processes result in persistent derangement of proteins, including those in cell membranes, receptors and mitochondria. Natural immunity systems are variably affected [7].

As a result of the interplay of chronic inflammation and oxidative stresses, various vital processes undergo profound dysfunction during the aging process. It is very likely that an important link exists between the free radicals of oxidative stress and the inflammatory processes.

Derangements of lipid metabolism in old age are major risk factors in the inflammatory process. Accumulation of fat inside muscles in old age is looked upon as a deleterious factor, in various aspects, similar to that of visceral fat [7].

Some professionals look upon aging as an ultimate failure in the medical model founded on the idea of curing disease.

To others aging is considered a normal part of the life cycle. There is an ongoing controversy around the concept of whether humans are programmed to die. There is some scientific understanding of the aging process indicating that, instead of being programmed to die, we age because gradually we accumulate a host of faults in the cells and tissues of our body [8]. A large number of maintenance and repair systems collectively provide the network of cellular defense mechanisms. The weak links of this network may predispose to age-related disorders, such as cardiovascular disease, diabetes mellitus, degenerative disorders, mutations leading to malignancies and other disorders. Death finally sets in because of such disorders, rather than from old age per se.

The aging process is characterized by its unpredictability at the individual level. Aging can be healthy or pathological.

Supporters of this view consider aging to be not a disease, but another stage of life with its own challenges and satisfactions [9]. Genes, in their view, account for only a quarter of what determines length of life. Other factors, such as life style, nutrition and environment account for the majority of an individual's exposure to damage and capacity for repair.

If this view is accepted, we could find explanation to prolonged longevity of many centenarians encountered in many societies. This also could explain the examples cited in religious history of mankind such as the longevity of Prophet Nuh (Noah) [A.S.].

On the other side, and citing religious literature, there are several lines of evidence indicating that we are destined to die. Whether this destination (ajal) implies that we are programmed to die is a philosophical concept.

Aging and the brain

The volume of the brain and its weight declines with age at around 5% per decade after age 40 [10], with more decline over age 70 [11]. Shrinkage of the brain stems from neuronal cell death, dendritic changes, with decline of the white matter and gradual demyelination. These brain changes do not occur to same extent in different brain regions, and in different people . The prefrontal cortex was reported to be the most affected, with the occipital cortex being the least affected. This fits well with the cognitive changes seen in aging. Men and women differ, with frontal and temporal lobes most affected in men, compared with the hippocampus and parietal lobes in women.

Conversely, functional organizational change may occur and compensate for cell death [13].

The neurotransmitters most discussed in aging are dopamine and serotonin . Dopamine levels decline with aging, and have been associated with declines in congnitive and motor functions [14] .

Serotonin levels also fall with age, with implications in regulation of synaptic plasticity and neurogenosis .

The neurotransmitter (monoamine oxidase) increases with age and may liberate free radicals that may compromise the inherent antioxidant reserves [15] .

Hormonal changes take place with increasing age. This includes sex hormones, growth hormone and other hormones, with possible physical and cognitive sequellae.

Vascular changes [16] are associated with aging, especially those related to blood pressure and atherosclerosis, which may result in strokes, small vessel disease, cognitive dysfunction and dementia [17] .

Protective factors, include physical exercise, proper diet and, most significantly, intellectual pursuits and active involvements which contribute to cognitive reserve and protect against decline despite neuropathology.[18-22]

Aging and mental health:

There is abundance of evidence suggesting that mental health diverges

from physical health, in that coping, adaptation and resilience functions are surprisingly well preserved throughout most of the human life span [10]. This important aspect of aging has very significant implications in the various roles that older people can perform in various aspects of their societies. Their input could be extremely fruitful in many areas that need cognitive capability. The physical aging should not bar them from providing this crucial input. This may add to the various shortcomings and fallacies of the arbitrary retirement age of 65 years.

As people proceed from being merely old by current recognized standards, to extreme senescence and frailty, mental health gradually deteriorates at variable and unpredictable pace.

The cognitive derangements that are most frequently encountered in clinical practice are in the areas of memory, attention, executive functions, and speed at which information is processed.

The most severe and insidious, as well as the first to appear, are problems affecting memory.

The most frequently encountered clinical problems of cognition as people age are depressive disorders, personality changes and dementia.

Depressive illness in the older population is a serious health concern leading to unnecessary suffering, impaired function states, increased mortality and excessive use of health care resources[24]. Late-life depression remains underdiagnosed and inadequately treated.

Risk factors of elderly depression are [25]:

- Female gender.
- Social isolation.
- Widowed, divorced or separated marital status.
- Lower socioeconomic status.
- Comorbid medical conditions.
- Insomnia.
- Functional impairment.
- Cognitive impairment.

Depression is not a normal consequence of aging [26]. Sadness and grief are normal responses to life events that occur with aging, such as loss of dear ones, transition from independent to assisted living, loss of income, loss of physical, social or cognitive function from illness and disability, which could increase rates of depression in older people, and may exceed 30% in hospitalized patients.

Comorbidity of depressive illness with other psychiatric syndromes, such as anxiety, somatization and substance abuse may add to the complexity of the problem[27]. Suicide risk is well established in old depressed people[28].

Frailty:

This is an advanced stage in the process of aging, which needs special care in management.

Its presence is often subtle or asymptomatic. It is evident over time through an excess vulnerability to various stressors, with reduced ability to maintain or regain homeostasis following any destabilizing event.

The term "frail" has varied clinically

relevant meanings, including: muscle weakness, bone fragility, very low body mass index, susceptibility to falling, vulnerability to infection and high risk for delirium, depression and dementia. The term usually describes a condition in which a critical number of these specific impairments occur in parallel, individually or in various combinations [29].

This stage of elderly life necessitates different approach by the medical professionals, family members, and society at large.

One of the aims of care is to delay this stage as long as possible, by maximizing the healthy and productive years lived successfully in later life. But once this stage finally sets in , the real compassion, help and kind loving care are needed, from family members in particular, and society in general.

Horizons in care of the elderly:

Aging has significant implications:

1. Social: rehabilitation, jobs, recreation.
2. Health: age-related chronic illnesses, and disabilities.
3. Economic consequences.

Quality of life has various dimensions and multiple meanings for various people. Several studies show a correlation between personality and quality of life satisfaction or well-being.

Life satisfaction, and well-being are parts of the quality of life, and describe different focuses.

Life satisfaction has a more objective insight, and includes satisfaction with current resources and conditions, such as welfare and relational aspects.

Well-being is the emotional reaction to the resources and conditions, and how the subject and others use them [30].

Before proper management is discussed, the issue of **elder abuse** must be clearly defined and tackled.

Three basic categories of **elder abuse** are known [31] : domestic, institutional and self neglect. The most encountered types of abuse are:

1- Physical abuse.
2- Psychological abuse: humiliation, intimidation and threatening.
3- Financial abuse: improper or illegal use of resources.
4- Neglect: abandonment, denial of proper nutrition and health-related services.
5- Abandonment and desertion by family members and friends.
6- Self neglect.

Most abused elderly are those above the age of 80 years.

The concept of successful aging:

Successful aging is related to the opportunity for continued generativity. Remaining active physically, cognitively, socially and making a contribution, are the main principles of successful aging [1]. Remaining active has specific health benefits, both in physical and cognitive domains. There is evidence to support the old saying "use it or lost it": to live longer and also healthier.

Being able to make a contribution has been described as an essential

element of successful aging. It has been reported that women who participated in voluntary work or activity had greater longevity than those who did not. Moreover, this voluntary work is essential to psychological well-being in late life. Physical and cognitive activity, along with social engagement are related to improved health and function with aging.

In addition to the generativity and contributions, elderly individuals can ensure their legacy through defining one's life contributions and achievements.

Staying cognitively active helps to protect memory in older people.

Regular physical activity, both of moderate and high intensity, is associated with decreased risk of cardiovascular disease,lower frequency of diabetes mellitus, maintenance of proper weight, and lower likelihood of disability and dependence.

Much has been learned recently regarding the adaptability of various biological systems by exercise [32].

Regular exercise is effective to reduce or prevent a number of functional declines associated with aging, and contribute to an increase in healthy life expectancy.

Additional benefits include:

- Improved bone health with reduction in risk of fractures.
- Improved postural stability, with reduction in falls.
- Increased coordination, flexibility and range of motion.
- Psychological benefits: related to preserved cognitive function and alleviation of depression.
- Improved concept of personal control and self-efficacy, independent life style, functional capacity and quality of life.

A good number of clinical studies showed significant benefits of exercise and community involvement [33],[34]. Those who live long lives, and are vibrant until shortly before death, may provide the best possible example of successful aging.

From the psychological domain, aging is seen as a life-long adaptive process, an ongoing dynamic of selective optimization with compensation, involving the following three elements, which provide a general framework for understanding the developmental changes and resilience across the life span [35]:

(1) Selection: as a result of physical and cognitive limitations, individuals select, or optimize, their efforts into areas of high priority.

(2) Optimization: individuals continue to engage in behaviors that enrich and augment their physical and mental reserves.

(3) Compensation: individuals compensate by using psychological and technological strategies.

Psychological strategies may involve using external memory aids.

Technological strategies may include a hearing aid.

The three elements interplay with one

another so that a person may suffer from a reduction in general capacity and losses in specific functions, but creates a transformed and effective life, and thereby the older person maximizes and attains positive or desired outcomes, and minimizes or avoids negative or undesired ones.

The role of society:

It may be very difficult for old individuals to get involved in activities that produce successful aging. It is hard to accomplish in a retirement setting or in isolation. The family, society (local or the wider one) need to develop modalities to achieve this, in active efforts towards maximizing productive and healthy years of life, side by side with minimizing the number of years of late life lived sick and disabled. Such modalities also help to decrease costs.

It is the duty of society to create widely accessible opportunities for older adults to remain active and productive.

Positive social support, and social activity of the older adults have been related to improve their health, functioning and happiness.

A prominent example of opportunities for older people to accomplish is the field of children education [1]. In most societies there is a two way deficiency of time and attention provided by working parents, as well as by the school systems to provide various types of care to the young generation. This deficiency includes teaching and education, as well as areas of culture and general knowledge.

With their wide knowledge and experiences, together with their valuable support, advice and helping hand, both at home and school levels, the older generation can provide valuable contributions and role models.

Their mature experienced human power could fulfill this role through nurturing and enriching the roles of paid teachers –educators, without displacing them. They could provide an image for a positive successful aging whereby the older retired individuals are looked upon to leave their legacy, after completing their own role in fulfilling their duties, and their own child rearing responsibilities. In addition, it provides them with the joy of giving and happiness of more achievements.

Programs must be designed that are attractive and convenient to old people, to maximize their effectiveness and contributions, as long as possible.

This educational model could be conveniently and actively extended to include areas of health, environment, social and charitable work to serve and support their communities.It would be beneficial to extend incentives to older volunteers, which could be material, symbolic or honorary.

Islamic perspectives of aging:

There is a wealth of references addressing aging in the Qura'n, the tradition of the Prophet (PBUH), and Muslim scholarly heritage. They characterize the Islamic vision of human life with its various stages.

Whether old age is associated with

frailty or not, there are special moral considerations of respect and dignity entitled to the elderly in Islamic teachings.

When old age is accompanied with frailty, these considerations become more clearly manifest, and various rights are clearly enjoined on family members and society at large.

Many Qura'nic verses provide definitions and obligations of this stage of human life:

> *"It is Allah, who created you (in a state) of weakness, ordains strength (on you) and then, after a period of strength, ordains (old age), weakness and gray hair. He creates whatever He wills, and He alone is all-knowing and infinite in His power"* [35] .

The word "weakness" in this verse pertains to utter helplessness of the human being during infancy. Then life evolves gradually to the stage of strength, followed by old age and frailty, which affects different individuals at different times and patterns of body and/or intellectual deterioration.

Biological aging eventually leads to utter senescence and compromise of all capabilities. The human being will then be reduced to a state of complete or near complete dependence on others.

A second Qura'nic verse states

> *"And Allah has created you, and in time will cause you to die, and many a one of you is reduced in old age to a most object state, ceasing to know any thing of what he once knew so well* [36] .

This deterioration of knowledge represents a more advanced stage of intellectual frailty that may lag in time after physical frailty. At a certain stage some elderly people may suffer senile, or other forms of dementia, behavioral disturbances and susceptibility to various illnesses.

The realization of our weaknesses, and the eventuality of death, ought to make our minds and hearts open for proper reasoning and contemplation to utilize the remaining times of our lives for deeds and achievements that benefit us and mankind at large, in various aspects, within the framework of what pleases Allah (SWT). The Qura'n and Prophetic tradition, continuously remind us of a time in the hereafter when some of us will painfully beg for return to life to work and rectify what we failed to do when we were granted the opportunity of life prior to death The Qura'n states:

> *"If only you could see when the guilty ones on the day of judgment will bend low their heads before their Lord! (saying): Oh Lord! We have (now) seen and we have (now) heard: now then send us back (to the previous life): we will work righteousness: for we do indeed (now) believe* [37].

Life span: Islamic view:

The Prophet (PBUH) stated: "the life span of my Ummah (nation) is between sixty and seventy, and a minority of them will exceed that [38] !

It was, however, repeatedly reported

that the Prophet referred to longer life spans in favorable terms. These are but few examples:

"The best among you are those who live longer lives with good deeds [39].

He was reported of making a Duaa (supplication) whenever he concluded a meeting or gathering, saying: "Oh Allah ! bestow on us a fear from you that prevents us from disobeying you ..., and grant us the enjoyment of our (senses of) hearing, seeing and energy, as long as you grant more life to us, and make this everlasting for us" [40].

The Prophet [PBUH] prayed for one of his companions, and said: "Oh Allah ! grant him blessing and increase his wealth and progeny, prolong his life and grant him forgiveness" [41].

It was reported this companion lived more than one hundred years.

The Prophetic tradition established the concept that the devote believer continues to gain favorable outcomes as he proceeds in age. This is evident from the Hadith:

> *"Do not express your wishing to die, and do not make Duaa for death before it comes on you, because death will terminate your good deeds, while prolonged living will further increase the good deeds of the faithful"* [42].

Old age and our responsibilities

It is pertinent to address the mutual obligations between the elderly and their society.

Islam places a duty on every individual to seek healthy lifestyle, and to seek remedy from ailments. Moreover, healthy and competent old people have significant roles to play in their society, their nation and humanity at large. With their knowledge, experiences and wisdom, they can provide valuable functions at various levels.

On the other hand, the society has obligations to adopt various arrangements to keep open avenues for the older generation to play their proper roles. As frailty clouds finally set in, their rights on society gradually expand. Ultimately the frail elderly individual becomes totally dependent. Family and society are morally and religiously enjoined to provide the proper caring. In Islam, this caring is looked upon as an act of worship, that Muslims expect the best level of reward by their Creator. He/she also expects the same level of devoted loving care, if he/she is destined to live to the stage of frailty.

Religious concessions to the elderly [42]

Older people, who become incapable to perform religious duties, are exempted, or their compliance is compassionately modified. This includes daily prayers (Salah) . Allah says:

> *"And celebrate Allah's praises standing, sitting and lying on your sides"* [43].

They are entitled to pay monetary or material substitution (fidyah) for untolerated fasting in Ramadan. Such substitution is directed to charitable support of needy people.Allah says:

> *"Oh you who believe! Fasting*

is prescribed to you as it was prescribed to those before you, that you may (learn) self restraint. (Fasting) for fixed number of days, but if any of you is ill or on a journey, the prescribed number (should be made up) from days later. For those unable to fast, a substitution (fidyah) by feeding of one who is indigent [44] .

These exemptions or modifications of religious duties extend to Hajj (pilgrimage), jihad and other demanding acts of worship.

The Prophet [PBUH] advised leaders of prayers (Imams) to be considerate for the weak and the elderly, "If one of you leads people in prayer, he should be easy on them, for among the people are the weak, the sick and the aged" [45] .

On the other hand, elderly competent people are enjoined to display exemplary character and behavior. They are expected to utilize their remaining years for more pure and piety deeds. These remaining years are invaluable and uncompensatable if used to add to their favorable acts, and to wipe away their unfavorable ones. Such years could be looked upon as favors granted by their Creator if properly utilized with pure intention (niyyah) to be blessed with life in paradise (Jannah) by the mercy and grace of Allah (SWT).

Elderly people should be extremely careful and weary of committing sins or immoral behaviors in their advanced years. The Prophet [PBUH] said: "Three persons, whom Allah will not speak to, nor purify, nor look at on the day of resurrection, and they will be afflicted with a painful torment: An old person who is an adulterer, a king (ruler) who is a liar, and a beggar who is arrogant (proud)" [46] .

One of the most overwhelming pleasures on the day of judgment is when the Creator looks at the believer or speaks to him/her.

Failure of cognition:An Islamic perspective:

Muslim scholars believe that true and faithful believers may not reach the stage of cognitive compromise.

Al-Qurtubi stated: Senescence and mental deterioration do not apply to the knowledgeable believer [47] .

According to Al-Suyouti, those who are recitors of Al-Qura'n are the most who will enjoy cognitive preservation [48] .

Al-Shanquiti stated: Those who memorize and repeatedly recite Al-Qura'n will not suffer from dementia or delirium [49] .

Mohammad Bin Ka'ab Al-Qurathy reported, (He who repeatedly recites Al-Qura'an will enjoy preservation of cognitive power, even if he lived two hundred years [50] .

Rights of the elderly are obligations on society:

Parent and child in Islam are bound together by mutual obligations and reciprocal responsibilities [51] .

When a frail, senile parent, or grand parent, repeats his old memoirs over and over, and expects audience to listen,his/her caring son/daughter

remembers childhood times when he/she persistently requested stories from the parent or grand parent, over and over.

When the frail elderly suffers and cries of pains, the caring offspring remember their childhood illnesses, and the havoc it caused for their parents.

As one Sahabi acompanion of the Prophet described it: when your parent took care of your childhood sufferings, his heart and mind deeply prayed for your recovery, while you will be looking forward for the end of your parent's final sufferings by death!

Principles of elderly care in Islam:

Family and society care for the elderly is based on the following principles of faith and morality:

(1) The dignity and respect of the human being: (And we glorified the progeny of Adam) [52] . Allah (SWT) ordered the angels to kneel to Adam, as a sign of respect and glorification. This status is extended to all mankind, including the elderly.

(2) The Muslim society is distinguished with mercy, solidarity and caring, especially towards those in need. The Prophet [PBUH] said:

(He does not belong to us who does not show mercy to our young, and respect to our old ones) [53] .

(3) Elders who spent their lives in services and accomplishment, are duly entitled for reward and return of favor by family and society. The Prophet [PBUH] said:

When soever a young person provides a favor for an old person, Allah will provide people to provide favors for him when he becomes old) [54] .

He also said:

One of the great favors from Allah is for those who provide favors and respect for an elder Muslim [55] .

(4) Caring for the elderly in the Muslim society is a moral and religious obligation on capable relatives and the society in case no capable offspring is available.

Friends and relatives of parents:

Not only parents, but also their friends and relatives are entitled for care and respect. The Prophet [PBUH] said:

One of the purest deeds is for a person to provide care for the beloved ones of his parents.[56]

This practice was widely implemented by companions of the Prophet [PBUH] and their successors. As one Sahabi advised a young man: My son! Preserve the love of your father's beloved ones.

This society-wide behavior has extremely favorable outcomes on minimizing social isolation and psychological disturbances among the elderly.

The Prophet [PBUH] listed parents' neglect together with worshiping partners along with Allah (shirk) and murder[57].

When the Prophet (PBUH) was asked about the best deeds in the eyes of Allah (SWT), he answered:

Performing timely prayers,then caring of the parents, then jihad for the cause of Allah.[58] . Caring for parents was

given priority over jihad.
This care was not limited to Muslim parents, but also to non-Muslim ones. This is clear in the Qura'nic verse:

> *"And We have enjoined on man to be good to his parents: In travail upon travail did his mother bear him, and in years twain was his weaning (hear the command): Show gratitude to Me and to your parents: To Me is your final goal (return)"*
>
> *"But if they strive to make you join in worship with Me things to which you has no knowledge, obey them not, yet bear them company in this life with justice (and consideration), and follow the way of those who turn to Me (in love and obedience). In the end the return of you all is to Me, and I will tell you the truth (and meaning) of all that you have done"*[59] .

Obligations to respect, value, serve and support the elderly are exemplified by a wealth of Qura'nic verses and Prophetic sayings: here are but a few:

> *"We have enjoined on man kindness to his parents* [60] .

A man asked the Prophet (PBUH) to take part in jihad. The Prophet asked: Is either of your parents alive? The man replied in the affirmative. The Prophet then asked: do you seek reward from Allah? The man replied in the affirmative. The Prophet said:Then return to your parents and exert yourself in their service. [61]

The elderly right to be remembered in Dua'a:

One of the most answered (honored) Dua'a (Supplication) is that of a son/daughter for his/her parent. Unpaid debts, Zakat, and unfulfilled Hajj can be performed by the offspring of a person who is unable to do so, or even after his death.
The Prophet (PBUH) said:
When a person dies, his actions come to an end, except in respect to three matters that he leaves behind: Sadaqah jariyah (a continuing charity), knowledge from which people benefit, and a pious child who makes Dua'a for him" [62].

Old age homes in Muslim society [43] .

Old age is the time when people need loving care, which is best performed by their beloved ones. The current trend of abandoning the elderly and placing them in old age homes is not consistent with this concept, and contradicts basic Islamic teachings.
In some instances, the contemporary lifestyles may necessitate utilizing Muslim old age homes for people in special circumstances. In such cases, their relatives, friends and society at large, should not abandon them. They should receive visits, care, cheering, social and other engagements on an ongoing pattern to fulfill the family and society caring concept.
The best **conclusion** to this presentation is exemplified by the Qura'nic verse:

> *"And that you be dutiful to your parents. If one of them or both attains old age during your life, say not to them a word of disrespect (not shout at them), not repel them, but speak to them with gentleness and generosity. And out of kindness, lower to them the wing of humility and say: my Lord! Bestow on them your mercy even as they cherished me in childhood"* [63] .

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THE LIVING WILL (WASIYYAT AL-HAYY): A STUDY OF ITS LEGALITY IN THE LIGHT OF ISLAMIC JURISPRUDENCE

Abul Fadl Mohsin Ebrahim

Introduction

Death is an inevitable phenomenon which strikes at any time during a person's infancy, youth or old age. But, one cannot overlook the fact that before the inevitable (i.e. death) does take place a person may become a victim of a terminal illness, or may lapse into irreversible coma, or a persistent vegetative state (PVS). In various countries, an increasing number of healthy people have appended their signatures on what is called the Living Will (Advanced Medical Directive), which is in effect a document safeguarding their right to die. This paper is an attempt to assess the validity of the Living Will in the light of Islamic Jurisprudence.

The Living Will, however, has other important aspects. Whether the individual is elderly, terminally ill or a healthy young one, he/she needs to express his/her wishes as to what the treating physician should do or not when the individual is rendered physically and mentally unable to make decisions for him/herself.

The contemporary soffisticated medical care of terminally ill patients increasingly utilizes life support technologies and procedures that many individuals prefere to avoid when they reach to that stage.

This will also help in resolving conflicts between family members and treating physicians, which may become very problematic.

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Medical Options

A person afflicted with a terminal illness, like cancer, eventually experiences excruciating pain and although nothing can be done to arrest the progression of the disease, pain killers are usually administered to the patient to keep him/her as comfortable and pain free as possible.

A PVS patient is one who retains the capacity to maintain the vegetative part of neurological function, i.e. can breathe unassisted but has no cognitive function. Such a patient has no awareness of surroundings or self, but can follow objects with the eyes and does respond to painful stimuli. However, he/she would have to be artificially fed through a tube that is attached to the nose (nasogastric tube) or directly to the stomach (gastrostomy tube).

As for the person who lapses into irreversible coma as a result of massive head injury, there is no expectation of him/her ever regaining consciousness. Medical intervention in this regard is to place the patient on a respirator, for he/she will be unable to breathe on his/her own. Unlike a PVS patient, he/she will not be able to respond to painful stimuli nor would his/her pupils react to light, remaining fixed and dilated; and he/she will be unable to swallow, yawn or vocalize.[1]

The Living Will

The Living Will (Advance Medical Directive) is a document in which a healthy person explains in writing which medical treatment he/she would accept or refuse at that critical juncture when he/she may not be in a position to express his/her wishes as a result of serious illness or injury. In other words, this document assists the attending physician to withhold or withdraw certain medical procedures and allow the patient to die naturally.

AL-WASIYYAH (The Last Will And Testament)

Al-Wasiyyah is the Arabic equivalent of what is termed today the Last Will and Testament. The drafting of such a will during one's lifetime is divinely ordained. The *Qura'nic* imperative in this regard is as follows:

> "*O you who believe! When death approaches any of you, (take) witnesses among yourselves when making bequests, - two just men of your own (brotherhood) or others from outside if you are journeying.....*"[2]

Likewise, the Prophet Muhammad (PBUH) has also emphasized the need to write down one's will. He is reported to have said:

> "It is not right for any Muslim person, who has anything to bequeath, that he may pass even two nights without having his last will and testament written and kept ready with him."[3]

However, it ought to be noted here that, according to Islamic jurisprudence, the proportionate respective shares that the legal heirs receive from the deceased's estate are neither dependent on a will nor on any other direction of the deceased.

Rather, these shares are governed by certain rules that have been laid down in the Islamic Law of Succession.[4] Thus, what can be included in a will are certain specific stipulations, for example that which relate to the affairs of the testator's young children, facilitating the marriage of the testator's daughters, and the devolution of one third of the testator's estate[5] in favour of a particular person or a charitable institution.

The question that arises here is whether it is permissible for a Muslim to include an advance medical directive in his his/her *wasiyyah*? Attention should be drawn here to the fact that the Living Will cannot form part of the *wasiyyah* since what is incorporated in the *wasiyyah* will be executed only after one's demise. According to Professor Jerold Leonard-Taitz, former Professor of Public Law and Director Medico-Legal Centre, University of Durban-Westville, South Africa:

> The "living will" is executed years in advance of the effects of old age which may render the patient *non compos mentis*; for instance many years later when the patient is unfortunately stricken with a terminal disease he may not be in a position to refuse treatment.(6)

Analysis Of The Document (7)

The document poses certain problems which are discussed below:

A. Right To Die As A Human Right (*Haq Al-mawt Min Huqquq Al-insaniyyah*)

The document in essence advocates the right to die as a human right. It is interesting to note that no reference to the right to die is enshrined in any bill of rights of any secular or religious jurisdiction, including the Universal Declaration of Human Rights of the United Nations and the European Declaration of Human Rights.(8)

The *Qura'n*, in various passages, emphasizes the fact that it is the sole prerogative of *Allah* (SWT) to bestow life and to cause death. For example:

> *"And Allah has created you, and in time will cause you to die ...."* (9)

It must also be pointed out here that the penal code of Islam which stipulates the death penalty for those who commit specific crimes is based on divine injunctions. For example, the *Qura'n*, prescribes the following punishment for committing wilful murder:

> *"O you who believe! Just retribution is ordained for you in cases of murder ..."* (10)

The Arabic equivalent for the punishment of the person guilty of committing murder is *al-Qiysas* (just retribution). This measure ensures that if the death sentence is to be carried out then only the one guilty of the crime will lose his/her life. It may be appropriate to point out that the family of the one who has been murdered also has other options: either to forgive the murderer, or to accept compensation.(11)

PROTOTYPE OF THE LIVING WILL[7]

TO MY FAMILY AND MY PHYSICIAN:

This declaration is made by me

.....

(full name and address)

..... at a time when I am of sound mind and after careful consideration.

If the time comes when I can no longer take part in decisions for my own future let this declaration stand as my directive.

If there is no reasonable prospect of my recovery from physical illness or impairment expected to cause me severe distress or to render me incapable of rational existence, I do not give my consent to be kept alive by artificial means and I request that I receive whatever quantity of drugs and intravenous fluids as may be required to keep me free from pain or distress even if the moment of death is hastened.

This declaration is signed and dated by me in the presence of the two undermentioned witnesses present at the same time who at my request in my presence and in the presence of each other have hereunto subscribed their names.

Signed .....

Date .....

Witnesses: (Witnesses should not be members of one's family)

Signature	Signature.....
Name	Name.....
Address.....	Address.....
Occupation	Occupation.....

Note: Should they wish, any person has my concurrence to apply for a court order to ensure compliance with this directive should any medical practitioner or health authority refuse to give effect to it.

Codicii : I do not consent to any form of tube feeding.

Signature	Witness.....
Date	Witness.....

B. Euthanasia *(Qatl Al-shafaqah)*

In the Living Will document above, consent is given for both passive and active voluntary euthanasia. This is evident because a clear directive is given for refusal of undergoing medical treatment and a request is made for the attending physician to administer "pain killers" even if that would result in hastening the event of death.

Islam upholds the sanctity of life. There are a number of *Qura'n*ic verses that testify to this. Some of these are:

> "*If anyone slays a human being unless it be (in punishment) for murder or for spreading corruption on earth - it shall be as if he had slain the whole of mankind; whereas if anyone saves a life, it shall be as if he has saved the lives of all mankind.*" (12)
>
> "*And do not take any human being's life - the (life) which Allah has willed to be sacred - other than in the (pursuit of) justice*." (13)

The instruction given to the doctor to take the necessary step to relieve pain even if it results in hastening death would render the doctor guilty of culpable homicide. Dr Hassan Hathout rightly points out that the *Shari`ah* (Islamic Law) has listed and specified the conditions that make the taking of life permissible (i.e. exceptions to the general rule of the sanctity of life), and they certainly do not include "mercy killing" nor do they make allowance for it.(15) This is why it is categorically mentioned in the *Islamic Code of Medical Ethics* that "the doctor shall not take any positive measure to terminate the patient's life."(14) However, one cannot overlook the fact that the Muslim doctor may face a dilemma when he/she administers a therapeutic procedure in order to relieve the patient's pain and it results in the death of the patient. Dr Hassan Hathouts provides an insight into this matter. He states:(15)

> From a religious point of view, the critical issue is the doctor's intention: is it to kill or to alleviate (the suffering)? Intention is beyond verification by the law, but according to Islam it cannot escape the ever-watchful eye of God. Who according to the *Qura'n* "*is aware of the (most) stealthy glance, and of all the hearts conceal* " (15) .
>
> Sins that cannot be proved to constitute a legal crime are beyond the domain of the judge but remain answerable to God.

C. The Question Of Pain And Suffering

According to the Islamic philosophy of life there is a transcendental dimension to pain and suffering. The *Qura'n* declares that human beings will not be left alone on saying: "*We believe*".(16) It asserts that the faith of the believer will be put to test through different forms of trial.(17) In other words, a Muslim looks upon disease, fatal or otherwise, as a test of his/her faith and true resignation to one's Creator. This affliction helps to contribute in one's favour in that it helps to expiate one's minor sins. This is evident from the following *hadith* of

the Prophet Muhammad (PBUH):

> When a Muslim is tried with a disease in his body, it is said to the angel: `Write for him the good actions which he used to do.' If He (Allah) cures him, He (Allah) absolves him (of all sins); and if He (Allah) takes his life (as a result of this disease), He (Allah) forgives him and shows mercy upon him.(18)

Hence, there is no justification to end the life of a person so as to relieve him/her of suffering. The *Qura'n* categorically states:

> "*Allah does not tax any soul (human being) beyond that which he can bear*."(19)

Muslims believe in the hereafter, the real and everlasting life, and it is this belief which enables them to bear their pain and suffering with what the *Qura'n* terms as s*abr* (patience). This in no way suggests that Muslims are fatalistic. It is mandatory for Muslims to seek medical treatment whenever they fall ill or suffer from any form of physical pain. In this regard the Prophet Muhammad (PBUH) is reported to have said: "Seek treatment, subjects of Allah, for to every illness Allah has created a cure;(20) and he cautioned them saying: "Your bodies have a right over you." (21)

D. Refusal Of Tubal Feeding

Some doctors are of the view that the artificial feeding of a PVS patient will not benefit the patient.22 But one cannot overlook the fact that artificial feeding is a substitute for normal eating. Withdrawing, for example, a nasogastric tube would in effect starve the patient thus leading to his/her death. Acceeding to the patient's advance medical directive not to feed him/her by artificial means would be termed active voluntary suicide assisted by a third party. Suicide in all its forms is a crime according to the *Shari`ah* (Islamic Law) and constitutes a sin against *Allah* (SWT). The *Qura'n* explicitly censures suicide with the following categorical prohibition:

> "*Do not kill yourselves: for verily Allah has been to you Most Merciful*."(23)

The Prophet Muhammad (PBUH) in the following *hadith* closes the fate of a person who chose to terminate his life:

> "There was a man before you who was wounded. The pain became unbearable and so he took a knife, and cut off his hand. Blood began to ooze out profusely leading to his death. The Almighty Allah said: `My servant hastened himself to Me and so I made Paradise unlawful for him." (24)

It would, therefore, be wrong to equate artificial feeding to a form of medical treatment. The following statement ought to be considered:

Doctors who look after vegetative patients frequently agree with families and nursing staff to withhold antibiotics and cardiopulmonary resuscitation. But cardiorespiratory arrest seldom occurs, and, even without antibiotics, repeated infections are often survived.(25)

Legal Status Of The Above Living Will

In the light of Islamic Jurisprudence, the

wishes of a Muslim may be included in the Last Will and Testament, but the Living Will above will not form part of the Last Will and Testament because, as already discussed, the Last Will and Testament is only executed after death takes place. However, if a Muslim were to append his signature on the above Living Will, such a document would be considered to be *wasiyyah muhrimah*[26], having no legal status on the basis of the following:

a. It is disliked (*makruh*) for a Muslim to ask for death. In this regard the Prophet Muhammad (PBUH) said: "*Let no one among you wish for death due to any hardship that may befall him. But if one has no other choice but to do so, one should say: `O Allah! grant me life as long as life is good for me, and cause me to die when death is better for me.*'"[27]

b. A Muslim should place his trust (*tawakkul*) at all times in *Allah* (SWT) and despair must not be allowed to set in during adverse times. While accepting the eventuality of death one may not lose hope of the Mercy of *Allah* (SWT). The *Qura'n* states:

"So lose not heart nor fall into despair for you must gain mastery if you are true in faith." [28]

c. Depriving a person of food and liquids, in whatever form, will cause death and this is a crime in Islam. That is why we find that even when Muslims are required to fast during the month of *Ramadan*[29], it becomes necessary for them to break their fast after sunset each night and to renew it the next morning before dawn. Hunger strike is alien to Islam.

The Alternative

A Muslim may draw up an alternative Living Will to the one above, but such a document will not be legally binding and it would be termed as *wasiyyah mubahah* (permissible or a legally indifferent document). The following may be incorporated into the Living Will:

a. Request to discontinue treatment

A terminally ill Muslim patient can request that treatment be discontinued if the treatment would not in any way improve his/her condition or quality of life based on the Islamic juridical principle of *la darar wa la dirar*[30] (no harm and no harassment). The intention here is not to hasten death, but the refusal of 'overzealous' treatment. However, 'palliative' care in the sense of maintaining personal hygiene and basic nutrition should not be discontinued.

b. Instruction to switch off the life-support equipment

A healthy Muslim may instruct that should he/she, as a result of a terminal illness or massive head injury, be diagnosed as brain stem dead then the life-support equipment should be switched off. In this regard the Council of the Islamic *Fiqh* Academy of the Organisation of the Islamic Conference,

during its third session held in Amman – Jordan from 8 - 13 S*afar* 1407 *Hijri*/11 - 16 October 1986, resolved that a person whose brain activity has ceased and the physicians confirm that such a cessation is irreversible and that the brain has entered the state of decomposition, under such circumstances the patient may be weaned off the intensive care equipment even though some organs of his body, like the heart, continue to function artificially with the help of the life-support equipment.(31)

c. Inclusion of organ donation

Today, modern science has made it possible to harvest the organ of the deceased and to transplant it into the living for the purpose of improving the quality of life of the living. Considerations for the justification of inclusion of organ donation in a Muslim's Living Will are based on (i) *al-Maslahah* (the well-being and general welfare of Muslims) and (ii) al-*ithar* (altruism i.e. generosity towards humankind).

(i) *Al-Maslahah*

It is true that Islam forbids any act of aggression against human life as well as the body after death. Thus, to take an organ out of the dead person's body to be transplanted into another person could justifiably be argued to be tantamount to mutilation of the body and violation of the sanctity of the corpse. However, what is to be noted is that the Islamic legal system the rights of the living supersedes consideration over the dead.(32)

(ii) *Al-Ithar*

The *Qura'n* and *Sunnah* exhort Muslims to cooperate with one another and to strengthen the bond of brotherhood among them. The *Qura'nic* imperative in this regard is:

> "Help you one another in righteousness and piety."(33)

and from the Prophetic tradition the following may be cited:

> "The believers, in their love and sympathy for one another, are like a whole body; when one part of it is affected with pain the whole of it responds in terms of wakefulness and fever."(34)

In the light of the above teachings, a living person's gesture in willing to donate his/her cornea, for example, after death has taken place should be viewed as an act of altruism. One cannot underestimate the fact that through corneal transplant a noble contribution is made in restoring the sight of another fellow human being suffering from corneal blindness. The Council of the Islamic *Fiqh* Academy of the Muslim World League, Makkah, Saudi Arabia, at its eight working session (19-28 January 1985), resolved that it would be permissible in *Shari`ah* (Islamic Law) to remove an organ from a dead person and to transplant it into a living recipient, on the condition that the donor was a sane person and had wished it so.(35)

At this juncture, it may be appropriate to point out that vital organs, for example, heart, lungs, kidneys and liver, of brain stem dead patients have a better chance of functioning in the post-operative period.(36) The question that arises here is

whether it would also be permissible for a Muslim to include in his/her Living Will a directive that he/she consents to donate his/her organ should he/she be diagnosed as brain stem dead? Deliberating on this issue, the Council of Islamic *Fiqh* Academy of The Organisation of the Islamic Conference, during its fourth session held in Jeddah, Saudi Arabia from 6 - 11 February 1988, noted that that death could take two forms:

(a) when the heart and respiration come to a stop, and no medical cure can reverse the situation; and

(b) when all functions of the brain come to a complete stop, and no medical cure can reverse the situation;

and thus resolved that it would be permissible to transplant the organ from a dead person to a living recipient on the condition that it has been authorized by the deceased or by his heirs after his death.[37] From this, it may be implied, although not categorically stated, that it is permissible to retrieve organs from brain stem dead patients for transplantation purposes. Moreover, it ought to be pointed out here that :

d. Power of attorney (*wakalah*)

In the alternative Living Will it would be prudent on the part of a Muslim to entrust someone with the power of attorney and mention that person by name in his/her Living Will. This would safeguard that should he/she become *non compos mentis* then his/her wishes as stated in the Living Will would be expressed by his/her *wakil* [38] (authorized representative) to family members and the attending physicians. The document should be dated and signed by the person giving the advanced medical directive, his/her *wakil*, and that of two witnesses.[39]

Conclusions

The prototype of the Living Will as documented in this article goes against certain basic Muslim beliefs and it cannot enjoy any legal status in view of the fact that it falls outside the domain of the *wasiyyah* (last will and testament). The bestowing of life and death is according to Islamic belief the prerogative of *Allah* (SWT) and hence none has the ability to prolong life. The *Qura'n* tells us that the *ajal* (appointed term) of every person's span of life has already been decreed by *Allah* (SWT).[40] To hasten the event of death is a crime in Islam. There is no justification, therefore, to terminate a life which may seem to be worthless. Pain and suffering is not viewed as a punishment but rather as a *kaffarah* (expiation) for one's sins. While it is true that Muslims must endeavour to seek medical treatment whenever they fall ill, treatment may be discontinued if *ahl al-khibrah* (the experts in the field of medicine) are of the view that there is little or no hope of recovery. It is the principle of *la darar wa la dirar* (no harm and harassment) which justifies one to allow death to take its natural course. However, `palliative' care of the terminally ill should be carried on, not with a view to cure the patient, but rather to relieve suffering and maintain personal hygiene and basic nutrition. One may argue that tubal feeding should also be discontinued since it constitutes an extraordinary means

of nourishing a person whose end is imminent. But, as pointed out, depriving the patient of forms of nourishment would in effect be tantamount to starving the patient so as to hasten death. However, it ought to be noted here that while there is no moral or legal right for the patient to refuse to take in food, the opinion of *ahl al-khibrah* (experts in the field of medicine) in this regard ought to be complied with. If artificial feeding would not benefit the patient and would only result in aggravating the condition of the patient it would be justified not to utilize this form of feeding on the basis of the Islamic juridical principle of *la darar wa la dirar* (no harm and no harassment).

It is the view of the writer of this article that a Muslim may draw up an alternative Living Will and to include in it instructions pertaining to the cessation of treatment, switching off the life support equipment, and organ donation. Although such a will would not be legally binding, nevertheless, it would be classified as *wasiyyah mubahah* (a permissible document), and the *wakil* (authorized representative) would be morally bound to express and convey the wishes of the person concerned to members of the family and the attending physicians. If none of the clauses of the Living Will contradicts the broad teachings of the *Qura'n* and *Sunnah* of the Prophet Muhammad (PBUH) there would be no justification to ignore the directives given therein. *Wa Allah A`lam* (And *Allah Subhuna Hu wa ta`ala* knows best).

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39. The provision for two witnesses is based on the *Qura'ni*c injunction which appears in 2:282.10.

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Editor's note

A prototype of an Islamic Living Will has been developed by the Ethics Committee of the Islamic Medical Association of North America (IMANA), It was published in The Journal of the Islamic Medical Association of North America, Volume 37, Number l,July 2005. P.37 and is reproduced here with permission.

Declaration made this …….day of ……..20 ……. A Muslim of sound mind, willfully and voluntarily make known my desires that my dying shall not be artificially prolonged under the circumstances set forth below and I declare : If at any time I have an incurable injury, disease or illness certified in writing to be a terminal condition by my attending physician(s), and my attending physician has determined that the use of life-prolonging procedures would serve only to artificially prolong the dying process, I direct that such procedures be withheld or withdrawn, and that I be permitted to die naturally with only the provision of appropriate nutrition and hydration and the administration of essential medications and the performances of any medical procedures necessary , (as determined by my physician) to provide me with comfort or to alleviate pain .

In the absence of my ability to give direction regarding the use of life-prolonging procedures, it is my intention that this declaration be honored by my family and physician as the final expression of my legal right to refuse medical or surgical treatment and I accept the consequences of the refusal.

…….. is my case manager to enforce my living will, if I am not physically able to give direction, I do not permit autopsy of my body unless my death occurred in a suspicious manner and it is important to know that cause of death or if it is required by the court of law . It is my desire that Muslims attending my dying process ensure that Islamic Shari'ah is practiced during preparation of my body for burial and that my body be treated with grace and privacy and buried with Islamic guidelines under the directions of my Muslim family, Imam or other qualified Muslims as soon as it is feasible.

Signed …… Date…….

Place ……..

The declaring person has been personally known to me and I believe (him/her) to be of sound mind. I did not sign the declaring person's signature above for or at the direction of the declaring person, I am not a parent, spouse, or child of the declaring person. I am not entitled to any part of the declaring person's estate or directly financially responsible for his/her medical care. I am competent and at least eighteen (18) years of age.

Witness(to the document) ……

Date……

BRAIN DEATH
Definition, Medical, Ethical and Islamic Jurisprudence Implications

Sameer Farah and Ashraf Al-Kurdi

Introduction

Life ends when the person's heart stops beating and breathing stops. A person is then declared dead. This is the way human kind understood death for a long time and we had very little reason to challenge this concept for thousands of years

It is only recently that our simple given, forgranted concept of death was challenged.

With the advances in life support technology, we are frequently confronted with the situation of patients being hooked to life support machines , whose hearts are beating and other organs are functioning, but actually have no evidence of brain function or ability to survive away from the ventilator support.

A new concept of death appeared and physicians started talking about **Brain Death** being equivalent to actual death .

This article discusses the concept of brain death, its historical background, definition, and criteria of the diagnosis

It also reviews the Muslim world concerns and current Islamic Jurisprudence opinion on this issue.

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Historical Notes

Brain death is the re-expression for irreversible loss of brain function. Brain death is declared when brainstem reflexes, motor responses, and respiratory drive are absent in a normothermic, non-drugged comatose patient with a known irreversible massive brain lesion and no contributing metabolic derangements. The determination of brain death in adults has become an integral part of the neurologic and intensive care practice, but may include physicians of any specialty .

Arriving to the acceptance of this concept took decades of hard work and bald challenges to prefixed ideas about death among doctors, legislators and religious groups .

Perhaps one of the early references to brain death came from Lofstedt and von Reis[1], who, in 1956, described six patients with apnoea, absent reflexes, hypotension, polyuria, and hypothermia. While supported with mechanical ventilation, all patients showed no intracranial blood flow during angiography, but they were not certified dead until cardiac arrest had occurred within 2–26 days. Necropsies revealed advanced cerebral necrosis.

Mollaret and Goulon, in 1959, described a condition they called " Coma de Passe" in 23 patients in whom all the criteria now recognised as being characteristic of brain death were present[2]

Lundberg[3] reported, in 1960, changes in cerebral perfusion pressure in which the intracranial pressure exceeded arterial pressure during brain herniation.

The term "brain death" was introduced in 1965 during a report of renal transplantation from a heart-beating, seemingly brain-dead donor[4]

In 1968 [5] the Ad-hoc committee of the Harvard Medical School reported guidelines for determination and definition of " irreversible coma" which included:

1- The patient should be unreceptive and unresponsive.
2- Apnoea was to be confirmed by 3 minutes off the ventilator.
3- No reflexes were present.
4- A flat or isoelectric EEG at high gain was a significant confirmatory test.

All of the above criteria were to be present at least 24 hours later with no change in the findings.

Clinical experience with the Harvard criteria suggested that they may be excessively restrictive. This led Mohandas and Chow [6] to propose the "Minnesota criteria" for brain death. Notably absent from this list are absent spinal reflexes and EEG activity (electroencephalography being viewed as an optional confirmatory investigation). The key elements of the Minnesota criteria are; (a) absence of spontaneous movement, (b) absence of spontaneous respiration over a four minute test period, (c) absence of brain reflexes as evidenced by: fixed dilated pupils; absent gag, corneal and ciliospinal reflexes; absent doll's eye movements; absent response to

caloric stimulation, and absent tonic neck reflex, (d) unchanged status for at least twelve hours and (e) The responsible pathological process deemed irreparable.
British criteria, influenced by the Minnesota criteria, appeared in 1976 and 1979 and were recognised as the UK code.[7]

In 1981, the President's Commission for the Study of Ethical Problems in Medicine and Behavioural Research recommended that irreversible cessation of all functions of the whole brain and brainstem be required for the diagnosis of brain death[8]. The Uniform Determination of Death Act, based on the President's Commission recommendations, is the federal legislation subsequently adopted by most states in the United States. Death may be declared by traditional cardiorespiratory or recent brain death criteria.

In 1995, the American Academy of Neurology (AAN) published a set of evidence-based practice parameters for determining brain death in adults [9]. These are the most accepted criteria for brain death worldwide. (appendix 1)

The force behind all this was probably multi-factorial:

1- The growing need for healthy organs for organ transplant bringing into focus many ethical and legal issues.
2- The burden of the costs of maintaining terminally ill patients on life support equipment in intensive care units (ICUs) both at individual and government levels.
3- The emotional and psychological burden of such situations on relatives and family members.

What about the status in the Muslim world ?

Because Shariah (Islamic Jurisprudence) is an integral part of the civil legislations of most Muslim communities ,the issue of brain death has brought intense debate among physicians, legislators and jurists.
It started at local levels in the early 70's of the last century when individual countries developed their own policies regarding this issue. Countries like Suadi Arabia, Kuwait, Iran and Jordan were pioneers in that field. In Jordan for instance , Prof. Kurdi and Hijazi, following a series of seminars with Islamic jurists, managed to lay down the Jordanian brain death criteria , and succeeded in implementing them in a legislation in Jordan .[10]
The era of the 80's witnessed the group work of Muslim countries in lying down unified legislations on this matter
In its second seminar, in 1985, the Islamic Organisation for Medical Sciences (IOMS) [11] held a symposium to study "the end of human life "in Kuwait. The issue of brain death was extensively discussed and the following recommendations were adopted :
1-The seminar realizes that in the majority of cases, there is no difficulty in recognizing the occurrence of death,

through conventional signs, or as a result of external medical observation which notes the absence of the signs that distinguish the living from the dead.

2- The seminar has reached the conclusion that there are few cases, which are usually under careful and comprehensive medical observation at hospitals, specialized medical centres, and intensive care units that have particular importance because there is an urgent need to diagnose death, although the body still shows signs, which have been always accepted as signs of life, whether these signs are naturally displayed by some organs of the body or result from resuscitation equipment applied to the patient.

3- The seminar discussed the signs of death listed by fiqh (jurisprudence) reference works and discovered that, in the absence of a Qura'n text or a saying of Prophet Mohammad (PBUH) which explicitly defines death, these opinions reflect the medical knowledge available at the time of writing. Because the diagnosis and the signs of death have always been a medical matter, on the basis of which fiqh scholars make legal rulings. Participant physicians presented the current medical view concerning the occurrence of death.

4- The decisive factor for physicians to proclaim the death of a patient is the lifelessness of the area of the brain that is responsible for vital body functions, which they express as death of the brain stem. A diagnosis of brain stem clearly rules out certain suspicious cases, and physicians are capable of coming up with a confident diagnosis of brain stem death about which they have no doubts.

Any other vital organ or function, such as the heart or respiration, may temporarily stop, but as long as the brain stem is alive, can be revived. When, however, the brain stem itself has died, there is no hope of saving the patient, for his life has come to an end, even if other systems of the body continue to move or to function. Undoubtedly, with the death of the brain stem, these systems are eventually going to stop and be lifeless.

5- On the basis of the presentation by physicians, fiqh scholars are inclined to the view that when it is ascertained that a human being has reached the stage of brain stem death, he is considered to have withdrawn from life, and certain rulings of the dead are applicable to him, in analogy, though with the evident difference, with what classical fiqh books say about an injured person who has reached the stage known as that of the "slain".

Thus when the death of the brain stem is certified by a report of a committee of medical specialists, it is lawful to remove resuscitation equipment.

As for the remaining rulings that concern the dead, the participant fiqh scholars preferred their postponement until all major systems of the body come to a stop.

It is therefore recommended that an additional, detailed study should be made to determine which rulings for the dead apply immediately and which

should be delayed.

6- On basis of the above, it has been agreed that when the death of the brain stem is certified by a report of a committee of medical specialists, it is lawful to remove resuscitation equipment.

The Islamic Jurisprudence (fiqh) Academy in Jeddah has endorsed this opinion. The Saudi protocol for diagnosing brain death goes along the same lines as most international protocols, and it is based on the Islamic legal ruling on the issue.

Resolution No. (5) D 3/07/6 of the Academy, held in Amman in October 1986, stipulates that:

In Islamic Law, a person is regarded as dead, and all the legal consequences of death become operative, if one of the following signs is detected:

1. If his heart and respiratory system stop completely and physicians decide that this cessation is irrevocable, or

2. If all functions of his brain cease completely, physicians decide that this cessation is irrevocable, and his brain is subjected to analysis.

The physician in charge has to take maximum precaution in confirming the death of a patient, particularly brain death, lest his decision amounts to a death sentence or manslaughter.

Some newspapers and television stations reports and some physicians in Egypt and elsewhere were questioning the internationally dominant notion that the complete death of the brain is the decisive factor in determining the moment of death. Some media have also reported stories of people who came back to life after it had been declared that their brains were dead

In response to that, the (IOMS) organization deputed three of its members to participate in the November 1996 international conference held in San Francisco, U. S.A., by the American Association of Bioethics, the International Association of Bioethics and the network death by brain death together with brain stem death. No case where brain and brain stem death was correctly diagnosed ever came back to life, and none of the cases that came back to life carried an established diagnosis of brain and brain stem death. Issues of novelty were confined to philosophical views or the relative evaluation of confirmatory procedures after the diagnosis was established.

A symposium was held in Kuwait from 17 to 19 December 1996, [12] to discuss the medical definition of death. A distinguished group of scholars in the specialities of neurology, neurosurgery, anaesthesiology, intensive care, neurophysiology, cardiac surgery, organ transplantation, medicine, paediatrics, obstetrics and gynaecology, general surgery, medical jurisprudence; who came from Kuwait, Saudi Arabia, Egypt, Lebanon, Turkey and the United States of America, was invited, It was also attended bye the Director of the East Mediterranean Regional Office (EMRO) of the World Health Organization (WHO).

The subject was comprehensively discussed over a three days, including

a meticulous appraisal of the clinical cases presented in support of the dissent. No case properly diagnosed as brain and brain stem death ever regained life, and all the cases that regained life had an obvious and flagrant fault in making such diagnosis, omitting, misreading or violating the standard criteria.

Reviewing the global situation and the regional experiences and safeguards taken, and in full awareness of the scientific and religious dimensions, the Organization (IOMS) found no reason to discard, modify or alter the recommendations of its previous symposium on " Human Life : Its beginning and its end " held in Kuwait in 1985, or the rulings issued by the Congress of Islamic Jurisprudence.

The following standards, criteria and safeguards were spelt out by the Symposium :

First : Signs which signify death:

An individual is considered dead in one of the following two situations:

a- Complete irreversible cessation of respiratory and cardiovascular systems.

b- Complete irreversible cessation of the functions of the brain including the brain stem.

This should be confirmed upon by the accepted medical standards.

Second: Guidelines for diagnosing brain and brain stem death:

- The presence of a reliable medical specialist well experienced in the clinical diagnosis of brain and brain stem death and the various implications of such diagnosis.

-Prescribed observation necessitates complete medical coverage in a specialized suitably equipped institution.

-Second opinion should be accessible whenever sought.

Preconditions necessary before considering the diagnosis of brain death:

I. The person must be in continuous deep uninterrupted coma.

2. The cause of the coma can be explained by extensive damage to the structure of the brain, such as severe traumatic concussion, massive intracranial haemorrhage, after intracranial surgery, a large intracranial tumour or obstructed blood supply to the brain: confirmed by adequate diagnostic measures.

3. At least six hours have passed since the onset of coma.

4. The absence of any attempt at spontaneous breathing.

The diagnosis of complete irreversible cessation of brain and brain stem function necessitates :

1. Deep coma with complete unreceptivity and unresponsivity.

2. The clinical signs of absence of brain stem functions including absence of the pupillocornial reflex, absence of occulocephalic reflex, absence of occulovestibular reflex, absence of the gag reflex and absence of the cough and vomiting reflexes.

3. Absence of spontaneous breathing as confirmed by the apnoea test when the respirator is temporarily disconnected.

It should be borne in mind that:

- Some spinal reflexes may persist for some time after death. This is not incompatible with the diagnosis of brain death.
- Conclusions ensuing upon "decortication" or "decerebration", and also "epileptic seizures", are incompatible with the diagnosis of brain death.

All cases should be excluded which may be reversible or curable such as:

1. If the patient is under sedatives, tranquilizers, narcotics, poisons or muscle relaxants; or if in hypothermia below 33°C; or in an untreated cardiovascular shock.
2. Metabolic or endocrine disturbances that might lead to coma.
3. There should be certainty of complete cessation of brain function over a period of observation of:
   - 12 hours since the onset of irreversible coma.
   - 24 hours if the coma is due to cessation of circulation (such as cases of cardiac arrest).
   - In children under 2 months of age, the observation period is extended to 72 hours, followed by repetition of electroencephalography or tests for cerebral circulation.
   - Children between 2 and 24 months of age require a longer observation period of 24 hours followed by repeat encephalography.
   - Children over one year of age are handled like adults.

Specifications of the team authorized to diagnose brain death:

1. The team comprises two specialists with experience in diagnosing brain death.

2. One of the two doctors of the team should be a specialist in neurology, neurosurgery or intensive care.

No member of the team should be:

1. A member of the organ transplantation team.
2. A member of the family of the deceased person.
3. Have any special interest in the declaration of death (such as inheritance or bequeath).
4. Blemished by any accusation by the family of the deceased that he had committed any professional misconduct.

The symposium proposed a special form for issuing a brain death certificate (appendix1)

There is still controversy on when to declare a person as Dead: Is it the time the decision is taken by the doctors , or when the support is actually switched off?

This has its legal and moral implications, especially when coming to the issue of harvesting organs for organ transplant,

Even though there is almost unanimous agreement on the concept of brain death, there are many differences in the criteria adopted to decide on brain death in different countries, and even different hospitals in the same country, and this is not confined to the Arab or Islamic countries only .[13,14]

The differences however are related to minor technical details and on whether there is a need or not to adopt confirmatory tests.

Eelco F.M. Wijdicks reviewed the brain death criteria in 80 countries and found out vast differences among them. Table 1 shows some of these differences in some countries [14].

The most widely accepted criteria of brain death are those of the American Academy of Neurology Practice Parameters which are not different from the criteria laid by the IOMS and are being presented here for comparison. (appendix 2)

Concluding remarks

The medical profession defined death as the biological phenomenon characterized by total cessation of brain function, or brain death according to recognized criteria and standards

Definition of the end of life, from the Islamic Jurisprudence view , depends heavily on current opinion of medical professionals as long as there is no clear evidence in the Qura'n or the tradition (the Sunnah) of the Prophet (PBUH) to define the exact moment of death. Jurists will not encounter difficulties in making verdicts related to death, if the medical professionals are able to clearly define and time the event of brain death in undisputed certainty .

Contemporary Jurists are now able to reach at reasonable agreement on issues such as timing of death, resuscitation, removal of life support medical devices and organ donation and transplantation.

Table 1. Brain death survey in different nations around the world

P.S. Some of the information mentioned here may have changed recently

Continent/country	Law	Guideline	Apnea test	No. of physicians	Observation time, h	Confirmatory test
North America						
United States	P	P	PCO_2	2*	6	Optional
Canada	P	P	PCO_2	1	6	Optional
Central and South America						
Argentina	P	P	DVO	1	6	Mandatory
Brazil	P	P	DVO	1	6	Optional
Europe						
United Kingdom	P	P	PCO_2	2	6	Optional
France	P	P	PCO_2	2	A	Mandatory
Germany	P	P	PCO_2	2	12	Optional
Middle East & South East Asia						
Egypt	A	A	A	A	A	Not known
Tunisia	P	P	DVO	1	A	Optional
Iran	A	P	A	3	12, 24, 36	Mandatory
Jordan	A	P	A	1	A	Mandatory
Lebanon	P	P	A	2	6	Mandatory
Oman	P	P	PCO_2	1	6	Optional
Qatar	P	P	PCO_2	1	A	Mandatory
Saudi Arabia	P	P	PCO_2	2	24†	Mandatory
Syria	A	A	A	A	A	Not known
United Arab Emirates	P	P	PCO_2	1	3	Optional
India	P	P	DVO	4	A	Mandatory
Indonesia	A	P	PCO_2	3	24	Optional
Malaysia	P	P	PCO_2	2	12	Mandatory
Pakistan	A	A	A	A	A	Not known
Oceania						
Australia	P	P	PCO_2	2	2	Optional
New Zealand	A	P	PCO_2	2	2	Optional

PCO_2 = target PCO_2 defined (50 or 60 mmHg); A = absent criterion or guideline; DV = disconnection from ventilator only; N = neurologist; MD = medical doctor; P = present; A = absent; LAW = legal standard of organ donation.

* Eight US states only; time within parentheses indicates observation time required in conditions due to anoxia.

† Observation time can be shortened or eliminated if one confirmatory test is positive for brain death.

Appendix1

Proposed Form for Issuing a Brain Death Certificate

The first examination should be at the initial diagnosis of brain death and the second 6 hours after the initial exam.

A- Preconditions:

-Extensive noncurable brain damage (mention cause) ....

-Six hours passed since onset of coma -Absence of ....

spontaneous breathing ....

B- Exclusion of confusing causes:

-Is temperature below 33 °C? ....

- History of sedatives, tranquilizers, poisons,

muscle relaxants ....

-Laboratory assay of above drugs? ....

-Is this a case of untreated cardiovascular shock? ....

-Have metabolic and endocrine factors been

excluded? ....

C- Clinical examination:

-Is there unresponsiveness to external stimuli ? ....

-Are the following brain stem reflexes absent? ....

-pupillary reactivity to light ....

-response to touching cornea ....

-cephalo-occular reflex ....

-vestibulo-occular reflex ....

-vomiting reflex ....

-cough reflex ....

D- Confirmatory tests: (if necessary):

-standard electroencephalography	☐	no electrical activity
or		
-imaging for cerebral circulation	☐	no cerebral circulation

E. After all the above has been fulillled:

-has the apnea test been done?

-what was its result

Appendix 2

PRACTICE PARAMETERS: DETERMINING BRAIN DEATH IN ADULTS (Summary Statement)

Report of the Quality Standards Subcommittee of the American Academy of Neurology.

Overview. Brain death is defined as the irreversible loss of function of the brain, including the brainstem. Brain death from primary neurologic disease usually is caused by severe head injury or aneurysmal subarachnoid hemorrhage. In medical and surgical intensive care units, however, hypoxic-ischemic brain insults and fulminant hepatic failure may result in irreversible loss of brain function. In large referral hospitals, neurologists make the diagnosis of brain death 25 to 30 times a year.

Justification. Brain death was selected as a topic for practice parameters because of the need for standardization of the neurologic examination criteria for the diagnosis of brain death. Currently, there are differences in clinical practice in performing the apnea test and controversies over appropriate confirmatory laboratory tests. This document outlines the clinical criteria for brain death and the procedures of testing in patients older than 18 years.

Description of the process. All literature pertaining to brain death identified by MEDLINE for the years 1976 to 1994 was reviewed. The key words "brain death" and "apnea test" (subheading, "adult") were used. Peer-reviewed articles with original work were selected. Current textbooks of neurology, medicine, pulmonology, intensive care, and anesthesia were reviewed for opinion. On the basis

of this review and expert opinion, recommendations are presented as standards, guidelines, or options. The recommendations in this document are guidelines unless otherwise specified (see Definitions).

I. Diagnostic criteria for clinical diagnosis of brain death

A. Prerequisites. Brain death is the absence of clinical brain function when the proximate cause is known and demonstrably irreversible.
   1. Clinical or neuroimaging evidence of an acute CNS catastrophe that is compatible with the clinical diagnosis of brain death
   2. Exclusion of complicating medical conditions that may confound clinical assessment (no severe electrolyte, acid-base, or endocrine disturbance)
   3. No drug intoxication or poisoning
   4. Core temperature ≥ 32° C (90°F)

B. The three cardinal findings in brain death are coma or unresponsiveness, absence of brainstem reflexes, and apnea.
   1. Coma or unresponsiveness--no cerebral motor response to pain in all extremities (nail-bed pressure and supraorbital pressure)
   2. Absence of brainstem reflexes
      a) Pupils
         (a) No response to bright light
         (b) Size: midposition (4 mm) to dilated (9 mm)
      b) Ocular movement
         (a) No oculocephalic reflex (testing only when no fracture or instability of the cervical spine is apparent)
         (b) No deviation of the eyes to irrigation in each ear with 50 ml of cold water (allow 1 minute after injection and at least 5 minutes between testing on each side)
      c) Facial sensation and facial motor response
         (a) No corneal reflex to touch with a throat swab
         (b) No jaw reflex
         (c) No grimacing to deep pressure on nail bed, supraorbital ridge, or temporomandibular joint
      d) Pharyngeal and tracheal reflexes
         (a) No response after stimulation of the posterior pharynx with tongue blade
         (b) No cough response to bronchial suctioning
   3. Apnea--testing performed as follows:
      a) Prerequisites
         (a) Core temperature ≥ 36.5°C or 97°F
         (b) Systolic blood pressure ≥ 90 mm Hg.

(c) Euvolemia. Option: positive fluid balance in the previous 6 hours

(d) Normal PCO_2. Option: arterial $PCO_2 \geq 40$ mm Hg

(e) Normal PO_2. Option: preoxygenation to obtain arterial $PO_2 \geq 200$ mm Hg

b) Connect a pulse oximeter and disconnect the ventilator.

c) Deliver 100% O_2, 6 l/min, into the trachea. Option: place a cannula at the level of the carina.

d) Look closely for respiratory movements (abdominal or chest excursions that produce adequate tidal volumes).

e) Measure arterial PO_2, PCO_2, and pH after approximately 8 minutes and reconnect the ventilator.

f) If respiratory movements are absent and arterial PCO_2 is $\geq$ 60 mm Hg (option: 20 mm Hg increase in PCO_2 over a baseline normal PCO_2), the apnea test result is positive (ie, it supports the diagnosis of brain death).

g) If respiratory movements are observed, the apnea test result is negative (ie, it does not support the clinical diagnosis of brain death), and the test should be repeated.

h) Connect the ventilator if, during testing, the systolic blood pressure becomes ≤ 90 mm Hg or the pulse oximeter indicates significant oxygen desaturation and cardiac arrhythmias are present; immediately draw an arterial blood sample and analyze arterial blood gas. If PCO_2 is $\geq$ 60 mm Hg or PCO_2 increase is ≥ 20 mm Hg over baseline normal PCO_2, the apnea test result is positive (it supports the clinical diagnosis of brain death); if PCO_2 is < 60 mm Hg or PCO_2 increase is < 20 mm Hg over baseline normal PCO_2, the result is indeterminate, and an additional confirmatory test can be considered.

II. Pitfalls in the diagnosis of brain death

The following conditions may interfere with the clinical diagnosis of brain death, so that the diagnosis cannot be made with certainty on clinical grounds alone. Confirmatory tests are recommended.

A. Severe facial trauma

B. Preexisting pupillary abnormalities

C. Toxic levels of any sedative drugs, aminoglycosides, tricyclic antidepressants, anticholinergics antiepileptic drugs, chemotherapeutic agents, or neuromuscular blocking agents

D. Sleep apnea or severe pulmonary disease resulting in chronic retention of CO_2

III. Clinical observations compatible with the diagnosis of brain death

These manifestations are occasionally seen and should not be misinterpreted as evidence for brainstem function.

A. Spontaneous movements of limbs other than pathologic flexion or extension response
B. Respiratory-like movements (shoulder elevation and adduction, back arching, intercostal expansion without significant tidal volumes)
C. Sweating, blushing, tachycardia
D. Normal blood pressure without pharmacologic support or sudden increases in blood pressure
E. Absence of diabetes insipidus
F. Deep tendon reflexes; superficial abdominal reflexes; triple flexion response
G. Babinski reflex

IV. Confirmatory laboratory tests (Options)

Brain death is a clinical diagnosis. A repeat clinical evaluation 6 hours later is recommended, but this interval is arbitrary. A confirmatory test is not mandatory but is desirable in patients in whom specific components of clinical testing cannot be reliably performed or evaluated. It should be emphasized that any of the suggested confirmatory tests may produce similar results in patients with catastrophic brain damage who do not (yet) fulfill the clinical criteria of brain death. The following confirmatory test findings are listed in the order of the most sensitive test first. Consensus criteria are identified by individual tests.

A. Conventional angiography. No intracerebral filling at the level of the carotid bifurcation or circle of Willis. The external carotid circulation is patent, and filling of the superior longitudinal sinus may be delayed.

B. Electroencephalography. No electrical activity during at least 30 minutes of recording that adheres to the minimal technical criteria for EEG recording in suspected brain death as adopted by the American Electroencephalographic Society, including 16-channel EEG instruments.

C. Transcranial Doppler ultrasonography

1. Ten percent of patients may not have temporal insonation windows. Therefore, the initial absence of Doppler signals cannot be interpreted as consistent with brain death.

2. Small systolic peaks in early systole without diastolic flow or reverberating flow, indicating very high vascular resistance associated with greatly increased intracranial pressure.

D. Technetium-99m hexamethylpropyleneamineoxime brain scan. No uptake of isotope in brain parenchyma ("hollow skull phenomenon").

E. Somatosensory evoked potentials.

Bilateral absence of N20-P22 response with median nerve stimulation. The recordings should adhere to the minimal technical criteria for somatosensory evoked potential recording in suspected brain death as adopted by the American Electroencephalographic Society.

V. Medical record documentation (Standard)

A. Etiology and irreversibility of condition.

B. Absence of brainstem reflexes

C. Absence of motor response to pain

D. Absence of respiration with $PCO_2 \geq$ 60 mm Hg

E. Justification for confirmatory test and result of confirmatory test

F. Repeat neurologic examination. Option: the interval is arbitrary, but a 6-hour period is reasonable.

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END OF LIFE ISSUES :
Making Use of Extraordinary Means to Sustain Life

Abul Fadl Mohsin Ebrahim

Introduction:

Attempts to save life in general is a noble task and this is evident from the following *ayah* of the *Noble Qura'n*:

> "*…and whoever saves the life of a human being, it is as if he has saved the life of all humankind* "(1) .

This *ayah* could justifiably be used to make a case for attempting to sustain human life even if it involves placing a patient on a respirator or other life-sustaining devices. On the basis of analogy (*qiyas*) then, not to make use of extraordinary means to remove the distress of the patient would be in contravention of the above Qura'nic imperative pertaining to the importance of saving human lives. But, Muslims should not lose sight of the fact that resorting to extraordinary means to sustain life does not in any way "prolong" life. Islam teaches us that death is inevitable and will occur at the time decreed for it by Allah (SWT). The *Qura'n* states:

> "*And for all people a term has been set. And when the end of the term approaches, they can neither delay it by a single moment, nor can they hasten it*"(2) .

Referring to the inevitability of death, Ibn Sina states(3) .

> It should be remembered that knowledge of health preservation helps neither in avoiding death nor in escaping from external afflictions. It also does not provide the means of extending life indefinitely.

In this article an attempt is made to address a number of pertinent issues pertaining to end of life in light of Islamic Medical Jurisprudence (*Fiqh al-Tibb al-Islami*). Included in this article too are some specific pediatric and adult clinical scenarios and the writer attempts to resolve dilemmas that these scenarios pose to Muslims in general.

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Intensive Care Unit

The Intensive Care Unit (ICU) or Critical Care Unit (CCU) is the special hospital ward within which the highest levels of continuous care and treatment are provided to patients after major surgery, with severe head injuries, life-threatening illnesses, respiratory insufficiency, coma, haemodynamic insufficiency, severe fluid imbalance or with the failure of one or more of the major organ systems.

Highly skilled specialized nursing staff mans the ICU, which is undoubtedly the most expensive and the most highly technological area of medical care. Some of the equipments that feature prominently in an intensive care unit are:

i. ventilators to assist patients with breathing through an endotracheal tube or a tracheostomy opening;
ii. dialysis machine for patients with renal problems;
iii. monitors to chart the ongoing vital status and progress of the patient; and
iv. other aids in the form of intravenous (IV) lines, feeding tubes, nasogastric tubes, suction pumps, drains and catheters.

Depending on the availability of resources, certain hospitals are able to have designated intensive care areas for the different specialties of medicine, for example, Coronary Care Unit (CCU) for heart disease, Medical Intensive Care Unit (MICU), Surgical Intensive Care Unit (SICU). Paediatric Intensive Care Unit (PICU), Neuro Intensive Care Unit (NICU) and Neonatal Intensive Care Unit (NICU), etc[4].

Generally, patients whose conditions are expected to improve with intensive care aid are admitted to the ICU. In other words, patients are not admitted to the ICU to die. However, families of patients in the ICU are plagued with a host of dilemmas. Some of these dilemmas pertain to:

(a) the justification for "prolonging" the suffering of their loved ones;
(b) what extent they must outlay their financial resources in order to keep their loved ones in the ICU;
(c) whether or not to give their consent to disconnect the ventilator once their loved ones are diagnosed to be brainstem dead; and
(d) the validity for seeking extraordinary treatment measures for their loved ones when the prognosis is poor.

Do Not Resuscitate (DNR)

Resuscitation is a medical procedure which seeks to restore cardiac and/or respiratory function to individuals who have sustained a cardiac and/or respiratory arrest. "Do Not Resuscitate" ("DNR") is a medical order to provide no resuscitation to individuals for whom resuscitation is not warranted. This order is generally given by the patient in an advance medical directive or it may be requested by the family members of patients who are terminally ill, having short life expectancy and little

chance of surviving cardiopulmonary resuscitation ("CPR"). In other words, such request is made so as to let nature take its course in the face of an impending cardiac arrest [5].

Medical Treatment In The Light Of Islamic Teachings

The injunctions of the *Noble Qura'n* and traditions of Prophet Muhammad (PBUH) pertaining to hygiene, dietary habits, and the necessity of upholding moderation in all walks of life, led Muslims to the study of medicine. There are many traditions of Prophet Muhammad (PBUH) which make specific reference to illness and their cure. In fact, the *Hadith* literature has a separate chapter entitled 'Medicine of the Prophet'. Dr Seyyed Hossein Nasr highlights the importance of this literature in the following manner:

> Since all sayings of the Prophet are guideposts for the life of the devout Muslim, these latter sayings, even though they do not contain an explicit system of medicine, have played a major role in determining the general atmosphere in which Islamic medicine has come to be practiced. Their guidance has been followed over the centuries by every succeeding generation of Muslims; they have determined many of the Muslims' dietary and hygienic habits. Moreover, 'The Medicine of the Prophet' became the first book to be studied by a medical student before he undertook the task of mastering the usual compendia of medical science. It has thus always played an important role in creating the frame of mind with which the Muslim physician has undertaken the study of medicine [6].

The motivating factor behind Muslims' quest for knowledge in the medical field was primarily to understand the creation of Allah (SWT) so as to be drawn closer to Him (i.e. their Creator). It was never their aim to exert control over life and death. Hence, within the Islamic framework, biomedical technology cannot be completely divorced from ethics. Moreover, in Islam, ethics is not independent of the *Shar`iah* (Islamic Law). One ought to concede that in the biomedical field there has always been a tendency to 'conquer' death by means of life-sustaining technology and it is especially in this field that Muslims are confronted with a series of ethical issues which have legal implications as well.

Restoration Of Health: Is It Mandatory?

Ibn Sina' (Avicenna, 980-1037) defined medicine as the knowledge of the states of the human body in health and decline in health; its purpose is to preserve health and to endeavour to restore it whenever it is lost[7] . In other words, health signifies the natural state in a person's life, whilst illness or disease is a sort of unnatural condition which afflicts the human body and can be combated and cured by the use of proper treatment. Illness or disease undoubtedly causes a lot of discomfort

to the afflicted person, but in no way does a Muslim view such an affliction as a curse, wrath, or punishment from Allah (SWT). He is conditioned to view the discomfort of any sickness as a trial or ordeal which in reality brings about expiation of sins. Prophet Muhammad(PBUH) said:

> No fatigue, nor disease, nor sorrow, nor sadness, or hurt, nor distress befalls a Muslim, even if it were the prick he receives from a thorn, but Allah expiates his sins for that [8] .

But, at the same time, Muslims are advised to seek medical attention whenever they fall sick and this can be deduced from the broad teachings of the *Qura'n* and traditions of Prophet Muhammad (PBUH). The importance of seeking medical attention or treatment is hinted by the Qura'nic verse which describes honey as having curative powers. It states:

> "*…..there issues from their bodies a drink of varying colours, wherein is a healing for people " [9].*

Man, being composed of body and soul, Prophet Muhammad (PBUH) alluded to two types of ailment - affecting each of the two components separately or jointly. He (PBUH) remarked:

> You have two cures at your disposal: Honey and the *Qura'n* [10] .

Hence, it follows that Muslims are duty-bound to take care of their physical and spiritual health. Today, it has scientifically been proven that honey has curative powers both internally when swallowed and externally when applied to wounds and sores. The disease of the soul which the *Qura'n* refers to pertains to the disease of the heart, which may either be that of doubt and uncertainty or that of submission to one's sensual passion — the *Qura'n* is the cure for such disease [11] .

Whilst addressing the question pertaining to whether it is mandatory to seek medical treatment, one may wrongfully cite the following *Hadith* as evidence:

> The bedouin Arabs came to the Prophet (PBUH) and said, "0 Messenger of Allah, should we treat ourselves?" He replied, "Yes, servants of Allah, make use of medical treatment for verily, Allah has not created a disease without providing a cure for it, except for one disease." They asked him: "Which one is it?" He replied, "Old age"[12] .

However, Muslim jurists infer from the above *Hadith* that it is permissible (*mubah*) and recommended (*mustahabb*) for Muslims to seek medical treatment when unwell. However, they consider resorting to medical treatment mandatory (*wajib*) only when it is certain that the medical intervention would assist in saving the life of a person. For example, when someone is bleeding profusely, it would become mandatory to seek medical attention to stop the bleeding for failure to do so would result in death [13] .

The Right To Refuse Treatment

Some people may wrongfully conclude that they have a right to refuse treatment on the premise that resorting to medical treatment would be tantamount to placing one's faith in the attending physician, medications and/or sophisticated life support equipment, thereby compromising one's reliance/trust (*tawakkul*) in Allah (SWT). Thus it is imperative to draw the attention of the reader to the fact that Prophet Muhammad (PBUH) advised his followers who came to offer their *salah* in the *Masjid* to tie their camels and then place their *tawwakul* in Allah (SWT). It may correctly be inferred from this that if one is unwell, one should take the necessary medication and/ or seek medical attention and then place one's trust in Allah (SWT). Muslims are taught to say when taking any medication: "He (Allah) is the Ultimate Healer."

This affirmation that Allah is the Ultimate Healer conditions one to accept the fact that some medications or forms of treatment may not necessarily bring about the desired results. Hence it follows that one has the right to refuse treatment if the prognosis is poor according to the opinion of *ahl al-khibrah* (the experts in the field of medicine) (14). Likewise, one also has the right to refuse to take medication if one feels that one is not deriving any form of benefit from it as is evident from the following *Hadith* in which *Sayyidatuna* `A'ishah (r.a.) relates about an incident before the demise of the Prophet (PBUH) .

> We put medicine in one side of his mouth, but he started waving us not to insert the medicine into his mouth. We said: "He dislikes the medicine as a patient usually does." But when he came to his senses he said: "Did I not forbid you to put medicine (by force) in the side of my mouth…." (15)

However, no matter how hopeless the prognosis is, one is not allowed to wish for death as a result of one's predicament as is stated in the following *Hadith*:

> None of you should wish for death because of a calamity befalling him; but if he has to wish for death, he should say: "O Allah! Keep me alive as long as life is better for me, and let me die if death is better for me." **(16)**

It may be reiterated here that it is not mandatory for Muslims to seek medical attention when they fall ill, but rather it is recommended for them to do so. Likewise, Muslims are not obliged to make use of extraordinary means to sustain life in patients with poor prognosis. It, however, becomes mandatory to seek medical intervention in a situation where refusal of treatment could place one's life in grave danger, e.g. refusal to give consent for blood transfusion despite severe loss of blood.

Deliberations On The End Of Human Life

Muslims are particularly concerned with establishing the moment of death in view of the fact that according to Islamic Law, when a person is pronounced dead then certain worldly and religious consequences follow. Some of the worldly consequences are:

- that certain contracts made by the dead person are regarded as valid, while others, such as silent partnerships and the like, become void;
- that any will made by him, up to a maximum limit defined by Islamic Law, becomes effective, and its amount is taken out of his property and added to that of the persons mentioned in the will;
- that his property is no longer his, for it now belongs to his legal heirs;
- that his debts have to be paid, whether they are due or not;
- that the effects of death on securities and promissory notes come into effect;
- that the support he had to pay to certain people is no longer due;
- that his marriage comes to an end, his wife begins her waiting period (*`iddah*) [17], and the deferred part of his wife's dowry (*mahr*) is due;
- that whatever objects were entrusted to him for safekeeping must be given back to their owners.

The religious consequences pertain to:

- the washing of the deceased;
- performance of the *salat al-janazah* (prayer for the dead);
- burial according to Islamic rites;
- and condolences that are to be extended to the deceased's family and relatives [18] .

In the past, death was considered to be a simple and straightforward phenomenon. The general practitioner would issue the death certificate once he was convinced that there was cessation or absence of spontaneous life in the patient. This meant that the patient had stopped breathing, his heart had stopped beating, there was unresponsiveness, his body had turned cold and finally rigor mortis had set in.

With the successful accomplishment of heart transplantation, it became obvious that determining the moment of death now required further thought. Cessation of heartbeat is no longer considered evidence of death since the heart can now be substituted with that of a just-deceased donor, with that of a baboon's, or even with a mechanical one. Moreover, modern biomedical innovations like the resuscitator and cardiac pacemaker have made it imperative to establish a set of criteria by which the moment of death can be identified [19].

The Process Of Dying

Frank J. Ayd describes death as 'an orderly progression from clinical death to brain death, to biological death, to cellular death.' This may be elucidated as follows:

Clinical death occurs 'when the

body's vital functions - respiration and heartbeat - wane and finally cease. Clinical death may in some cases be reversed. For example, a child who has drowned and is pulled out of the water without heartbeat and not breathing can be saved through the initiation of mouth-to- mouth resuscitation and cardiac massage.

Brain death occurs after cardiac and respiratory arrest because 'under normal temperature conditions, the human brain cannot survive loss of oxygen for more than ten minutes. Ayd points out that as a result of anoxia (oxygen starvation), the component parts of the brain die in progressive steps. Death of the cortex is followed by that of the midbrain (diencephalon) and finally ending with the brainstem. When the whole brain has died, biological death takes place. Biological death is denoted by the absence of bodily movements. A dead brain cannot sustain bodily life. Once bodily life ceases, cellular death follows [20] .

From the above, it is clear that death occurs progressively and that the death of the brain is the determining factor in the process of dying. Dr Ahmad Elkadi aptly explains that:

> Any other organ may die or be surgically removed and yet the owner continues to live, retaining his reason, power of thinking, awareness, personality, and everything else, either because the organ concerned is one that a person can live without such as the limbs, parts of the stomach or the intestines, and so on or because of the availability of a replacement which can carry on the functions of that organ for a long or short period of time [21] .

The brain is a different kind of organ altogether. The brain cells, as Harmon L. Smith points out, are extremely sensitive to anoxia. Thus the cerebral cortical cells begin to die within five minutes, if deprived of oxygenated blood, and death of the entire brain follows after a further ten minutes. The other vital organs like the heart, for example, can be reactivated after several minutes of cessation; the kidneys can still be viable one hour after cessation of blood supply; and corneal transplants can be carried out several days after the corneas had been surgically removed [22] . Moreover, unlike the other vital organs, the brain cannot be replaced in view of the fact that a sound living brain can only be found in a living person and it will not be possible to find a substitute to the human brain in the foreseeable or distant future. It is for this reason that modern medical science holds that brain death determines the end of human life. This is confirmed in a statement made by M. Goulon and P. Babinet:

> The brain only gives man his reality; when it has disappeared, man no longer is. Such is also the opinion expressed by the leading national and international medical authorities [23] .

Furthermore, the observation made by Dr Mukhtār al-Mahdi, a neurosurgeon,

may be relevant to the understanding of brain death:

> Damaged brain cells are irreplaceable. But by resorting to the ventilator, the organs of the body other than the brain may be kept alive for a period of time ranging from few hours to two weeks, more or less. But that period cannot go on much longer even if we continue to give the patient all the stimulating aids possible. Blood pressure would begin to drop, food assimilation process would slow down, body temperature would drop, and finally the heart would stop [24] .

Diagnosis Of Brain Death

It is important to point out here that a vegetative state should not be confused with the diagnosis of brain death. Vegetative patients are able to breathe spontaneously; at times, they can follow objects with their eyes; they do respond to painful stimuli and in due course may even recover from their neurological disability. Thus patients suffering from irreversible coma are certified brain dead only after stringent tests have been carried out. These tests will confirm the patients' unresponsiveness to painful stimuli; their pupils' non-reaction to light, their remaining fixed and dilated; their inability to swallow, yawn or vocalize; and their inability to breathe spontaneously within a three-minute period after the ventilator is switched off. Flat electroencephalogram (EEG) will further verify the absence of electric waves being transmitted by the brain. Extreme caution is taken before finally pronouncing them brain dead in that these clinical examinations are repeated at intervals to ensure that there is no improvement in the patients' condition. In the event that organ donation is envisaged, upon confirmation of brain death, the patients are reconnected to the ventilator, and kept in the intensive therapy unit (ITU) until the transplant surgery can be carried out [25] .

Vital organs, for example, heart, lungs, kidneys and liver, of brain dead patients have a better chance of functioning in the post-operative period if circulation is maintained to them till the time of removal. This, however, should not lead us to believe that the motivation behind declaring patients brain dead is conditioned by the interest of transplant surgeons to harvest the organs for transplantation purposes. As a matter of fact, the physicians who are to be associated with the subsequent organ transplantation are precluded from declaring the patient brain dead.

The Qura'nic Concept Of Death

The *Noble Qura'n*, emphasizing the universality of death, uses the expression "*every soul is bound to taste death*," [26] thus signifying that all that exists will die "*but will abide (forever) the Face of your Lord, full of Majesty, Bounty and Honour*" [27] .

In several passages, the *Qura'n* affirms that both life and death are in the control of Allah (SWT) . For example, it states:

> "*Say (0 Muhammad): Allah gives you life, then causes you to die....*" [28]

According to Ibn Kathir, the renowned *mufassir* (exegetist) of the *Qura'n*, this verse was revealed in order to impress upon the Quraysh, who denied the existence of life after death and attributed all earthly events to Time (*al-dahr*), that Allah (SWT) is the One Who exercises control over everything[29] .

The *Qura'n* makes mention of the *ruh* (the spirit) being breathed into every human being during the process of being created as cited in the following verse:

> "*He made all things good which He creates, and He began the creation of man from clay. Then He made nasla-hu (his seed) from a quantity (sulalatin) of lowly fluids. Then He fashioned him and breathed into him from His Spirit (ruh-Hi)* "[30] .

The *Qura'n* also informs us that death as an event occurs when the *nafs* (the soul) is separated from the body as in the following citation:

"*Allah takes the souls (anfus) at the time of death*. " [31] .

The Arabic operative verb *yatawaffa* has been used in the above-mentioned Qura'nic verse in order to designate death and this term implies both 'seizing' and 'causing to die [32] .

It may be noted here that the two Qura'nic terms, namely *ruh* (pl. *arwah*) and *nafs* (pl. *anfus*), are synonymous (even if they are translated as spirit and soul respectively) and imply one and the same thing, i.e. the soul. This is pointed out by al-Husayn Muhammad al-Damaghani in his *Qamus al-Qura'n* (*Dictionary of the Qura'n*). Hence, in the *Hadith* literature we come across an incident whereby Prophet Muhammad [(PBUH)] came to Abu Salamah (r.a) as he died. He noticed that his eyes were fixedly open, so he closed them and said: 'When the soul (*ruh*) is taken away (i.e. at the time of death) the sight follows it...' [33] .

Death as a process is signified by the Qura'nic term *ajal* as is evident in the following citation:

> "*But to no soul will Allah grant respite when its appointed time (ajaluha) has come, and Allah is well acquainted with all that you do*." [34].

The Arabic-English Lexicon explains that the term *ajal* implies 'the duration of life and its end: a man's life being thus termed and his death by which it terminates; the assigned or appointed duration of the life of man [35] .

Thus, according to the *Noble Qura'n*, death is something that is pre-determined and fixed by Allah (SWT) as categorically stated in the following verse:

> "*And no human being can die save by Allah leave, at a term pre-ordained*." [36] .

In other words, therefore, death is a natural phenomenon. Where there is life, death is sure to follow. Moreover, according to the Qura'nic teaching, the moment of death would be at the

time when the soul is separated from the body. But one has to concede that the *Qura'n* does not in any way tell us anything about the nature of the soul nor of its location in the human body, hence the dilemma of Muslims insofar as brain death is concerned. Referring specifically to the *ruh* (the spirit or soul) the *Qura'n* simply states the following:

> "*They ask you (0 Muhammad) concerning the ruh (spirit or soul). Say: The spirit (or soul) is of the authority of my Lord. Of knowledge it is only a little that is communicated to you*. "(37).

Commenting on the above verse, Sayyid Qutub states in his celebrated *Fi Zilal al-Qura'n* that man has (through his God-given ingenuity) invented many undreamt-of things and discovered many unheard-of natural phenomena. But he is confused about the soul and remains helpless in solving its mystery in view of the fact that it is beyond the reach/range of human perception. Man is unacquainted with the reality of the soul, its property and nature. He is unaware of its routes of arrival and departure (into and out of the human body). He does not know where it comes from, where it is (located) and where it goes (upon separation from the body). His knowledge pertaining to the unknown realm is limited to what Allah (SWT) makes known to us through the medium of revelation i.e. the reality of the soul cannot be discovered through scientific observation, experimentation or speculation (38) .

Definition Of Death

Islam, like the other major religions, subscribes to the view that every human being is a composite of body and spirit or soul. *Imam* Abu Hamid Muhammad Ibn Muhammad al-Ghazali in his celebrated *Ihya' Ulum al-Din* points out that the body has been constituted in such a manner so as to accommodate the soul, and that at death there is separation of the soul from the body (39) .

Medical science tells us that the brain is the center of human activity, while Muslim jurists are of the view that the organs carry out the dictates of the soul. The late *Qadi* Mujahid al-Islam Qasmi explains that there is no contradiction between the two viewpoints. He points out that medical science concerns itself with the brain because the soul, which is a non-rational entity, is beyond its scope. He then states that the soul makes the brainstem the center through which it functions (40) . Dr Muhammad Na`im Yasin reinforces this view by stating that it would be hard to believe that mere movements performed by the organs through instructions received from the brain could produce a feeling of pain, pleasure, joy, reassurance or other states attainable by man (41) According to him, therefore, it is the soul or spirit which controls the living body through the brain. Moreover, Dr Yasin substantiates his stance by arguing that if the brain is responsible for every voluntary action of the body organs, the brain's own action cannot be

attributed to the mere material, tangible cells of the brain because abstract and immaterial things cannot be produced by a material entity without the intervention of another source. This source, therefore, is a rational. living, non-material and intangible existence, namely the soul, which stands behind every rational activity carried out by the brain [42] . Here, a Qura'nic reference which affirms that the soul will be held responsible for its actions on this earth may be cited:

> "*Every soul will be (held) in pledge for its deeds*." [43] .

From this one may rightly deduce that in *al-Akhirah* (life after death), it is the soul and not the brain that will enjoy the blessings of *al-Jannah* (Paradise) or suffer the punishment in *al-Jahannam* (Hell).

The Moment Of Death

Imam al-Ghazali explains that death occurs at the moment when the soul is separated from the body and that at this juncture, the body ceases to be an instrument of the soul [44] . Muslim jurists in general uphold the traditional definition of clinical death, which is, permanent cessation of heartbeat and respiration. However, as pointed out earlier, advances made in the field of biomedical technology have complicated the issue of determining the moment of death. The mechanical ventilator, for example, can help to keep the organs of a person diagnosed as brain dead, perfused with blood in order to keep these organs viable for transplantation. Muslims do not regard the issue of the moment of death as an amoral one; to them it poses a real moral dilemma. In view of the fact that the *Qura'n* and the *Sunnah* are silent on this issue, there are differences of opinion among contemporary Muslim scholars on the issue of brainstem death.

Muslim physicians like Dr Ahmad Shawqi Ibrahim, a consultant in Internal Diseases, Al-Sabah Hospital, Kuwait, and Dr Ahmad Elkadi hold the view that the person whose brainstem has died may be pronounced dead [45] . On the other hand, we find that there are Muslim physicians like Dr Hassan Hathout, a former staff of the Faculty of Medicine, University of Kuwait, and now residing in the USA, who is cautious in pronouncing death upon a person whose brainstem has died. He is of the view that, with the progress being made in the field of medical science, it may well be possible, in the near or distant future, to save the life of such a person [46] .

Muslim jurists like the late *Qadi* Mujahid al-Islam Qasmi states that once the brainstem dies, the soul leaves the body [47] . Likewise, Dr Yasin is of the opinion that if the damage to the brain is catastrophic and it (the brain) fails to respond to the soul's will and all other organs irrevocably fail, then the soul departs from the body by the Will of Allah (SWT) [48] . There are other Muslim religious scholars who hold the view that being declared brainstem dead is not equivalent to death and base

their stance on the following Islamic juridical principles:

(i) 'what is known to be certain cannot be cancelled on the basis of what is suspected'; and

(ii) 'the natural thing is for what has been to go on until a change is proved to have taken place [49] .

Principle (ii) can be substantiated in the following statement of *Imam* al-Nawawi who suggests that death must be ascertained beyond any doubt:

> If there is suspicion of something unnatural about the death of a person, or if there is the possibility that it is temporary failure, or if his face reveals signs of terror or something similar suggesting the possibility that he has fainted or that he is in a coma, or the like, (his burial) must be postponed until death is ascertained through the change of odour or something of that sort [50] .

The Religious Rulings Committee, Kuwait Ministry of Endowment, Kuwait, resolved on December 14, 1981 that a person could not be considered dead when his brain has died as long as his respiration and circulation systems are alive, even if that life continues through mechanical aid [51] . *Shaykh* Badr al-Mutawalli 'Abd al-Basit, *Shari`ah* adviser, Kuwait Finance House, Kuwait, and `Abd al-Qadir Ibn Muhammad al-'Amari, judge, First Court of Islamic Law, Qatar, do not dismiss the probability that in the future Allah (SWT) may inspire some researchers to discover a means to restore life to the brain after it has stopped functioning [52] . *Shaykh* Muhammad al-Mukhtar al-Salami, the *Mufti* of Tunisia, is of the view that it would be incorrect to consider a brain dead person to be dead, as long as the essential systems of such a person are alive [53] .

It may be appropriate to point out here that the majority of Muslim scholars have not yet been convinced that brainstem death is the moment of death. Their stance is based upon the view of the classical Muslim jurists who did not recognize the mind or awareness as the source of life, but maintained that it is the body which is involved in determining life and death since it is the body that actually moves[54]. This stance is somewhat flawed since brainstem death is irreversible and there is no chance for the body to regain movement after a person has been diagnosed brainstem dead.

Legal Maxims Of Islamic Jurisprudence

Al-Qawa'id al-Fiqhiyyah (Legal Maxims of Islamic Jurisprudence) are theoretical abstractions, usually in the form of short statements, that are expressive, often in a few words, of the goals and objectives of the *Shar`iah*. The actual wordings of the maxims are occasionally taken from the *Qura'n* or *Hadith*, but are more often the work of leading jurists [55] .

Some of the legal maxims that are discussed here will assist us in our

quest to come to terms with some of the ICU dilemmas that are discussed in this article.

It is to be noted that some of the maxims are basically a reiteration of some of the broad principles that are found either in the *Qura'n* or *Ahadith*. The maxim "***Hardship begets facility***" is a rephrasing of the Qura'nic *ayat* that state: "*Allah intends for you ease and He does not intend to put you in hardship*" [56], and "*Allah does not intend to inflict hardship on you*" [57] . Muslim jurists have used this as evidence in support of the many concessions that are granted to the disabled and the sick in the sphere of religious duties. For example, allowing them to perform the *salah* while sitting or reclining. This maxim maybe used in justifying one's decision not to use extraordinary means when treating a terminally ill patient if it places a burden on others.

The maxim "***Harm must be eliminated but not by means of another harm***" (*al-darar yuzalu wa lakin la bi-darar*) is a rewording of the *Hadith* that "harm may neither be inflicted nor reciprocated in Islam" (*la darar wa la dirar*) [58]. A practical manifestation of this is the validation not to opt for over zealous treatment of ourselves and/or our loved ones and to allow death to take its natural course. However, the aim should never be to hasten death and hence, basic needs which are necessary to sustain the life of the patient should never be discontinued.

"***Necessity makes the unlawful lawful***" (*al-daruratu tubihu al-mahtzura*t). Prophet Muhammad(PBUH) said: "Breaking the bone of a dead person is equal in sinfulness and aggression to breaking it while a person is alive"[59] . In other words, it would be an act of aggression, tantamount to mutilation of the human body, to remove the organs from the dead for transplantation purposes. The writer of this article is of the view that the maxim "Necessity makes the unlawful lawful" can be used to support harvesting the organs from brainstem dead patients [60], for transplantation into others whose quality of life could be significantly enhanced by receiving these organs. After an, 'the most suitable cadaveric donors are those who have died in intensive care units.' [61] .

"***Lesser of the two evils***"(*akhaffu al-dararayn*). This maxim can be applied in such a situation whereby the pregnant mother dies and the dilemma is whether or not to do a Caesarean section to remove, for example, a 28-week-old baby from the mother's womb. Rather than losing both lives, this maxim would justify performing the Caesarean section to save the life of the baby.

The maxim "***Actions are judged by the intention behind them***" is a rephrasing of the famous *Hadith*: "Actions are valued in accordance with their underlying intention" (*innama al-a`malu bi al-niyyah*) [62] . The element of intent often plays a crucial role

in differentiating, for example, the deliberate withholding of treatment due to poor prognosis and allowing nature to take its course.

The dilemma which doctors often have in deciding whether to do what they think is best for their patients or whether they are obliged to consult the guardians or relatives of their patients may be resolved by the maxim "***Private authority is stronger than public authority***" (*al-wilayah al-khassah aqwa min al-wilayah al-'amnmah*), which means that the authority, for example, of the parent and guardian over the child, is stronger than that of the ruler and the judge.

A. Paediatric Clinical Scenarios

Case 1: The Preterm Neonate

In the last 50-60 years technological advancements have allowed babies who would otherwise have died, to survive. This technology, however, comes at a cost, both financial as well as in terms of adverse outcomes. The following scenario reflects some of the dilemmas that may arise:

A preterm neonate is born at 27 weeks of gestation, the first child of a 22-year-old mother. The girl weighs 800g and has immature lungs, which will require ventilation. The baby's condition is discussed with the parents. The information that they are made aware of includes:

- there is a strong possibility of the child not surviving (30-40%)
- there is a significant risk of brain damage, which could range from very severe (22%) to schooling difficulties
- high risk of chronic lung disease (46%), blindness (16%) and deafness (9%) [63] .

Questions:

1. Is it acceptable for parents to request that their child not be subjected to these interventions, as they are concerned that the multiple procedures, blood taking, etc. will cause unnecessary suffering in a child who is very likely to suffer multiple handicaps and be mentally retarded and thus the child should be allowed to pass away "naturally" in their arms?
2. In the public sector in South Africa, due to limited resources, such babies (under one kilogram) are not routinely offered ventilation, as it is felt that these resources should be used on less premature babies who have a better overall outcome. Is this stance justified?
3. On the other hand, if the parents move their child from the State hospital to a private one with the hope to save their child, but are fully aware of the fact that this would drain their financial resources, are they still obliged to seek this care?

While attempting to answer the above questions, it is important to point out that life and death are the prerogatives of Allah (SWT) and that within the

period of our sojourn in this world, Allah (SWT) will test us in many different ways as alluded to in the following *ayah* of the *Qura'n*:

> "*Be sure We shall test you with something of fear and hunger, some loss in goods or lives or the fruits (of your toil), but give glad tidings to those who patiently persevere — who say when afflicted with calamity: 'To Allah we belong and unto Him is our return.*"' [64] .

It is, therefore, important that we come to terms with the fact that none of us is in a position to protect our loved ones from death. The *Noble Qura'n* categorically states:

> "*Wherever you are, death will find you even if you are in towers built up strong and high.*" [65] .

In reply to question (1) above, it would be acceptable for parents to request that their child should not be subjected to unnecessary medical interventions which would not in any way enhance the quality of his/her life and would in fact only prolong his/her suffering. The legal maxim: "*Harm must be eliminated but not by means of another harm*" could be used to justify the parents wish not to opt for extraordinary measures for their ailing child and to allow death to take its natural course. However, the aim should never be to hasten death and thus 'palliative' care in the sense of maintaining basic hygiene and basic nutrition should not be discontinued [66] .

In response to question (2) above, it is perfectly in order not to place such a premature baby on the ventilator. After all, the ventilator does not in any way guarantee improving or enhancing the quality of life of the very premature babies. The legal maxim "*Hardship begets facility*" may be used to justify the practice at State hospitals to restrict the use of ventilators to those patients who have a better prognosis.

Insofar as question (3) above is concerned, the parents who are cash-strapped and cannot afford to make use of extraordinary means of sustaining the life of their child are under no obligation to resort to such means which would "endanger" their lives and that of their families. The Qura'nic *ayah*:

> "*Do not let your hands contribute to your own destruction*" [67] .

can be plausibly used to justify one not to resorting to extraordinary means to sustain life if it would result in placing the family in financial or other difficulties.

Case 2: The Asphyxiated Neonate

A 3kg infant is born at 36 weeks gestation by emergency caesarean section for abruptio placenta. He is severely asphyxiated with low Apgar scores at 20 minutes. As he is not breathing adequately but has gasping respiration with a good heart rate, he is placed on a ventilator.

After 12 hours on a ventilator, he is assessed and the attending doctors strongly feel that, although not brain dead, he is very unlikely to survive

without the support of the ventilator. If he does survive, they are convinced that severe brain damage wi11 be inevitable. The medical team talks to the parents about withdrawing ventilator support.

Questions:

1. Is it acceptable for the parents to accept this medical opinion?
2. Keeping this child on a ventilator is likely to deprive another infant, with a better prognosis, of the facility. Would it then be acceptable to remove ventilator support?

In response to question (1) above, it ought to be pointed out that doctors are *ahl al-khibrah* (the experts in the field of medicine). While it is justified for laymen to accept the diagnosis of the doctors, parents have the option not to accede to the request to have their child forcibly removed from the ventilator on the grounds that that would be tantamount to 'killing" their child who is not brain dead and is dependent upon the ventilator to sustain his breathing. Although question (2) above suggests that keeping that particular child on the ventilator would deprive another infant with a better prognosis to have access to this facility, the argument of probability would not override the right of the child who is already on the ventilator on the grounds that denying him ventilator support would *ipso facto* result in hastening his death and the *Qura'n* categorically states:

> *"... and do not take the life of any human being - (the life,) Allah has declared to be sacred — otherwise than (in the pursuit) of justice...."* [68] .

Case 3: The Anencephalic Neonate

A neonate is delivered with anencephaly. In this condition, the brain stem is present, but most of the cerebral hemispheres are absent. These children inevitably die within hours to days of birth and have no hope of survival.

Question:

The parents of this child are approached to consider donating the heart of this child for transplanting into another neonate with severe congenital heart disease who would otherwise die. Is it acceptable for the parents to comply with this request?

The above question does not specify whether the child is on a ventilator and cannot breathe on his own. What is clear from the above scenario is that the anencephalic neonate is still alive although it is anticipated that his lifespan may be short. It ought to be noted here that it would be a crime according to the *Shari`ah* to remove a vital organ (like the heart) from the anencephalic neonate for that would inevitably result in his death. The *Shaykh* Jad al-Haqq, former Grand *Imam* of Al-Azhar University, explains that this prohibition has no exception, whether the one from whom the vital organ is taken has given his/her permission or not. Thus if the parents were to give permission for the heart of their anencephalic neonate to be

transplanted into another neonate, they, along with those who are involved in the transplantation process, would be guilty of taking the life of that neonate without any justifiable *Shari'h* (Islamic legal) cause [69] .

Case 4: A Child with Trisomy 18

At birth a term neonate is found to have multiple congenital defects. Investigations reveal that the baby has Trisomy 18. Children with this condition almost inevitably die in childhood and rarely survive beyond one year of life.

He presents critically ill at night and the attending doctor places him on a ventilator. A serious congenital heart defect is detected which would require surgical correction if the child is to survive this episode. The parents are consulted.

Questions:

1. Are the parents obliged to have the surgery done?
2. If the diagnosis was made antenatal, could the parents have opted for termination of pregnancy?

In reply to (1) above, one ought to note that while parents may not be obliged to have the surgery done on their child, nevertheless, they would be morally bound to see to it that corrective surgery is done since it is related to "saving" the life of their child. Here the Qura'nic imperative *"...and whoever saves the life of a human being, it is as if he has saved the life of all mankind...."* [70] . would apply.

Question (2) above relates to the termination of pregnancy if the diagnosis was made in the antenatal period. It may be argued firstly, that abortion would relieve the mother-to-be of her mental anguish which pertains to her carrying to term a defective fetus, and secondly, it would avoid a case wherein the child would start his/her life as a handicapped person. One cannot overlook the fact that the fate of a defective fetus is a highly complex problem. Advocating its antenatal abortion, it maybe argued, could well provide a precedent for the ultimate justification of euthanasia for the handicapped and the aged, who are viewed as burdens on their families and upon the State and society.

It is important to mention here that in reply to a questionnaire compiled by the Islamic Medical Association of South Africa on defective fetuses, the *Dar al-Ifta'* in Riyadh, Kingdom of Saudi Arabia, categorically stated in its *fatwa* (religious verdict) that abortion on such grounds cannot be allowed [71] . However, it is the writer of this article is of the view that if the diagnosis is conclusively made before the first trimester then the mother-to-be may opt for the abortion if she feels that carrying the pregnancy to term would endanger her mental health [72] . However, if the diagnosis is done after the first trimester, then the mother-to-be would be obliged to carry the pregnancy to term in view of the fact that the fetus would at that stage possess the *ruh* (soul) and aborting it

would constitute the killing of a human being. After all, the lifespan of such a child, being relatively short, she should face the consequence as a trial from Allah (SWT) and observe resoluteness (*sabr*), bearing in mind what the *Qura'n* says:

> "*Your riches and your children are but a trial, whereas with Allah is an immense reward*" [73] .

Case 5: Trisomy 21 and Congenital Heart Defects

A child with Trisomy 21 (Down's syndrome) has a heart defect (atrioventricular septal defect). If it were not corrected in childhood, he almost inevitably would develop pulmonary hypertension later, which would make heart surgery impossible. He is likely to become ill from this heart condition in late teenage years or early twenties and ultimately dies from it at this age.

Children with Down's syndrome typically are mildly mentally retarded or may have IQ tests that are borderline normal. Some may be able to attend normal schools. They are prone to other conditions such as hypothyroidism, leukemia and respiratory tract infections, which are treatable. However, in their thirties, most develop Alzheimer's Disease and dementia, which would require additional care.

Question:

In the above scenario would be considered acceptable, in situations where resources are limited, to deny surgery to these children in favor of "normal" children?

It is necessary to point out here that denying surgery to such children is hedged upon the lack of resources. Surgery in such cases would be considered as an extraordinary means of medical intervention and hence, due to limited resources, it would not be an obligation to carry out surgery on such children.

However, the writer of this article is of the view that irrespective of the child being a Down's syndrome child, every effort ought to be made for him to have the corrective surgery done. This would in a way enhance his quality of life.

It is important to note that children with Down's syndrome are usually quite happy people and thus it would be advisable to relieve this child of the distress that he is experiencing due to his defective heart condition. In support of this, the following *Hadith* may be cited:

> "The believer to another believer is like a building whose different parts reinforce each other," said the Prophet (PBUH). He (PBUH) then clasped his hands with his fingers interlaced. (At that time) the Prophet (PBUH) was sitting and a man came and begged or asked for something. The Prophet (PBUH) faced us and said, "Help and recommend him and you will receive the reward for it, and Allah (SWT): will bring about what He wills through His Prophet's (PBUH) tongue."

Case 6: The Infant with Neuromuscular Disease

A six-month-old girl is referred for delayed motor milestones and "floppiness". Diagnostic tests are done, however, during muscle biopsy the child stops breathing and has to be put on a ventilator. On the ventilator, she is mentally alert and responsive, but because of the muscle weakness, it becomes impossible to wean the child from the ventilator support. The investigations confirmed the diagnosis of spinal muscular atrophy.

The neurologists involved are unanimous that there is no hope at all of any recovery, and although mentally alert, the child is completely paralyzed and will be unable to sustain spontaneous respiration.

Question:

It is recommended to the family that life support be discontinued. Is this acceptable?

In this case, there is no *Shari'h* (Islamic legal basis) to remove the infant from life support since she is mentally alert and she also not brainstem dead. Her very survival depends upon her having access to the ventilator. If the use of the ventilator is going to be for a long-term period, necessary steps should be taken to ensure that resources be made available to continue providing her with the life support facility. Since she is already on the life support, to deny her of this facility would lead to her "premature" death and hence that would be crime equivalent to deliberate murder of a human being. This is evident from the following *ayah* of the *Noble Qura'n*:

> "*If anyone slays a human being unless it is in legal punishment for murder or for spreading corruption on earth it shall be as if he had slain the whole of mankind...*" [74] .

B. Adult Clinical Scenarios

Case 1: Pregnancy and Malignant Brain Tumor

Mrs J S is 26-year-old and 20 weeks pregnant. She complained of excessive headaches and vomiting. Initially it was thought that these problems were due to the pregnancy. She was treated with medicines to prevent nausea and was given extra fluids to take by mouth. However, this did not resolve the problem, and Mrs J S's vomiting continued to the extent that she became dehydrated and had to be admitted to hospital for treatment with intravenous fluids. At this stage, a CT scan of the brain was performed. This revealed a mass that was extending from one hemisphere of the brain to the other, across a bridge of neural tissue called the corpus colosum. The appearances of the mass on CT scan were highly suggestive of an extremely malignant tumor called a butterfly glioma. This descriptive name is applied to the tumor because it spreads like a butterfly wings throughout the brain, and extends into both cerebral hemispheres. The tumor is irresectable, and is usually treated with radiotherapy and chemotherapy.

A biopsy of the mass showed that she had a Glioblastoma multiforme, a highly malignant (grade 4) brain tumor. Brain tumors are graded from 1 to 4, where 1 is the most benign, and 4 is the most malignant. Grade 4 tumors have an average life expectancy of between six and twelve weeks without any treatment. With radiotherapy, the survival is "prolonged" to between six and nine months, and with chemotherapy, survival is "prolonged" to between nine and twelve months. Sometimes, survival as long as two years has been recorded. Ultimately, the tumor has a dismal prognosis.

The fact that Mrs J S was 20 weeks pregnant was a major medical and ethical dilemma. The administration of radiotherapy and chemotherapy, while likely to prolong Mrs J S's life, was also sure to harm the unborn baby. Mrs J S, in consultation with her husband and together with other family members, decided not to receive radiotherapy and chemotherapy.

Instead, Mrs J S was treated with small amounts of steroids to try and decrease brain swelling and limit her headaches and vomiting. Initially, Mrs J S made good recovery and was discharged. She continued to see her gynecologist, and the baby made good progress. However, roughly seven to eight weeks later, Mrs J S had to be readmitted to hospital with severe vomiting, dehydration and under nourishment.

Her level of consciousness gradually began to deteriorate despite receiving the massive doses of steroids. The fetus's condition at this stage was still stable. Despite all medical treatment, Mrs J S continued to deteriorate, and eventually had to be put onto life support machines, including a ventilator. Eventually, even her blood pressure had to be supported by artificial means using drugs. A day or two later, Mrs J S was clinically brain dead. A decision had to be made by Mr S whether to allow the doctors to perform a caesarean section, and to deliver a 28-week-old baby in whom problems such as premature lungs and infection were likely to be expected. In addition, Mr S, a first time father, would have to care for the baby in the absence of a mother. This was an extremely difficult decision for Mr S. Various family members gave their views.

The neurosurgeon, neurologist and gynecologist had several meetings and also discussed the case with their colleagues in open meetings. No consensus was reached either by the medical or the lay people involved in this tragic case. Eventually, Mrs J S had a cardiac arrest. Resuscitation was unsuccessful and the baby suffered fatal fetal distress with cardiac arrest and also passed away.

In retrospect, the questions that were asked were:

1. Should radiotherapy and chemotherapy have been given at 20 weeks once the diagnosis of the brain tumor was made, irrespective of harm to the baby?
2. Should an abortion have been

performed at 20 weeks in order to decrease the metabolic demands on Mrs J S who was already suffering from a malignant brain tumor?

3. Once Mrs J S's condition deteriorated and was declared brain dead, should caesarean section have been performed to deliver a premature 28-week-old baby? It is acceptable that a 28-week-old baby can be viable, though problems such as premature lungs, intraventricular hemorrhages and infections, would lead to prolonged ICU care, including ventilation. The long term prognosis of such a child is likely to be affected by these serious complications,
4. Do the wishes of the father, Mr S, who would have been a first time father, play a role in the decision making?

In response to the questions (1) and (2) above, one has to take into consideration the apparent positive role that radiotherapy and chemotherapy could have played if they were administered to Mrs J S. The evidence given in the above scenario is that with radiotherapy chance of survival is "prolonged" to between six and nine months, and with chemotherapy to about nine and twelve months.

This is compelling evidence that Mrs J S should have been administered with these forms of therapy. But, these therapies would have the potential to harm the baby, who at 20 weeks would have been endowed with the *ruh* (soul)[75] , and would technically have at that point in time have equal right to life with its mother. The dilemma whether to go on with these therapies irrespective of the harm to the baby and/or to abort the fetus could be resolved on the basis that in such a situation the mother's life would take precedence over that of the fetus. The rationale behind this is found in *Shaykh* Shaltut's *Al-Fatawa*:

> The mother is the origin of the fetus, she is established in life, with duties and responsibilities, and she is also a pillar of the family. It is not possible to sacrifice her life for the life of the fetus which has not as yet acquired a personality and has no responsibilities or obligations to fulfil [76] .

As for question (3) above, once the mother was declared brain dead, it would have been in order to carry out a Caesarean section to deliver the 28-week-old baby, bearing in mind that: firstly, at 28 weeks, the baby is viable although he/she would require prolonged ICU care and secondly, on the grounds of the legal maxim "*Lesser of the two evils*" so as to avert losing two lives - that of the mother-to-be and her baby. Once the mother was diagnosed brain dead, nothing could possibly be done to reverse her condition, whereas there was always the hope that the baby, although delivered prematurely by Caesarean section, would still have had the chance to survive.[77]

Question (4) above pertains to the issue of legal guardianship of the wife. It seems that in the above scenario, the

husband played a decisive role in the wife not opting for radiotherapy and chemotherapy as well as in the decision whether or not to do the Caesarean section in order to deliver the premature baby once his wife was declared brain dead. In the first instance, when the wife is in full senses and of mature age, the husband is not regarded in terms of the *Shari`ah* to be her legal guardian. Thus the husband would have no right to prevent her, in the above case, from having radiotherapy and chemotherapy, if she were to opt for such treatments. When she was diagnosed brain dead, her husband's wishes would really not have mattered. During that state then, her son (who had attained maturity) would be recognized as her legal guardian and in the event that she had no son, then her father would assume the role of her legal guardian.

Case 2: Congenital Abnormalities

Mrs K S was a second time mother who gave birth after an uncomplicated pregnancy to a term baby. The baby had multiple congenital abnormalities. The most serious being a Myelomeningocele in the thoracic lumbar area.

Myelo means spinal cord. Meninges refer to the coverings of the spinal cord, and cele refers to a sac filled with fluid. Myelomeningocele is therefore a herniation of the spinal cord together with its covering, and a collection of cerebrospinal fluid, through a defect in the bones. The sac then protrudes through the back in the thoraco lumbar area onto the surface of the body. This abnormality occurs in *utero*. Because the spinal cord is exposed to the harmful effects of the amniotic fluid, the spinal cord at this level dies resulting in paraplegia below the level of the lesion. This child was therefore born paraplegic and incontinent of both urine and stool because there was no motor function below the level of the lesion and there was no sensory function of the bladder or bowel. In addition to this, the abnormality is also associated with hydrocephalus. This causes pressure on the surrounding brain tissue, resulting in marked behavioral, cognitive and learning defects later on in life. To complicate matters, leaking of cerebral spinal fluid may create a medical emergency with the potential of serious infection, such as meningitis setting in. The myelomeningocele therefore has to be closed immediately. This is a cosmetic and lifesaving procedure and will not alter the child's neurological status. It is accepted that such children can be prevented from dying by closing the myelomeningocele, thereby preventing infection, and by inserting a ventriculo-peritoneal shunt to relieve the hydrocephalus.. This then relieves the child of the excessive pressure within the brain. However, such children will at best be confined to a wheelchair, and are still likely to suffer from some form of mental retardation even though mild.

Such children also experience numerous other problems associated with bladder and bowel dysfunction often requiring

colostomy, that is, drainage of the faeces through an opening in the front of the abdomen. They also require catheters into the bladder in order to relieve themselves of urine. They are thus also prone to recurrent infections of the bladder. They also develop pressure sores on the buttocks and in other areas, because they are unable to feel sensation. These children often require multiple admissions to hospital for treatment of these complications. Their school life is disrupted and they require special care for the rest of their lives.

The prognosis of Mrs. K S's child was put to the parents. They jointly decided not to allow surgery on their child. The child was therefore discharged into their care, and demised of serious meningitis two weeks later.

Questions:

1. Should the medical personnel have put the offer of non-treatment to the parents in the first place?
2. Should the doctors not have played God and closed the myelomeningocele and inserted a ventriculo-peritoneal shunt in any case, irrespective of the prognosis of the child, in order to save the child's life?
3. Or was the humane thing to do, to let nature take its course, and to let the child die bearing in mind that antibiotics are now available to prevent such infections, but also bearing in mind that subsequent infections are likely to be more resistant, requiring the administration of more and more powerful antibiotics. Also, had the child not died and the infection been treated with antibiotics, the pressure within the brain would have continued to rise and would have caused continued pressure upon the brain resulting in greater and greater mental retardation in later years to come.
4. Lastly, if the condition of a serious neural tube defect such as myelomeningocele is diagnosed in *utero* after 28 weeks of pregnancy, should termination of pregnancy be offered to the mother?

In response to questions (1) and (3) above, it was perfectly in order for the medical personnel to put the option of non-treatment to the parents who were in effect the legal guardians of the baby with congenital abnormalities. But, in reply to question (2) above, taking into consideration that life and death are in the hands of Allah (SWT) one could rightfully conclude that the doctors should have proceeded to close the myelomeningocele and inserted a ventriculo-peritoneal shunt, irrespective of the prognosis of the child. To save the baby's life would have been in line with the Qura'nic imperative to save lives. What is important to note is that since that procedure does not result in improving the condition of the baby, the doctors were justified in not intervening surgically [(78)] .

With regards to question (4) above, , Muslim jurists are of the view that once

the ensoulment of the fetus has taken place it would be *haram* (forbidden) to abort the fetus at that stage. Muslim jurists concur that the only time when it would be permissible to abort an ensouled fetus would be when the continuance of the pregnancy would result in the death of the mother [79] .

Case 3: Severe Head Trauma

Mr. AD was a 23-year-old mechanic who was working under a car when the jack slipped, crushing his head between the tarmac and the car. He was extricated from the car, was resuscitated by the ambulance personnel, and rushed to the nearest hospital. It was found that his level of consciousness was extremely poor. However, he was rushed to a major metropolitan hospital where he was assessed. At that stage, his Glascow Coma Scale was 3/15. The Glascow Coma Scale is a scale of consciousness and is rated from 3, which is the lowest to 15, which is the normal level. That is, he was in deep coma. In addition, his pupils were noted to be fixed and dilated and non reactive to light. This is an extremely poor prognostic indicator. A CT scan of the brain was done. This revealed an extremely crushed skull with extensive brain damage. However, he also had a large blood clot between the dura and the bone. This means that he had an acute extradural haematoma, which by itself normally has a good prognosis if drained immediately. He, however, also had extensive brain damage from which he was extremely unlikely to recover. The patient's condition began to deteriorate and his respiration became extremely poor. The prognosis was put to the parents. It was put to them that their son was not likely to survive despite any measures, including surgery. However, surgery could be performed to remove the extradural blood clot, but this was only likely to prolong survival by a few days to a few weeks, and that ultimately, the severe brain damage was likely to be fatal. The parents, however, decided that their son should undergo the urgent surgery to remove the extradural blood clot.

This was duly performed as an emergency procedure. The patient's condition improved somewhat within the next few hours, and his breathing became more regular. However, within a few days his condition deteriorated and he had to be placed onto a ventilator, and medications were given to elevate his dropping blood pressure.

Within a few days, the patient was brain dead. The parents sought several opinions, but all concurred that their son's prognosis was extremely poor and that as he was brain dead and that there was no chance of recovery. The parents refused for their son's life support apparatus to be switched off. Their son suffered a fatal cardiac arrest a few hours later and was declared clinically dead.

Questions:

1. Knowing the prognosis of the case and knowing that evacuation of

the blood clot was only likely to prolong life by a few days, should the offer of surgery have been put to the parents in the first place, knowing that the parents would take any chance of prolonging their son's life?

2. Since there was no chance of recovery, should the option for organ donation have been given to the parents?

In reply to question (1) above, it was right for the doctors to have consulted the parents and offered them the choice of surgery on their son since they were his legal guardians. But, what could have perhaps been done by the doctors were to advise them that future prospect of their son's recovery were not good and although there was the option of intervening surgically to remove the extradural blood clot, it would not in any way result in curing their son due to his having sustained massive head trauma. However, if eventually the parents were to opt for surgical intervention, the doctors would be obliged to accede to their request.

Question (2) above is in relation to the option of organ donation to be given by the parents. This is a highly complex problem because some of the Muslim jurists still subscribe to the conventional definition of death, i.e. the cessation of heartbeat and respiration. Nevertheless, the writer of this publication is of the view that the option of organ donation should have been given to the parents .

Diagnosis of brainstem death is relevant to the issue of retrieving vital organs, viz., the heart, lung, liver and kidney for transplantation purposes. At this juncture, it may be appropriate to question as to whether it would be an act of murder to retrieve a vital organ from a brainstem dead patient for transplantation purposes. Dr Muhammad Sulayman al-Ashqar, an expert in the field of Islamic Jurisprudence, Kuwait, argues that a brainstem dead person should be considered to be virtually dead and is to be treated as dead as far as permissibility to disconnect the resuscitation equipment or to remove his organ for transplantation purposes is concerned[80] . In other words, he likens brainstem death to the attainment of unstable life. Muslim jurists hold unstable life to be the stage immediately before the body becomes lifeless, the process of spirit or soul i.e. departure[81]. During this stage, the person has no eyesight, is unable to talk and cannot engage in voluntary motion [82] .

It may be appropriate here to allay fears that retrieving organs from brainstem dead patients would not constitute an act of murder by drawing the reader's attention to the recommendations made at the conclusion of the Seminar on 'Human Life: Its Inception and End as viewed by Islam' which was held in Kuwait in January 1985. Among the recommendations, it was stated that "*Fiqh* scholars are inclined to the view that when it is ascertained that a human being has reached the stage of brainstem death, he is considered to have withdrawn from life..." [83] .

Conclusions

There are numerous *Ahadith* which suggest that Muslims should seek medical help whenever they fall ill, but Muslim jurists are of the view that it is not obligatory for Muslims to seek treatment for their medical conditions if the apparent cure would not be of any benefit to them. However, medical or surgical intervention would become obligatory in such situations where one's life would be in danger if one were not to receive medical attention. For example, if one were to accidentally cut oneself and was bleeding profusely. In such a situation it would be obligatory for one to seek medical attention and have the bleeding stopped. Failing to do so would be tantamount to committing suicide.

In this article, every attempt was made to conclusively provide guidelines for Muslims in both the pediatric and adult clinical scenarios. What came out clearly from these scenarios is that: firstly, it is not an obligation to persist with treatment if the treatment is not going to benefit the patient. Secondly, Muslims are not under any obligation to have their loved ones treated with extraordinary means of treatment which could result in placing themselves into various types of difficulties, including financial. Nevertheless, they do have every right to make an appeal to the community for financial assistance so as to place their loved ones in the ICU. Thirdly, while the parents are the legal guardian of their minor children, the husband is not his wife's legal guardian if she, as a patient is in her full senses. This means that her wishes to resort to a particular form of treatment would matter and not that of her husband. Even when she is declared brainstem dead, her husband would not assume the role as her legal guardian in view of the fact that guardianship is based on `*asabah* (male blood ties). This means that if her son is *baligh* (having attained the age of maturity according to Islamic Law) then the son would be her legal guardian while she is in a state of brain death. In the event of her having no son, then her father would become the legal guardian and not the husband. The same rule would apply in DNR cases. Fourthly, a Muslim woman cannot choose to have an abortion if she is diagnosed after 20 weeks of pregnancy that she is carrying a defective fetus because by that stage ensoulment of the fetus would have taken place. Finally, once someone is placed on the ventilator, it is not permissible for that person to be removed from it if he/she is not brainstem dead, is mentally alert and dependent upon the ventilator for respiration.

Allah (SWT) knows best!

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(79) See Qadaya Tibhiyyah Mu`asarah fi Daw al-Shari`ah al-Islamiyyah (1995), op. cit. vol.1, p. 235.

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The Right to Die: Some Personal Reflections on the Terri Schiavo Case and the Role of Hydration and Nutrition in Hopelessly Ill Patients

Faroque Ahmad Khan

Terri Schiavo, 41, died March 31, 2005 at the Pinellas Park hospice where she lay for years while her husband and her parents fought in the nation's most divisive—and most heavily litigated-right-to-die dispute .Although tragic, the plight of Terri Schiavo provides a valuable case study. The conflicts surrounding her situation offer important lessons in medicine, law and ethics.[1] The following is a summary of Mrs Sciavo's case and my personal thoughts about it:

On February 25, 1990, 26-year-old Terri Schiavo suffered a sudden cardiac arrest, the cause of which was not determined. She thereafter lapsed into a persistent vegetative state (PVS). She remained in a vegetative state for fifteen years. She died of dehydration on March 31 2005, nearly two weeks after her feeding tube was removed in accordance with a court order.

Her husband, Michael Schiavo, had long sought to have the feeding tube taken out, arguing that she would not have wanted to be maintained in a vegetative state, but her parents fought to keep her alive. Members of the United States Congress, the Florida Legislature and Florida Governor Jeb Bush intervened to keep Mrs Schiavo's feeding tube in place.

After many rulings and appeals, in November 2002, a judge again ordered Mrs. Schiavo's feeding tube removed. The Schindlers, Mrs. Schiavo's parents, appealed again.

With appeals running out, the Schindlers in September 2003 asked a federal court to intervene. Governor Jeb Bush filed a brief in the case supporting the Schindlers.

On October 10, 2003, the federal court judge ruled that the federal court has no jurisdiction in the Florida case. On October 15, 2003, doctors removed the feeding tube.

On October 21, 2003, Governor Bush successfully pushed for an emergency act of the Florida Legislature to restore the feeding tube. The law became known as "Terri's Law." A lawsuit challenging its constitutionality was immediately filed.

On September 23, 2004, the Florida Supreme Court struck down Terri's Law. On January 24, 2005, the U.S. Supreme Court refused to hear arguments for Terri's Law. On February 23, 2005, the Schindlers in another hearing asked for more time to file appeals.

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The appeals would address whether new therapies would help their daughter and whether their daughter's religious beliefs prohibited withholding nutrition.

On March 18, 2005, the feeding tube was removed and thirteen days later, on March 31 2005, Terri Schiavo died.

Before reviewing the ethical questions raised by this landmark case, a brief review of her medical illness is in order. There was general agreement that Mrs. Schiavo was in a persistent vegetative state or PVS.

PVS is a condition of patients with severe brain damage in whom coma has progressed to a state of wakefulness without detectable awareness.[2] There is still controversy in both the medical and legal fields as to whether this condition is irreversible. Mrs Schiavo had all the features of prolonged PVS.

The syndrome was first described in 1940 by Ernst Kretschmer, after whom it also has been called Kretschmer syndrome.[3]

The term PVS was coined in 1972 by Scottish neurosurgeon Bryan Jennett and American neurologist Fred Plum to describe a syndrome that seemed to have been made possible by medicine's increased capacities to keep patients' bodies alive.[2]

Many patients emerge from a vegetative state within a few weeks, but those who do not recover within 30 days are said to be in a persistent vegetative state. The chances of recovery depend on the extent of injury to the brain and the patient's age, with younger patients having a better chance of recovery than older patients. Generally adults have a 50 percent chance and children a 60 percent chance of recovering consciousness from a PVS within the first 6 months. After a year, the chances that a PVS patient will regain consciousness are very low and most patients who do recover consciousness experience significant disability. The longer a patient is in a PVS, the more severe the resulting disabilities will be. Rehabilitation can contribute to recovery, but many patients never progress to the point of being able to take care of themselves. Few people have been reported to recover from PVS. Some authorities hold that PVS is, in fact, irreversible, and that the reportedly recovered patients were not suffering from true PVS. In the United States, it is estimated that there may be as many as 15,000 patients who are in a persistent vegetative state.[4-5]

Nonetheless, some dispute still remains over the reliability of PVS diagnosis, particularly when a limited number of physicians (or physicians without experience in the area of PVS) make the diagnosis. One study of 40 patients diagnosed with PVS in the United Kingdom determined that 43% were misdiagnosed.[6] This highlights the need for very vigorous diagnostic criteria to be used in making a PVS diagnosis. For example, not every comatose patient is in PVS. Specific tests under the supervision of qualified professionals are needed in order to make a diagnosis of PVS.

PVS has been at the center of much controversy in recent years. Most of this controversy comes from the difficulty in defining and understanding this condition, and this has led to discussion over how people in this state are to be treated. The greatest public controversy stems around the euthanasation of patients with this condition. The case of Terri Schiavo, who remained in this state for approximately 15 years, shined a spotlight on this topic.

Legal Definition

As opposed to brain death, PVS is not recognized as death in any known legal system. This legal grey area has led to several court cases involving people in a PVS, between those who believe that they should be allowed to die and those who are equally determined that, if recovery is possible, care should continue. The media circus case of Terri Schiavo in the United States is an example of PVS, having been so diagnosed by multiple court-appointed physicians. A dispute of this diagnosis was a major issue in a lengthy and unsuccessful court challenge.

The Schiavo case was governed by Florida Law, under which the legal definition of "PVS" is:

"Persistent vegetative state" means a permanent and irreversible condition of unconsciousness in which there is (a) the absence of voluntary action or cognitive behavior of any kind and (b) an inability to communicate or interact purposefully with the environment.

This legal definition is found in State Law 765.101(12).

There were two key questions in this case:

1) Was Schiavo's condition hopeless?

2) Would she have wanted her feeding tube removed?

While we need to be aware of the difficulties in prognosticating PVS patients, in the case of Ms. Schiavo there was general agreement, from a medical point of view, that she was in an irreversible stage of PVS and was consequently hopelessly ill with no chance of recovery.

Secondly, there is no strong evidence that she would have wanted her feeding tube removed because there was no documented living will by Ms. Schiavo.

Islamic View

I have previously published on the topic of brain death and suggested that when brain death is present, life support can be removed.[7,8] Mrs Schiavo did not meet the criteria of brain death.

So what is permissible in cases like Terri Schiavo, where the patient is not brain dead but have virtually no hope of recovery? In the position paper published by the ethics committee of Islamic Medical Association of North America (IMANA), this issue was discussed and I reproduce the statement:

IMANA believes that when death becomes inevitable, as determined by physicians taking care of terminally ill

patients, the patient should be allowed to die without unnecessary procedures. While the patient is still alive, all ongoing medical treatments can be continued. IMANA does not believe in prolonging misery on mechanical life support in a vegetative state. All of the procedures of mechanical life support are temporary measures. When a team of physicians, including critical care specialists, have determined, no further or new attempt should be made to sustain artificial support. Even in this state, the patient should be treated with full respect, comfort measures and pain control. No attempt should be made to withhold nutrition and hydration. In such cases, if and when the feeding tube has been withdrawn it may not be reinserted. The patient should be allowed to die peacefully and comfortably. No attempt should be made to enhance the dying process in patients on life support. Suicide and Euthanasia are prohibited in Islam (Qura'n 17:33). Muslim physicians are instructed to uphold the sanctity of human life. IMANA is absolutely opposed to Euthanasia and assisted suicide in terminally ill patients by healthcare providers or patient's relatives.[9]

Ms Terri Schiavo, in my opinion, should have been allowed a dignified death. She was starved to death after thirteen days of withholding food and water. While I may not have put in a feeding tube, I would have allowed provision of water with ice chips, sips of water and liquid diet as tolerated.

Cost to Society

During the very public debate regarding Ms Schiavo's care, very little mention was made of the financial cost of over a decade long care in an institution. I often wondered why the family was unable/ unwilling to take care of Ms Schiavo at home. If that option had been pushed, I have a feeling that Ms Schiavo would not have lingered on for over a decade hovering between life and death. Many of our ethical issues in medical care are directly a price we pay for advanced technology. A patient like Ms Schiavo in many parts of the world would have succumbed to complications such as pneumonia and sepsis and would have died a natural death. While the exact cost of care for Terri Schiavo is not known, my best estimate is that for the fifteen plus years of total care the cost must have been well over a million dollars. No one seemed to address whether this expense was justified. Eventually this cost is borne by the tax payers.

Another key issue in this discussion is the role of feeding and nutrition in hopelessly ill patients. Is tube feeding a medical treatment? What is the intention behind the withdrawal of food and fluids?

The following arguments have been advanced that tube-feeding is a medical treatment and can therefore be stopped without breaching the duty of care:

a) It is a medical response to pathology, namely the patient's inability to swallow or to swallow safely.

b) It uses artificial means.

The following counter arguments have been proposed that food and fluids are part of the basic nursing care all patients deserve:

a) Tubes can be passed and operated by people other than doctors (e.g. nurses and family care givers).

b) The concept of 'artifice' is potentially misleading. We bottle feed-babies and use knives and forks ourselves.

Euthanasia has been defined as 'the intentional killing by act or omission of a person whose life is felt not to be worth living'. Intention is a critical religious, ethical and legal concept. So, was the Terri Schiavo case one of 'Let poor Terri die' or was it a case of 'Let us kill poor Terri'?

Similarly, should Terri Schiavo have been given antibiotics for life-threatening infections during the course of her long illness? If not, what is the difference between withholding antibiotics and withdrawing tube-delivered food and fluids?

From my point of view, a patient who develops pneumonia, for which treatment is not provided, dies (foreseeably, but not certainly) of pneumonia and PVS. If a patient simply has tube-delivered food and fluids withdrawn, the patient dies (foreseeably and certainly) of dehydration/starvation and PVS. There is an ethically significant difference.

Conclusion

Persistent vegetative state is a condition that will continue to be at the center of controversy until there is greater understanding of the condition and more accurate definitions and methods for diagnosis. At this point, the only known hope for recovery is the chance, spontaneous natural recovery of the patient. As with all medical conditions, there will be continued interaction between government, business, academia, medical practitioners, and the public to formulate the discourse and develop the treatments surrounding PVS. Advances in medical technology have far outpaced laws that regulate its use. Congress should play a constitutional role by listening to religious leaders and ethicists as well as doctors and scientists and write laws that address both moral and medical concerns.

IMANA recommends all Muslims to have a "living will", "advance directive" and a case manager to help physicians know their wishes when they are unable to give directions (i.e. in a coma).[9] Ms Schiavo's case went through an extensive legal battle primarily because of the absence of any written directive from her.

As a postscript, Ms. Schiavo's body at autopsy weighed 112 pounds and had a height of 62 inches. Her brain showed marked global anoxic-ischemic encephalopathy resulting in massive cerebral atrophy. Her brain was half the expected weight. There was hypoxic damage and neuronal loss in her occipital lobes, which indicates cortical blindness. No areas of recent or remote traumatic injury were found.[10]

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COMMENTARY
End Of Life Medical Interventions

Aly A. Misha'l

On March 31, 2005, A 41 year old patient, Terri Schiavo died several days after her feeding tube was removed in a Florida, USA nursing home.

The saga of Mrs. Schiavo started in 1990 when she developed cardiac arrest of undetermined etiology, she was resuscitated, but never regained consciousness. A percutaneous endoscopic gastrostomy (PEG) tube was introduced for feeding and hydration. She was placed in a nursing home, and the court appointed her husband as her legal gardian, with no objection from her parents.

Neurological evaluation established the diagnosis of persistent vegetative state (PVS). Detailed swallowing testing showed severe inability to swallow, and Terri continued to receive nutritional as well as physical therapy.

4 years later, her husband petitioned the court to authorize removal of Terri's PEG tube, because she had no chance of improvement. He also claimed that Terri, when she was healthy, had expressed her wishes, not be subjected to life-sustaining treatments (LST^s) for situations such as PVS, in which she could not make decisions for herself. This claim was denied by Terri's parents who claimed that Terri would have wanted to be kept alive.

From that point on, a major conflict started, and became the focus of heated and prolonged medical, legal, religious, ethical, social and political controversy. Several contradicting court or administrative orders were issued to remove or maintain the tube, or to re-instate it after its removal!

This situation of court trials persisted from January 24, 2000, until March 30, 2005, when the court rejected a petition by the parents, and Terri died few days later. During that period, there were active movements by ethical and human rights groups to defend Terri's right to live, and others to defend her right to withdraw LST^s and die.

The practical questions that must be answered in Terri's case, as well as many other similar cases, could be summarized in the following ten points:

(1) Is it ethically and legally permissible to withdraw or withhold LSTs?

(2) Who speaks for the patient when he/she can't speak?

(3) What are the duties of a surrogate decision maker or proxy?

[Surrogate or proxy decision makers are persons appointed to speak and make decisions for the unconscious patient]

(4) What should be done when it is suspected that a surrogate may not be acting in the best interests of the patient?

(5) Is artificially supplied fluid and nutrition (AFN) considered a medical treatment or a mandatory comfort care?

(6) Are feeding tubes free of risk and otherwise benign interventions?

(7) Does the patient's diagnosis make a difference in the decision to withdraw or withhold medical treatments?

(8) Is terminal dehydration painful?

(9) Is withholding or withdrawing AFN the same as Euthanasia?

(Euthanasia could take place in the positive sense by administering a lethal material. It could also take place in the negative sense by withholding or withdrawing materials.)

(10) Is there a better way to deal with such end-of-life issues?

This last question demonstrates the dilemma facing medical professionals as well as ethical, human rights and legal bodies. The main constituents of this dilemma could be illustrated in the following points, and lessons to be learned:

1. People rarely execute living wills or advance directives, to help in delineation of their wishes regarding medical interventions when they face end-of-life stages, or when they become unconscious. Physicians also rarely encourage their patients and families to do so. Physicians very rarely do that for themselves! Physicians rarely discuss such issues with patients and families when they face terminal illnesses. And if they do so they do not usually document patients' and families' opinions and wishes in the medical records.
2. Surrogate decision makers: In this case only the husband's opinion was taken in consideration. Parent's opinion was largely ignored. Is this the right situation?
3. There was an alleged claim that this patient talked to her husband about her wishes not to be resuscitated, or her life should not be prolonged in case she

reached an irreversible terminal health status. This brings an issue which was the center of most legal, ethical and medical decisions, namely: The patient's right to withhold or withdraw treatments and to be left to die. Such standpoint depends on the local prevailing culture, moral and social values of death and dying, and whether the patient has the full right to end his/her life by withholding or withdrawing treatments. Most religions, including Islam, consider life as a property of its Creator. Nobody, including the individual himself, has the right to end it. Medical practitioners should take that in consideration.

4. In this age of advanced medical technology, life could be maintained for long periods of time. It is mandatory on medical practitionals to decide clearly on what is considered basic mandatory care, and what is considered a medical intervention by procedures or technologies. And to consult actively with the pertinent family members, and with ethical committees in their institutions.
5. Physicians must better understand the importance of optimizing pain control, nutrition, mental and spiritual stability during the remaining life of their patients facing end of life stages.
6. Resource utilization and outcomes in gravely ill patients must be observed. Futile treatments and medical interventions must be considered in light of outcomes. Unnecessary prolongation of life could be looked upon as prolongation of death. In Islamic teachings, it is not obligatory to administer medical interventions which are deemed definitely futile. Such interventions may be withheld or withdrawn in terminal patients who have no chance of recovery. Physicians, however, must maintain basic rights of patients, including hydration, nutrition, nursing care and relief from pain.

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RULINGS ON EUTHANASIA

From The Perspective Of Purposes (Maqasid) And Principles (Qawa'id) Of The Islamic Law (Al Shari'ah)

Omar Hasan Kasule

Definition Of Euthanasia:

Euthanasia is Greek for good death which translates into English as easy death or mercy killing. Other terms similar to euthanasia are aid-in-dying or physician-assisted suicide. In essence it is painlessly putting to death persons suffering from painful and incurable disease or incapacitating physical disorders. Euthanasia was accepted by the ancient Greeks and Romans. It is accepted by 3 Asian religious traditions: Budhism, Shintoism, and Confucianism. It is rejected by the 3 main monotheistic religions: Christianity, Judaism and Islam. Euthanasia has its supporters and opponents in all countries.

Two types of patients are involved in euthanasia:

(a) a patient in a persistent vegetative state who is awake but is not aware of self or the environment. Such a patient has no higher brain functions and is kept 'alive' on artificial life support: respirators, heart-lung machine, and intra-venous nutrition.

(b) patient in terminal illness with a lot of pain, psychological suffering and loss of dignity. The patient may or may not be on life-support.

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Types Of Euthanasia:

A distinction is made between active euthanasia which is making a patient die and passive euthanasia which is letting a patient die. Active euthanasia, an act of commission that causes death, is taking some action that leads to death like a fatal injection. Depending on the underlying intention, *niyyat* or *qasd*, the same action could be considered normal therapy or could be considered euthanasia. For example terminal sedation can be a therapeutic action against pain or can be an act of euthanasia. Sedation has a dual effect; it controls pain while at the same time leading to respiratory depression that can end in death.

Passive euthanasia, an act of omission, is letting a person die by taking no action to maintain life. Passive euthanasia can be withholding or withdrawing water, food, drugs, medical or surgical procedures, resuscitation like CPR, and life support such as the respirator. A do not resuscitate order (DNR) is also a form of passive euthanasia. In passive euthanasia the patient is then left to die from the underlying disease. The distinction between passive euthanasia and withdrawal of life support when there is no evidence and hope of recovery depends on the underlying intention, *niyyat* or *qasd*. The outward actions may be the same but the *niyyat* determines whether it is euthanasia or allowable withdrawal of life support in a hopeless case.

Euthanasia can be by the patient or by the health care giver. It can be voluntary when the patient takes the decision, non-voluntary when another person makes the decision for the unconscious patient, and involuntary when the decision is made contrary to the patient's wish. It may be assisted when the physician provides knowledge and skills that the patient uses to carry out an act of euthanasia.

Euthanasia And The Purposes Of The Law, *Maqasid Al Shariah*[1]

Maqasid Al-shariah Include :

The purpose of life

The purpose of preserving life, *hifdh al nafs*, makes any form of active or passive euthanasia illegal. Life and good health must be protected and promoted in all circumstances. This includes, *inter alia*, adequate nutrition, hydration, prevention and treatment of any illness and disease. Every disease has a treatment known or discoverable by further scientific research. The purpose of life applies to life whatever its quality.

The preservation of *d-Din*

Euthanasia is illegal because it violates the purpose of preserving religion, *hifdh d-Din.* It involves a human attempt to appropriate the divine prerogative of giving and taking away life.

The preservation of progeny

Euthanasia can indirectly lead to the violation of the purpose of preserving

progeny, *hifdh al nasl*, by cheapening human life thus encouraging feticide and infanticide.

The preservation of wealth

The enormous resources used to care for terminal patients have to be considered in the light of the purpose of preserving wealth, *hifdh al maal.* Those resources, if from the family, could have been used to care for the orphans and widows left behind. If they are from the state they could have been used to care for many poor and disadvantaged persons. Using them in a case with no hope of eventual recovery could be a form of waste. The issue of resources can be used as an argument for withdrawal of useless life support but cannot be used for euthanasia. The difference lies in the underlying intention.

Euthanasia And The Principles Of The Law, *Qawaid Al Shari'ah*[2]

The Principle Of Intention, *Qa'idat Al Qassd*

There is no legal distinction between active and passive euthanasia because the Law considers only the intentions behind human actions and ignores the terminology used, *al ibrat fi al maqasid wa al ma'ani wa laisa li al alfaz wa al mabaani*. Since both active and passive euthanasia have the same intention of ending the life of a terminally ill patient, they are the same action under the law. The physician who advises, assists, or carries out a euthanasia operation at the instructions of the patient, in full knowledge of the underlying intention, is committing a crime. The physician involved in euthanasia, either as an active participant or an advisor, may have intentions relating to self-interest and not the interests of the patient or those of religion. These could include trying to get rid of a difficult medical case, cutting costs of intensive and expensive terminal care, or possible ulterior material, political, or social motives. Members of the family may have the intention of hastening death in order to inherit the deceased's estate. They may also want to avoid the costs of terminal care. In all these cases there is a possibility of bad intention in euthanasia decisions. The general principle of the law is to give priority to prevention of evil over accrual of a benefit. Thus euthanasia is forbidden because of the potential evil inherent in it.

The principle of injury, *qa'idat al dharar*

No one should be hurt or cause hurt to others, *la dharara wa la dhiraar*. Decisions on euthanasia hurt patients in their life and health. The family is also hurt emotionally and psychologically by the death of the patient. The family hurt is accentuated by feelings of guilt about the euthanasia decision. The converse argument could be made that continuation of the pain and suffering of the patient under life support in terminal care, the emotional and psychological burden on the patient and the family, and the material costs

of expensive terminal care constitute an injury to all involved.

The law requires that any injury should be mitigated to the extent possible, *al dharar yudfau qadir al imkan.* However one injury cannot be removed by another injury of similar magnitude, *al dharar la yuzal bi mithlihi.* A lesser injury could be used to remove a bigger injury, *al dharar al ashadd yuzalu bi al dharar al akhaff.* It is therefore wrong under the law to mitigate the physical and emotional injury of terminal illness by another and bigger injury of euthanasia.

When faced with two evils, the lesser one is chosen, *ikhtiyar ahwan al sharrain*. This is interpreted to mean that continuation of painful terminal life is better that euthanasia.

A further argument against euthanasia is that a person should bear personal injury if that prevents public or widespread injury, *yatahammal al dharar al khass li daf'ui al dharar al 'aam*. Suffering of some individuals in terminal life is preferable to legalizing euthanasia because euthanasia could be criminally abused leading in some cases to genocide. Public interest takes precedence over personal interest, *al maslahat al aamat muqaddamah ala al malahah alkhhasa*h. Preventing evil from euthanasia takes precedence over any consideration of benefits from it, *dar'u al mafasid awla min jalbi al masalih.*

The principle of hardship, *qa'idat al mashaqqah,*

Hardships necessitate relaxing the law, *al mashaqqa tajlibu al tayseer.* The pain and suffering of terminal illness are not among the hardships recognized by classical jurists. The life of handicapped invalids as well as psychological and emotional stresses due to illness are difficult situations but do not reach the level of the legally defined hardship. In general in cases of hardship where a clear necessity is established, the prohibited can be allowed at least temporarily until the hardship is relieved, *al dharurat tubiihu al mahdhurat.* A necessity is defined in law as what threatens any of the 5 purposes of the law namely religion, life, intellect, progeny, and wealth. Euthanasia cannot be accepted as a necessity since it destroys and does not preserve 2 of the purposes of the law: religion and life.

The principle of custom or legal precedent, *qa'idat al a'adah*

Custom*, 'a'adah* is defined as what is uniform, widespread, predominant, and not rare, *al ibrat li al ghalib al shaiu la al naadir*. Once a custom is established it must be accepted until there is evidence to the contrary. Custom has the force of law, *al a'ada muhakkamah.* The role of physicians has customarily been known to be preservation of life. It is therefore inconceivable that they could be involved in any form of euthanasia that destroys life. The principle of custom is also used to define what is customary medical care to distinguish it from heroic efforts that are sometimes

employed in euthanasia. It is a crime to fail to provide care that is customarily accepted as appropriate. There is no obligation to institute heroic measures that are out of the ordinary.

Other applicable principles of the law:

A distinction in law exists between withholding life support and withdrawing it. The issue is legally easier if life support is not started at all according to a pre-set policy and criteria. Once it is started, discontinuation raises legal or ethical issues. The principle of the law that applies here is that continuation is excused where commencing is not, *yughtafar fi al baqaa ma la yughtafar fi al ibtidaa.* Continuation is easier than starting, *al baqau ashal min al ibtidaa.* Euthanasia like other controversial issues is better prevented than waiting to resolve its attendant problems, *al maniu afdhal min al raf'iu*

Conclusion

Our analysis has shown that there is no legal basis for euthanasia. Physicians have no right to interfere with *ajal* that was fixed by Allah. Disease will take its natural course until death. Physicians for each individual patient do not know this course. It is therefore necessary that they concentrate on the quality of the remaining life and not reversal of death. Life support measures should be taken with the intention of quality in mind. Instead of discussing euthanasia, we should undertake research to find out how to make the quality of the remaining life of an individual as high as is possible. The most that can be done is not to undertake any heroic measures for a terminally ill patient. However ordinary medical care and nutrition cannot be stopped. This can best be achieved by the hospital having a clear and public policy on life support with clear admission criteria and application to all patients without regard for age, gender, socioeconomic status , race, or diagnosis.

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EUTHANASIA

Abdul Jabbar Dayeh

Introduction:

Euthanasia is a Greek word composed of two syllables:
EU means Good or Easy, Thanatos means Death [1]

Thus the meaning becomes good death or easy death, and nowadays proponents like to call it " mercy killing ".

Historically euthanasia was practiced since anceint history of mankind, when there was compromise of respect of human life and dignity. Secular Europe continued to follow these ancient philosophies despite modernization and civelization.

Islamic teachings, and those of some other past relegins, emphasyzed the value and sanctity of human life and degnity. There is a wealth of Islamic haretiage that addresses human life, virtues of compassion, patience and perseverance. The muslim faithful expects great virtues and pleasure of his Creator, when he/ she maintains these vertues.

However the interest in this issue has doubled in the eighties of the last century because of the following :

1.The large scale practice and legislation in Netherlands

2. The rise of incurable diseases, such as AIDS

3. With the technological advances there is demographic shift towards aging and chronically ill patients. The average length of human life is currently 75 to 78 years, and may increase to 85 years during the coming two decades . [2] .

4. The zeal of pro - euthanasia groups and lobbies .

This paper addresses the various aspects of the Euthanasia issue, its various types, the current status in some western countries, with philosophical background, and also addresses the Islamic perspectives in light of relevant values and Jurisprudence.

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Types of Euthanasia : [3] .

1. Death-inducing types (active/direct)
   A) Voluntary euthanasia : At the request of the patient who wants to die .
   B) Involuntary euthanasia :Initiated by the treating physician who believes it to be in the best interest of the competent patient .
   C) Non-voluntary euthanasia believed by the treating physician to be in the best interest of the incompetent patient.
2. Pain – reducing type (indirect) : Whereby the physician administers marcotic and analgesic medications to cancer patients suffering from severe pain. In most instances the dose should be increased to control pain. Such increased doses may suppress pain, which is a desirable effect. But the large doses could also suppress breathing and may end up in death of the suffering patient. This is the (principle of double effect). It all depends on the intension of the treating physician . If his intension is to control pain, the effect is desirable and commendable . But if his intension is to cause respiratory failure and death, the action is considered unethical.
3. Support Withdrawing type e.g. discontinuing mechanical ventilation (MV)in "brain – dead" patients.
4. Treatment Withholding type(passive) e.g. withholding antibiotics for chest infections in cancer patients .

Comments:

- The Anglican Board on Dying Well Report 1975, considered the last three kinds as non-euthanasia, and that withholding antibiotics in the 4th kind is a commendable medical practice.
- Type 2– double effect- is allowed by the Catholic Church and I believe it is not denied in Islam depending on the intent of the person giving the medication, as the rule is " actions are judged by the intentions " .
- Type 3 – the Christian doctrine " Thou shall not kill ,one should not strive zealously to preserve life. " Thus using extraordinary heroic measures to sustain life is actually prolonging the dying process and is acting against the fourth principle in medical ethics that is : Justice in allocation of resources .

Euthanasia in History:

Historically euthanasia has been practiced long ago though the excuses were varied. [1]

* Greeks: practiced euthanasia since the days of Hippocrates. Plato , in 'Utopia' recommended abortion and infanticide. Socrates - took poison to die with dignity.
* Arabs in the pre-Islamic era had disregard for human life to the degree they buried their children especially girls for fear of poverty or dishonor .
* Islamic era : Islam emphasized the sanctity of life and categorically forbade euthanasia.
* Modern secular Europe:

Albert Schweitzer, in his book " Civilization & Ethics " adopted a value

in which life is the supreme good and thus its sustenance is a great virtue .
Nicoli Hartman, in his book "Ethics", reaffirmed that life is an infinite value.
Nitche looked at the white person as superman who is worthy of living ! Thus devaluing the lives of nonwhites, a racist disgraceful philosophy.
Politics : in the western world, despite the claims of modernization and civilization ,we all have witnessed the scale of devaluation of human life that took place in the first & second world wars , the bombardment of Hiroshima and Nagasaki by nuclear bombs, the genocide committed by Natzi Hitler and what took place in Bosnia and Kosova by Serbs!'

The changing perception of the medical profession:

The physician's role has changed very much over the years :

a) Curing (Healing) that was the mission of the Hippocratic Medicine, Hippocrate declined treating non-curable illness.
b) Caring (Palliation) considered and brought into action by medieval Muslim physicians.
c) Killing (Euthanasia), new dimension broght into action by western physicians.
d) Training / Teaching / Research .

- Doctor as a needs meter! Modern societies view doctors as needs-meters, whereby patients expect to find medical solutions to their needs and desires in various circumstances . Doctors took significant part in this medicalization of society .
- Doctor as a death – controller ! They are expected to honor the patients desires in ending their life by euthanasia .
- Overzealous doctor : Preserving life in situations when there is no hope in cure .
- Doctors as better communicators, that is more appropriate than overuse or abuse of high tech means .

Proponents of Voluntary Euthanasia :

Germany:

Euthanasia under dictatorship!

a) 1931 meeting of Bavarian psychiatrists to discuss sterilizing and euthanasia of mentally ill patients.
b) 1936 : extermination policy adopted by the Nazi regime.
c) 1939 : direct order by Hitler to begin executing the program! Karl Brandt was appointed as the head of the medical division and Philip Bohler was appointed as the head of the administrative division . The result was :
   * Mass Extermination; the victims were exposed to cyanide gas before combustion
   * Experimental medico-military research such as;
     - Intravenous injection of phenol or Gasoline

- Intravenous injection of pus loaded with streptococci
- Intravenous injection of TB suspension
- Forcing victims to drink sea water until they succumb to death within 6-12 days
- Transplantation experiments from victims to other living subjects

For such criminal acts Nuremberg trials were held at the end of WW II [4].

Holland [5] :

nonprosecution policies adopted.
Rotterdam criminal court guidelines 1981 as follows;

- The patient should be suffering both physically and mentally
- The suffering is not temporary or short –lived
- A fully informed consent has been given by the patient.

U.K.:

The idea was originally put foreword by Bishop Roger Bacon and thinker Thomas Moore. 1936,1969 Voluntary Euthanasia bills were resented by proponents, however they were rejected by the Parliament and the British Medical Association.
Changing public opinion (Newsweek march 88):
* U.K. 72 % in favour of VES
* France 76 % in favour of VES

USA [6] :

It is expected that VES should be more popular for two reasons:

- The prevalence of Hegelian 'Rational utility' philosophy, the slogan of which is "what is more useful is good or right "
- The shortage of funds versus the tremendous expenditure in the health sector.

Basis Of Moral Judgments :

A multitude of principles are used for judging the morality of acts in general, such as ;

* The deontological principles - Kantian or otherwise.
* The consequences or utilities - Utilitarianism , or the lesser of two evils.
* Motivations – Intentions ,according to the rule : "actions are judged by intentions "
* Holistic, as in Islam , viewing the issue from all aspects ,its principles , consequences , and intentions.

Arguments for Euthanasia

1. Respect of freedom.
2. The right to die.
3. Compassion with the suffering patient.
4. Quality of life .

Respect for Autonomy:

Some people believe that one should be free to determine his own destiny. However a question arises, is this freedom unlimited ? Also some think that one has the right to dispense of his body as he likes ,whereas others believe that human body is a loan

from God and it is only God who has the right to act as such ! . On the other hand the patient's judgment could be at fault being based on erroneous view of prognosis, or the patient may be undergoing a state of transient depression and such situations can be dealt with verbaly or medicaly. Also some people argue that euthanasia is no more than assisted suicide .However such claim is deceiving ,because if we accept that suicide is morally and legally sound ,euthanasia is not morally equivalent to suicide. In suicide the person kills himself, whereas in euthanasia somebody else is required to do it for him !

The Rights Principle:

The proponents argue that one has the right for death!

Yes, we can understand the right for life though not absolute, and the right for cure though it is sometimes out of hands, and the right to be looked after or receive medical care, but the right to die is quite odd, and the right to be killed is contradictory.

However some people think the patient has the right to commit suicide based upon (my body) argument, and some others believe the patient has the right to assisted suicide though such an action runs against the physician's autonomy.

Having listened to all these arguments and counter-arguments we come to the conclusion that the rights argument is just a slogan sing rather than a genuine concept.

Compassion:

The proponents argue that euthanasia should relieve the patient from his sufferings. Whereas the opponents argue whether killing becomes the best medicine. On the other hand such pains and sufferings are not out of control and that every effort should be taken to bring these sufferings under control rather individually. They also rightfully argue that such pains and sufferings are not pointless and that we are tested in this life for some supreme purpose as Prophet Job was tested. What is noted in our societies these days is the trend toward societal hedonism, one wants to eat ,drink, enjoy life free from all sufferings and ailments , thus relying heavily on various medicines leading to drug dependence with all its consequences on the society and the individual alike.

Quality of life:

Euthanasia proponants say the life of some patients is not worth living and it is rather better for them to die. However the opponents woud say what measure you are using ? Do patients share with you such claim ? They also claim that the life value is measured by the patient's contribution in its productively and creativity .For those we say: where is human dignity then ?

For the sake of others:

Compassion for relatives, friends and community at large. This way the

patient is used as means to an end , quite contrary to Kent's philosophy , besides that those close people around the patient may suffer from guilt feelings thereafter.

Economic reasons :

The proponents would argue that getting rid of these patients would save money for the government, community and relatives... In fact this argument runs against human dignity which should be protected from being treated as economic commodity .

The punishment logic :

The proponents say we should clear society from such useless or harmful weeds ! Referring to AIDS patients for example .However such an argument would open the way for compulsory rather than voluntary euthanasia .

Dangers in legalising Voluntary Euhanasia :

1. Elasticity in terminology : The words and phrases used in such a bill or act would have so many explanations and understandings.
2. The appropriate time: We know that patients when informed to have life threatening illness usually go into the following stages : Denial – Anger – Resentment – Depression –Acceptance.
3. Undue pressures: If such practice becomes lawful, terminal patients may become exposed to pressures from relatives, in order to gain some financial benefits.
4. Vulnerable groups : Certain groups of patients, like Mongols, become at risk, though their mental retardation may be mild and that some lead a normal life.
   'Slippery slope' argument : it is feared that if V.E is legislated, with passage of time it may be practiced with patients against their will, and it may also include the mentally and physically retarded patients against their will. As they say : Corrosion begins in microscopic proportions !
5. Loss of impetus towards better care of the dying : This way Palliative medicine would not advance .

Implications of legalising Euthanasia for Medical and Nursing staff :

1. The trusting relationship between doctor / nurses and their patients would be at risk
2. A fundamental shift in the doctor's role from preserving life to controlling death
3. The raison d'etre for people entering the health profession becomes questionable.
4. The worth of human life would be devalued. The short and long term consequences of such implications upon nursing and medical staff cannot be overlooked .

Islam and Euthanasia :

Islam's perception of euthanasia evolves around the following :

1) Dignity of mankind.
2) Sanctity of human life .

3) Allah is the Lord of life and death.
4) The virtue of compassion.
5) The virtue of patience.
6) The obligation of seeking medical care .

The sanctity of human life in Islam :

Human life is one of the basic values and goodies `as decreed by God even before the times of Moses, Jesus, and Mohammad, PBU them. Commenting on the killing of Abel by his brother, God says in the Qura'n : " On that account ,we ordained for the children of Israel that if any one slay a person, unless it be for murder or spreading mischief in land ,it would be as if he slew the whole mankind, and if any one saved a life ,it would be as if he saved the life of the whole mankind " [10] :
Preserving life is one of the five Shari'ah prinaples .
Deliberate killing is a major sin and crime ,for which the offender deserves capital punishment ,Qura'n says

> *"Take not life which Allah made sacred, otherwise than in the course of justice"* [11]

Suicide is a grave sin. The argument "my own body " does not stand. It is stewardship not ownership .Humans are entrusted with their bodies for care, nurture ,and safe keeping .God is the owner and giver of life. The Qura'n says:

> *"Do not kill yourselves ,for verily Allah has been to you Most Merciful "* [12]

Man's dignity in the Glorius Qura'n

Man is dignified at three levels in the Qura'n:

- *Humanity: "we have honored the progeny of Adam , provided them with transport on land and sea , given them for sustenance things good and pure and conferred on them special favors above a great part of our creation"* [13] .
- *Knowledge: " And He taught Adam, the names of all things"* [14] .
- *Faith : " Verily the most honored of you in the sight of Allah is the most righteous of you"* [15] .

Allah is the Lord of life and death :

There are several Qura'nic verses in support of this fact :

> *" And verily it is We Who give life, and Who give death, It is We Who remain the Inheritours, (After all else passes away).*[16]
>
> *" And that it is He Who grant death and life".* [17]
>
> *"And no human being can die save by Allah's leave, at a term pre-ordained"* [18]

Compassion (Mercy) :

Compassion or mercy means in Qura'nic language "lifting up any kind of torture or harm imposed upon the human being "
It is a human initiative confirming the integrity of the moral system in Islam. It is a kind of genuine expression of mankind's empathy towards each other, when faced with illness, sufferings,

disasters …..etc .
In philosophies of Plato ,Aristotle and Nitche They looked adversely at this virtue (value).
The merciful action in Islam has two levels : active (positive) and passive (negative).
Active (positive) by efforts to remove harm to others .
Passive (negative) by abstaining to inflict harm on others.

Patience (Endurance) :

Doctors expect from ill people to be patient. Patience and endurance are virtues highly rewarded in Islam.
The Qura'n says:

> *"Those who patiently persevere will truly receive a reward without measure"* [19] .

Another verse from the Qura'n says :

> *" And bear in patience whatever ill may befall you, this behold is firmness (of purpose) in (the conduct) of affairs"* [20] .

Prophet Mohammad(PBUH) taught " when the believer is afflicted with pain, even that of a prick of a thorn or more, God forgives his sins, and his wrong doings are discarded as a tree sheds off its leaves [21] .
Prophet Ayyub(PBUH) demonstrated the supreme example of patience to believers. His skin was afflicted with sores, he lost family ,home and possessions but he never lost his faith in God.The Qura'n says :

> *" Truly we found him full of patience and constancy ,how excellent is the servant, ever did return to us "* [22] .

Seeking Medical treatment :

Seeking medical care in Islam takes five positions, ranging from permissible to haram (forbidden) .

1) Permissible : according to the fundamental rule "All things are permissible by nature "
2) Mandatory : in life threatening situations ,and when treatment is available (e.g. acute appendicitis and blood transfusions following road traffic accident …etc) .
3) Commendable :Prophet Mohammad says "Seek treatment, subjects of God,for every illness Allah has made a cure " [23] .
4) Abhorrent :Like cautary .
5) Haram : when it is recommended to use alcohol or pork …etc.

Treatment ceases to become mandatory when it holds no promise. In such cases the patient may refuse treatment without feeling guilty, as the Caliphs Abu Bakr and Omar bin Abdul –Aziz did.
Actually seeking treatment does no negate reliance on God ,because both malady and remedy are from God.

The Alternatives ?

The Hospice movement, with multidisciplinary programs, including sound palliative therapy, is a logic and humane answer for relief of incurable ailments.
Pain components include: physical, emotional, social and spiritual dimensions. The Holistic approach

should take in consideration all these components, and is expected to include:

1. Effective caring of physical sufferings, with proper supportive and palliative care, in dignity, and avoidance of exaggerated and extraordinary means.
2. Moral and spiritual support. Hospices should provide environment of spiritual calm, contemplation and discovery of meanings of humanity, life, death and the hereafter.
3. Communication and counseling, whereby the caring team spend time with patients and families to discuss alternatives of care. Self confidence, promoting understanding and confidence between patients and the treating team, dispelling fears, phobias and wrong ideas, are examples of this important interaction.

Euthanasia and civilization perturbations :

Arnold Toynbee , an eminent British historian, in his book " Study in History 1947 " [24] , stated that civilizations pass into three stages :

1. Rise and progress.
2. Disdainful arrogance leading to oppression and killings .
3. Fall and disaster .

That is just what happens when civilizations go astray, people lose faith and compassion . Killing and oppression prevail.

The Qura'n says:

" Such is the chastisement of thy Lord when He chastises communities in the midst of their wrong, grievous indeed and severe is His chastisement " [25] .

Ethical code and Fatwa :

Islamic code of Medical ethics was endorsed by the 1st International Conference on Islamic Medicine held in Kuwait 1981. [26] " In his /her defense of life, however, the doctor is well-advised to realize his limit, and never to transgress it .If it is scientifically certain that life cannot be restored, then it is futile to diligently keep the patient in a vegetative state by heroic measures, or to preserve the patient by deep freezing or other artificial methods . It is the process of life, the doctor aims to maintain and not the process of dying. In any case, the doctor shall not take a positive measure to terminate the patient's life! "

On the other hand the Islamic figh Assembly held in Jeddah, in May 1992[27] declared a strong rejection against the so-called euthanasia under all circumstances. And that terminally ill patients should receive the appropriate palliative medication ,utilizing all measures provided by God in this universe ,and that no way one should despair from Allah's mercy, and that doctors should do their best to support their patients morally and physically irrespective of whether these measures are curative or not .

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DEATH AND DYING:
AN ISLAMIC PSYCHO-SPIRITUAL MEDICAL POINT OF VIEW

Malik Badri

Introduction

In the medical literature there is paucity of writings about death and dying, that address psycho-spiritual and ethical issues which guide the conduct of medical practitioners.

No problem is more distressing to the treating physician than a patient with incurable illness in his final days. The amount and type of information that the patient or family should know, as well as the manner of relaying such information, is rarely dealt with in medical schools curriculum.

The practicing physician in Muslim societies needs adeqate familiarity with psychospiritual aspects of terminal illness, death and dying, from both an Islamic as well as the medical viewpoints. The same applies to the help and care of the bereaved members of the family.

This paper is directed to enrich the wisdom and insight of physicians who deal with dying individuals throughout their medical lifetime career .

Nowadays, most treating physicians look at their dying patients with unmoved hearts. Amidst their familiarity of seeing dying patients very frequently in their daily practice, and their career obligations, they often miss the human and spiritual perspectives related to human dignity and sanctify of life.

The spirituality of Islam, and some earlier religions, provides important concepts for physicians' behavior and outlook to death, dying and life after death.

This paper is directed to the compassionate, unhurried physician for proper conduct towards the dying patient and his family.

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What is death and what are its symptoms?

a. Symptoms of death in early societies

Death is defined as the permanent end of all the functions of life. But this definition actually begs the question since it defines an unknown phenomenon with an equally unknown phenomenon. That is so because the term "life" itself stands for an equally inexplicable phenomenon. The more we know about the process of dying, the more we get ourselves into more confusion.

In the past the cessation of breathing or loss of consciousness has been taken as the sign of death. So there were a few recorded cases of comatose persons who were presumed to be dead and were about to be buried when unexpectedly they 'returned' to life by the help of sharp gifted physicians. The unlucky ones may wake up from their coma to find themselves in pitch black darkness of the grave and would quickly die because of this horrifying experience or because of insufficiency of oxygen and lack of water.

Some of these rare cases were described seven centuries ago by our great Muslim historian of medicine, Ibni Abi ÕsaybÊah [1] . In his colossal volume, ÑyËn Al AnbÉ Fi Tabaqat AlatibÉ (n.d.), he wrote that while the famous Muslim physician Ibni JameeÑ was relaxing in his shop in Cairo, he saw a group of people carrying their dead relative to the graveyard. He leapt from his comfortable seat shouting to the astonished group that they were going to bury a live person. After some arguments they decided to take their 'corpse' back and to let this weird physician try his magic on him. They agreed that they would lose nothing. If he succeeds, they would be happy to see their relative coming back to life, and if he fails they would carry him again to his final destination. Ibni JameeÑ told them to take off his shroud and carry him to the traditional sauna bath (hammam) where he poured water over him, massaged him and immersed him in very hot water. To the great astonishment of the crowd the man exhibited some weak signs of life. The physician then continued his treatment until his patient regained his health.

He was then asked what made him so sure that the supposedly dead body was in fact still alive. His answer gives us an unambiguous illustration about the brilliance and keen clinical observation of our early Muslim physicians. He said that the feet of dead person lose their muscular strength and flaccidly take a horizontal shape while the feet of a sleeping or fainting person lying on his back would take a semi-vertical angle or even a perpendicular position. He noticed that under the thin shroud the feet of the mistakenly dead person were not flat .

Another case reported by Ibni Abi ÕsaybÊah was that of a Syrian physician by the name of ÓlyÉbrudi. While this

physician was roaming in Damascus market, he saw a hot-tempered man defying a group of onlookers that he can eat a very large quantity of boiled horse meat. When he saw the man gulping down this incredible quantity of meat and drinking over it much iced water, he was sure that he may not survive it. So he followed him to his house and waited outside to hear what would happen to him. After a short time he heard the sudden wailing and cries of his relatives lamenting his sudden death. Thereupon, ÓlyÉbrudi entered the house and declared that the man was in a coma and is not dead. He took him to the hammam, forcibly opened his mouth and poured down his throat very hot water containing a strong emetic medicinal plant. The man vomited the undigested stuff and gradually regained his consciousness.

Again, this incident should cause us to greatly appreciate the knowledge, sincerity and humane spiritual behavior of our early physicians. For a doctor who casually observes the physically dangerous behavior of an anonymous person and then leaves whatever he had wanted to do in order to follow him to his house and treat him is probably beyond the wild imagination of our most conscientious contemporary Muslim doctors. I have personally known of many poor patients who may be deprived from the medical help they desperately needed because the doctor is no where to be found in the hospital. He or she would drive to his private clinic during the office hours of the hospital from which he draws his monthly salary to examine a rich patient in his private clinic.

Now back to the symptoms of death. It is sad to say that up to this date many less developed Muslim societies still presume that loss of consciousness and the apparent crude observations of the cessation of breathing and pulse as the determining factors about the loss of life. As a child I do remember that a sick 11-year-old cousin was pronounced dead by our relatives when they confirmed these usual symptoms. Some strong men were sent to dig a grave and white material was bought for her shroud. It was only when my father saw a faint pulse in her jugular vein that they waited for a few hours to ascertain whether she lives or dies. She lived and had a very long life after that. My father told her parents to take her shroud to a tailor to make garments for her!

Even in modern contemporary Cairo there was a story about the presumed death of a famous actor after a heart attack. He was buried in the Egyptian way in which dead bodies are laid in a small room under the ground with a heavy concrete cover to seal it and prevent the smell of decaying bodies from reeking out. When the time came for putting in a new body, the graveyard's caretaker was shocked to find the dead body of the actor near the slap without its shroud. He must have found himself shrouded with the remains of the dead in the darkness of the cave-like room. He took off his

shroud and the cotton wool from his eyes and nose and crawled to where he could have escaped. Indeed, in our less developed Islamic rural societies where modern doctors are as rare as water in the desert such premature presumed deaths may not be totally unexpected.

b. The symptoms of death from the modern medical perspective:

Modern medicine and its miraculous technological progress have given us much more information about the precise symptoms of death particularly from the physiological perspective. We now know that not all the human body dies at the same time. First the body dies as a whole and this is what is known as the somatic death. After that, comes the death of individual organs, cells and their different constituents. When the organism experiences somatic death, the heart stops beating and this is accompanied by cessation of respiration, reflexes and most importantly, brain activity. Brain death is considered most important because the other earlier major signs of death such as breathing and blood circulation can now be artificially run by machines. Thus, the concept of brain death, though recently challenged, is now universally accepted and the irreversible loss of brain activity is the acknowledged sign that death has occurred [(2)].

Medical sciences have also revealed some of the important changes or continuity of body organs after brain death. Though pronounced dead, other organs of the body continue to live for a short time; while brain cells may not exceed 5 minutes, the heart may stay alive up to 15 minutes and the kidneys up to 30 minutes. This great medical discovery has made it possible for the vital organs of the dead to be transplanted into the body of a needy sick living person. Medical sciences have also given us valuable information about what happens to the body after death thus helping us to determine the time of death and its circumstances. The body cools because it now takes the temperature of its environment, the skeletal muscles stiffen after 5 to 10 hours of death and this disappears after three to four days and the bluish red discoloration of the backside due to the settling of the blood. Thereafter, the body enzymes and bacteria combine to putrefy the body to its final decay.

But this rapidly developing medical technology has not helped us in answering the two major questions we posed at the beginning of this paper. What is death and what is life. As a science, medicine prefers to limit itself to the observable "hows" of things; the nature and essence of things and their non-empirical "whys" are left to philosophy, cultural beliefs and religion. By so doing, medical technology by its rapid advancing has created new problems and moral issues.

In the past , when people die , they are buried or cremated and the issue is finished. Not even in their wildest imagination would they expect some of their own organs will continue to live

into somebody else's abdomen or chest cavity while they rot in their graves. No one would have envisaged that a living person would donate or even sell a kidney to another person to live with it. This led to moral issues concerning the legal authority that decides whether a person is dead or not. For example, if a patient is kept alive by artificial support, who should decide to pull the plug out and allow him or her to die. Do patients of incurable diseases have the right to end their lives? If the dying patient is in a coma, can his next of kin take such a decision on his behalf? If the patient is brain dead, can his relatives decide on donating his vital organs?

Such issues of course depend on whether the person believes that he has a soul or not , and whether he owns his body and can do whatever he wants with it or not or whether he and his body belong to God and he has to follow Divine guidance in dealing with such questions. I have discussed this issue at some length in my paper, "Islamic Versus Western Medical Ethics: a moral conflict or a clash of religiously oriented worldviews?" [3] .

I read this paper in the annual conference of the Islamic Medical Association of Pakistan. It was also published as a monograph by the Islamic Medical Association of South Africa. I need not repeat these issues here. I can only say that the worldview based on secular humanism in the West works like a religion and not simply as a general way of looking at things. The western man has crowned himself with the decision making authority with respect to the moral codes that have previously belonged to God himself. Deciding on matters of life and death such as abortion, euthanasia, suicide, rented uteruses and cloning or the use of stem cells is a matter of personal choice. Similarly, he gave himself the right to denigrate religion and go against its moral codes and to develop his own code of ethics in any way that brings him pleasure and saves him from pains so long as it does not go against the secular laws of the country. It is under such a libertine approach that we see the adamant defense behaviors like homosexuality, lesbianism and suicide that were considered evil sins and apostasy only a few decades ago. For the rest of the paper I wish to speak about death and dying from an Islamic psychospiritual perspective.

The Islamic conception of death*:*

a. Belief in the existence of the soul as a universal conviction

Like earlier revealed religions, Islam consider death for a believer in God as a form of elevated spiritual upgrading from the life of this earth in which humans are imprisoned within the confinements of time, space earlier experiences and limitations of a physical body to the boundless spiritual existence of the soul. It is clear from contemporary studies of ancient civilizations such as that of Egypt, India and China that belief in the existence of a soul that survives the

body after death was well established. The mummification of the bodies, the burial in tombs and the packing of the tools and the things the deceased used in his life are evidences of this belief. In ancient China the conviction of life after death was so strong that Emperors in terminal illness used to kill their servants to wait for them and serve them in their afterlife. When they die, their wives and concubines would also follow. Secular scholars can give different speculative explanations to this puzzling similarity in belief in the soul and in life after death between civilizations that are thousands of miles apart; however as Muslim thinkers, we should consider the fact stated in the Holy Qura'n that Prophets and Messengers of Allah have been sent to all nations of the past without exception.

"Verily We have sent you with the truth, as a bearer of glad tidings, and as a warning . And there never was a people without having a "warner" (Prophet) who lived among them " [4] .

Thus, all civilizations have had their Prophets, but after their death, their religions were distorted and what remained were these confused beliefs about the soul and life after death. Islam has come to reinstate this belief and to purify it from superstitions and injustice. As Muslims we should believe that it is only after death that humans can clearly see what was concealed from them during their brief life on earth. In this life they were tested like students taking a difficult exam. When they die their "answer" are already collected and they can only then see what the correct answers for the exam were. Thus, as stated in early Islamic literature, living people in this world are actually in a state similar to that of sleep; they wake up when they die. Another saying puts it in a clearer form, "Wakeful living is a slumber; death is waking and man, between them, is a moving shadow".

b. The spiritual relationship between sleep and death :

This relationship between death and sleep is quite frequently cited in Islamic literature and particularly in the works of Muslim Sufis, philosophers and psychologists. In both sleep and death the person is unconscious. And if after death the person can be happy by seeing his reward for this good deeds or fearful by being punished for his bad deeds, in sleeping the unconscious person can see joyful dreams of beautiful scenery with his beloved sweetheart or see scaring nightmares that may end up in a heart attack or even death. Such insightful reflections must have been influenced by the Holy Qura'n in which our Creator Says :

" It is Allah who takes the souls of humans at death and those still alive at their sleep. Those on whom He had passed the decree of death, He keeps back from returning to life but the rest He sends to their bodies for a term appointed"[5] .

Muslim interpreters of the Qura'n, shuch as Ibin Kathir, call sleep the minor death (الوفاة الصغرى) in comparison to the major death (الوفاة الكبرى) . In both, the souls are taken by God, permanently in real or major death and temporarily in sleep. This is supported by other Qura'nic Verses :

" It is He who takes your souls by night and knows all what you have done by day to raise you again until a fixed term is fulfilled. In the end, unto Him you will return then He will show you the truth of all that you had done. He is irresistibly supreme over his servants and He sets guardians over you, so when death comes to you, our angels will take your souls and they never fail in their duty. " (6)

Interpreters of the Qura'n , supported by the blessed sayings of our beloved Prophet, assert that during sleep, the soul of the sleepers meet with the souls of those who already died and that some of the spiritual experiences of such meetings can be fashioned in the form of the dreams that the sleeping person sees. This is so because when the human soul is freed from the body, during the unconsciousness of sleep, it is no longer imprisoned within the confinements of time and space or limited to worldly knowledge, though it continues to be cognizant of its individuality and its previous experiences. Thus dreaming can take various forms. This is clearly exemplified by the blessed saying of our beloved Prophet in which he states that human dreams are of three kinds. The dreaming person may simply replay the experiences he had during wakefulness (hadith annafs), or his dream may be influenced by devils and evil spirits causing him to see saddening or embarrassing things, or his soul may experience a Divine connection with Allah Ta'ala or his angels or with the souls of good people and see pleasing dreams or dreams that tell him about the future and give him good tidings and advice.

Accordingly, since death to a believer is the way to an elevated position of existence and a higher rank in knowledge, we read to many of our Muslim worshippers and Sufis that they are not afraid of death. On the contrary, they welcome it. It is to them just like moving from one uncomfortable room to a much better one.

Not only that but we read in their biography that they accurately predicted the date and time of their death. Such statements may appear to be inappropriate from the perspective of modern science, but as Muslims we at least believe that the Prophet Muhammad (PBUH) knew about his death. In the final Hajj, he slaughtered 63 camels in thanks to Allah Ta'ala saying that each camel is for a year of his life. He died shortly after that. This predictive phenomenon is not limited to early worshippers. In this paper, I wish to overlook the artificial identifications of scientism to confirm

here that I have personally known two great men of Islam who informed their families about the date of their death. One of them has even sent to his relatives in other cities to come and attend to his death and funeral. It is as if he were inviting them to his marriage ceremony ! .

c. The spiritual journey from the womb to worldly life, and from life to death and resurrection :

Abu Hamid Alghazali in his Ihya' Ulum Addin [7] gives us a very insightful analogy of comparing living in this world with life after death in the barzakh or barrier and later with life in the hereafter. I have discussed his analogy in one of my earlier publications,[8] but now I am developing it into more detailed scenes and dialogues. If the fetus in its mother's womb were to hear us and understand what we say to him about life outside the darkness of the womb, he would have failed to understand us or even to believe us. To tell him that his dark world in the womb is a very constricted type of living with his cramped curled body surrounded by layer upon layer of flesh. Informing him about the outside world with its beautiful earth and glowing sun and silvery moon and green trees and fast moving cars, airoplanes and rockets would not ring a bell even if he can understand our language. He is a prisoner of his experiences and his experience is limited to life in his tightly closed cave.

He thinks it is comfortable there. The placenta brings him food and takes away his waste without any effort on his part. But then comes birth with its painful pressures and suffocation and the umbilical cord is cut off and the placenta, that was the sustainer of his life, has now carried out its duty and is gotten rid of. No body will care about where his placenta is buried or used for stem cells or transformed into food for cats and dogs. No one would write a poem about its great services nor remember its life saving duties or stand contemplating on its grave. No one will even remember to look at his navel where it was attached to his growing body.

Now he grows up to live in the wide world, but also with a placenta. A moving placenta that goes wherever he goes. In this life outside the womb, our bodies are our placentas. If we overvalue this body and its pleasures and beauty and if we believe that this life on earth is the beginning and end of our existence, and if we do not believe in Allah Ta'ala who created us or the Hereafter to which we are traveling, we would be like the fetus that does not believe that there is a spacious world outside the womb. We would lead a materialistic life devoid of the spiritual dimension. As we deny the existence of our Creator, Allah would cause us to be unaware of our own souls and spiritual existence. *" Those who forgot God; and He made them forget their own souls "* [9]

But then, whether we like it or not, there will be a new birth. A more painful birth than the one in which we passed through the birth canal of our mothers. We will endure much more pain and suffocation to pass into the " black hole" of death. If physics tell us that in a real black hole, the gravitational drag is so powerful that nothing can escape it, even light; in death the pulling of the soul by the angel of death is so strong that a person would find himself in quite another form of survival. And if modern physics tell us that a black hole can cause a dent in the space and time dimensions that Einstein has combined into a single spacetime dimension, then we should contemplate about the nature of spacetime existence that is waiting for us after our death.

In this new existence, we will be freed from all our prisons of time, space, past experiences and the limitations of physical bodies. They will no longer obstruct the acquired immeasurable perception of the dying person. The soul is now free to perceive without the already dead senses of the body. It hears without a vibrating drum and sees without a retina. As the Qura'n States, *"We have removed your veil (of worldly perception) so your power of sight is now really sharp."*(10)

It is thus rather arrogant of us if we deny the punishment that an evil person will be subjected to in his grave. The grave, qabr in Arabic, is not only the pit in which the dead person is buried. Once he passes through the "black hole" of death and space and time cease to exist, then what we consider a few minutes or even seconds after death may be measured in centuries in the other realm of existence. Similarly the good tidings and the pleasures offered to a believer or a good person after his death cannot be measured with our electronic watches and scales.

And just as the pain of childbirth is followed by a much wider existence of the life outside the womb, the pain of death is also followed by the comparatively extreme vast existence of the barzakh or barrier. And just as the umbilical Cord with its placenta are discarded after childbirth since they are no longer needed, the body that was our placenta in this world would no longer be of help in the higher realm of life in the Barzakh and thrown into a grave. The spiritual umbilical cord attaching our souls to our bodies would also be severed to give us the freedom to float in a form of existence that cannot be comprehended by our minds of this world. It is only through revelation that we can get an extremely simplistic glimpse of that life. We are in this connection like a fetus being told about the world outside of his womb.

And lastly when the time comes for resurrection, and the trumpet is sounded, we will again go through the greatest agony of our earlier lives. This is the Day of Judgment in which you will see the man running naked avoiding

his own wife and children. The day in which children's hair would turn grey from its horror. But for the believers, when this calamity comes to an end, they will ascend to the highest level of spiritual and physical pleasures. So, in this spiritual journey, the life of the good person is analogous to that of a rocket ship traveling in different stages to outer space. As the rocket speeds consuming much fuel, part of its body is no longer useful. It breaks off from its main body to make it go faster with the reduced weight until it reaches its destination.

These then are three important occurrences in the life of the Muslim. The day he is born, when he comes out from the darkness of the womb to the outside world, the day he dies when he emerges from the constricted womb of this world to the vastness of the Barzakh, and the day in which he is resurrected when he finds himself facing his Creator in the indescribable Day of Judgment. It is for this reason that the Holy Qura'n has given these stations a special citation when talking about the Blessings and Salams of Allah to His Prophet Yahay (PBUH) :

" He was Kind to his parents and not overbearing or rebellious. So peace be upon him the day he was born, the day that he dies and the day that he will be raised up to life again ". (11)

The same Verse about the peace of Allah descending on the days of birth, death and resurrection was repeated in the same Surah with respect to Prophet Jesus (PBUH).

The evidence for life after death from Islamic sources:

Belief in the existence of life after death is one of the fundamental doctrines of Islamic faith, since it is unambiguously stated in the Holy Qura'n, the Blessed sayings of the Messenger of Allah (PBUH) and the actions of the Prophet and his companions. The Noble Qura'n in a number of its revealed verses speaks about the life of the martyrs who shed their blood for the sake of Islam. They so much enjoyed and appreciated their spiritual life after their death that they asked Allah to send them back to earth to tell their companions to follow their way and join them in their everlasting bliss. Allah Ta'ala informs us on their behalf by saying:

"Do not think that those who are slain in the cause of Allah's way as dead. They are alive finding their sustenance from their Lord".

"They rejoice in the Grace and Bounty of their Lord and wish to give good tidings to those who have not yet joined them that if they too give their lives for the cause of Allah they would have no more fear nor grief (for what they left behind)". (12)

In a similar verse in Surat Al-Baqara the Holy Qura'n even orders the believers not to talk about the martyrs as dead people since they are alive in

an elevated state that living humans cannot perceive:

"Do not say of those who are slain in the cause of Allah: "They are dead". They are indeed alive but you cannot perceive them." (13)

A number of Sayings by the Prophet assert that the souls of all the believers after their death enjoy a blissful existence. He taught his Ummah to greet the dead in their graves and give them salams. This belief was so strongly held by the early Muslims that they would ask a dying person to give a special message to a dead friend or relative when he meets him after his death. Listen in this respect to Um Bishr the daughter of Albara' who came to visit Abu Abdel Rahman in his death bed. She said to him, "When you meet a certain relative, whom she named, after your death please convey to him my greetings and salams". He said to her that when I die I will be too busy with my own problems; but she insisted saying that you know that the Prophet (PBUH) had said that the souls of the dead believers will be in the form of green birds that fly wherever they want and eat from the trees of Paradise. He affirmed and promised to deliver the message. This story was authenticated by Ibni Maja.

A more interesting story is that of Thabit ibni Qays who was killed in the battle of Yamama (quoted by Ibni Qayyim Al-Jawzeeyyah in his book titled Arruh) (14) . Thabit was wearing an expensive shield when he was slain. The next day after his death he visited a companion of the Prophet in his dream. He asserted to him not to take what he was going to tell him as a normal dream but to act seriously on his instructions as if he were alive. He informed him that after the battle, one of the Muslim soldiers took the expensive shield from his dead body and hid it in his house under a clay pot covered with a saddle. He showed him where the house was. He told him to inform Khalid ibni Alwaleed who was the general in command of the Muslim army to recover the shield and then to inform Abu Bakr Assidiq, who was then the first successor or Khalifa of the Prophet, to order the selling of the shield to settle a certain debt he took from a person he named. He also informed him to ask Abu Bakr to free a slave he had during his life time. When the dream was relayed to Khalid, he immediately sent for the shield and found it exactly where Thabit mentioned to his friend in his dream.

After that, Abu Bakr was informed and he made sure that the debt is authenticated with the exact amount of money mentioned in the dream. So he ordered that the shield be sold, its price used to settle the debt and the slave to be freed . It is recorded that this will of Thabit ibni Qays is the first that was affirmed and discharged after the death of its perpetrator.

Because of this belief about the

certainty of meeting dead relatives and friends after one dies, we hear a great early Moslem scholar like Ubaid ibni Umair say that if he were to lose hope in meeting the beloved people, who already died before him, he would have died from sadness and depression . (15)

Of course this life after death in the Barrier is not restricted to believers and good Muslims or martyrs. Evil wrongdoers and those who deny the existence of God or who seek to worship other created deities would certainly live after their life to taste the bitter fruit of the follies they committed in the years of kufr and hypocrisy. The sacred revelation of the Holy Qura'n tells us in unambiguous clarity the punishment inflicted upon such people as their souls are pulled out of their bodies by the prescribed angels:

" If you could see when the angles take the souls of the unbelievers at their death how they smite their faces and backs and saying to them, "Taste the chastisement of the blazing fire"

" This is because of the bad deeds which your own hands committed for Allah is never unjust to His servants". (16)

We must state again that the time needed for the soul to be pulled out of the dying body may appear short to our worldly senses, however it can be much longer in the other form of existence. We cannot observe the degree of punishment an evil dying man receives since we understand the concept "pain" only from the physical worldly harm that befall us and the way we respond to it. The dying person may appear to be calm and serine to our eyes and we may say, "He passed away peacefully", but in reality he would be tolerating an amount of pain that would crush hundreds of people if it were to be evenly distributed among them. Nor can we measure the length of time of this punishment in terms of the minutes and hours that are created for our limited worldly survival.

Because of this greatly altered and amplified state of consciousness of life after death to the disbelievers, Prophet Muhammad (PBUH) loudly addressed those who were killed by the Muslims in the famous battle of Badr; he called them by their names and the names of their fathers saying to them, "Have you found what Allah has promised you (in terms of punishment) to be true. As for us we have found what He promised us to be true." Some of his blessed companions said to him, "O Messenger of Allah how can you talk to people who are already dead?" He answered them, "You are not more capable of hearing my voice than them but they cannot reply back".

(Authenticated by Bukhari)

We conclude this section of the paper by referring the reader to moving Verses from Surat Alwaqi'ah (17) in which the Holy Qura'n reaffirms to us that the reward of Paradise and the punishment of Hell are initially felt as

the soul leaves the body. This Surah speaks about three groups of people. The ones who are nearest to Allah, the normal good Muslims called the companions of the right hand, and the evil disbelievers. First the Qura'n, in moving Arabic words, tells those who are sitting around a dying person, when his soul reaches his throat, that Allah and his angels are much nearer to him than them, but they cannot perceive it. Allah then defies them to bring his soul back into his body if they have any power to do so. They cannot because, like the dying person, they are in the grip of the Qadar of Allah. Then the Verses continue to describe the rewards and punishment that take place right in front of their eyes but they are unable to perceive or feel them. If the dying man is from those nearest to Allah then it is happiness in a garden of delights, and if he is a normal Muslim he will receive greetings and salutations from those believers like him who died before him, but if he is an evil doing unbeliever it is burning in Hell fire.

The evidence for life after death from modern studies in Transpersonal psychology parapsychology *:*

Only a few decades ago, it would have been rather unthinkable for one to look for the evidence of life after death in the literature and researches of modern Western psychology. That is so because such an endeavor would require a belief in the existence of the soul and hence a belief in God the Creator of the soul, but this is out of bounds to a discipline that strives to be a secular science trying to fashion itself after physics and similar exact sciences. This state of affairs is beautifully expounded by Scott Peck in his book, Denial of the soul. [(18)] . He writes:

"The word "soul" is probably in the vocabulary of every second-grader…. We speak of particular people as "having soul". ..The fact is that almost everyone understands the real concept. Then why is it that the word "soul" is not in the professional lexicon of psychiatrists, other mental health workers, students of the mind, and physicians in general? There are two reasons. One is that the concept of God is inherent in the concept of the soul, and "God talk" is virtually off-limits within these relatively secular professions."

This denial of the soul has in the near past been extended to all fields in psychology that endorsed a belief in the existence of paranormal and spiritual phenomena such as the new area of transpersonal psychology as well as parapsychological occurrences such as telepathy clairvoyance, psychokinesis and near death and out of body experiences. Research in the latter areas gives much support to a spiritual life after death. Anti-religious and secular psychologists explain away such phenomena as delusions, hallucinations, neurophysiological illusions, statistical coincidences and fraud.

However, the picture is now beginning to change. As the famous theoretical

physicist, Fritjof Capra states:

"In the past mystical, paranormal and other transpersonal experiences were not taken seriously in our culture, because they contradicted the basic concepts of classical Western science. People who had experiences of that kind were often diagnosed as schizophrenic by psychiatrists who lacked the conceptual framework for dealing with the transpersonal realm. This situation is now changing rapidly" (19) .

Indeed it is changing rapidly; we now hear of a prestigious western university creating a professorship post in parapsychology and the British Psychological Society establishing a section of transpersonal psychology.

Western modernity is gradually beginning to free itself from associating religious experiences with the cruel history of the Church of the Middle Ages and its inquisitions, and to view spirituality in a positive picture. The influence of Eastern religions in this respect cannot be ignored; however, the most important factor is the failure of all three major perspectives in psychology (psychoanalysis, behaviorism and humanistic psychology) in bringing about happiness and spiritually inspiring their clients. What they fail to give is the main area of interest of transpersonal psychology which is now supported by the paranormal studies investigating phenomena related to near death and out of body experiences. Listen for example to this near death experience quoted by Charles Tart from the experience of a patient :

"…I began to feel very ill…suffering from gastroenteritis…I had developed all the symptoms of acute poisoning. I wanted to ring for assistance, but found I could not… I suddenly realized that my consciousness separating from another consciousness which was also me… Gradually I realized that I can see, not only my body in bed in which it was, but everything in the whole house and garden, and then I realized I was seeing not only "things" at home but in London and Scotland, in fact wherever? my attention was directed…I was free in a time-dimension of space…'He is nearly gone' (the doctor said). I was really cross when he took a syringe and rapidly injected my body… As the heart began to beat more strongly, I was drawn back, and was intensely annoyed…all the clarity of vision of anything and everything disappeared". (20)

The modern psychological literature is full of such authenticated cases, in which people who experience this near death phenomenon, see things that are later confirmed after they come back from their spiritual journey. Our early Islamic literature has many such authenticated cases, but I wish to conclude this section with an experience of a modern Muslim worshipper who had the near death experience in his twenties during which he saw the angels of death. Instead of taking away his soul, they said that he had many years to live. This was confirmed because he died at the age of 94. After this vision, he lost his fear of death; in fact he was looking forward to it. This is his story :

"I had another attack of Malaria then, which became so severe that my female

servant had to carry me like a small child to the latrine (toilet) and back. The worst pain inflicted by the fever was that I was prevented from attending the Friday services (prayers); and one day I heard people coming back from the mosque, chanting loudly the creed, 'There is no god but Allah and that Muhammad is the Apostle of Allah,' I wept until I lost consciousness. Then in my swoon I saw three figures with white faces and white beards, one carrying a large knife, the second a pair of scales, and the third a thong of leather. The one with the knife sat at my waist, the one with the thong at my feet, and the one with the scales at my head, and I expected death and said to myself, 'these are angels of death who have come to take my soul'…But after a little talk between the three angels which I did not understand, the one who had the knife in his hand leant forward and cut off my right leg at the thigh. I shrank back with a terrible shudder, which was seen by those who were gathered around and were reciting the creed (La ilaha illa allah Muhammad rasulul allah) over me, though I heard nothing of it. Then he turned to my left leg, and as he turned, my eyes turned to follow him. He cut it off, and the man with the scales came and weighed the legs one against the other; and one of them- I think it was the right leg- much overweighed the other. He threw down the scales, and I heard the loud clang of them as they fell. I looked at my horribly twitching stumps and said, …'now I understand why people say the soul of a dying man goes out at his legs, because they are first cut off! After that the man with knife cut off my right hand (arm), then turned and cut off my left arm; and at every movement my eyes followed him with a fixed stare, at which those around me (his relatives waiting for his death) wondered. The man with the scales then weighed my arms too, one against the other, and again one outweighed the other; and he threw them down as before. And now my soul after my arms are cut off, rose into my throat, and the three men began to talk to each other. While they were doing so I raised my eyes and saw two maidens up in the roof, the one with a white kerchief in her hand, and the other holding a dazzling white cup; and the tresses of each one of them hung down towards me, wonderfully beautiful. I said to myself, 'These are two houris of Paradise waiting to receive my soul; the one with the cup will give me a drink, and the one with the kerchief will lead me to everlasting bliss.' So I was overcome with joy and surrendered myself to the passing of my soul; but then I heard the man-angel with the scales say to his companions, snapping his fingers in contempt, 'He has long to wait', and they rose in the air, and as I followed them with my eyes I saw no vestige of the two maidens; but the roof of the house opened for the three men, and as they were lost to sight I saw my people (relatives) and my sisters weeping around me, (my sister Husna with her head on my chest, and my mother telling her beads in sad submission. At once I felt sudden vigor in my body, and called out loudly, 'What is the matter with you? Give me room!' Gladly, joyfully and wonderingly they made way for me and I leapt up and went out of the room." [21] .

The ethical and Islamic duty of physicians and psychologists in helping Moslem patients to die gracefully and optimistically and to treat the bereaved:

a. The psychological and spiritual responsibility of the Muslim physician towards very sick and dying patients:

Now we come to the last part of this paper in which I wish to extract some recommendations to Muslim physicians and psychologists from what we have talked about in this article; committed Muslim physicians should be thankful to Allah Ta'ala for giving them the chance to see so many Muslims who pass in front of their eyes through the "black hole" of death. It is unfortunate that many of them are influenced by their western medical practice in looking at death with the unmoved heart of their western and westernized professors. This is of course reinforced by the familiarity of seeing so many people dying every day in their practice. By so doing, they are in fact throwing away a lot of reward from Allah.

It is quite essential for the Muslim physician to raise the hope of a very sick patient in getting better even if he knows from his training that it is a downhill course. Muslim doctors, since the time of Abu Bakr Arrazi, the sheikh of Muslim physicians in the ninth century, were aware of the influence of the psyche over the soma. He wrote that the doctor should continue to uplift the optimism of his patient in being healthy even if he gives up any hope in his recovery. That is so, as Arrazi affirms, because the working of the body is very much affected by the conditions of the soul or the mind. Recent studies in psychosomatic medicine have confirmed that the psyche can have tremendous influences over the body. To enhance this influence, Arrazi used both a spiritual and an enrapturing delightful inducement. His patients listened to beautiful chanting of the Holy Qura'n and later to delightful music and singing. Music therapy was one of Arrazi's many discoveries.

But when the patient deteriorates and realizes that he is being terminal, it is the Islamic responsibility of the Muslim doctor to council the patient and to convince him that all his agony will wash away his sins, and his patience will surely secure for him the pleasure of Allah. But if the patient is actually dying, then spiritual words of optimism about the forgiveness of our Merciful Lord and happiness in life after death can have unequaled positive effects on the patient and much reward to the doctor. Repeating the creed to those whose soul has already reached their throat is again an act of great Islamic importance particularly for those poor Muslims who die alone in a hospital bed. For the Moslem doctor to ask the nurse about a dying person, give a quick glance at his or her medical reports and just go away without contemplation or du'a' or feelings about the angels

around the death bed or the unseen pleasures and punishments round the corner, is the action of a secularized physician.

Some Christian doctors and interested individuals and volunteers have appreciated the importance of dealing with those who are terminal. They established the Hospice foundations "to help those who cope personally or professionally with terminal illness, death, and the problems of grief and bereavement"[22] . Isn't it rather shameful for a Muslim doctor to see a Hospice volunteer helping a Muslim to die gracefully while he is looking around in an unconcerned manner? Committed Muslim clinical and medical psychologists can be of much help in this respect since they may have the time and the know-how of effectively talking to patients and giving them optimistic spiritual motivation. However their greatest assistance is in helping the bereaved.

b. Helping the bereaved:

No psychologist, whether he is a Muslim or not, can help a depressed bereaved patient who lost a relative, without directing his therapy along the Islamic conception of death and life after death. Though there are individual differences between the bereaved that make it necessary for the psychologist to direct his psychospiritual therapy in a particular manner, there are a number of general strategies that can be of much benefit to most grieved persons. Spiritual therapy that stresses to the bereaved that the soul of his dead relative has been given to him by Allah and it is He who called it back. Death is the unavoidable route of all humans of the past, present and future, and the souls of all of us, whether alive or dead are in the grip of Allah Ta'ala. He is reminded about the death of the Prophet Muhammad (PBUH) and the pains he tolerated. In my experience, this reference to the Prophet is very calming to most committed bereaved persons. The person is also reminded that excessive mourning and impatience will not bring back the dead person. It may only give pain in his new spiritual life. He is made to accept that in a few years he would meet again with the deceased. This kind of spiritual therapy is often naturally applied by normal Muslims in helping their grieved relatives and friends.

Other less spiritual therapeutic strategies are given by Abu Zayd Albalkhi who was a 9th century Muslim scholar. [23] He was the first person to write in a detailed systematic manner on the psychotherapy of anxiety and mood disorders in his masterpiece titled, *Masalih al-Abdan wa'I-Anfus,* (Hand-written Manuscript No. 3741. Ayasofya Library, Istanbul) that translates as, "The sustenance of body and soul". His work is surprisingly similar to contemporary cognitive therapy and excels in being culturally more suited to Muslims. I have

translated to English his chapter titled, "Methods of dealing with sadness and grief" that I wish to present to Muslim psychiatrists, psychologists and physicians. I feel that presenting this brief translation is far better than my own words or that of a modern western psychotherapist. I have restricted myself to an accurate translation that reflects the spirit of the Arabic speaking author :

"The symptoms of sadness and depression are of special significance in comparison to other psychological symptoms since they can cause very severe reactions to man when they take over his heart. This fact is clearly illustrated from the serious changes that beset an individual suffering from acute sadness and depression. He appears in the most horrible form, showing uncontrollable deeds that demonstrate his impatience and annoyance. Depression and bereavement in their acute form are like a blazing coal fire, while sadness is like the coal that remains glowing after the fire has subsided. These symptoms have pronounced effects in exhausting the body and draining its activity and wearing out its wish for pleasurable desires. It is as though the healthy human soul is the sunlight of the body that can be totally eclipsed by grief and depression. It will lose its glowing rays and turn into utter darkness. In summing up we say that sadness is the opposite of joyfulness and happiness. The face of a happy elated person radiates with cheeriness and brightness while that of the grieved expresses gloom, pessimism and despair.

Just as fear and anxiety are caused by the expectation of a future threat, sadness and grief are caused by the loss of a something the person loves or attached to. Thus fear is directed to the future and sadness and bereavement to the past. They are the strongest among psychological symptoms…. No one should aspire to rid himself from all sorts of anxiety and sadness since this world is not the place where people can enjoy a life of total freedom from such negative emotions. This condition is only granted to the saved ones in Paradise in the Hereafter.

There are a number of mental mechanisms that a bereaved person or his therapist can use to get over his sadness. One of these thought mechanisms is to weigh up the excessive bodily harm that continued sadness and depression can cause to his body. Logical thinking would convince him that his bodily health should be the most beloved thing to him. He would not accept to trade it with any amount of money or relatives. The fact that he is feeling sad and depressed for his presumed loss is actually because he loves his body and soul and wants to please himself with what he failed to get or stop the loss from happening. By destroying his health in agony about (the death of a relative or a friend), he would be like the one who sells out his capital to gain some little profit. Pondering on this would prove to him that he would be the loser if he allows sadness to subdue his soul and harm his body.

Another maneuver is for one to understand and realize that life in this world, by its very nature, is not the place for perpetual joy and happiness nor is it the habitat of avoiding any loss of loved ones or sought after desires. One should look around to see if there is any person who has been spared from such losses and bereavements. He will find none. If this is the way it is, then he should deeply convince himself that all the pleasures he gets in his life are but an additional gift that he should enjoy with pleasure and that the losses and unattainable should not cause him much sorrow and

bereavement. This should give him a fairly happy life of satisfaction and content.

In addition to that, the bereaved person who behaves with extreme impatience and uncontrolled bereavement, when he faces a misfortune or human loss, should seriously consider this weak behavior as a greater calamity than what he had faced. The reason for this is that life in this world will certainly bring to him more losses and if he is to respond every time with impatience to these future unhappy occurrences, his life would certainly be a very wretched one. Accordingly, a wise person should train himself to face the misfortune or loss with disciplined endurance until this becomes a usual pattern of confronting future mishaps. If this disciplinary training is carried out, one would reduce all misfortunes to only the one that he had overcome: that of losing his patience in confronting mishaps.

One more mental tactic is for one to become strongly conscious of the fact that those who lose their patience and succumb to despair and helplessness are the spineless cowards or the weak in nature such as women and children. On the other hand, it is those who faced calamities and catastrophes with unbending endurance that have been exalted by their societies. Their tales of fortitude and courageous forbearance have been recorded in the history of their nation as exemplary character to be modeled. The one facing a grieving event should ask himself whether he wants to be like the cowards or to model himself after the glorified heroes.

A further mental approach is to realize that his soul or self should be and ***is*** in fact the most precious thing he has and to preserve it he is diligently pursuing every kind of desire. If it is safe, then any other loss should comparatively be much less disturbing and tolerable. This being the case, any loss that affects one's soul or self safety with excessive sorrow and dejection is unjustified.

One more mental approach is to ponder on reducing the effect of the grief that afflicted him by realizing that it could have been much more depressive and agonizing. (For example, if he is grieved by the death of a friend, he should tell himself that it could have been the death of his son or his parent). Imagining that it could have come in a much more sorrowing and grieving manner may cause him to be grateful to God for saving him from a possible greater catastrophe and giving him a lighter misfortune. At any rate, since his soul had been spared from demise and he has the future to make up for what he had lost, he must think of the gifts that God has bestowed on him and to see how best he can make of them. The expectation of such future pleasures can help him to soothe his saddening mood and can even transform it to happiness.

Finally, by surveying his and other people's experiences he would realize that all sorrowing and grieving mishaps are destined to be forgotten and that the passing of days would certainly diminish the agony. He must take cognizance of the fact that the most saddening moment of an incident is its inception and that the days that come after that would certainly reduce its painful effect until it is gradually pushed into forgetfulness. This kind of mental maneuver is bound to bring about a quick feeling of comfort or even happiness and pleasure".

Is death a one way road ?

In conclusion, I wish to discuss a very important issue with regards to our *aqidah* as true believers in the Noble Qura'n and the blessed sayings of our Prophet. As I said in the opening

sentences of this article, to define death as the cessation of life is actually a form of begging the question since one cannot define an unknown phenomenon with an equally or even more unknown phenomenon. " Life " and what causes living things to live is probably more mysterious than the death of these living things. We know that elements constitute the body of a living human. In chemical combination, these elements may give you a few nails of iron, enough calcium compounds to whiten the color of a wall, enough fat to produce a few blocks of soup and enough water to keep you living for few days. But how can these constituents come together to give you a living human.

It is true that our life must start with single cell, but the complexity of a single cell is not as simple as Darwinians once thought. It is as complex as the body it forms. We can understand how the amazing complexities of the living cell works but this does not solve the problem of secular scientists about how life came into it or what made it in the way it is . As Behe [24] says in his well researched book, *Darwin's black box :*

" … Understanding how something works is not the same as understanding how it came to be. For example, the motion of the planets in the solar system (the question of how the sun, planets and their moons formed in the first place) is still controversial .

Science has made enormous progress in understanding how the chemistry of life works, but the elegance and complexity of biological systems at the molecular level have paralyzed science's attempt to explain their origins. There has been virtually no attempt to account for the origin of specific, complex molecular systems, much less any progress" .

Thus as Muslims we should simply submit to the second Verse of the Holy Qura'n in Surat Al-Mulk that life and death are secret creations of Allah as a test for humanity. There is nothing in existence save Allah and what he created. So, let not the familiarity of the laws He set to run the universe fool us into believing that it is the natural cause that brings about the effect and we forget the unseen hand of Allah in this transaction. All the causes and their responses are in His hands. He can always say to the cause do not bring about the effect.

For example, we should believe that it is not the fire that burns what is thrown into it, it is Allah that causes it to destroy it. But when He said to the inferno be cool and peace unto Ibrahim, its blazing flames engulfed him with the cool breeze of a modern air conditioner! Now since death is a created phenomenon in God's hands, then He can always suspend it , reduce its effect, or bring the dead back to life. Death is not a one way road . The Holy Qura'n tells us in Surat Albaqarah, [25] that a murdered man in the time of Bani Israel was miraculously brought back to life by God's permission in order to declare who was his murderer.

Prophet Jesus [PBUH] was given by Allah the miraculous ability to bring back the dead to life and to cure the lepers and the blind and to breathe onto a clay model of a bird to become alive and

flies away,[26] Prophet Ibrahim (PBUH) was shown a similar miracle as he asked Allah about how He brings back the dead to life. Allah told him to kill four birds, cut them into pieces and to place a portion of them in different hills, and then call them. They came back to life and flew to him [27].

Another form of existence in the twilight between death and living can be created by Allah in which the body is in a form of " living death " so to speak. We read about this state in Surat Alkahf or " The Cave " [28] in which Allah reveals to us in a number of Verses how he kept the Muslim inhabitants of the cave who ran away from their *Kafir* persecutor in a state similar to that of hibernating animals, only He used to turn them over from side to side to prevent their muscles from atrophy and to save them from bed sores! They remained in this no-life- no-death condition for more that 300 years. In similar state, Allah kept a man 100 years then he resurrected him to find that his food did not spoil but his donkey had already became a bony skeleton. Allah demonstrated to him how He can bring back the bones of the donkey in form and clothe them with live muscular and other tissues until it came back to life [29].

Furthermore, death in this world can be totally avoided if God wishes. If you do not wish to accept in the continued living of Prophet Alkhidir, the companion of Musa in Surat Al-Khaf, then you should accept the fact mentioned in the Qura'n in three different places about the wish of Satan " Iblis " that was granted by Allah to allow him to live until the time of resurrection [30].

Finally, some of us doubt the extended life or Prophet Jesus until the end of time . If the normal Muslims of the Cave were kept alive for more than 300 years, and iblis is to live until all of us die, it would be rather arrogant to deny the Prophetic Ahadeeth about the life of Jesus (PBUH) .

My final advice that I wish to re-iterate is that as medical doctors, we should accordingly take this issue of life, disease and death with spiritual contemplation. When you as a surgeon succeed in relieving a patient from his trouble, you should appreciate that it was Allah who did it through you. So let us thank Allah for using us as humble tools for helping his suffering servants. Let us avoid the secular callousness in seeing our patients suffer and die. Let us not talk with certainty about giving our terminal patients a fixed number of months or weeks to live. In this respect I have known of cancer patients who were told by committed Muslim doctors that they would die after a maximum period of three months, but they lived for five years. Professor of medicine Abu Ayshah told me about a cancer patient who was really terminal. He was told to vacate his bed in King Faisal Specialist Hospital in Saudi Arabia , because he had only weeks to live. Professor Abu Ayshah took him to his house in Riyadh and fed him intravenously because he could not take

food by mouth. On seeing a prophetic dream about his illness, a brother of the patient came from overseas and continued making continuous du'a' for him day and night. To the amazement of Professor Abu Ayshah, the patient quickly improved and was able to eat normally. After being bed-ridden for months, he started to walk by the help of his brother. He traveled to his country where after a few months Professor Abu Ayshah saw him buying fruits in a public market; he who was completely cured.

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