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Kuwait Foundation for
Advancement of Sciences
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**Bulletin of Islamic Medicine
Vol. 2**

**Proceeding of
The Second International Conference on**

Islamic Medicine

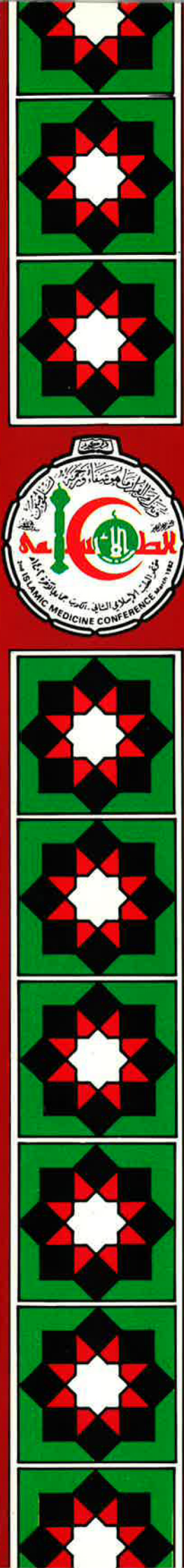
No. II

**Commemorial Lecture
and
The Importance of Spiritual and Religious
Aspects in Therapy**

Supervised by
H.E. Dr. Abdul Rahman Abdullah Al-Awadi
The Minister of Public Health and
President of Islamic Medicine Organization

Edited by
Dr. Ahmed Ragai El-Gindy
Hakeem Mohammad Zahoorul Hasan

Jumada Al-Thani 1402 / March-April 1982
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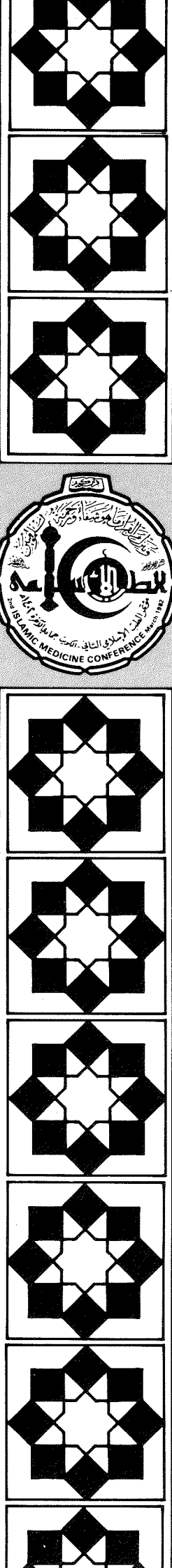
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PART ONE

COMMEMORIAL LECTURE

PLATE 1

Part One: Commemorial Lecture.

CHAPTER ONE

(Commemorial Lecture)

1. REPORT ON THE SESSION.

Editors.

2. OPENING REMARKS.

Dr. Ahmed Al-Ansari.

3. THE ORIGIN OF MAN AND THE HOLY SCRIPTURES IN THE LIGHT OF MODERN KNOWLEDGE.

Dr. Maurice Bucaille.

4. GENERAL DISCUSSION.

REPORT ON THE COMMEMORIAL LECTURE

This session was held in the evening from 4.30 to 6.30 p.m. Before the lecture, the guest speaker, Dr. Maurice Bucaille was introduced formally by Dr. Ahmed Al-Ansari. Then Dr. Maurice Bucaille gave his lecture on a very important topic i.e. "THE ORIGIN OF MAN AND THE HOLY SCRIPTURES IN THE LIGHT OF MODERN KNOWLEDGE". In the end the comments were allowed and many interested participants and Ulama spoke and asked some queries. Dr. Bucaille gave replies and then the session ended.

Editors

OPENING REMARKS ABOUT DR. MAURICE BUCAILLE

Dr. Ahmed Al-Ansari

One of the main highlights of this programme is this unique memorial lecture to be given now by Doctor Maurice Bucaille of Paris. Dr. Bucaille is a medical person, who went off the routine of his medical career and became attracted, by his Muslim patients to look at the Quran and the other scriptures with the keen eyes of a scientist. The result was his famous book "The Bible, the Quran and Science". While he found that the scientific connotations in the Quran all the way agreed with established scientific facts. He also noted that much of the information it contained was absolutely unknown in the days of Prophet Mohammed (ﷺ). Mohammed (ﷺ), therefore could not be the author of the Quran. With this conclusion, Dr. Maurice Bucaille's mind saw the un-acceptable light.

Ladies and Gentlemen, this evening Dr. Maurice Bucaille talks on "The Origin of man according to science and according to the Holy Scriptures".

THE ORIGIN OF MAN AND THE HOLY SCRIPTURES IN THE LIGHT OF MODERN KNOWLEDGE

Dr. Maurice Bucaille

FRANCE

During thousands of years, man, questioning himself on the origin of his species, had at his disposal for reflection, only those elements drawn from religious teaching and various philosophical systems. But, prior to this period, there must have existed another, even earlier, wherein superstitions or traditions, passed on from generation to generation and for which the origin is lost in the darkness of time, must have been present.

Then comes the divine revelation, initially passed on by word of mouth and then in written form. Of the scriptural texts, we will consider only those relating to monotheistic religions.

One can only speculate on the date at which man became aware of the first revelations. As to the manner in which they came to him, are we not permitted to suppose that Noah was the first to bring this subject to the attention of his people? The Bible makes no reference to this fact. However, we may take from the Quran the idea that the first call to man to meditate on his origins, was made by Noah.

Do we not read in the Sura نوح which concerns God:

وقد خلقكم اطواراً

HE CREATED YOU IN (DIFFERENT) STAGES

(S. 71: V.14)

I will return later to the meaning I believe should be given to اطواراً which appears only in the Quran in the Sura نوح. This Sura deals with God's mercy towards the guilty people of Noah, and lists the blessings which God nevertheless bestowed upon them; it evokes the creation of heaven and earth by insisting through this verse on the fact that man owes his existence to God. Finally, it deals with the punishment to come for the unbelievers. (This will be the flood, reserved for the people of Noah with the exception of a very small number).

Everything leads to suggest according to the Quran as to the Bible, that Noah was the most ancient of the prophets. According to the Quran, he alone evoked in his preaching that man is the work of the Almighty God.

The most ancient texts of the Holy Scriptures that we possess and which deal with human origins, created work of God, are, without doubt, - based on that which we know today - the two Yahvist and Sacerdotal narratives of the Bible. Both are included in the Pentateuch, the collection of the first five books of the Bible, inserted in the Book of Genesis. The Yahvist version, the most ancient, is today considered to be a work written in the ninth or tenth century before Christ. But nothing allows us the slightest hint as to its degree of popularization in this era. It would seem however, that the more recent version, the Sacerdotal version, the work of priests of the sixth century before Christ, which contains the lengthy narrative of the creation placed at the beginning of all Bibles, had a certain diffusion in its time. It is indisputable, from the references made to it by the authors of the Gospels, that the Sacerdotal version, at the time of Jesus, was well known in Jewish circles. It should be noted that at the time of the Sacerdotal version of the Bible, in the Greek world there ruled the conception of a universe which had no beginning and no end. Thus plato and Aristotle considered that the world had existed for all eternity.

In truth, the impatience of man to put forward theories on that which he nevertheless does not dominate — but which he believes he dominates — is such that, in ancient times, many ideas had been advanced on the question which preoccupies us. And yet, I must mention the birth, in the middle of

many wanderings, of certain philosophical conceptions which later revealed themselves to be exact. Here, I am thinking less of Empedocle's fantasies on evolutionism in general, the fruit of a rather delirious imagination, than of the possibility of an evolution in the animal kingdom, intuitively suggested by Anaximandre of Milletus in opposition to the ideas of his contemporaries of the sixth century before Christ.

Christianity naturally took up the idea of creation and repeated, on the origin of man, Biblical teachings, but without offering more details on this issue than those contained in the Old Testament, with the exception of the genealogies of Jesus, especially Luke's tracing back to Adam, showing Jesus being preceded by seventy six generations of humans, which, today, is untenable.

The Quranic revelation will considerably enrich man with data about himself, as it did otherwise for all the works of God concerning the creation and organization of the inanimate world as well as the living world. Its teachings insist on the numerous manifestations, seen by man, of the omnipotence of God, religious teachings that must be drawn from the Holy Scriptures before all other considerations.

Thus, during many centuries, on the question of its origin, the human mind in the west, fed itself, if I may say so, on Biblical teachings, whereas in the Islamic world, the Quranic texts brought, in the meantime, not only the general idea of the Divine Revelation common to the three monotheistic religions, but also, further teachings concerning man himself, new teachings, since non-existent in the Bible, and to which I will refer later.

Up to the eighteenth century of the Christian era, at which time science registered its initial major progress, man had at his disposal for reflection, only the data provided in the Scriptures. But, as soon as man came to possess scientific knowledge, even rudimentary — and wholly insufficient to arrive at any formal conclusion — thus nevertheless led him to develop various speculations. Thus those who were known as "Philosophers" did not hesitate to construct theories which were founded on very fragile bases.

It was in the West, at this time, that arose the first disputes with religious teachings, essentially with those of the Bible, bearing particularly on the fixity of the species through the ages, clearly formulated in the Old Testament. In France, Buffon was a very apprehensive contender, but Lamarck was less so with his theory of the transformism, which he exposed at the beginning of the nineteenth century when he protested against Biblical fixism. But it was, above all, Darwin in the second half of the nineteenth century who, with the theory of natural selection, supported in his book "On the Origin of species", dealt a severe blow to Biblical facts, in my opinion more as a result of his follower's use of the theory than that which the theory itself explained. In fact, in contradiction to that which many have said, even more so today, Darwin never demonstrated the transformation of one species into another: he acknowledged this himself. Darwinism which appears, at present, to be rather lacking in solid scientific bases, was more a philosophical speculation under the influence of Malthus. In my recent book, "WHAT IS THE ORIGIN OF MAN? THE ANSWER OF SCIENCE AND THE HOLY SCRIPTURES", I believe I have shown the deficiency of Darwin's theory and the abuse of those, who, amongst contemporary scholars, have built, around the undemonstrated assumption of natural selection, a so-called "Synthetic theory" of evolution. I qualify it "so-called" because, in no way, does it bring together all facets of the problem, but it draws conclusions from certain aspects, taken from laboratories where present day micro-organisms are studied or arising from mathematic calculations on the spread of populations, but *without taking into account the concrete facts of past events*, that is to say the documents provided by paleontology corroborated by other disciplines. Today's Darwinism has no sounder a base than had the original Darwinism, despite an apparent richness of arguments.

Since the beginning of my medical studies in 1937, I have very closely followed all that scientific progress has offered on the origin of man. The accumulation of knowledge required to judge the ques-

tion is considerable. Few are those who possess it. Eminent specialists on these subjects, such as Professor P.P. GRASSE in France, are few and far between. Authors often arrive at hasty conclusions with the help of very few really determinant basic elements. Yet today, we possess very precious data drawn from genetics or molecular biology which could be used with more circumspection, but we see them—and it is a great shame — presented, without being confronted by the elements of other disciplines. One thus observes the birth of theories, supported by scholars as depending purely on science, but which, in fact, translate the compromises with their personal philosophy. On this point, in France, we are well placed to recognize just how a very great specialist in molecular biology, Jacques MONOD — worthy however to have received a Nobel Prize for medicine — could take his materialistic desires for realities, by dealing with animal evolution and the origin of man in his book “The random and the necessity”. “(Le hasard et la necessite”, I included in my last work — and this after several others — severe criticism in respect to scholars putting forward certainties which are only hypotheses convenient to their metaphysic conceptions but which have no solid scientific bases.

The greatest harm is done in the United States, by specialists, undoubtedly eminent in their field, but who are not aware that, to judge the origin of man and the evolution of the animal kingdom, it is necessary to possess global knowledge truly encyclopaedic, bearing on very diverse disciplines such as botany, embryology, paleontology, genetics, molecular biology and others which are also most important. We now see, for example, paleontologists make deductions, formal, but wrongly so, from a fragment of a skull or a mandible, dating from several million years, and present to us, in exhibitions, life-size models which, according to them, would constitute a well defined link between the apes and the human species.

One wishes to link everything to Darwin and a subtle amalgam is made between the best established modern discoveries and the scientifically poor reflections on evolution of the English naturalist. It is then said that Darwinism and evolution are identical, and yet one may be perfectly convinced of the existence of evolution in the animal kingdom — which is as near as demonstrated today — and reject the unfounded explanations of the mechanism of evolution, so dear to Darwin and the Neodarwinians of our age. Amongst the latter, those in the United States who follow Wilson and his socio-biology are materialists, infinitely dangerous towards their fellow-men with their pretention of privilege to modify the human species as they see fit through genetic manipulations. Unfortunately, here, I can not enlarge on the errors of certain modern scholars on these points which I have developed in my book “What is the origin of man?”

But we should not reject all that is advanced by the evolution specialists of our era. There are facts that no educated man may deny, that is, that there have been, through the ages, transformations of the human form. I will say, right away, that these transformations are perfectly compatible with the concept of creation by God, present in all three monotheistic religions, and that nothing in the texts of the Quran opposes the idea of modification of the initial human form: on the contrary, I think that the Quran alludes clearly to this.

But let us first sketch-out what we are taught with certainty by modern knowledge on the subject, and we will then cover that which, successively, the Bible and the Quran have taught us on this subject.

Before putting questions about Man, it is necessary for a better understanding of the problems. To answer two preliminary interrogations:

1. Is the life in general the result of random?
2. Does the evolution exist in the animal kingdom? Was it demonstrated?

When we know the utmost level of complexity in the structures and functioning of living organisms, to say that life might have occurred spontaneously is an absurdity.

Most certainly, experiments like those of Miller in 1955 were able to demonstrate that very small

amounts of chemical components having high complexity, like the amino-acids of the cellular proteins, might be produced artificially. In a gaseous atmosphere made of hydrogen, ammonia, methane and water, electrical discharges of high intensity are able to produce samples of those components. But it is not the life which is obtained for all that. The reasoning of Miller is erroneous. It suggests a similarity with what follows:

We have in Paris the Eiffel Tower, more than 300 meters high, which is built with intersecting metallic girders. We know that very high temperatures made possible the production of parcels of metal, made from iron ore and carbon. Might this fact bring somebody to suggest the possibility of a spontaneous gathering of metallic girders in order to erect the tower? And we must note that its structure is much less complex than the most simple living cell.

Each cell possesses, if I dare say, its computer. The orders for innumerable functions are given by molecules through which a program of functioning is elaborated, including the reproduction. In the nuclei of the cells, a proteinic macro-molecule, the desoxyribonucleic acid (or D.N.A.) is the base to register the orders through other chemical components. By this way, coded orders are sent by chemical messengers, and, after decoding, specific enzymes are produced, leading to the synthesis of proteins which are necessary to life. Each cell possesses a considerable number of genes, segments of D.N.A., ordering innumerable activities: so, the genetic code is constituted. Even the living organisms which have not a nucleus, like the bacteria, have such a system of command. In the cells there is a tape of D.N.A., folded over on itself a great deal of times. By this way, thousands of different kinds of proteins may be produced (3.000 for bacteria like *Escherichia Coli*). In the case of *Escherichia Coli*, the length of tape of D.N.A. is one millimeter, i.e. 5.000 times the maximum size of the bacteria. In human beings, where the size of each cell is down to a scale of thousandths of a millimeter, the cumulated lengths of the tapes of D.N.A. of all the cells of the body is approximately the distance between Earth and Sun.

The basic characteristic of the living organisms is the fantastic organization. The genes order the functions of every cell. While man is able voluntarily to influence certain aspects of functions of the organs, in the animals most of the functions are totally automatic, due to an extremely sophisticated programming in certain cells, in the nervous cells of the birds for example. The very complicated migrations are under the dependence of a prodigious stocking of information, inducing automatic behaviours. We know the extremely reduced volume of the Central nervous system where the program is registered. Through such an example we have an idea of the capability of the living matter, necessitating a prodigious organization.

Where the origin of life might be situated?

As far as we know, the most likely hypothesis is an aquatic origin. Algae and bacteria existed one billion of years ago (the earth is 4 billions and a half years old). Other micro-organisms were found in rocks dating back to 3 billions of years. According to what we know about the complexity of the organization in living organisms, the hazard is unimaginable.

A first point: the concept of creation by God can be refuted by no scientific argument.

A second point: on the contrary, one can not deny-paleontology demonstrates - that in Africa, at least four or even five million years ago, there existed living beings gifted with intelligence, not only making use of tools (certain animals are capable of this) but even making tools to be used (a capacity of invention achieved by no animal). These first hominides had a morphology similar to ours, although smaller and having a much smaller skull capacity (about 500cc). They were the australopithecus; who constituted the most ancient generation, formally recognized as belonging to the Hominides, but it may not be excluded that future discoveries will push even further back the date of man's appearance on earth. It is difficult to say exactly when this first wave died out. Today we possess no fossil proof of the existence of Australopithecus dating prior to a million years for some, 600,000 years for others. The second wave was

that of the Pithecanthropus, which have been identified in Africa, Asia, Indonesia and perhaps in France. Their size was closer to ours, with a larger brain (on average 900cc); and they discovered the use of fire. They would have existed during periods falling between 500,000 and 150,000 years before our time. With Neanderthal man, whose remains are found in Europe, Africa, the Middle East and Java, the brain developed to exceed even in volume the human brain of today. This third wave, it seems, was of a shorter duration; remains have been found in ground dating from between 100,000 and 40,000 years. At around this latter age, the fourth and last wave appeared bringing in today's Homo Sapiens who seems, to date, to have evolved very little.

We have never found the link formally joining any one of these forms to animal lineage, even an intermediate between primates and the lineages I have just mentioned.

Modifications of the human species through the ages have not given rise to the formation of races properly speaking. Anatomic characteristics differentiate, for example, by certain measurements of the head and by the colour of the skin, the geographic groups of a particular aspect, but they all belong to the same species. The today's simple notion of groups, differing by certain characteristics, is the best proof that, starting with our common ancestor, modifications must have taken place for us to end up with different types of the same species. Within this species, an obvious evolution has taken place. An impartial observer is therefore obliged to recognize that throughout the course of history there have been modifications of the human form, but in no way does this signify that we descend from apes as the adepts of Darwin have claimed.

Furthermore, all that we learn from the study of evolution of the animal kingdom, a perfectly orderly evolution, suggests that its explanation by the hazard of random genetic mutation is impossible. The genetic code, which controls the function of each of our cells, is the director having control over all transformations which arrive in an orderly, not chaotic, manner. When a new characteristic appeared in evolution, this was the obligatory reply to an order from one or more specific genes. Evolution has perpetually been the creator of increasingly complex forms. Thus, when one studies the infinitely small in the living, one arrives at the notion that everything is entirely programmed at the level of the genetic code exercising its control over extremely complex functions in connection with anatomic modifications. How can the existence of a programmer be found incompatible with science? Even further, how can an objective and impartial scientist of our age avoid the impossibility of explanation of this extraordinary arrangement of the phenomena of life which would depend on the notion of accident? How then can one rely on pre-conceived ideas such as Darwin's natural selection, which in no way explain what we know today of evolution?

Jaques MONOD had invented the random and the necessity to explain everything. We have just said what we must think about the accident or random. And, if we must consider the necessity when we evoke the origin of man and his successive transformations — as well as the evolution in the animal kingdom — I find that, faced with the well established facts of science, it would be the idea of a creation by God which would seem to constitute the most satisfactory explanation, in conformity with logic: as taught by the holy books of the three monotheistic religions. The objective scientist can not but be satisfied with receiving this teaching.

From the Bible, I have retained as perfectly valid only the idea of the creation which is exposed. As to the present value of the integrality of its narratives of the event, something entirely different is considered. The longest Biblical narrative on the creation (in fact there are two of them in the Bible), describes, as I have exposed in "The Bible, the Quran and Science", the creation by God of the animals by presenting the various species as fixed through the ages. Moreover, according to the chronological data of the Bible, one may evaluate at about 57 or 58 centuries ago, the age of creation of the world and the appearance of man on earth. At the end of 1981, the Hebrew calendar places them at

5742 years ago. None of this is scientifically acceptable. However, one readily conceives that, for the Bible, it could not have been otherwise when dealing with such subjects. The Biblical authors of these narratives (ninth and sixth centuries before Christ) are recognised by the Christian exegetes themselves as indeed inspired by God as far as the truths of faith are concerned, but having written following the ideas, traditions, superstitions or myths of their age. How, in these circumstances, can they have not committed errors concerning facts on which no scientific light was shed prior to the modern era. It is not, therefore, astonishing that the Second Vatican Council (1961-1965) declared that certain parts of books of the Old Testament included imperfections or were null and void.

As to the Quran, I repeated in my last book "L'homme, d'ou vient-il", "What is the origin of man?", that which I had already expressed in my previous work, that is that these statements on man were those that impressed me most — as a scientist, I mean. I even delivered a lecture on this subject in 1976 at the French Academy of Medicine.

When dealing with the origin of man, I cannot fail to evoke how the Quran teaches us, in a more general sense, on the starting point of life. I will quote only the verse of the Sura الأنبياء :

أولم ير الذين كفروا أن السموات والأرض كانتا رتقا ففتقناهما وجعلنا من الماء كل شيء حي . أفلا يؤمنون .

DO NOT THE UNBELIEVERS SEE THAT THE HEAVENS AND THE EARTH WERE JOINED TOGETHER, THEN WE CLOVE THEM ASUNDER AND WE GOT EVERY LIVING THING OUT OF THE WATER. WILL THEY THEN NOT BELIEVE?

(S.21: V.30)

Who today does not know that the origin of life is aquatic?

Even though the Quran evokes in this same Surate in verse 53 the elements of couples (male and female) amongst plants, it deals with man at several points, offering for our meditation data on reproduction, conforming to modern embryology, which naturally, were strictly unknown at the time of the prophet (ﷺ).

Furthermore, I believe I distinguish in the Quran allusions to transformations of man's morphology, taking place in sequence, in different phases, as modern science demonstrates. These verses have become accessible to human understanding, only in the modern era: the ancient commentators, as well as today's translators and commentators could not and cannot grasp the real meaning: only a scientist understands.

I will not repeat here the deep spiritual sense attached to the creation of man, from the ground exposed in many verses. But the Quran evokes, after the creation, a second phase wherein God gave form to man. The Sura الأعراف :

ولقد خلقناكم ثم صورناكم ثم قلنا للملائكة اسجدوا لآدم .

WE CREATED YOU AND THEREUPON WE FASHIONED YOU; THEREUPON WE TOLD THE ANGELS: BOW DOWN TO ADAM...

(S.7: V.11)

To fashion man was realised with harmony. Such is the meaning of سَوَّى which applies to man in the Sura الحجر (S.15: V.28 and 29) and the Sura ص (S.38: V.72). Moreover, in the Sura الانتظار it is specified that:

الذي خلقك فسواك فعدلك (٧) في أي صورة ما شاء ركبك (٨)

(GOD) IS WHO CREATED YOU, THEN FASHIONED YOU HARMONIOUSLY AND IN DUE PROPORTION; INTO WHATSOEVER HE MADE YOU OUT OF COMPONENTS.

(S.82: V.7& 8)

I will follow with the quotation of verses which speak for themselves, if I may so: Sura التين:

لقد خلقنا الانسان في أحسن تقويم (٤)

WE CREATED MAN ACCORDING TO THE BEST ORGANIZATION PLAN.

(S.95: V.4)

I suppose that such is the sense of تقويم. I quoted at the beginning of this paper the following verse:

Sura: نوح

وقد خلقكم أطواراً (١٤)

HE CREATED YOU IN (DIFFERENT) STAGES.

(S.71: V.14)

I suggested in my last book that اطوار which appears only once in the Quran could well be related to the transformations undergone by the human species throughout the ages. Indeed, all those who have studied embryology are well aware that it is in the uterus of the mother where is outlined then settled all morphologic transformations which will fully develop in the adult. The stages through which the embryo passes in uterus (to which one generally relates the word), are just as applicable to all the human lineage.

Finally, when one has in mind the paleontologic data concerning the successive waves of humans in the history of our species, how can one not compare these two verses of the Quran:

Sura الانسان where God speaks of men:

نحن خلقناهم وشددنا أسرهم وإذا شئنا بدلنا أمثالهم تبديلاً . (٢٨)

VERILY WE CREATED THEM AND STRENGTHENED ALL OF THEM. AND WHEN WE WILL, WE REPLACED THEM COMPLETELY BY PEOPLE WHO WERE OF THE SAME KIND.

(S.76: V.28)

Sura الأنعام:

أن يشأ يذهبكم ويستخلف من بعدكم ما يشاء كما انشأكم من ذرية قوم آخرين (١٣٣)

IF (GOD) WILLS, HE DESTROYS YOU AND IN YOUR PLACE APPOINTS WHOM HE WILLS AS SUCCESSORS, JUST AS HE BROUGHT YOU FORTH FROM THE POSTERITY OF OTHER PEOPLE.

(S.6: V.133)

These two verses consequent emphasize the disappearance of certain communities and their replacement by others, in accordance with the will of God, through the ages.

What greater compatibility can one find between Quranic teachings and the perfectly established data of science in the fields of paleontology and many others. Let us remember that they were absolutely unknown at the time the Quran was brought to the knowledge of man.

Such is the important lesson that any objective scientist must draw from these facts.

GENERAL DISCUSSION

Dr. Ahmed Ansari

I thank you Dr. Maurice Bucaille for this very nice talk. In fact you have covered most of the points, which I had, in mind before you started your talk. We have here Sheikh al-Khalid. He always says that when you are reciting the Quran, you are not pronouncing it properly. I do not know if he has any comments, because it is very difficult for those who do not speak Arabic to pronounce Quran perfectly all right. So, I ask Sheikh al-Khalid to give his comments, if he has any.

Sheikh Al-Khalid

I think, the lecturer has exerted his great efforts in this lecture and he has dealt with the question that is always repeated, 'What is the origin of man and how he has been developed and evolved?' If we are to say anything, we would like to thank him very much. As for the Quranic Verses, of course, we do appreciate the fact that he is dealing with Islam and that he cannot speak proper Arabic and of course, we know that Arabic language is quite a difficult language for beginners. Even when the earlier Muslims used to learn reading they used to make such mistakes and they always found such a difficulty. The Islamic Shariah (شريعة) has given credit to all those who are trying to do so. I think that these verses should have been punctuated, but of course, we do appreciate the difficulty he had in reading out these verses and of course, we hope that he would resume his learning of the Arabic language and we wish him very good luck.

Dr. G.M. Karim,

I am from South Africa and I am a General Practitioner (طبيب عام). I would like to comment on Dr. Bucaille's talk and I may perhaps elaborate on an aspect that was not commented on by him. That is, that in Quran there is no link between the apes, the primates and man. In other words if Darwin's theory was to hold, then there should be a continuity between the apes going onto man. Now, in Sura *Bakara* (سورة البقرة) there is an Ayah (آية) of Quran, which gives an explanation for the existence of the apes and for the sub-human type of creations, that is to say, the primates. And that verse is *وَكُنُوزًا* *فَرَدَدَ خَاشِعِينَ* that is when a group of human beings transgressed Almighty Allah's laws, He cursed them and they became apes. Now these apes, we say that it was a mutable type of human being and it is the law of genetics, that mutations do not survive, that you have them dying out and this is the reason, why we have different shapes. For example, we have humanoids with small brains. Then suddenly the brains went big, but these were mutant forms of man-kind and therefore, what the scientists call, what the anthropologists call 'The missing link', will never be found, because this will be contrary to the *Wahi* (وحى) or to the revelation of the Holy Quran. And regarding the modification of the early initial human form, as outlined by Dr. Bucaille, I would like to say that the genetic of the phenotype, the genetic, the genes never change, because Almighty Allah has programmed us to be in a certain form and the genes will never change, but certainly the morphology, that is to say the outside shape can be determined by the environmental factors, e.g. we will find that certain races are darker in colour, to protect them from the harmful rays of the sun and in certain countries people are absolutely white skinned, because they don't need that protection. In fact, in my country, where there is considerable dis-crimination between black and white, we say that Allah has given the black people something in addition to the whites and therefore, they are superior. And going on to this factor, we find that the skulls of the African people in South Africa, are thinner in size than the skulls of European, that is to say that the people descendant from Europe, the white skinned people. And although the skin of the skull is thinner in the black people, it is far stronger than the skulls of the white people. So, I would like to conclude my comment here, but I

like, it will be very interesting, to hear the views of the مفسرين concerning the Ayah (آية) quoted by Dr. Bucaille, when he said from *Sura Al-Inam* (سورة الأنعام) I think it was, that Allah changes one people into another people. When he said that Allah changes them from one ذرية , I think it is من ذرية قوم آخرين . Well, I think that doesn't refer to an anatomical evolution at all. It refers to the historical or should we say political. There is one type of people who transgressed limits (حدود) set by Almighty Allah. Then He replaces them by another set of human beings, but not a different set, not an anatomical different set.

Dr. Ahmed Abu Zaid

We would like to thank Dr. Maurice Bucaille for this valuable lecture, we listened to. It casts many lights on many things, but it poses many questions as well, and we would like to listen to his own opinion. As a matter of fact, the theory of evolution, as put by Darwin, meets a lot of opposition on two parts. The first part is from the anthropology scientists, who have scientific data that was not provided by Darwin . The theory of Darwin that there is a continuous line between the animal and the human being and that the evolution was a continuous process, is being opposed too, nowadays. And of course, there are many strides taken in this direction, and after certain period of time, a certain evolution takes place and then it stops and then another race is subjected to such an evolution. It means that the old line of evolution that has been mentioned by the scientists in the 19th century, is no longer standing. The other opposition comes from scientists, believing in the theory of creation and not the theory of evolution and I think that the United States' scientists have preceded the other scientists in this regard. We find a great number of institutes in United States, which are trying to give scientific shape to these theories of creation. It has all the physical anthropology scientists, nowadays and in Britain today, one of the big astronauts *Alferdhoil*, who is trying to prove the theory of creation, based on the most up-to-date theories of Mathematics .He stated; We should come to the conclusion that there is first a creator. The scientists have been trying to prove this, through very complex mathematical operations. The second: as has been said by Dr . Bucaille, that anthropological researchers and particularly in the Central and Eastern Africa, and Dr. Leaky Jr., was the last to reach such conclusions. And there is an American Scientist also, who wrote a book entitled, 'Lucy', and the name 'Lucy' is the name of an animal, which he discovered. He said, as Dr. Bucaille said, there are some creations that have these descriptions and Lucy dates back to 4 or 5 million years. It could be an ethical problem and of course, we would like to listen to the opinion of the doctors attending here and Dr. Bucaille. The problem, we are facing today, particularly in United States, is an ethical one despite the fact that the Americans are trying to attribute this to the Chinese and Russians by using policy in the fields of science. This tendency is derived from the idea of the experiments on the apes and human beings. What would happen if the apes would get married to human beings and if this is true; we heard that the Chinese are trying to do this and they are trying to get an ape married to a human being and the chromosomes in the chimpanzees and in the human beings are very similar to an extent that exceeds the similarity between the horses and the donkeys. This gives them a medical pretext. If some woman would volunteer, and if this woman has been married to such creature, I do not think that this will lead to any generation. This is an ethical problem, that will impose many questions. To what extent could science go, as far as the experimental human being is concerned?

Dr. Maurice Bucaille,

I want to thank you very much. The speakers were very kind to express their opinions, but I want to say that my problem was not at all the origin of apes or monkeys. It was the origin of man. There must be no confusion between that problem and the other one and I want to answer about 2 points. At first, what is the importance of the genes in the evolution? It is very well known, if we consider the evolution in animal kingdom, because it is not possible to draw conclusions from the story of the animal kingdom

and compare exactly with man precisely, because the more logical hypothesis upon the origin of man is, the creation and the problem is entirely different. It is not possible to summarise in one hour lecture all these problems, which are purely problems concerning evolution. But I want to say about the genes, the genetic codes, but we know perfectly well that there were passages from humanotories micro-organisms to the animals progressively and it is due to the addition of genes in genetic code. That was perfectly well demonstrated during the last year and I recommend, particularly to the specialists to read the works of Prof. Russy, I have quoted, who was during 30 years, teaching evolution at the faculty of sciences in Paris and he is the author of the theory of the creative evolution by progressive accumulation of genes, because there are certain quantity, certain number of genes in a bacteria, in an amoeba, for example, and there is a considerable increasing of chemical components along the tape of D.N.A. and it is the explanation of the evolution in animal kingdom. It is a fact and that is not a view of the mind, not at all. It is impossible, I have quoted the thesestic theory of evolution and now the pure Darwinism is tenable. It is very well demonstrated now, one century after the death of Darwin; it is now the second death of Darwin, 100 years after his natural death and despite the fact that Darwin was put in the ground in the Abbey of West Minister, in London . Darwin was at first a man who was an excellent naturalist, but who demonstrated the impossibility of the fixity of species in animal kingdom, but Darwin never demonstrated the passage from one species to another one. And it is precisely what very emminent scholars, that I know perfectly well in Paris, which are at first laid the aim to bring up human to their materialistic desires and they are doing their best to support, as far as they can, the old theory of Darwin, which is not at all now tenable from the scientific point of view. I think that is the great fact of the last years. That is the importance of the interference of the theory with the genetic code and this is clearly, I think so, a revolution in the conception of the evolution in animal kingdom and as well as the transformation of the human form. As to this famous 'Lucy', I know perfectly well Prof. Coppens, from the museum of Paris, who discovered the most ancient type of phothelopic and Coppens told me recently that for him the one ancient fossil of human precisely, was those which were discovered in Africa and after 4 or 5 million years, we do not know at all, what is the history of man. It is something which stops to 4 million years and for the present time, we do not know any thing more to the monkeys or the apes, it is perfectly well-known that the theologists know that perfectly well, that the monkeys, we know today, they were fixed 9 million years ago, for the more recent one, and there are monkeys which were fixed since 60, for the Taxians in the Pacific, they were fixed since 60 million years. So that there is no possibility of a link between the monkeys and human lineage. There are many discussions and in Paris, in June 1980, there was an International Symposium at the National Center for Scientific Research, under conclusion of the Chairman, which is written in the book of the papers, which were read before that symposium, that we do not know at all the Ancestors of man, before this 4 or 5 million years. We do not know and to say we do not know, it is not to give exactly an origin, but it is only to say the truth asked for the theory of the chromosomes. That is impossible to treat the question, but it is now, it was recognized during this symposium, that the theory of the chromosomes could not be used to make genealogy of man and every body was accordingly agreed about that. I think now that we are only dealing parthenology which are sure and demonstrated and it is not possible to make amble gamble of every thing to come to a theory to support now the Darwinism.

Sheikh Moawadh Ibrahim,

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ .
« ولقد خلقنا الانسان من سلالة من طين ثم جعلناه نطفة في قرار مكين ثم خلقنا النطفة علقة فخلقنا العلقة مضغة فخلقنا المضغة عظماً فكسونا العظام لحماً ثم انشأناه خلقاً آخر فتبارك الله احسن الخالقين »

This is a Sura from the Holy Quran. This is the story. In fact, this Sura tells the story of the creation, the story of life and if the Quran in سورة المؤمنين talks about the story of resurrection, which could end our meeting, but I begin with this آية . I would like to convey my greetings to the lecturer and I have known him for more than 6 years. This was probably when he first gave his lecture in this respect in Saudi Arabia and I was a Professor there in the university, and I also read his book.

Now, I would like to say that the lecturer has made a great effort in talking about the story of the creation in the Bible, the old Testament. He himself and others know about the Bible and old Testament, that a lot has been said concerning them and now we face the fact that doesn't allow us really to go beyond the birth of Christ. So, since the birth of Christ and since the Quran arrives to dominate every thing that has been said, we should abide by what has come in the Quran. I do not know if I could say that this is a mental luxury or it is a useless work.. I think if one truly wants to research for the creation and all with the Suras that mentioned by Dr. Maurice Bucaille, is an excellent way of telling the story. We thank him because we know that he made an effort and he succeeded very well in conveying his ideas. I know a lot of people in this Islamic country who will find it difficult to read the Quran as he did, who is a French.

And I hope that even our young generation will know as much as our Professor does. And I will add this one of the Sura:

« يخلقكم في بطون أمهاتكم خلقاً من بعد خلق في ظلمات ثلاث »

and I would say this آية , because the Professor mentioned certain evolution of the fetus in the uterus. I wanted to add this Sura, so I could add to the آيات of the Suras that have been mentioned by Prof. Bucaille, but I think talking about the original species and the original animals, could be possible and reasonable, but the evolution of man has nothing to do with that and it is the wish of God and as the Sura says:

« هو الذي يصوركم في الأرحام كيف يشاء »

I think those who study the Quran, I greet them all and I recognize that when God says:

« سنريهم آياتنا في الآفاق وفي أنفسهم حتى يتبين لهم أنه الحق أولم يكفى بربك أنه على كل شيء شهيد . »

Dr. Hafiz Helmi

First of all, I would like to thank the lecturer, but I think that this subject has obliged him to talk about evolution and its different aspects. And here, I think, we should divide the subject, the idea of the evolution, the tools of evolution or the mechanism of the evolution and then the creation of man. We would like to divide the subject as such. Let us say, in three parts. The lecturer opened the last door and then he opened every thing for discussion. I thank him for the information he has given and I thank him for the information concerning the critique of the new Darwinism in its different aspects, which he said, does not really belong to Darwin, but only it is given the name of Darwin. This is the new Darwinism and not real Darwinism. I would like also to say briefly, the idea mentioned by the prof., concerning scientific aspect of the field of evolution. This has two aspects. First of all, I point out to what has been said by a philosopher now, referred to by Professor, that the theory of the evolution is not a scientific theory, but it is a theory that leads to metaphysics and it is a metaphysical theory, but he assessed the psychologist's criteria. Dr. has set in definitions of the scientific theory and when he applied this criteria, he said that Darwin's evolution theory is a philosophical theory, but not a scientific theory and I would like to emphasize this after the lecturer. He also mentioned the large numbers of

genes, which are found in each human cell. I would like to add to this that most of these genes are regulatory genes. They are not satural genes and this confirms what the lecturer said, that the genes system is the most important and this is the basis, and this leads me to say or to mention more about the theory of the creative evolution, also mentioned by the lecturer. This is an evolution theory, and that means that, evolution is a creative evolution and it is a constructive evolution and that means the improvement of the species. But I would like to mention here that there are two tendencies and that we can talk about creation, about evolutive creation and this is different from creative evolution, but I am speaking about a creation, created by God and develops according to His will and this theory attacks a lot of the faithful , who believe that God Almighty has wished that these creatures should have the capacity to reproduce and have this capacity to make the species improve from one and to another, but of course subject to His will. And there are many scientific proofs that support this theory. This, of course, does not contradict what has been mentioned by the Islamic scholars in the middle ages, but as far as this is mentioned in this Sura: *وجعلنا من الماء كل شيء حي* . He said, that we made life out of water. He said the word 'out' for *من* , that does not mean that the life came out from the sea, from the water, but that it was created from liquid and water. I think, I can proceed, but I do not have time, but I think that the scientists could discuss this word 'من' i.e., 'out of'.

Dr. Abdul Muttalib

The Holy Quran is said to have about 6,666 verses, out of which about 1200 verses are on the subject of science. About the human creation, the origin of man, if I may repeat or say one verse from the Holy Quran I hope my pronunciation will be appreciated, because I am a non Arab.

« هل أتى على الانسان حين من الدهر لم يكن شيئاً مذكوراً »

'Has man ever thought that a time has passed in a question of which he was nothing about to be mentioned'. And then God, in the Holy Quran, in many places has mentioned, the mud, the clay the clay of pottery in the creation of man, that relates the creation of man with the Art and then God, in the Holy Quran has mentioned in many places, which our Sheikh Moawwad has mentioned; about *نطفة* , about *مضغة* , about *قرار* , about *علقة* , and that He has put it in the narrow passages of the womb under tripled darkness and then He developed flesh and then bones, covered it with the flesh, then with the skin and then breathed into it his spirit. There, man is different from the plant and animal kingdom. The animal kingdom and plants do not have the spirit, what is known as the *روح* or *نفس* . And then there is the mention about the Virgin Birth of Mariam and this Virgin Birth is possible and has been proved by artificial inseminations and in test-tube babies. So, the Virgin Birth is also possible, but for a long time it was thought that it was impossible.

PART TWO

**THE IMPORTANCE OF SPIRITUAL AND
RELIGIOUS ASPECTS IN THERAPY**

Part Two: The Importance of Spiritual and Religious Aspects in Therapy.

CHAPTER ONE

(Papers Presented)

1. REPORT ON THE SECOND SESSION.

Editors.

2. OPENING REMARKS.

H.E. Mr. Ahmed Al-Jaser.

3. FAITH AND CURE.

Prof. Dr. Abdul Aziz Kamel.

4. THE HOLY QURAN AND PSYCHOTHERAPY.

Prof. Dr. Mohd. Osman Najati.

5. ISLAM AND BEHAVIOUR THERAPY: SOME THEORETICAL AND PRACTICAL APPLICATION.

Dr. Adel M. Demerdash, et al.

6. POINTS ON THE CONCEPT OF MAN AND HIS SPIRITUAL POWERS IN ISLAM.

Prof. Dr. Mehdi Ben Aboud.

7. ANXIETY AND ADDICTION.

Prof. Dr. Omar Shaheen.

8. COMMENTS.

i. Dr. Adel Al-Sobky.

ii. Prof. Mohd. Emadudin Fady.

9. GENERAL DISCUSSION.

REPORT ON THE SECOND SESSION

This session was held in the evening under the chairmanship of H.E. Mr. Ahmed Al-Jaser, the Minister of Awkaf, Kuwait and co-chairmanship of Prof. Dr. Fakher El-Islam. Dr. Abdul Sattar Abu Ghudah acted as moderator. This session was a seminar on "THE IMPORTANCE OF SPIRITUAL AND RELIGIOUS ASPECTS IN THERAPY". First the honourable chairman gave his opening remarks and then four papers were presented by eminent professors, psychiatrists and scientists. Later on two commentators gave their comments. In the end delegates took part in the discussion.

Prof. Dr. Mehdi Ben About could not come in time to present his paper as per programme, but as per selection and status, the paper is included in the concerned chapter.

Editors.

OPENING REMARKS OF THE CHAIRMAN

H.E. Mr. Ahmed Al-Jaser.

The psychological aspects, the religious aspects and certainly these have their own effects and this interaction has an effect on the human being, but I think there is a dimension, another dimension, which needs to be tackled and this is the effect of the relationship between God and the human being that the Muslim believes to exist and which is proved and confirmed by many of the Sayings of the Prophet (ﷺ) and this is called the medicine of the Prophet (ﷺ). There is a Saying of the Prophet (ﷺ) :

"God says, Man can try to get nearer to Me by excessive prayers and when he does so I will be his sight and I will be his hearing and will be his tounge and if he calls upon Me, I will help him and respond to him".

And there is an interaction between the Creator, the Almighty and the slave who sticks to Him and who has faith in Him and there is no doubt that this relation has direct reflections on man . When the faithful, who is certain of God's response he calls upon Him. No doubt then there is another dimension that has to be studied and probed and we should know their effects, their curative or therapeutic or psychological effect on the individual, on the society and on the family.

FAITH AND CURE

Prof. Abdul Aziz Kamel

KUWAIT

1. Knowledge and Faith

At the beginning of this study I would like to clarify the difference between knowing and believing as conceived by Islam. The Islamic definition of these two concepts is quite different from the prevailing definition in the West.

In Islam, the Divine Revelation is the highest source of knowledge. Addressing His Prophet (ﷺ), God says in the Holy Quran,

ALLAH REVEALETH UNTO THEE THE SCRIPTURE AND WISDOM, AND TEACHETH THEE THAT WHICH THOU KNEWEST NOT. THE GRACE OF ALLAH TOWARD THEE HATH BEEN INFINITE.

(S4: V 113).

God has also instructed the Prophet (ﷺ) to say in his prayer:

MY LORD! INCREASE ME IN KNOWLEDGE.

(S20 : V 114)

Concerning the narratives of ancestors God says:

WE NARRATE UNTO THEE (MUHAMMED) THE BEST OF NARRATIVES IN THAT WE HAVE INSPIRED IN THEE THIS QURAN, THOUGH AFORETIME THOU WAST OF THE HEEDLESS.

(S12 : V 3)

God has also pointed out other sources of knowledge when He said :

WE SHALL SHOW THEM OUR PORTENTS ON THE HORIZONS AND WITHIN THEMSELVES UNTIL IT WILL BE MANIFEST UNTO THEM THAT IT IS THE TRUTH. DOTH NOT THY LORD SUFFICE, SINCE HE IS WITNESS OVER ALL THINGS?

(S41: V 53)

In these verses we can identify four basic sources of knowledge: 1) Revelation. 2) History. 3) the Horizons which combine the whole universe. 4) the human psyche with all the related sciences. When God says, "WE SHALL SHOW THEM" He indicates a maintained opening up of all horizons of knowledge.

The Divine Revelation has ceased at the conclusion of the Holy Quran, the last one of God's Scriptures revealed to the last one of His prophets (ﷺ). However, its verses are extensive and always call for thinking and meditation. In "WE SHALL SHOW THEM" there is a permanent invitation for people to conduct further research and seek more knowledge and an incentive for every researcher to maintain his efforts.

As for believing, Islam relates words to action, thinking to faith, and theory to practice. Therefore, when the Quran deals with the subject of faith it speaks of its inception in the soul and impact on it. But the "WHATNESS OF FAITH" is the experience itself, and there is no way it could be explained to the unbeliever. How could you describe colours to the blind or the difference between odours to those deprived of the smelling sense?

According to Islam, knowledge paves the way to faith. When man undergoes a faith experience he grows more knowledgeable of it, and this experience becomes part of his intellectual resources and calls for further experiences. In this way the interaction between faith and knowledge is initiated and main-

tained. This knowledge will then ramify with the ramification of fields where man practises his faith. From the very beginning, the sources of his faith should be of such a nature as to help make his experience both intensive and extensive. As he feels the impact of the experience upon him he is elevated to a higher experience which develops into a level of behaviour. This newly acquired level induces him to embark upon a new experience. Succession from experience to level is what is termed by Islamic Sophism as "Position and Rank". Position is the experience and rank is the level. The faithful upgrades himself from his present rank, through assuming a new position, into a higher rank. In other words, his position, which is the new experience, carries him to a higher rank, which becomes his new level. From this level he starts out into a fresh experience, which becomes his new position, which in turn becomes a new rank, and so on.

Faith is not presented in this study in abstract terms but as depicted by Islam according to which it has two basic concepts:

First: a comprehensive concept comprising belief in all prophets sent by God. It is belief in the word of God to each prophet and each nation. God says:

AND WE CHARGED THOSE WHO RECEIVED THE SCRIPTURE BEFORE YOU AND (WE CHARGE) YOU, THAT YE KEEP YOUR DUTY TOWARD ALLAH.

(Quran, S4: v131)

Therefore, a Muslim must believe in what all the prophets believed in. God says:

THE MESSENGER BELIEVETH IN THAT WHICH HATH BEEN REVEALED UNTO HIM FROM HIS LORD AND (SO DO) THE BELIEVERS. EACH ONE BELIEVETH IN ALLAH AND HIS ANGELS AND HIS SCRIPTURES AND HIS MESSENGERS. WE MAKE NO DISTINCTION BETWEEN ANY OF HIS MESSENGERS, AND THEY SAY: WE HEAR AND WE OBEY. (GRANT US) THY FORGIVENESS, OUR LORD. UNTO THEE IS THE JOURNEYING.

(Quran, S2: v285)

Second: the doctrine of Islam revealed by God to the last one of His prophets, Muhammad (ﷺ), peace be upon all the preceding prophets. It comprises the above mentioned comprehensive belief in all the prophets especially as its basic creed of God's oneness is not unlike anything advocated by these preceding prophets. But this second concept is distinguished from the first by detailed statements of the various worships, transactions between people and a set of ethics. Though giving the community its main features, these details do not constitute any constraints on its forward movement. On the contrary, the Islamic doctrine rids the community of the fetters that hamper its free movement. Describing the mission of His final messenger (ﷺ), God says:

HE WILL ENJOIN ON THEM THAT WHICH IS RIGHT AND FORBID THEM THAT WHICH IS WRONG. HE WILL MAKE LAWFUL FOR THEM ALL GOOD THINGS AND PROHIBIT FOR THEM ONLY THE FOUL; AND HE WILL RELIEVE THEM OF THEIR BURDEN AND THE FETTERS THAT THEY USED TO WEAR.

(S7: v157)

This study deals with faith in its general terms with emphasis on its Islamic aspects as expounded by the Quran and the Sunna (the prophet's tradition). But followers of each religion may, according to their belief, study the relation between faith and cure in terms of theory and practice as well as their own experiences and observations in this respect.

2. Isolation, Disease, and the First Father:

A sick man is an isolated man even if he lives among his family or in a hospital. At home, members of his family are free to move around. In the hospital each patient has something or another to attend to.

Once he has to stay in bed, a patient feels that he has become rooted to the ground like a plant. Unable to move physically, a patient tends to be mentally active. In his meditation he begins to think of the underlying reasons of disease and pain. He may even go so far as to wonder what the philosophy of existence itself is. His rambling thoughts might go as far back as the genesis and he drifts into questions like, "Why have I come to this world?", "What is the relation between me and the first father? What is his story?"

Many colleagues working in the field of psycho-analysis have heard questions of this type from patients in great despair. In our region which witnessed the revelations of the heavenly religions there are two versions of Adam's story: the version provided by the Old Testament adopted by Judaism and Christianity, and that provided by the Quran and believed by the Muslims. There are major differences between these two versions relating to the attributes of God as mentioned in the Book of Genesis.

In a paper about the Book of Job, Karl Yung comments on these attributes: "Before the Book of Job, there were many indications about the attributes of God, -the god- as depicted by the Old Testament, who went into extremes of emotions and who suffered much because of it. ... he admitted that he gave in to his rage and that in his actions compassion and love mingled with cruelty, and creation mingled with destruction. This was actually the case and none of those attributes blocked the others." ¹ One reads about punishment imposed on the offsprings as a legacy of their fathers' sins and realises that the severity of the punishment was hardly justifiable by the size of the sin. History abounds with examples. There is the story of Adam and how he was punished together with his wife and even the serpent after eating from the prohibited tree, and the story of Noah and the punishment of his people which was exploited by those who tried to justify apartheid in South Africa as the blacks were the descendants of Kan'aan "the slave of slaves". When one reads these stories while sick in bed one despairs of ever getting the mercy one hopes for. As Christianity recognized the Old Testament it had to find a correlative for the first sin and introduce the element of salvation to erase the effects of that sin on those who preceded Jesus Christ, peace be upon him, as well as those who came after him. In the Christian thought, therefore, the first sin was linked with the punishment imposed on Adam, his wife, and his children and also with the curse called down upon this earth and the suffering of men and women and their offsprings. Man had been under this curse until Christ came with salvation and forgiveness.

Various Christian denominations have different views about Christ himself, some considering him a god and others saying he is a mortal human being. But the consensus among them is that he is a God-sent messenger, and as such he cannot be telling but the truth.

According to Christianity, then, God's forgiveness had been denied mankind since the beginning of creation until the advent of Christianity. This forgiveness was then bestowed upon everybody, whether before or after Christianity, whether those who knew it or those who did not. That is what we read in the Acts of the apostles.

The story in the Quran is basically different in that forgiveness came immediately after repentance, and repentance came immediately after the sin. The only trace left by the sin was the deduced lesson learned from it about the necessity of obeying God's injunctions and staying away from the temptation of the devil and the evil. ³ God says:

AND ADAM DISOBEYED HIS LORD , SO WENT ASTRAY . THEN HIS LORD CHOSE HIM, AND RELENATED TOWARD HIM, AND GUIDED HIM.

(S20 : v121-122)

And God says:

THEN ADAM RECEIVED FROM HIS LORD WORDS (OF REVELATION) AND HE RELENATED TOWARD HIM. LOI HE IS THE RELENTING, THE MERCIFUL.

(S2: v37)

In the Quran we do not read that God is irritable, punitive, or slow to forgive as we find in the Book of Genesis. These attributes of God are not mitigated in the Christian thought except in the story of crucifixion and salvation, and that is where the Quran differs from the bibles.

According to the Quranic method, then, God is tolerant with man if he makes a mistake, and promptly forgives him if he repents, and guides him to the right way if he drifts into disobedience. Moreover, man is not held responsible for the sin of the first father as it is something he had never witnessed or helped to bring about. Man begins with a blank sheet, and nothing is later recorded in this sheet except his own deeds which he performs through his own efforts and his Lord's mercy. That is why a Muslim should begin his prayers, recital of the Quran, and anything else he does with "In the name of God, the Compassionate, the Merciful". The gist of all this is that man will bear no grudge towards the first father or blame him for his sufferings in this world. To God, Adam is an honoured prophet who underwent a bad experience followed by God's forgiveness. Man is brought to this world not to atone for a sin committed by someone else, but to carry out a mission. In Al-Isra Wal Me'raj (Muhammad's nocturnal journey and ascension to the seven heavens on the 27th of Rajab) Adam, the first father and first prophet, was the first to be met in the first heaven by Muhammad (ﷺ), a gesture of tribute not of punishment.

3. Deputization:

A second thing that helps raise the morale of the individual in life especially at times of trouble and sickness is his belief in his status in this life. He comes to this life, as mentioned before, with a blank sheet and is entrusted with the duty of reconstructing the earth through toil and perseverance. On this earth, he is God's vicegerent.

AND WHEN THY LORD SAID UNTO THE ANGELS: LO! I AM ABOUT TO PLACE A VICEGERENT IN THE EARTH.

(S2: v30)

In the story of the tribe of Thamud and their prophet Saleh, God says:

AND UNTO (THE TRIBE OF) THAMUD (WE SENT) THEIR BROTHER SALEH, HE SAID: O MY PEOPLE! SERVE ALLAH, YE HAVE NO OTHER GOD SAVE HIM. HE BROUGHT YOU FORTH FROM THE EARTH AND HATH MADE YOU HUSBAND IT. SO ASK FORGIVENESS OF HIM AND TURN UNTO HIM REPENTANT. ĪO ! MY LORD IS NIGH, RESPONSIVE.

(S11: v61)

Man must believe that God has created this world and made it accessible to him so that he may seek both pleasure and hard work. God says:

THERE SHALL BE FOR YOU ON EARTH A HABITATION AND PROVISION FOR A TIME.

and

(S2: v36)

HE IT IS WHO CREATED FOR YOU ALL THAT IS IN THE EARTH.

God calls upon man to be active on earth:

(S2: v29)

SAY (O MUHAMMAD): TRAVEL IN THE LAND AND SEE HOW HE ORIGINATED CREATION, THEN ALLAH BRINGETH FORTH THE LATER GROWTH.

(S29: v20)

Originating in religion, these verses constitute a permanent hope for any man to know more about life, the soul and the universe. Knowledge in itself is a source of pleasure and stimulation, but if it is linked with religion it makes life more meaningful and accentuates man's desire to work and produce,

and consequently to recover if he is ill. In his illness, he will have a friendly outlook on the universe around him. That is what he is taught to do by the Quran.

About the heavens with their configurations of planets God says:

*SEE YE NOT HOW ALLAH HATH CREATED SEVEN HEAVENS IN HARMONY,
AND HATH MADE THE MOON A LIGHT THEREIN, AND MADE THE SUN A
LAMP?*

(S71: v 15-16)

About this earth God says:

*AND ALLAH HATH CAUSED YOU TO GROW AS A GROWTH FROM THE
EARTH, AND AFTERWARD HE MAKETH YOU RETURN THERETO, AND HE
WILL BRING YOU FORTH AGAIN, A (NEW) FORTHBRINGING.*

(S71: v 17-18)

About these plains and mountains:

*AND ALLAH HATH MADE THE EARTH A WIDE EXPANSE FOR YOU THAT YE
MAY THREAD THE VALLEY - WAYS THEREOF.*

(S71: v 19-20)

People around man is one big family with one father and one mother:

*O MANKIND! BE CAREFUL OF YOUR DUTY TO YOUR LORD WHO CREATED
YOU FROM A SINGLE SOUL AND FROM IT CREATED ITS MATE AND FROM
THEM TWAIN HATH SPREAD ABROAD A MULTITUDE OF MEN AND WOMEN.
BE CAREFUL OF YOUR DUTY TOWARD ALLAH IN WHOM YE CLAIM (YOUR
RIGHTS) OF ONE ANOTHER, AND TOWARD THE WOMBS (THAT BORE YOU).
LO! ALLAH HATH BEEN A WATCHER OVER YOU.*

(S4: v1)

Muhammad, (ﷺ), says:

*“O people: you have one god and one father. You are all the sons of adam
who is created from this earth. an arab is no better than a non-arab except
inasmuch as he fears allah.”*

The fact that people have different colours and speak different languages is an evidence of God's ability. These differences among people should be their incentive to get to know each other and co-operate with each other:

*AND OF HIS SIGNS IS THE CREATION OF THE HEAVENS AND THE EARTH,
AND THE DIFFERENCE OF YOUR LANGUAGES AND COLOURS. LO! HEREIN
INDEED ARE PORTENTS FOR MEN OF KNOWLEDGE.*

(S30: v22)

*O MANKIND! LO! WE HAVE CREATED YOU MALE AND FEMALE, AND HAVE
MADE YOU NATIONS AND TRIBES THAT YE MAY KNOW ONE ANOTHER. LO!
THE NOBLEST OF YOU, IN THE SIGHT OF ALLAH, IS THE BEST IN CON-
DUCT. LO! ALLAH IS KNOWER, AWARE.*

(S49: v13)

Islam links faith with succession and good work:

*ALLAH HATH PROMISED SUCH OF YOU AS BELIEVE AND DO GOOD WORK
THAT HE WILL SURELY MAKE THEM TO SUCCEED (THE PRESENT RULERS)
IN THE EARTH EVEN AS HE CAUSED THOSE WHO WERE BEFORE THEM TO
SUCCEED OTHERS; AND THAT HE WILL SURELY ESTABLISH FOR THEM
THEIR RELIGION WHICH HE HATH APPROVED FOR THEM, AND WILL GIVE
THEM IN EXCHANGE SAFETY AFTER THEIR FEAR. THEY SERVE ME. THEY*

ASCRIBE NO THING AS PARTNER UNTO ME. THOSE WHO DISBELIEVE
HENCEFORTH, THEY ARE THE MISCREANTS.

(S24: v55)

4. Belief in the day of Judgement:

Man is entrusted with everything he has: his own life, his senses, his mind, his money, his family and his children, According to the Islamic Shari't (Law), man has five things to safeguard and maintain: religion, mind, body, money and offspring. The scale of priorities of these five assets may be a controversial issue, but the general agreement is that they are all important. In our study we will be especially concerned with the matter of maintaining the body and mind. In other words, what concerns us here is the physical and mental health. What helps man to keep these two in good health is good care of his religion, money and offspring. Practically, we find that these five possessions are in a continuous state of interaction: faith leads to physical and mental health which in turn is made possible by the possession of money and children. On the other hand, parenthood calls upon the father or mother to take good care of his or her health so that they could look well after their children.

In the Hadith (the Prophet's Tradition) we read:

"Blessed be a situation where the right kind of money is placed in the hands of the right kind of man".

In Islam man's legal capacity for God's commandment is based on the fact that he has a mind and a mental ability to distinguish between what is right and what is wrong. Combined with his physical abilities, man is in a position to shoulder the responsibilities of maintaining and safeguarding the other four assets in his life. Man's belief that he will be held accountable for what he does, both in this world and in the other world, makes him keen to live up to these responsibilities:

*AND THEIR LORD HATH HEARD THEM (AND HE SAITH): LO! I SUFFER NOT
THE WORK OF ANY WORKER, MALE OR FEMALE, TO BE LOST. YE PRO-
CEED ONE FROM ANOTHER.*

(S3: v195)

God may postpone reckoning and settlement of accounts in this world to the other world:

*AND WE SET A JUST BALANCE FOR THE DAY OF RESURRECTION SO THAT
NO SOUL IS WRONGED FOR AUGHT. THOUGH IT BE OF THE WEIGHT OF A
GRAIN OF MUSTARD SEED, WE BRING IT. AND WE SUFFICE FOR RECK-
ONERS.*

(S21: v47)

In order for man to live up to his responsibilities he must have strength both of body and mind. Both body and mind were praised in the Quran. In the story of Moses, the good man's daughter said to her father:

*O MY FATHER! HIRE HIM! FOR THE BEST (MAN) THAT THOU CANST HIRE
IS THE STRONG, THE TRUSTWORTHY.*

(S28: v26)

The two words "strong" and "trustworthy" combine physical and mental health together with morality.

In the story of Saul, there is again an emphasis on both physical and mental health:

*HE SAID: LO! ALLAH HATH CHOSEN HIM ABOVE YOU, AND HATH
INCREASED HIM ABUNDANTLY IN WISDOM AND STATURE. ALLAH BES-
TOWETH HIS SOVEREIGNTY ON WHOM HE WILL. ALLAH IS ALL-
-EMBRACING, ALL-KNOWING.*

(S2: v247)

Advocating strength is there also in the story of Dhu'l-Qarneyn, He said:

THAT WHEREIN MY LORD HATH ESTABLISHED ME IS BETTER (THAN YOUR TRIBUTE). DO BUT HELP ME WITH THE STRENGTH (OF MEN), I WILL SET BETWEEN YOU AND THEM A BANK.

(S18: v95)

In this way, the five objectives are closely linked together. Among these five are a healthy body and a healthy mind and man's ability to perform better in life and the necessity to preserve these God-given gifts and the fact that we will be held accountable for them in the other world.

A Muslim's belief that there is another world too will come after this earthly one makes life stronger than death. Man comes to this world where he spends a lifetime, then dies, then he is resurrected in the Day of Reckoning where he will lead an eternal life thereafter, a life where death itself dies and existence is united with eternity and immortality.

This continuum, where our life on earth is just a part, renders man better able to put up with pain and overcome his weaknesses, for life with all its troubles and hardships is dwarfed by the Day of Judgement. In the Quran we read this dialogue that takes place on Doomsday:

*HE WILL SAY: HOW LONG TARRIED YE IN THE EARTH, COUNTING BY YEARS? THEY WILL SAY: WE TARRIED BUT A DAY OR PART OF A DAY. ASK OF THOSE WHO KEEP COUNT!
HE WILL SAY: YE TARRIED BUT A LITTLE IF YE ONLY KNEW.
DEEMED YE THEN THAT WE HAVE CREATED YOU FOR NAUGHT, AND THAT YE WOULD NOT BE RETURNED UNTO US?
NOW ALLAH BE EXALTED, THE TRUE KING! THERE IS NO GOD SAVE HIM,
THE LORD OF THE THRONE OF GRACE.*

(S23: v 112-116)

This Quranic presentation helps man to bear with pain which, no matter how great, is only mortal. This life with all it holds for us is nothing compared to our eternal life in the other world where we shall look back to it and feel that it lasted only for a day or even part of a day. I still remember a friend, now dead, who was a great believer in God and spent the better part of his life promoting faith and piety. Once he was put to test when he lost both his legs in two amputation operations within a short interval between them. When I visited him in his house he talked to me about the present condition of the Islamic world and the problems besetting it, while my eyes were fixed upon the blanket that covered most of his body and the stump of his amputated legs. Taking notice of where I was looking he smiled and said: "All what I have lost is up there kept for me by God and will be returned to me. Sometimes, parts of our bodies make it to God before us. All I hope is that God preserve for me the blessing of faith in him, as faith in God and patient acceptance of His ways will be our intercessor on that day when we meet Him. I would like to carry on with my conversation, but I can see that you are distracted by your feelings of sympathy for me. So, please concentrate on what I am saying until I finish what I want to say. Then, when we part each of us will remember his brother in his prayers so that God may reunite us in the other world as He has made us jointly work together in this world for the good of His religion."

5. The Scientific Method and Believing in Fate:

Islam calls for positivism, study and seeking cure. It identifies the domains of disease and healing⁶. There are three for each of them:

Disease: The domains of disease may be the body, manners or intellect. The Quran mentions all three of them:

In the story of Job, there is mention of physical sickness:

AND (REMEMBER) JOB, WHEN HE CRIED TO HIS LORD "TRULY DISTRESS HAS SEIZED ME, BUT THOU ART THE MOST MERCIFUL OF THOSE THAT ARE MERCIFUL"

(S21: v 83)

And as said by Ibrahim:

AND WHEN I SICKEN, THEN HE HEALETH ME

(S26: v80)

Reference to diseased manners is apparent in God's advice to the Wives of the Prophet Muhammad (ﷺ):

O YE WIVES OF THE PROPHET! YE ARE NOT LIKE ANY OTHER WOMEN. IF YE KEEP YOUR DUTY (TO ALLAH), THEN BE NOT SOFT OF SPEECH, LEST HE IN WHOSE HEART IS A DISEASE ASPIRE (TO YOU), BUT UTTER CUSTOMARY SPEECH.

(S33: v32)

Disease in intellect came as a description of the hypocrites:

IN THEIR HEARTS IS A DISEASE, AND ALLAH INCREASETH THEIR DISEASE. A PAINFUL DOOM IS THEIRS BECAUSE THEY LIE.

(S2: v 0)

As for healing there are three basic domains:

PHYSICAL , as in the quranic quotation of Ibrahim: :

AND WHEN I SICKEN, THEN HE HEALETH ME.

(S26: v80)

INTELLECTUAL , which starts by rectifying the creed. Describing the Quran, God says:

AND WE REVEAL OF THE QURAN THAT WHICH IS A HEALING AND MERCY FOR BELIEVERS THOUGH IT INCREASE THE EVIL-DOERS IN NAUGHT SAVE RUIN".

(S17: v82)

This means that those who shun the guidance of the Quran and disbelieve in it are in fact committing two sins: staying away from the Quran and doing evil things. But the Quranic healing power here includes both psychological and intellectual aspects.

The Quran mentions various methods of treatment. The list was never meant to be exhaustive but it constitutes a call for seeking cure. About water and its importance for cleanness, God advises Job:

(THE COMMAND WAS GIVEN:) "STRIKE WITH THY FOOT; HERE IS (WATER) WHEREIN TO WASH, COOL AND REFRESHING, AND (WATER) TO DRINK.

About honey, the Quran says:

(S28: v42)

THERE COMETH FORTH FROM THEIR BELLIES A DRINK DIVERSE OF HUES, WHEREIN IS HEALING FOR MANKIND. LO ! HEREIN IS INDEED A PORTENT FOR PEOPLE WHO REFLECT.

(S16: v89)

In the same sura there is a call for seeking ways of earning one's living:

AND THY LORD INSPIRED THE BEE, SAYING: CHOOSE THOU HABITATIONS IN THE HILLS AND IN THE TREES AND IN THAT WHICH THEY THATCH; THEN EAT OF ALL FRUITS, AND FOLLOW THE WAYS OF THY LORD, MADE SMOOTH (FOR THEE).

(S16: v 68-69)

Work for the purpose of sustenance is fundamental in Islam. It proves that the passive attitude unjustifiably attributed by some people to Islam is a groundless accusation. The religious interpretation of "Islam" is complete submission to the will of God; but the will of God is that an individual should be a positive and productive worker who is guided in his life by the light of inspiration as well as the light of the mind. There is no contradiction between these two. God says:

RECITE THAT WHICH HATH BEEN INSPIRED IN THEE OF THE SCRIPTURE, AND ESTABLISH WORSHIP. LO! WORSHIP PRESERVETH FROM LEWDNESS AND INIQUITY, BUT VERILY REMEMBRANCE OF ALLAH IS MORE IMPORTANT. AND ALLAH KNOWETH WHAT YE DO.

AND: (S29: v 45)

AND SAY (UNTO THEM): ACT! ALLAH WILL BEHOLD YOUR ACTIONS, AND (SO WILL) HIS MESSENGER AND THE BELIEVERS,

AND: (S9: v 105)

(O MAN), FOLLOW NOT THAT WHEREOF THOU HAST NO KNOWLEDGE. LO! THE HEARING AND THE SIGHT AND THE HEART — OF EACH OF THESE IT WILL BE ASKED.

(S17: v 36)

According to the Quran, failure to apply the mind is a big fault and a punishable sin. Describing a nation that did not make use of their minds, the Quran says:

AND THEY SAY: HAD WE BEEN WONT TO LISTEN OR HAVE SENSE, WE HAD NOT BEEN AMONG THE DWELLERS IN THE FLAMES. SO THEY ACKNOWLEDGE THEIR SINS; BUT FAR REMOVED (FROM MERCY) ARE THE DWELLERS IN THE FLAMES.

(S67: v 10-11)

Looking at the collective meaning of all these verses we can see that they express a closely linked series of acts: listening to inspiration, worship, translating belief into production and reconstruction of life, and basing all these acts on scientific study. Man is held responsible for all this and delay in any of these acts is considered a sin.

Fate and the divine decree do not interfere with any of these acts. Science, in Islam, is one of the attributes of God's perfection. One of the glorious names of God is "Omniscient". This omniscience embraces what we consider to be past, present and future:

HE IS THE FIRST AND THE LAST, THE EVIDENT AND THE IMMANENT; AND HE HAS FULL KNOWLEDGE OF ALL THINGS.

(S57: v 3)

Science, to us, is the result of our will and our experiments. To God, however, it is an attribute of perfection which lays no constraints on our will but sets it off to achieve what God has commanded us to achieve.

The true believer must tackle fate with fate as Imam Ibnul Qayyim says. An experienced skipper can successfully deal with such hazards as hurricanes, high waves, reefs and unsighted land by employing his skill, the wind movement and current direction which are all the creation of God and parts of his fate.

The Pakistani poet, Muhammad Iqbal once said: "The weak believer will always find an excuse for his weakness in God's fate; but the strong believer is in himself one of God's many fates". In other words, a strong believer is so effective in life that he can change the world into a better one because he himself is a fate with the power to change things. In the Islamic logic, then, there is no contradiction between the perfection of God's omniscience and man's free will which always calls upon him to take preventive measures against disease, to seek cure and develop ways of treatment. It also calls upon the

physician to do his best without ever giving up. Despair in Islam is synonymous to atheism.

God says in the Quran:

*NONE DESPAIRETH OF THE SPIRIT OF
ALLAH SAVE THOSE WHO HAVE NO FAITH.* (S12: v&7)

A believer is also steadfast in bearing the pain of sickness even when that pain is almost unbearable, and for this he is duly rewarded. God says:

*VERILY THE STEADFAST WILL BE PAID THEIR WAGES WITHOUT
STINT.* (S39: v 10)

Now, there are many forms of steadfastness in Islam. There is steadfastness in obedience and steadfastness in abstaining from wrong-doing. Obedience here means abiding with the right rules of eating, drinking, habitation, sleep, sports and work. By steadfastness in abstaining from wrong-doing we mean staying away from the prohibitions and iniquities which jeopardise man's health and do a lot of harm to his ethics and morals.

These are all aspects of religion as well as of health. Steadfastness in this way is expressive of strong belief and at the same time a way of prevention, treatment and cure. No matter how grave a trouble is or how serious a disease is a believer would always derive from his faith enough strength to face these situations and hold on until he either overcomes the trouble or passes away in the attempt, or keep steadfast with content knowing that he has done his very best. That is why Islam strongly opposes a deliberate attempt by a Muslim to take his own life as a means of putting an end to his pains or troubles. Life is sacred and leads up to another life hereafter. In this Islam is in full agreement with other religions and sects which believe in requital after this formula of life.⁷ Although each of these religions has its own way of belief and its own doctrine like the Christian doctrine, the creeds of certain Jewish sects and the belief in the incarnation of souls prevalent among the Buddhists and Hindus, they all help to keep the rate of suicides at a minimum.

In the Western culture, a lot of people have come to believe that death is the ultimate end of life on this earth, with nothing whatsoever after it. They believe that everything happens in this world: deeds, accountability and all, with no hope of wrong-doing ever being rectified or pain from hardships or disease ever being soothed by comfort everafter. That is why, some of these Westerners have accorded to themselves the right to put an end to their lives. Aren't they the sole owners of these lives with full authority to do what they like with themselves? And why not, if they feel there is no higher power to be accountable to or no Hereafter to prepare for? It is also for these wrong beliefs that the number of psychiatric clinics in the West is on the rise to meet the needs of a growing tension in the societies there. Where there is no faith there is no security; for faith is the "safety valve" with which man can offset the tension of his life.

Describing the oppression he suffered in the way of Islam through imprisonment and banishment, Imam Ibn Timiyah once said: "In jail, I am in seclusion; in meditation, I am a tourist; in death, I am a martyr". He used to say that God had opened for him while he was in jail a lot of doors to knowledge. The same thing was true about his disciple, Ibnul Qayyim.

Faith has this magic power of changing man's attitude towards the events of his life, including times of disease. The first Caliph in Islam, Abu Bakr, once became very ill and many attempts were made to cure him. One of his visitors asked him, "Did the doctor see you today?"

"Yes", Abu Bakr said.

"What did he tell you"? the visitor asked.

Quoting the Quran, Abu Bakr answered, "*I AM DOER OF WHAT I WILL*", thus linking faith with attempts for

healing, and acceptance of the Divine decree. Earlier, Prophet Muhammad (ﷺ), would always seek a cure for his disease and for the diseases of his Companions and would always encourage them to see a doctor if they felt sick.

Usama Ben Shereek once related the following incident:

“Once I was on a visit to the prophet (ﷺ), when some bedouins came to him and asked him, ‘Do you recommend that we take medicine if we fall ill?’ ‘yes, slaves of Allah’, He said, ‘Take medicine. Allah the almighty has created no disease without creating a cure for it except one disease’. ‘And what is that?’ They asked. ‘Senility’, He answered.”

(Narrated by Imam Ahmad)

In another version, the prophet ﷺ , said:

“Allah has revealed no disease without also revealing a cure for it, Known to some and unknown to others”

6. Aids to Faith and Recovery:

God says in the Quran,

SEEK HELP IN PATIENCE AND PRAYER; AND TRULY IT IS HARD SAVE FOR THE HUMBLE-MINDED,WHO KNOW THAT THEY WILL HAVE TO MEET THEIR LORD, AND THAT UNTO HIM THEY ARE RETURNING.

(S 2: V 45-46)

Prayer is the main pillar of Islam. It is the overall concept of the link between man and his God. It has its own rituals determined by the Shari’at: getting ready for it by ablution and facing the direction of “Qibla” (the Kaaba in Macca); performing it at fixed times and on certain occasions (the 24-hour five prayers, the Friday prayer, the two-feast prayers, and such other occasions as special masses held for the dead and prayers at times of drought asking God to send rain).

The interpretation of the word “Salat” (prayer) is that it is a relationship, a communication between man and his God. In mass prayers, there is also an opportunity for stronger relationship between man and his fellow men. In keeping the prayers along the years, there is also an uninterrupted continuation of relations from generation to generation and from one remote country to another.

Prayer is so historically rooted in Islam, so geographically extensive, so well integrated with other worships and so recapitulating to the whole idea of Islam that it has an all-embracing effect on the mind and heart of the Muslim. It can be performed under any circumstance, whether one is well established in his residence area or is always on the move, in peace or in war, in sickness or health, whether one is standing, sitting or lying down; it can even be performed by a mere nod of the head or movement of the eye-lid. Lack of water for ablution is no excuse for delaying or cancelling it as clean dust may substitute for water under certain circumstances.

The prayer combines the spirit of all the other pillars of Islam:

- Pilgrimage is represented in prayer as Muslims must face the House of God (Al-Kaaba in Mecca) during their prayers.
- Fasting is represented as Muslims abstain from eating or drinking during their prayers.
- “Zakat” (alms tax) is also there as a Muslim has to devote part of his time to perform it, and time is life.
- The Islamic doctrinal formula, consisting of admitting that God is One and that Muhammad (ﷺ) is His Messenger, is also a built-in part of the prayer as a Muslim must glorify God, read the Opening and other verses from the Quran each time he performs his prayers.

The prayer is also a kind of worship in which the whole body participates by standing, kneeling and prostrating; the tongue is active with reciting the Quran; the heart is totally involved in feeling complete submission to God, and the mind is occupied by reflection.

Prayer is isolation from life and absorption by it at one and the same time. In performing the prayer, a Muslim would leave anything and everything that may distract his attention such as his business or trade. Yet, while he is praying he listens to the Quran and invokes his God. Now listening to the Quran will teach him a lot about his life and enlighten him. It is significant that daylight prayer is done in whisper while people around are indulging in their loud-voiced communication, whereas the night prayer is done loudly when people have retired to their beds and calm reigns. Thus, a prayer is a sort of departure from the common practice of anything else, even in the voice-pitch. A Muslim would then return from his prayer to the daily occupations of his life with a better emotional, intellectual and moral supply. When Muhammad, (ﷺ), alerted the prayer caller, Bilal, to discharge his duty he would often say,

“let’s be comforted by it (the prayer), Bilal”.

It is preferable in prayer to call upon God for help, especially in the prostration position. The prophet, (ﷺ), often said:

“Man is never so near to his god as when he is prostrated” And “man is never so near to hisgod as when he prays very late at night”.

About prayer, God says in the Quran,

WELL KNOW WE THAT THY BOSOM IS PRESSED BY WHAT THEY SAY; BUT HYMN THE PRAISE OF THY LORD, AND BE OF THOSE WHO MAKE PROST-RATION (UNTO HIM). AND SERVE THY LORD TILL THE INEVITABLE COMETH UNTO THEE.

(S 15 : v 97-99)

Along these lines we can study the other worships in terms of their effect on the individual's morale, his adherence to the rules of prevention and pursuit of treatment with much patience and endurance, and the end result of self-possession and serenity.

7. Things to Avoid in Faith and Cure:

Talk about faith may unduly lead some confused people to expect miracles or may give rise to practice of magic arts that have no place either in religion or in science. It is true that belief in the Unseen is basic in Islam. In the opening verses of the sura of al Baqara (the Cow) God says :

THIS IS THE SCRIPTURE WHEREOF THERE IS NO DOUBT, A GUIDANCE UNTO THOSE WHO WARD OFF (EVIL); WHO BELIEVE IN THE UNSEEN, AND ESTABLISH WORSHIP, AND SPEND OF THAT WE HAVE BESTOWED UPON THEM.

(S2: v 2-3)

With the advent of Islam God has put an end to the age of portentous miracles which aims at emphasising the existence of God and the ultimate Truth. With Islam these miracles have been substituted by addressing people's minds and intellect. About these miracles, God says:

NAUGHT HINDERETH US FROM SENDING PORTENTS SAVE THAT THE FOLK OF OLD DENIED THEM.

(S 17: v59)

In the same sura of al-Isra, there is enumeration of the portents demanded by the unbelievers of Quraish (the leading clan in Mecca at that time) from the Prophet, (ﷺ), as proof of the truth of his mission as did the prophets before him. He pointed out to them that concluding mission had a different

style and approach from all that went before it. He asserted to them that from now on until the Day of Judgement their hope for guidance lay in the Scripture (the Quran) and the intelligence of their minds. As for himself, he often repeated that he was only a human being albeit being a Messenger:

AND THEY SAY: WE WILL NOT PUT FAITH IN THEE TILL THOU CAUSE A SPRING TO GUSH FORTH FROM THE EARTH FOR US; OR THOU HAVE A GARDEN OF DATE-PALMS AND GRAPES AND CAUSE RIVERS TO GUSH FORTH THERE IN ABUNDANTLY; OR THOU CAUSE THE HEAVEN TO FALL UPON US PIECEMEAL, AS THOU HAST PRETENDED, OR BRING ALLAH AND THE ANGELS AS A WARRANT; OR THOU HAVE A HOUSE OF GOLD; OR THOU ASCEND UP INTO HEAVEN, AND EVEN THEN WE WILL PUT NO FAITH IN THINE ASCENSION TILL THOU BRING DOWN FOR US A BOOK THAT WE CAN READ. SAY (O MUHAMMAD): MY LORD BE GLORIFIED! AM I AUGHT SAVE A MORTAL MESSENGER?

(S 17: v 90-93)

Although God has supported His Prophet with such miracles as instantaneous increase of food, the gush of springs or protection from enemies, none of these was a major proof of his prophethood. That remains to be the Quran which calls for believing through the mind.

When we study God's portents in the Quran, we always find a commenting reference to the importance of the mind. Let's look into the concluding parts of some verses of "The Romans" sura:

*LO! HEREIN INDEED ARE PORTENTS FOR FOLK WHO REFLECT.
LO HEREIN INDEED ARE PORTENTS FOR MEN OF KNOWLEDGE.
LO! HEREIN INDEED ARE PORTENTS FOR FOLK WHO HEED.
LO! HEREIN INDEED ARE PORTENTS FOR FOLK WHO UNDERSTAND.*

(S 30: v 21-24)

THUS WE DISPLAY THE REVELATIONS FOR PEOPLE WHO HAVE SENSE.

(S 30: v 28).

In the last verse of the same sura, God says,

SO HAVE PATIENCE (O MUHAMMAD)! ALLAH'S PROMISE IS THE VERY TRUTH, AND LET NOT THOSE WHO HAVE NO CERTAINTY MAKE THEE IMPATIENT.

(S 30: v 60)

The Prophet, (ﷺ), in showing the status of the mind in Islam as the only means of being convinced in a natural way says,

"All prophets before me were given signs of the type that made people believe. My only sign is the revelation of god (the Quran) and with that I hope my followers will outnumber theirs in the day of judgement".

(Narrated by Muslim quoting Abu Hurayrah)

I would like here to summarise what Sheikh Mahmoud Shaltout, Sheikul Azhar, said about legislative and non-legislative Sunna in his book entitled "al-Islam 'Aqeeda-wa-Sharee'a" (Islam as a Creed and a Legislation):

We should notice that what was told about the Prophet, (ﷺ) and what was written in the books of "Hedeeth" about his sayings, deeds and directives can be divided into the following:

First: that which covers the human needs such as eating, drinking, sleeping, and settling disputes between individuals through common laws and traditions.

Second: that which covers experiences, habits and customs such as those sayings relating to

agriculture, *medicine*, and ways of dressing in terms of length or shortness.

Third: that which covers human arrangements under certain circumstances such as the deployment of armies, logistics and selecting points of attack.

Sayings covering these three areas are not to be taken as legislative constituting allowed or prohibited matters. Rather, they are concerned with human affairs in which the conduct of the Prophet, (ﷺ), is more of the nature of a model than an outright canonical law.⁹

As for Sunna, Sheikh Shaltout says, it is both a general and a specific legislation. It can also be divided into the following:

First: What the Prophet, (ﷺ), said in his capacity as God's Messenger such as elaborating a certain point in the Scripture, or confining a general rule to specific cases, things relating to permissible and prohibited acts. These are considered general legislations until the Day of Judgement.

Second: What he said in his capacity as a leader of the Muslim community such as orders given to armies at times of war, and budget allocations of "Baytil Maal" (the Islamic equivalent of the Treasury) Sayings in this case are not to be considered as legislations, and no actions of this nature should be carried out without the special permission of the Imam (the leader).

Third: What he said in his judicial capacity. This, either, is not general legislation and judgements in specific cases are not to be followed literally by everybody. A person entitled to something shall get it only as judged by the ruler.

Sheikh Shaltout concludes his study with a rule that has a special importance for our subject:

Before deciding to take a certain statement or a certain behaviour by the Prophet, (ﷺ), as general legislation, it is very useful to know in which capacity he said what he said or did what he did. A lot of what was reported about him was in fact never meant to be either religious or judicial legislation. This was specially the case when he acted in his capacity as an ordinary individual with his own life experiences and habits. A great deal of confusion can also be attributed to the fact that what the Prophet (ﷺ) said or did in his capacity as a political leader or in his judicial seat was wrongly taken as general legislation. Therefore, every statement or action by the prophet (ﷺ) should be carefully judged in the light of the circumstances thereof before classifying it as a Sunna or a tradition to be followed or as a personal way of behaviour or a judgement of a specific individual case that does not necessarily apply to all other situations. I deemed it preferable to refer to the extensive study conducted by Sheikh Shaltout about the Sunna as a source of legislation¹⁰ because of the controversial issue of the practical applications of the Prophet's traditions in the field of the Islamic medicine.

8. Practical Proposals:

The Library of Faith and Cure

Understanding the above points is crucial in determining our approach to what came in the Islamic legislations about medicine as well as in the direction of our interests concerning the relation between faith and cure.

The main objective of this research was to pave the way to the establishment of a library that should be accessible to the Muslim reader especially in times of sickness. Such a library should primarily contain materials on preventive medicine and link it with its Islamic origins. By preventive medicine I mean that kind of comprehensive medicine including the physical, mental and intellectual aspects. There should also be materials on methods of medical treatment in the wider sense of treating the diseases of the body, the mind, and the moral or intellectual deviation. Topics offered by this library should cover the legislative origins, scientific methods and past applications. I envisage unconventional sections in the library housing modern equipment whereby materials can also be heard and seen with topics of interest to

children, young adults, and elderly people.

A library of these specifications could stimulate fruitful discussions about developing medical services in accordance with the Islamic concept which integrates creed, morals and scientific advance, and helps the new generation to make good use of its heritage and contribute to it with further additions.

The presentation of our heritage should not be confined to the biographies of outstanding characters, though it abounds with them. Reading these biographies is bound to make ordinary people feel dwarfed in comparison. Books on our heritage must also give adequate coverage of the common daily practices and the life events of average people with whom a patient can easily identify. Some of our historians really make a mistake when they deal only with the "supremes" with no attempt at an objective and integrated presentation of life as experienced by average people. Let me cite the following example.

In November, 1980, I was invited by the UNESCO to give a lecture in Paris about "Culture and Religion". One of the friends I met there, was an Arab Muslim who had been living and working in Paris for a long time. One lovely evening at his house, where he introduced me to his family, we had an interesting conversation about the stories behind selecting certain names for our children. "In the early days of our marriage", he said, "My wife and I were so anxious to have children that we would spend whole nights in prayers and invocations of God. When finally we had our first daughter we called her Najwa". (The word "jajwa" in Arabic means: confidential talk, secret conversation). "As for my second daughter, it is a long story", he went on, "When my wife felt delivery was imminent we went to the hospital where she had received maternal care during the long months of pregnancy. On examining her, the doctor looked quite worried. "There is little hope we could get the baby out alive", he said. Then he re-examined her as if to make sure, this time consulting with a number of his colleagues. It was confirmed. The baby might come out in pieces. You can imagine the horror we felt at the idea. "Could you please leave us together for a while?", I requested of the doctor who looked astonished by such a request as they were pressed by time. "All right, but don't make it long". he said. Alone in the room, my wife and I looked into each other's eyes in utterless distress. Then we fell to our knees and each of us got lost in private invocations and silent recitation of the Holy Quran. Meanwhile, our life together in Paris flashed back into my mind, a life of purity and piety in that foreign country. We always observed prayer times and always had square dealings with people around us. Then I looked at my wife. There she was, kneeling, with eyes turned up towards the sky and lips moving with the glorious attributes of God and the invocations she learned from the Quran.

In complete submission to God, we felt serene and comforted. Our minds were composed and our hearts were confident of God's mercy. When the doctor came back to the room the look in his eyes could tell that he was beholding two different parents. He started examining my wife one last time while she and I looked quite reassured and resigned to the will of God. Then we heard the doctor say: "We have a new situation here. The odds are greater that the baby may make it".

Then my wife was steered to the operating theatre, and we were blessed by our second daughter. We decided to call her Fadwa (meaning: redemption). The words of the French doctor still ring in my ears: "I don't know what happened when I left you alone!! I had to see this to believe it".

This is the fruit of deep faith in God and complete submission to Him, and it happened to ordinary people. Faith helps speed up recovery, because faith itself is the best cure for troubled hearts and weary minds.

9. Missionary Activity and Recovery:

By missionary activity I mean work for a specific creed, whether this involves a Muslim or a Christian. There is nothing wrong with a man working in the medical field to make use of his position in propagating a certain creed.

The Islamic world has often suffered from successive waves of Christian missionaries sent by some churches to work under the cover of serving human purposes. They managed to convert a lot of people to Christianity especially those of limited education who were writhing under the pressure of poverty, disease, and ignorance. Consequently, Christian churches spread in Central Africa and Southern Asia propped up by scientific, financial and technological support which came regularly from some Western capitals. These churches were the nuclei of a wide range of services and facilities including hospitals, schools, technical and vocational institutes, transportation and even private airports where planes alighted carrying shipments of medicine together with large doses of missionary propaganda. After converting to Christianity, the youths were sent on study missions to the Western world where they were groomed for the scientific, political and economic leadership of their countries when they came back so that they could carry on what the missionaries had started. What interests us here is this method of getting people imbued with the creed of those who have established the hospital through this silent process of associating the gratifying feeling of recovery from disease with that creed.

We, Muslims, are still lagging behind in this field. Great efforts must be exerted to make our medical services the live embodiment of our Islamic creed, from the moment a patient sets foot in the hospital until he checks out with a healthy body and a heart filled with love for those who saw him through his ordeal and a tongue active with praise for God who had mercy on him through these agents.

In these projects, efforts made by the government alone will not do, no matter how great. These efforts should be backed up by private institutions for the common objective of elevating medical services to become the practical and scientific expression of faith.

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In his investigation of the relation between the Creator and Man, Jung refers to the Book of Job in the Old Testament and admits that his approach is subjective, as if it was a free dialogue between the Creator and the created.
2. As an example, see the New Testament: "*the Message of Peter the apostle to the people of Romea*, 5: 18.
3. There is a good study of this analysis of Adam's story in the following book:
MOHAMMAD IQBAL: "*A New Approach to Religious Thought in Islam*", ch. 3 about Divinity and the Meaning of Prayer, p.p. 96-103.
4. *The Old Testament*: the Book of Genesis, 3: 14-19 about the story of Adam, Eve, and the Serpent. In the same Book, we read about the story of Noah and his sons.
5. See: "*Tafseer Al Tabari*" (Al Tabari's interpretation of the Quran), in dealing with the opening verses of Al-Isra sura, 15: 3-5, Al-Halabi, Cairo.
6. About the concepts of disease, prevention and recovery see: IBNUL QAYYIM: "*Al-Tib Al Nabawi*", (The Medicine of the Prophet), Darul Kutub Al-'Ilmiyyah, Beirut. It is one of the most interesting books in dealing with the subject of psychological, moral and physical aspects of disease, prevention and recovery. The writer has appended a chapter about the medicines and kinds of food prescribed by the prophet, (ﷺ), arranged alphabetically, p.p. 218-326.
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THE HOLY QURAN AND PSYCHOTHERAPY

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To be able to effect an alteration or a change in the personality or behaviour of a certain person, it is most necessary to start by altering or changing his ideas or attitudes. For a person's behaviour is greatly affected by his ideas and attitudes. Thus, psychotherapy basically aims at changing the ideas of psychologically disturbed persons of themselves, the people around them, life and the problems they had failed to face earlier and have caused their anxiety.

The Holy Quran was revealed to change the ideas, attitudes and behaviour of mankind, and to guide them and direct them for their own benefit and interest. The Holy Quran also provides people with new ideas about the nature of man, his role in life, new values, morals and ideals. The Holy Quran has greatly succeeded in influencing and changing the personalities of people. This change, in turn, had far reaching effects in laying down new basis for the personal life of man and for human relations both within the family and in the society at large. How was the Holy Quran able to discipline the Arabs and change their personalities is the subject of this paper.

FIRST: Faith and feeling of security:

The first thing that the Holy Quran sought to change in the Arabs is their beliefs. Thus, the verses of the Holy Quran revealed at Mecca during the earliest stage of Islam basically aimed at asserting the belief in monotheism. This was the first step that caused a great change in the character of the Arabs. For belief in one God generates in man a tremendous spiritual energy that changes his concept of himself, of others, of life and even of the whole world. This faith provides man with a new meaning of life and his role in it, fills his heart with love for the people around him and for humanity at large, and gives him a feeling of security¹.

Faith leads to the serenity, stability and security of the soul, for it provides a believer with a hope in God's help, care and protection. When a believer is confident that God is on his side, a feeling of security fills his heart.

In this respect the Holy Quran states:

WHO HAVE BELIEVED AND WHOSE HEARTS HAVE REST IN THE REMEMBRANCE OF ALLAH DO HEARTS FIND REST

(S.13: V.28)

Faith enables man to overcome fear and anxiety, for a believer knows that he can never be harmed except upon God's will, and that no man or power on earth could harm him or prevent him from acquiring gain or getting goodness.

A true believer also knows that his providence is in the hands of God, and that it is God who distributes it. Thus, a believer fears not poverty. The Holy Quran states in this respect:

AND IN THE HEAVENS IS YOUR PROVIDENCE AND THAT WHICH YE ARE PROMISED

(S.51: V.22)

And again in the same Surah:

TO ALLAH, HE IT IS THAT GIVETH LIVELIHOOD THE LORD OF UNBEARABLE MIGHT

(S.51: V.58)

A true believer does not fear death, for he knows that in this life he is but a wayfarer, who shall

soon move into another lasting world.

A true believer does not fear the calamities or disasters of time, because he believes in fate and divine decree, and is profoundly confident that whatever good or evil he encounters is ordained by God. In this respect the Holy Quran states:

*WE TRY YOU WITH EVIL AND WITH GOOD, FOR ORDEAL AND UNTO US YE
WILL BE RETURNED*

(S21: V.35)

A true believer does not worry due to unconscious feeling of guilt, from which many psychologically disturbed persons suffer. For he is most sincerely convinced that God accepts repentance and forgives sins. The Holy Quran states:

*OH MY SLAVES WHO HAVE BEEN PRODIGAL TO THEIR OWN HURT
DESPAIR NOT OF THE MERCY OF ALLAH, WHO FORGIVETH ALL SINS. HE
IS THE FORGIVING, THE MERCIFUL.*

(S.39: V.53)

Only recently modern psychologists realized the importance of religion to mental health, as they became aware of the fact that belief in God provides a believer with supernatural spiritual power that enables him to face all the difficulties and hardships of life, and spares him the anxiety suffered by many people in this modern world in which interest in material profit and dire competition prevail. For ours is the age in which there is a deficiency in spiritualism. This is why contemporary man has fallen a prey to anxiety and psychological disorders.

One of the first modern psychologists to realize the importance of belief in God and its effects on mental health was the American philosopher and psychologist "William James", who states that the best treatment for anxiety is faith. He also stated that the turbulent sea-waves never soil the quietness and calmness of the deep bottom. This is also the case with a profound believer in God, whose serenity is never affected by temporary surface changes. According to "William James", a true believer never worries, is always balanced and ready to face all catastrophies that time may bring him².

Carl Jung, the psychoanalyst states, "During the past thirty years, people from all the civilized countries of the earth have consulted me. I have treated many hundreds of patients... Among all my patients in the second half of life — that is to say, over thirty-five — there has not been one whose problem in the last resort was not that of finding a religious outlook on life. It is safe to say that every one of them fell ill because he has lost that which the living religions of every age have given to their followers, and none of them has been really healed who did not regain his religious outlook³."

SECOND: Faith and the feeling of belonging to the group:

The Holy Quran induces a believer to love his fellow believers, to treat them. For in Verse 10 of the Surah of the "The Private Compartments, the Holy Quran states:

*THE BELIEVERS ARE NAUGHT ELSE THAN BROTHERS. THEREFORE, MAKE
PEACE BETWEEN YOUR BRETHREN AND OBSERVE YOUR DUTY TO ALLAH
THAT HAPLY YE MAY OBTAIN MERCY*

(S.49: V.10)

The Holy Quran also calls upon Moslims to cooperate, integrate and establish a unified, consolidated community in which a moslim feels that he is a unit in a harmonious integrated and complete construction.

The Holy Quran in this respect states:

HELP YE ONE ANOTHER UNTO REGHTEOUSNESS AND PIOUS DUTY. HELP

NOT ONE ANOTHER INTO SIN AND TRANSGRESSION

(S.5: V.3)

The Holy Quran was keen on promoting the feeling of collectiveness in Moslems by ordaining the collective prayer on Friday. The Prophet ﷺ also encouraged moslems to perform this collective prayer and gave it preference to solitary prayer.

This keenness of the Holy Quran to induce Moslems to love their fellow brothers, to live in collectiveness and to unify their ranks promotes in them a feeling of altruism, of love of others, of toiling for the welfare of all people and the community at large, and suppresses their feelings of hatred, aggression, injustice and selfishness. For there is no doubt that the ability to love and help others and to serve the community augments the feeling of belonging to the group and overcomes all feelings of isolation or loneliness from which psychological patients suffer. An individual's feeling that he belongs to the group and that he has a vital role to play in the community in which he lives is of great importance to his mental health. Many psychotherapists have realized the important impact of human relations on mental health. This is why "Alfred Adler", for example, advised his neurotic patients to take interest in others and to try to entertain them and help the needy. He believed that man could get rid of his feeling of anxiety by strengthening his relations with those around him, and with the community at large, through useful social work and the love and friendship of others. That is, through achieving a feeling of belonging to humanity⁴.

THIRD: Changing behaviour through rites of worship:

Changing ideas is a first and basic step towards changing an individual's personality. But learning a new behaviour also requires practicing this behaviour for a long time. That is, it requires training so that it may be a well-established habit. In disciplining human beings and changing their behaviour, the Holy Quran followed the method of actual practice of the new ideas and habits that it seeks to implant in them. This is why God ordained the various rites of worship: prayer, fasting, paying the poor dues (alms-giving) and pilgrimage. Performing these rites of worship regularly and at their set times teaches and trains men to acquire many of the good habits which characterise a full healthy mature personality.

A- prayer

In prayer, man humbly and submissively stands in the presence of God, turning to Him with all his heart and soul, oblivious of all the problems of life, thinking of nothing but God almighty and the Verses of the Holy Quran that he is uttering. This absolute aversion to the problems and troubles of life and complete forgetfulness of them during prayer provokes in man a feeling of psychological serenity, contentment and relaxation⁵. This psychological serenity and relaxation caused by prayer has its important therapeutic effect in alleviating the severity of nervous tensions caused by the pressures of daily life and in releasing tension from which some people suffer. Dr. Thomas Highslop says in this respect that the most important factors of sleep, as he has found them out in his long years of experience, is prayer. He says that prayer is the most important means, so far known, spreading a feeling of serenity and calmness in the souls and appeasing nerves⁶.

Relaxation is one of the techniques used by some modern psychotherapists in treating neurotic patients. Relaxation is a habit which man can learn to acquire, and prayer provides us five times daily with the best method to practise and learn psychological and physical relaxation. The Prophet ﷺ used to say, whenever it was time for prayer:

"Belal, give us rest by prayer".

It is also said that whenever the Prophet ﷺ was troubled about something He prayed⁷.

The state of psychological calmness and relaxation caused by prayer also helps psychoneurotic patients to get rid of the anxiety from which they suffer. For such a state of calmness and relaxation usually lasts for some time after prayer. While in this state, an individual may face some of the situations that usually arouse his anxiety, or may also remember them. The repeated exposition of an individual to such situations while he is in a state of psychological calmness and relaxation following prayer would lead to the gradual extinguishing of anxiety and to linking such situations with the state of psychological calmness and relaxation, and thus one gets over the anxiety or tension which these situations used to provoke.

This important effect of prayer in overcoming tension resembles the effect produced by the method or treatment of anxiety used by some modern psychotherapists. These psychotherapists, such as "Joseph Wolpe" follow a system of treatment known as "reciprocal inhibition". According to this method the psychotherapist starts by training the patient in deep relaxation. Then, while the patient is in this state of relaxation, the psychotherapist would ask him to imagine one of the things that arouse his anxiety. In so doing, the psychotherapist follows a special method. Starting with the things that arouse light anxiety, then advancing to other things that arouse more anxiety, and so on. And when symptoms of anxiety appear on the patient as he thinks of any of these things, the psychotherapist would ask him to divert his thoughts from it and to return to the state of relaxation. When the patient calms down and resumes his state of relaxation, then he would be asked again to think of this thing that arouses his anxiety. Therapy continues on the same lines until the patient is able to think of this thing while he is in a state of relaxation without feeling any anxiety. Then the patient begins to think of another thing that arouses more anxiety while in state of relaxation, and so on until he overcomes his anxiety completely. This method used by "Wolpe" and other behavioural psychotherapists depends basically on the principles of conditioning, according to which the therapist tries to link situations that provoke the patient's anxiety with an anti-anxiety response, that is relaxation⁸.

The similarity between this method of treatment and the therapeutic effect of prayer is quite clear. For the repeated link between the state of psychological calmness, serenity and relaxation created by prayer with the situation that provoke anxiety either by actually facing them or merely by remembering them ultimately leads to the formation of new conditioned links between these situations and the response of psychological calmness and relaxation created by prayer. As this is anti-anxiety response, the person overcomes anxiety. This is basically the same method used by behavioural psychotherapists in treating anxiety as we have mentioned earlier.

Furthermore, the feeling of security and the relief of anxiety caused by prayer lead to the release of the psychological potentialities of man which had earlier been suppressed by shackles of anxiety, and consequently man feels a flow of energy and vitality.

Moreover, the spiritual contact between man and God in prayer provides the former with spiritual energy, revives his hopes, strengthens his determination and releases his tremendous potentialities which enable him to bear hardships and achieve great goals. As a matter of fact, man has great potentialities of which he usually uses but a small part. In this respect, "William James" states that if we compare ourselves with what we should be, we shall realise that we are only half alive. For we use only a small portion of our physical and mental resources, or in other words, an individual lives within narrow limits which he himself creates. Man has great and various powers but usually he is not aware of them, or fails to use them⁹.

The French physician "Alex Caryle" noticed that prayer causes a certain spiritual activation which leads to the speedy recovery of some patients in places of pilgrimage or worship¹⁰. The British psychologist "S. Burt" has later repeated William James' ideas regarding the impact of prayer. For he stated that through prayer we pass through the gate leading to a great store of mental vitality which we

cannot reach otherwise in ordinary circumstances¹¹.

Moreover, collective prayer in general, and that of Friday in particular, has an important therapeutic effect, as it enables an individual to react with others and to form sound social relations of friendship and emity with them. Such social relations promote the development of an individual's personality and his emotional maturity and satisfies his needs, for social belonging and social acceptance. This, in turn, makes him secure against anxiety from which some people suffer due to their feeling of loneliness, isolation and feeling of non-belonging to the group or non-acceptance by the group.

B - Fasting

Fasting is also of great psychological benefit. For it trains and disciplines the souls and cures many of the illnesses of the soul and the body. Fasting trains people to control and suppress their desires. This continuous training on self-restraint and self-control for one month every year, no doubt promotes one's will and determination, and enables one not only to control one's desires, but one's behaviour in general. Thus, one becomes fit to stand up to one's responsibilities, observing God's teachings and ordainments in all one's dealings. Fasting also trains one's conscience, and hence one becomes committed to good behaviour needless of the control of anyone.

C-The poor due (Alms giving)

This is another rite of Islam which trains Moslims to sympathize with the poor and needy and to extend a helping hand to them. Alms giving to the poor teaches Moslims to love others and to overcome their selfishness. It also enhances an individual's feeling of social belonging. This is also of great importance to one's psychological health as we have mentioned earlier.

D - Pilgrimage

Pilgrimage also has great psychological impact on an individual, for it trains him to bear all hardships and troubles, to be humble, to have self-restraint and to suppress his desires. For Pilgrimage is fighting one's desires.

Moreover, a Moslim also knows that a benevolent Pilgrimage forgives all sins, and that a Moslem returns from Pilgrimage free from any sins. This is why when a Moslem performs pilgrimage he is overcome by a feeling of happiness, peace and security. This feeling, in turn, provides him with a tremendous spiritual power which makes him forget all the troubles and hardships of life which arouse his tension and anxiety.

FOURTH: Patience

The Holy Quran calls upon believers to be patient and steadfast, as this disciplines the person and strengthens his personality. Patience increases one's ability to withstand hardships of life. Moreover, patience mobilizes one's ability to continue endeavouring for the cause of God. In this respect, the Holy Quran states:

*OH YE WHO BELIEVE, SEEK HELP IN STEADFAST - NESS AND PRAYER, LO
ALLAH IS WITH THE STEADFAST*

(S.2: V.153)

Recitation

When a believer continually remembers God by recitations of His names, by invocations, by asking for God's forgiveness and by reading the Holy Quran, he feels safe, secure and tranquil. The Holy Quran states

WHO HAVE BELIEVED AND WHOSE HEARTS HAVE REST IN THE REMEM-

*BRANCE OF ALLAH, VERILY IN THE REMEMBRANCE OF ALLAH DO HEARTS
FIND REST*

(S.13: V.28)

Remembering God gives man a feeling of security and tranquility. Thus it is a remedy for anxiety.

Repentance

The feeling of guilt makes one feel inferior and anxious and consequently symptoms of psychological disorders soon appear. The Holy Quran provides us with a unique and successful means for the treatment of the feeling of guilt, namely, repentance. For repentance to God forgives all sins, and promotes one's hope in God's blessing, thus alleviating anxiety. In this respect the Holy Quran states:

*OH MY SLAVES WHO HAVE BEEN PRODIGAL TO THEIR OWN HURT,
DESPAIR NOT OF THE MERCY OF ALLAH, WHO FORGIVETH ALL SINS. HE
IS THE FORGIVING, THE MERCIFUL*

(S.39: V.53)

(The verses of the Holy Quran mentioned here are copied from "The Meaning of the Glorious Quran". A translation by Marmaduke Pickthall. Dar al-Kitab Allubnani).

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ISLAM AND BEHAVIOUR THERAPY

Some Theoretical and Practical Applications

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Part I

The subject matter of this paper is the application of Islamic concepts of behaviour therapy. We shall first start, with God's will, by a brief review of behaviour therapy and its theoretical basis for the benefit of those colleagues who are not familiar with this subject. In the next part, we shall examine how these concepts were applied and in which form they appear in the Glorious Quran and venerable Hadith. We shall then point out how behaviour therapy was used by the great Islamic physician - philosopher Rhazes. Lastly, a hypothetical model for the application of Islamic concepts in behaviour therapy will be presented.

Behaviour therapy is unique in that it is both ancient and modern, practiced unwittingly by the layman and likewise by scientists in the confines of their sophisticated laboratories. Shrouded in the mists of Antiquity, it has survived the scrutiny of the most inquisitive and demanding scientific minds.

Behaviour is what an organism does including actions inside the organism's body and which therefore cannot be seen. This definition does not exclude thinking, imagining or problem solving which can all be indirectly observed. Therapy, on the other hand is any set of procedures which produce a beneficial effect in a patient. Behaviour therapy, is a method of psychotherapy based on the principles of the learning theory. It is concerned with the elimination of undesirable behaviours and the acquisition of desirable ones. In this form of treatment, the neuroses are considered as inadapative learned patterns of behaviour. The therapist's chief concern is with the manifest and observable aspects of behaviour, rather than with their esoteric or unconscious origins as in psycho-analysis. Punishment refers to the presentation on an aversive stimulus, or event or the removal of a positive event after a response that decreases the frequency of that response. For an event to meet the technical requirements of punishment, the frequency of a response must diminish. In this scientific definition, punishment does not necessarily entail pain or physical coercion. It is neither a means or retribution nor retaliation for misbehaviour. What really matters in behaviour therapy, is whether punishment will diminish the occurrence or a certain response. In everyday life punishment does not always lead to a reduction of undesirable behaviours such as the case of criminals whose criminal behaviour is not diminished by penalties. *Punishment is operative only if the frequency of the undesirable behaviour is reduced.* Punishment may be by application, as in being reprimanded or spanked for a certain behaviour; or it may be removal, as in the case of losing money for misbehaving or having one's driver's license revoked². However, punishment has undesirable side-effects, e.g. increased emotional reponding, avoiding the punishment agent and the imitation of the use of punishment. In behaviour therapy, we prefer to use positive reinforcement of a behaviour incompatible with the undesirable one or the use of extinction².

In some situations, punishment has to be used. However, this should be coupled with reinforcement of alternative methods of behaviour. Let us consider the following example: A child neglects his studies. He is spanked for this behaviour but persists in being negligent. This is the layman's concept of punishment. If the child neglects his studies and is spanked immediately on performing the negligent behaviour and this leads to his becoming less negligent, this is punishment by application. If we deprive

him of his pocketmoney and his negligence decreases, this is punishment by removal. So the criterion of whether to consider punishment in its technical or non-technical definitions depends on its *effectiveness in decreasing the frequency of the undesirable behaviour* .

The learning theory, briefly stated emphasises that learning is based on the laws governing the establishment of a stimulus-response relationship. It also includes other forms of learning such as problem solving and imagination which are subsumed under the title of cognitive learning. Learning itself is a relatively permanent change of behaviour that occurs as a result of prior experience. The phrase “relatively permanent” excludes changes in behaviour which result from temporary or transient conditions such as fatigue or the use of drugs. “Experience” excludes changes brought forward by maturational processes, disease or physical damage .

Classical conditioning is an experimental technique discovered by the great Russian physiologist and Nobel prize winner Ivan Petrovich Pavlov. In classical conditioning, a stimulus which normally evokes a given response is repeatedly paired with another stimulus which is neutral and does not elicit that response. By repeating this process, the neutral stimulus acquires the property of eliciting the response when presented alone. In operant conditioning, which was described by the American and psychologist B.F. Skinner, a response is strengthened by presenting a reinforcer until, the response occurs without any *stimulus preceding it*.

Reinforcement refers to any event which if presented increases the frequency of a behaviour immediately preceding it . In classical conditioning the reinforcement follows the neutral stimulus; whereas in operant conditioning the reinforcement follows a response . Once a conditioned stimulus-response combination has been established, stimuli which are similar to the original stimulus will also elicit a response which is usually weaker than the response elicited by the original stimulus. This phenomenon is described as “Generalisation”. A child who learns to say “Bow Wow” on seeing a dog will repeat the same sound on seeing any other animal. Generalisation need not be confined to a single sense. In man, semantic conditioning refers to the establishment of conditioned responses to the meaning of words. The Russian psychologist Volkova carried out an experiment on young children. The unconditioned stimulus or reinforcement in this case was strawberry puree delivered in the child’s mouth; the response was salivation. The conditioned stimulus was the Russian word for “good” pronounced aloud by the experimenter . After conditioning had been established , generalisation was tested by pronouncing Russian sentences that could be construed as having a “good” meaning and others which has the opposite sense. The children would salivate to sentences such as “Moscow is a wonderful city” or “the child helps his friends” but not to phrases like “the pupil was rude to the teacher” .

Discrimination is a process complementary to generalisation. Whereas generalisation is a reaction to similarities, discrimination is a reaction to differences . A child who says “Daddy” on seeing any male stranger is behaving according to the process of generalisation. When he grows up, it will only say “Daddy” to his father and approach him but avoid strangers. He has learned to discriminate between the two stimuli.

Extinction refers to the gradual disappearance of a conditioned response either because of its repeated presentation without being followed by the unconditioned stimulus, or in other words because reinforcement is lacking. In order to optimise the effectiveness of reinforcement it should be immediate, intense and partial or intermittent. The fact that partial or intermittent reinforcement is more effective than the continuous variety can be seen from the behaviour of the gambler who persists in his gambling behaviour although he loses frequently and may occasionally win. His occasional winning is a partial reinforcement because it does not occur all the time and it is in this simple fact that gambling behaviour is so strong and persistent.

Before leaving the subject of reinforcement, we wish to stress that it is not confined to food, water or the satisfaction of basic needs. In man social reinforcement such as the approving smile, the encouraging word, the angry frown, the pat on the shoulder and the silence which indicates disapproval or lack of interest in what another person is saying are potent and common reinforcers. In positive reinforcement, an increase in the frequency of a behaviour occurs when the positive reinforcer is contingently applied or presented e.g. when you praise someone for skilfully handling a situation. Negative reinforcement also, increases the frequency of a behaviour when the negative reinforcer is removed e.g. when your son talks in a loud voice and you react to this behaviour by frowning and you smile once he talks in a lower voice you increase the second behaviour by removing the negative reinforcement which is the frown in this example. Lastly, a stimulus which by conditioning elicits a response will acquire reinforcing properties of its own. In other words, it becomes a secondary reinforcer and can reinforce different situations. Money is a secondary reinforcer as we all know. We may represent the result of behaviour therapy as the result of the interaction of the therapist, the patient and the technique which is applied to effect the desired outcome as represented schematically below.

The personality of the recipient of behaviour therapy may favour or disfavour the outcome. We may briefly mention three relevant classifications of personality. Al-Imam al-Ghazaly described four impurities in Man's constitution which gave rise to four corresponding temperaments. The lionine, the bestial, the demoniacal and the divine. A lionine individual is overcome by anger and practices the deeds of lions such as physical and verbal aggression and experience hatred. A bestial individual is overcome by desire and practices the deeds of the beast, like greed, gluttony and lust. A divine individual is arrogant, tyrannical, authoritative and detests modesty and humility. The demoniacal type uses

his discriminating mind to use the ways of evil and reach what he wants by trickery, chicanery and cunning. Pavlov distinguished three main types of higher nervous activity in man according to the predominance of the first signal system which is present in animals also and connotes primitive responses such as salivation in response to food in dogs, and similar responses in man; or the second signal system which is confined to human beings and implies the use of symbols such as words. The watering of a glutton's mouth on imagining a banquet or hearing the word "meal" is a case in point of the functions of the second signal system. Pavlov accordingly describes the following types:

- a) *Artistic type*: with predominance of the first signal system which is easily irritated, passionate and pugnacious.
- b) *Intellectual type*: with predominance of the second signal system who is self-contained, quiet, steadfast and a persistent toiler.
- c) *Average type*: with body systems equally balanced who are stable and healthy.

Eysenk assigns a position to each individual on two axes, to wit stability instability and extraversion and introversion. Extraversion refers, among other things, to the ability to form durable conditioned reflexes. The higher the extraversion, the smaller the ability to form stable conditioned reflexes. Neuroticism or instability refers to the autonomic reactivity of the individual.

Behaviour Therapy Techniques

Crowe⁴ defines behaviour therapy as characterised by:

- Close observation of behaviour
 - concentration on symptoms as the targets for therapy
 - reliance on the principles of learning
 - an empirical approach to innovation and a commitment to objective evaluation of efficacy.
1. *Systematic Desensitisation*: It is a technique applied to reduce anxiety or remove a phobia—a fear from an object or situation from which most people are not afraid—by pairing an anxiety incompatible response such as deep muscular relaxation with visualisation of the anxiety provoking situations or object in a hierarchical order proceeding from the least to the most feared⁹. A man with a phobia of heights, is first taught deep muscular relaxation. He is then instructed to imagine himself on the bottom rung of a ladder which is the least anxiety provoking situation. If he does not feel anxious, he imagines himself climbing higher. If he feels anxious, he is instructed to stop imagining and relax. The procedure is repeated until the situation fails to provoke anxiety. We then proceed in the same way until he imagines himself at the top of the ladder without feeling anxious.
 2. *Implosion*: It is another technique by which the patient is instructed to imagine himself in the midst of the anxiety provoking situation without previous training in relaxation. He is encouraged to experience the intense anxiety associated with the situation. This is repeated until anxiety disappears. In the previous example, the patient is asked to imagine himself at the top of the ladder shaking and trembling with terror.
 3. *Exposure in vivo*: Here the patient is led to face the anxiety provoking situation as it occurs in reality; either gradually (desensitisation in vivo) or directly in which technique is called flooding. The therapist will ask our patient with a phobia of heights to climb the ladder gradually to the limit of his anxiety, asking him to relax after each step. He should not proceed until his anxiety has completely abated. In the second instance, he is asked by the therapist, provided that the patient agrees, to climb the ladder quickly and stay at the top experiencing intense anxiety until it subsides⁹.
 4. *Shaping*: In this case, the therapist reinforces the patient as each piece of the desired behaviour occurs or similar behaviours appear. The patient is praised by the therapist as he gradually approaches, then starts climbing the ladder or even moves his leg to a higher rung.
 5. *Modelling*: The therapist performs the behaviour which he wants the patient to perform and encourages him to imitate him. The therapist in our example climbs the ladder and asks the patient to follow him.
 6. *Aversion*: It is a technique employed to reduce the frequency of a maladaptive behaviour by pairing it with an unpleasant stimulus. For example, the administration of apomorphine or a painful electric shock to an alcoholic while tasting alcohol will lead to nausea and vomiting or pain which eventually become associated with the taste of alcohol, the sight of a bottle, the word alcohol or the sight of a bar (stimulus generalisation).
 7. *Covert Sensitisation*: It is a form of aversion but the unpleasant stimulus is presented in imagination. The procedure may be “assisted” by asking the patient to sniff L-valeric acid which has an unpleasant smell. In the previous example, instead of applying a painful stimulus, we instruct the patient to imagine that he is drunk and caught by the police and sentenced to prison or ridiculed and despised by his wife, children or friends.
 8. *Self-regulation and monitoring*: In self-monitoring, the patient is taught to observe, analyse the components of his undesirable behaviours and discover his own reinforcers e.g. an obese patient

with no organic pathology is instructed to observe himself and write down how many times he eats, where, why and how much. He is then taught to eat only in the dining room, to avoid eating while watching TV or reading a newspaper and to reinforce himself for eating less. This procedure disrupts the automatic nature of undesirable habits and helps the patient to find other substitutes. In self regulation, the patient is encouraged to tell himself that his fear of heights is not really bad and that he can tolerate it⁹.

9. *cognitive rehearsal*: The patient according to the procedure is asked to shut his eyes and imagine himself persuading another patient with a phobia of heights that it is good for him to go up the ladder⁹.

We come now to the last, but by no means least important ingredient of success in behaviour therapy namely the professional who applies the treatment or the therapist.

It is axiomatic that a therapist should believe in whatever he is doing. Furthermore, he should possess the ability to establish a humane and tolerant relationship with his patient. He should also be capable of mobilising the community backup facilities to help his patient. Most Western psychotherapists are by consensus impartial and committed to avoid interfering in their patients religious beliefs and religious attitudes one way or the other, and any deviation from this code is considered unethical. But what about Islamic psychotherapists? Should they adhere to this formula uncritically or should they evolve a formula of their own? No simple answer can be given to these questions but we shall reconsider them in a latter section of this paper.

In order to sum up what has been said so far about behaviour therapy, we suggest the following schematic representation adapted from Marks⁹.

PART II

We are now in a position to look for the application of some behavioural techniques in the Glorious Quran, the Hadith and the works of Islamic thinkers.

Prohibition of alcohol and gambling does not appear in the first Suras of the Quran. Instead, moslems are gradually led away from these practices by modifying their attitudes and later their behaviour.

The first step in shaping the moslems attitude in that direction is found in the Sura (النحل) of The Bee:

ومن ثمرات النخيل والأعناب تتخذون منه سكراً ورزقاً حسناً .

AND FROM THE FRUIT OF THE DATE-PALM AND THE VINE YE GET OUT WHOLESOME DRINK AND FOOD¹².

(S.16: V.67)

This Sura is Meccan and antedates prohibition which came in Medina. The message conveyed by the Ayah is clear in that drinks are not prohibited, but the matter is brought into focus and what we may describe as a neutral or baseline attitude is established.

The next step of the process can be seen in the Sura (البقرة) of The Cow:

يسئلونك عن الخمر والميسر قل فيهما اثم كبير ومنافع للناس واثمهما أكبر من نفعهما .

THEY ASK THEE CONCERNING WINE AND GAMBLING. SAY IN THEM IS A GREAT SIN, AND SOME PROFIT FOR MEN, BUT THE SIN IS GREATER THAN THE PROFIT¹².

(S.1: V.219)

When examining the Ayah, any objective behaviour therapist cannot help being fascinated. Rarely if ever, can we find an example of selective reinforcement so convincingly and elegantly demonstrated outside modern manuals of behaviour therapy. The statement "IN THEM IS GREAT SIN" implies punishment in its technical term; while "SOME PROFIT" is a positive reinforcer. However, the first statement immediately follows or is contingent upon a negative attitude towards drinking and gambling, it is also more emphatic and abrasive or more intense. "SOME PROFIT" which is a reward for drinking and gambling is mildly phrased and comes later, to be followed by "THE SIN IS GREATER THAN THE PROFIT".

According to the laws of reinforcement, a reinforcer which is applied immediately, intermittently and with great intensity is more liable to modify an attitude or a behaviour, and they all apply to the previous Ayah. Thus moslems at that stage become oriented toward adopting a distancing attitude vis-a-vis drinking and gambling.

The following step in the shaping process occurs in the following Ayah from the Sura of (النساء) The Women:

يا أيها الذين آمنوا لا تقربوا الصلاة وأنتم سكارى حتى تعلموا ما تقولون .

O YE WHO BELIEVE! DRAW NOT NEAR UNTO PRAYER WHEN YE ARE DRUNKEN, TILL YE KNOW THAT WHICH YE UTTER ¹³ .

(S.4: V. 43)

When contemplating this Ayah, we find two relevant points. Firstly, prayer is a reinforcement because it means obeying God's word as conveyed by his Prophet (ﷺ) and being accepted by other moslems. Secondly, drunkenness is not explicitly forbidden at other times. What does this mean in terms of behaviour modification? The desired behaviour is sobriety during prayers. Thus a moslem observing the Ayah would gradually diminish his intake of alcohol until it drops to a very low level or zero before prayer. There must have been individual variations of course, but the five daily prayers would lead moslems to curtail the amount or frequency of drinking. In other words, a reinforcement schedule has been established which avoids sudden complete abstinence with its unpleasant side effects and establishes self-monitoring which as we saw is a method of modifying undesirable habits by scrutinising them and selecting our own reinforcers which is prayer in that case.

The final phase of the shaping process is in the following part of the Quran, in the Sura of (المائدة) The Table Spread:

يا أيها الذين آمنوا إنما الخمر والميسر والأنصاب والأزلام رجس من عمل الشيطان فاجتنبوه لعلكم تفلحون .

O YE WHO BELIEVE! STRONG DRINK AND GAMES OF CHANCE AND IDOLS AND DIVINING ARROWS ARE ONLY AN INFAMY OF SATAN'S HANDIWORK. LEAVE IT ASIDE IN ORDER THAT YE MAY SUCCEED ¹³ .

(S. 5: V.93)

In this Ayah, drinking, gambling and heathen practices are associated with "Abomination" and "Satan". The behaviour which is being reinforced is avoidance of drinking and other practices and the reinforcer is the strong condemnatory wording of the Ayah.

Modelling which was first described by the American Psychologist Albert Bandura as a technique of behaviour modification can be found in the Quran¹⁴.

Modelling or observational learning means learning new behavioural patterns performed by another individual or a model with positive or negative reinforcement and reproducing the model's behaviour in

his absence as well as spontaneously in similar situations¹⁴. Modelling differs from imitation in two important aspects: In modelling, there is usually a strong emotional attachment between the model and the observer. The behavioural pattern is reproduced as a response to the symbolic representation of the model, such as hearing his name or imagining him on reading a novel. When a passerby stops and glances at a shopwindow and others do the same without even knowing him, such behaviour is imitation. A patient who has a fear of cats and watches the therapist fondle cats and repeats his acts even in his absence has been modelled by the therapist.

Models are not chosen at random, but must possess certain attributes in order to be successful in their task. Those models who demonstrate competence, who are experts or celebrities, possess status conferring symbols as well, are more liable to model behaviour effectively¹⁴. The age, sex and ethnic status of the model also influence the observer's behaviour¹⁴.

In Islam, our model is the prophet (ﷺ) as explicitly understood from the following Ayah of Sura of (الأحزاب) The Clans:

لقد كان لكم في رسول الله أسوة حسنة .

*VERILY IN THE MESSENGER OF ALLAH YE HAVE A GOOD EXAMPLE*¹³

(S.33: V.21)

What were those attributes which made the Prophet (ﷺ) the perfect model:

قل إنما أنا بشر مثلكم يوحى إلى

*SAY: I AM ONLY A MORTAL LIKE YOU. MY LORD INSPIRETH IN ME**

(Quran S18: V.110)

* This Ayah emphasises that the model is but a man like his followers which facilitates identification with him and enhances successful modelling.

He has status conferring symbols because by obeying him and practicing his deeds we become closer to the Creator. The affective valence of the model, as mediated by their attractiveness and other rewarding qualities which augment observational learning and that is precisely what God prescribes to His Messenger (ﷺ) in the following Ayahs of Sura of (التوبة) Repentance:

لقد جاءكم رسول من أنفسكم عزيز عليه ما عنتم حريص عليكم بالمؤمنين رؤوف رحيم

*THERE HATH COME UNTO YOU A MESSENGER (ONE) OF YOURSELVES, UNTO WHOM AUGHT THAT WE ARE OVER-BURDENED IS GRIEVIUS, FULL OF CONCERN FOR YOU, FOR THE BELIEVERS FULL OF PITY, MERCIFUL*¹³

(S.9: V.128)

The model is one of the observers and he cares for them which is one of the attributes of a successful model. He is kind, gentle and rewarding in his ways.

فيا رحمة من الله لنت لهم ولو كنت فظاً غليظ القلب لا نفضوا من حولك

*IT WAS BY THE MERCY OF ALLAH THAT THOU WAST LENIENT WITH THEM (O MOHAMMED), FOR IF THOU HADST BEEN STERN AND FIERCE OF HEART THEY WOULD HAVE DISPERSED FROM ROUNDABOUT THEE*¹³.

(S.3; V.159)

ادعو إلى سبيل ربك بالحكمة والموعظة الحسنة وجادلهم بالتي هي أحسن .

*CALL UNTO THE WAY OF THY LORD WITH WISDOM AND FAIR EXHORTATION, AND REASON WITH THEM IN THE BETTER WAY*¹³ .

(S.16: V.125)

Thus the Prophet's ways were those of the perfect model who would ensure maximal learning by his followers.

We also find examples of self-monitoring in al-Imam al-Ghazaly's book "Revival of the Sciences of Religion".⁵ In that work, the Imam describes how our Prophet (ﷺ) instructs the believers to deal with outbursts of anger:

"One should beg for the forgiveness of god. If anger still persists, one should sit down if standing and lie down if already seated."

These consecutive behaviours lead us to scrutinise our emotional angry behaviour and disrupt its spontaneity and automaticity. Another method applied for the same purpose is to perform the minor ablution (al-wuzuh) which has the previous qualities besides it being incompatible with tension or violent emotions because ablutions are associated with preparation for prayer which has to be approached in a humble, serene and devoted frame of mind. Prayer itself is self-monitoring and incompatible with anxiety and anger. Movements and sounds such as moaning or whining and haste nullify a moslem's prayer¹⁵.

Behaviour therapy was practised by Rhazes¹⁶ as seen from the following anecdote:

"Rhazes was forcibly summoned by the Amir Mansur Ibn Ishakh Ibn Ahmad Ibn Assad the second Samanian King and ruler of el-Rayy where Rhazes was born and which lies a few miles outside modern Teheran¹⁷ to treat him from, what seemed to be, a rheumatic affliction of his joints which none of his medical attendants could cure. When Rhazes came to the Amir, he tried various treatments without success. Finally, he took the Amir to a hot bath outside the city and entered the hot room of the bath with his patient alone. He then took out a knife and began reviling the Amir for forcing him to come to see him, and threatened then to take his life in retaliation. The Amir was furious and partly from fear, partly from anger, sprang to his feet and ran after Rhazes. The latter ran away at once and went home, then wrote to the Amir a conciliatory letter explaining the purpose of his unconventional approach".

One can tentatively try to explain what happened in the light of modern psychophysiological findings.

The Amir was suffering from a rheumatic or rheumatoid condition which could well have been psychosomatic. Chronic disease acts as a chronic stress over which the patient usually has no control. Seligman's work on dogs¹⁸ which were exposed repeatedly to painful electric shocks would not try to avoid the shocks even when the opportunity arose. This condition was described by Seligman as "Learned helplessness". Biochemical studies suggest that brain noradrenaline is lowered in this condition which explains the depression. Coming to Amir Mansur who was suffering from a chronic stressful and distressful condition over which he had no control; he may probably have experienced depression, listlessness and simply gave up. According to Seligman's paradigm, he was in a state of learned helplessness¹⁹.

In fact, Rhazes did two things. He created a sudden and acutely stressful situation, but with one important difference, namely the Amir could do something about it. He was no longer helpless in the face of this new stress, he could act! He responded to Rhazes' insults and threats by running after him. This situation was termed "dragging" therapy by Seligman²⁰. If the helpless animal is forced to face a way of escape he recovers from his helplessness and acts, and this is precisely what happened to the Amir. The other sequence of events which resulted from Rhazes' behaviour was stimulation of the hypothalamic - hypophyseal axis of his patient which led to the liberation of the stress hormones cortisol and noradrenaline, both of which elevate the mood. Furthermore, stress as recently shown liberates the endorphins and enkephalins of the brain which are our own endogenous analgesics manufactured by the brain²⁰. As we see, a psycho - somato - psychic therapeutic chain was established leading to the

dramatic response of the patient. We may ask which behavioural technique did Rhazes apply in this case and the answer is that he was practising role playing during which the therapist behaves in an artificial and purposeful way to elicit certain behavioural patterns in his patient.

Al-Imam al-Ghazaly⁵ also applied behavioural techniques which can be found in the chapter of "Fear and Hope". He refers to three types of behaviour displayed by certain people and describes how they should be managed.

The first type is overwhelmed with despair and abandons worship, the second is overcome with fear and overindulges in worship to the detriment of his well being and the welfare of his kith and kin, and a third type is the renegade and vain who undeservingly hopes for God's munificence while neglecting worship and committing misdeeds (Diagramme 4). As for the desperate and anxious, the Imam prescribes eliciting hope by contemplating all the good things with which the Creator provided mankind, in addition to looking into those Ayahs which refer to God's mercifulness and forgiveness. Incidents and events from Islamic history with an identical meaning should also be contemplated. Eliciting hope in the renegade on the other hand can be harmful and destructive. He should better be confronted with fear inducing Ayahs which emphasize punishment, suffering and the misery which he should expect. This approach is an example of the proper and therapeutic use of Quranic material as reinforcers of behaviour negatively or positively.

The Hypothetical Model

We would like to formulate our hypothesis in the following way, "The use of suitable religious material in selected techniques of behaviour therapy in religious and latently religious individuals after having scientifically mobilised their religious resources would lead to a better and more lasting improvements than if the Western conventional approach were adopted". However, we do state at the outset that we shall try to disprove this hypothesis and only if we fail to do so, can its validity be justified. Such a failure, however, should never be construed as implying any shortcomings of Islamic concepts, but should rather be attributed to a wrong formulation or errors of methodology.

You may have noted that in this hypothesis, like many others, many terms need precise definitions and explanations and we shall consider each in turn:

1. *Religious material*: It refers to a classification of Ayahs and Hadiths into anxiety inducing and anxiety reducing by exposing a random representative sample of religious and latently religious individual to the chosen item on a screen and record his psychological reactions, by which we mean chiefly anxiety, by psychometry and data polygraphy: pulse, B.P., pupillometry, ECG, EMG, etc.. before, during and after exposure. If an item is found to be anxiety provoking, we should test the anxiety relieving effects of an item which emphasises a meaning opposite to the first and the other way round. We thereby aim at grouping Ayahs and Hadiths on scientifically proven ground into the two previously mentioned categories.
2. *Religious or devout*: Religion has been defined by William James in 1902²¹ as "The feelings, the acts and the experience of individual men... So far as they apprehend themselves to stand in relation to whatever they may consider the divine". Gordon Allport²¹ divided religion into extrinsic and intrinsic and defines each variety. The authors completely disagree with his definitions but will retain the dichotomy, using their own definitions. The extrinsic aspect of Islam refers to the observable practices, such as: daily prayer, Friday prayer, fasting and so on. The intrinsic aspect, on the other hand floods the whole life of the moslem with motivation and meaning. It includes those feelings which a moslem experiences towards Allah and his prophets, the Quran, Hadith and injunctions of his religion.

The measure of attitudes is a part of the science of psychometry and is the concern of our brethren the Islamic psychologists whose contribution in that area could be of tremendous importance. However, as a temporary expedient the authors intend to use the scale of devoutness designed by Dr. S. Abdel Motaal which quantifies the extrinsic aspect of religion, much so ever inadequate as this may sound (Diagramme 5).

3. *The degree of devoutness:* Abul A'La Maududi²² classifies moslems into 4 categories: Those who have firm faith, those whose faith is not deep and strong, those who do not possess faith at all and those who neither possess faith nor do good deeds. Since a measure of taxonomy is essential for any scientific approach, the authors have adopted a modified form of the previous classification..

We thus have the following groups:

- (1) The religious who believe in God and his prophets, The Quran and Hadith and abide by their injunctions and therefore commit no misdeeds.
- (2) The latently religious: believe in God and his prophets but either practices regularly and commits misdeeds or practices irregularly or not at all and may or may not commit misdeeds.
- (3) The non-religious: do not believe in God at all and consequently do not practice.

Our chief concern will be with the first two categories as far as Islamic Behaviour therapy is concerned. The non-religious will be treated along Western lines unless they choose differently (Diagram 6).

Each of these categories can be placed on Eysenck's dimensional scale. Thus a religious individual may be unstable and extrovert or stable and introvert and so on. We hope again, that, psychometry may one day establish the correlation between devoutness in Islam and these dimensions. The value of this rather lengthy argument lies in the fact that only by having reliable prognostic and objective evaluative measurements of this kind can we hope to find what we are looking for.

4. *Selected techniques of behaviour therapy:* We intend to apply our model to systematic desensitisation and covert sensitisation only at this stage.
5. *Scientific mobilisation of religious resources:* In the course of this process, we suggest the assessment of each individual patient's devoutness and allocating him to one of our three categories. Then we shall measure his stability and extraversion. Following that, each category will be subject to a different approach. The religious individual will need heightening of his awareness of religion and its role in therapy by discussions, either individually or in groups and possibly in a mosque. A latently religious individual needs different approaches, such as: re-education, modelling, shaping, cognitive rehearsal or suggestion. The non-religious will be given the choice between the Western conventional treatment or the application of the techniques used with the latently religious.

In an inquiry of this sort which may sound like a monologue, without interruption one is too easily tempted into brushing aside thoughts which break into it. We shall, therefore, imagine that we have an opponent who follows this last argument with distrust and who will here and there interject some remarks. He may ask for instance: Aren't you really advocating the practice of some form of disguised coercive persuasion or "brainwashing" with your glib arguments?

What you in fact describe is a method of imposing your religious views on the patient which is contrary to the ethics of psychotherapy! There is nothing really new in what you say except using Ayahs from the Quran, and why go to such lengths if the Western model is so successful!

Our answer to the first question is that Islam is holistic and encompasses the temporal as well as the secular aspects of the life of its followers. Islam is not only a religion, but a Weltanshaung view of

the world, or better still a way of life in all its aspects. Those who have been subject to its influence bear its indelible stamp and many agnostics, to their considerable chagrin, cannot escape sometimes its influence altogether, however recalcitrant they may feel about it.

Almost every psychotherapist will agree that one of his objectives is to mobilise his patient's resources to cope with stress and distress. He may advise him to develop his hobbies, study, take up sports or practice meditation. Why should we then deny religion the status of these activities? The objections of our imaginary interrogator probably stem from the bias of some Western Judaic - Christian psychotherapists and psychiatrists against religion which has its historical roots in Freudian psychoanalysis. This attitude has been relevantly criticised by Badri²³ in his elegant little tome. Even in the Western culture, the pendulum seems to be swinging in the opposite direction, and this attitude is being increasingly recognised as unconstructive. Professor James Gill²¹ of Harvard University had the following to say about religion:

“Moreover, stable and profound religious thoughts and sentiments can add dimension and richness to the quality of one's maturity. It has been the writer's experience as a physician to encounter a large number of deeply religious persons of different “Faiths” whose mental health appeared to be strongly supported by the elements comprising their personal religious beliefs and practices. On the other hand, experience with neurotic and psychotic individuals, as well as with many suffering from the various types of character disorders, has provided striking evidence of the lack of such supporting elements in their lives”.

So in fact, we are not brainwashing but tapping a resource.

As to the ethics of psychotherapy which according to some schools consist in a completely passive attitude on the part of the therapist, and forbid him from expressing his religious views to patients so inclined, we refer to the work of Badri²⁴ once more and it has yet to be proved that the Western model is really successful in Islamic cultures. So there is nothing unethical in what we suggested nor can our hypothesis be considered redundant until proved otherwise.

Methodology

We propose to examine a random sample of phobic and sexually perverted patients and divide them, process them and assign them to one of the two following protocols: in a random fashion:

Schedule A

Protocol I: Assessment (clinical, psychometry, psycho - physiologically) to establish a baseline or operational rate, conventional systematic desensitisation or covert sensitisation with the application of the same measurements mentioned in assessment during and after treatment and at 6 months and 12 months follow up.

Protocol II: Assessment (as above)... establishing the level of devoutness... mobilisation of religious resources... treatment as above. In this experimental design as well as others a double blind technique will be employed. The variable we try to measure is the effect of mobilisation of religious resources on treatment and its outcome.

Schedule B

In this schedule which will be carried out concomitantly, each subject will be assessed as mentioned above, his religious resources mobilised and he will be exposed to a selection of Ayahs to know which are anxiety relieving and which anxiety enhancing. Next each subject will be randomly allocated to one

of 3 groups. In group A an anxiety reducing Ayah will be read through a hidden microphone in a neutral voice during instruction in progressive muscular relaxation. As the patient progressively relaxes as judged from the relaxometer readings another Ayah with similar effect will be read. Whenever the patient feels anxious as he is progressively asked to imagine increasingly anxiety provoking situations the Ayah is read and he is asked to imagine it and relax. In group B a neutral noise will be used. In group C, the conventional method used by behavioural therapist in Western countries will be applied. After the trial is over, the ratings and measurements will be compared and statistically analysed for comparison. In this trial also a double blind technique will be used. The variable which we shall attempt to examine is the difference between meaningful religious material, a neutral noise and non religious instructions. Moreover, in the analysis, the initial devoutness group to which patients belong will be considered to wit, religious, potentially religious etc...

We do not imply by any means that these schedules are perfect or uncriticisable. We are just starting to examine the issue in an objective way and we should never forget that science is a self-appraising discipline.

Needless to say that therapists who attempt such trials should be Islamic, and we use this word advisedly instead of Muslim, because a therapist may be a muslim yet indifferent to Islamic concepts, or avoid applying them altogether. So by the adjective "Islamic" we mean an attitude and a commitment to Islamic scientific concepts. The therapist should also possess an adequate amount of knowledge of religion in order to be able to face his patients confidently (Diagram 6).

Now such endeavours as are undertaken by contemporary Islamic scientists are not the end, nor the beginning of the end. But we may perhaps call them the end of a beginning which until recently was largely characterised by rhetoric redundancy, disunity and lack of clarity of purpose.

So let us with God's will substitute rhetoric by industry and supplant vague subjective views by scientific methodology! Let us unite and strive for our goals with a clear mind and unfaltering steps, supported by our noble faith and armed with the tools of modern science, so that posterity may say one day: They were indeed worthy successors of Rhazes, Avicenna and the other figures of the Islamic pantheon of science..

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POINTS ON THE CONCEPT OF MAN AND HIS SPIRITUAL POWERS IN ISLAM

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MOROCCO

GENERALITIES:

1. Islamic medicine is based on the image of man in Islam and the Islamic comprehensive view of man and the universe.
2. If Chinese medicine, for instance, has been characterised by a special approach to the nervous system that is drastically different from the universal academic anatomy of this system, Islamic medicine is characterised by its overall view of man as an integral composite of physiological, psychological, mental, and spiritual components unaffected by changeable intellectual trends which are confined to materialism or sectarianism.
3. On the basis of this universal concept of man the spiritual and material prescriptions of Islamic medicine are as good to all mankind as those of modern medicine.
4. The great advantage of Islam lies in the possibility for those nearest to God who have revelations of the Inscribed Register, as the Quran says, to be elevated to the supramundane lights.
5. Therefore, the Muslim doctor may prescribe aspiration to such heights to Muslims and non-Muslims alike according to the patient's strength of faith.
6. The scientific, medical, philosophical, and psychological schools in the West are still investigating the image of man about which Carl Jaspers says it is out of reach, beyond perception and eludes scientific research.
7. Man is naturally equipped to utilize strength of will, self-confidence and faith in God in getting cured from a host of diseases.
8. Contemplation, remembrance of God, peace of mind, silence, seclusion, hope, optimism, worships, adherence to Shariah, combining material and moral medicine when necessary as enjoined by the Sunna are all aspects of extensive work from an overall point of view based on the moral potentials of life as well as on:
 - a) Mystic and secular sciences based on faith.
 - b) Diligence, which is the highest form of will, based on confidence in God and reliance on Him.
 - c) Enlightened conduct without narrow-mindedness or ingratitude.
9. Recent experiments add yet another evidence in support of the effective role of the spiritual approach to treatment involving will, contemplation and submission to God.
10. Psychosomatic medicine is a good start towards appreciating the interaction between body and mind. Some psychosomaticists have embarked on a series of experiments to determine the nature of bio-electric changes in the body resulting from total absorption in Salaat (prayer) and complete submission to God during it. The aim is to establish the therapeutic effectiveness of the spiritual approach to treatment.
11. The ultimate objective of medicine is the maintenance of man's material and moral well-being through education, development, enhancement, and prevention of various diseases as well as through prescribing all sorts of treatment that are materially and morally effective. According to the Islamic heritage, there are two closely related kinds of science: the science of bodies and the sci-

ence of religions. The real purpose of medicine should be to help man lead a sound material and moral life so that when he dies he may return to his Creator with a clear conscience.

12. What should be of primary concern to us is the real, not the theoretical, image of man. Scientific endeavours should be made to keep this image pure, undistorted by ideologies and preconceived ideas based on mere conjectures and not on solid scientific grounds. We should also extend our view beyond the limited area of secular sciences into that vast realm of mysticism combining material and spiritual factors. Man stands to gain both physically and spiritually depending on how further up he can be elevated to the supramundane heights, how much he values faith and will, and whether his attitude to his God is positive.
13. The evoked spiritual power of healing ranges from the ability to effect personal cure to the ability invested in prophets and God's favourites to cure the blind and the leper, depending on the rank of the soul.
14. All medical evidence in all civilizations and religions support this thesis.

I THE MEETING-POINT OF MATTER AND MEANING, THE CONCRETE AND THE ABSTRACT:

If human knowledge is indeed mainly divided into the science of bodies and the science of religions, it occurs to one's mind that medicine, the knowledge closest to man, may be presented in two forms: material medicine using surgery and materia medica, and moral medicine using the mind and resolution to enter into a state of submission and deep reflection based on a certain creed or established wisdom.

This latter form has gradually been gaining a notable status with a considerable number of doctors all over the world who seem to be saying that if only people could realize the therapeutic potentials latent in their spiritual powers they would readily dispense with a good deal of the drugs they consume every day which, however, treat only the symptoms without in any way penetrating to the causes.

The deeper we think of and investigate the real meaning of matter and the real image of man, the more this spiritual aspect and its therapeutic techniques grow in importance. Physicists and technologists have come to recognize the dematerialization of matter, the thinglessness of things, and the desubstantiation of substance. When they got down in their researches to the infinitesimal state of matter after breaking it up and splitting the atom into electrons of various types and forms they could not get beyond the concept of electro-magnetic energy and a multitude of complex mathematical operations reaching a point where the material structure of things came pretty close to the abstract meaning of the general scientific concepts. Some even went so far as to say that the concept of electron and electronic energy with regard to man can never be understood unless his image in our minds is given a spiritual meaning. The French physicist, Jean E. Charon, calls the spirit-carrying electron, as he conceives it, "EON". He says, "We have tried to analyse thinking as a simple psychological process performed by each one of the electrons of which our organism consists. What we have found very clearly, however, is that our mind, which is very similar to the spirit existent in the electrons, also performs the process of thinking each time we undertake to do a certain job or whenever we try to form a new idea. That is, we create new meanings based on information stored in the memory.

On a deeper level, what we call consideration follows the same mechanism of contemplation and thinking. In view of what we have said, one can realize the great significance of contemplation to spiritual situations.

We should be aware of the fact that our spiritual roots reach back to millions of years ago. This constitutes a vast field of knowledge treasured deep down in our unconsciousness. For this vast knowledge to surface in our conscious minds we have to give every opportunity to our electrons to enhance the contemplation process, i.e. to make us discover artificial signs that can at the right time be decoded

and interpreted in our consciousness as symbols. Consideration on the human level takes another form. When the human body undergoes a certain disorder we ask ourselves what could restore it to its normal condition? Well, it is the electrons themselves. The health of the body is nothing more than the psychological harmony of our eons.

When we are ill, either physically or mentally, what we usually do is to hurry to the doctor, or at least that is what the modern man does now. Yet, animals and plants are not liable to such frequent recurrence of disorder.

I am not trying to underestimate the role of doctors or of the enormous amount of drugs they prescribe for their patients. But in the long run, no matter what the role of the doctor is or the effectiveness of the drugs he prescribes, the electrons from which our bodies are made up will have to depend on themselves in restoring balance to the sick body. Here, too, I think that consideration has an important role to play. The influence of the spirit on the body and its vital role in effecting cure has long ceased to be a cause for surprise especially in the dying years of the 20th century when a host of physical diseases are treated by psychiatry. I believe there is still a lot to be done in this direction. Many of our doctors still consider the patient just a physical body where the spirit plays only a peripheral part.

The fundamental cause of disease is disorder in the spiritual functioning of our eons when they have to accept information they fail to harmonize with their stored information. The source of the new information is the conscious mind, that is, of every day life. The reason why certain therapies, like the acupuncture, have succeeded is that it is our electrons that are mostly affected by the disorder. Acupuncture is a means of bringing about electric balance in the body through redistributing its electric charges. But such a treatment affects only the less important symptoms of the ailment, the profound causation of which lies, in fact, on the level of the spirit these eons carry. This spirit should be activated towards contributing to the cure. Who hasn't experienced relief of pain at a certain spot of the body once he concentrated his mental power on this particular spot? A great deal is still unknown about the potentials of our mental and spiritual powers and their great influence on the body functions.

It is the unconscious which is charged with the main life-preserving functions such as respiration and digestion. This does not mean, however, the futility of opening up a channel of communication between our conscious mind and these unconscious functions of the body for achieving a state of balance and to enable the conscious mind to feel and follow up these unconscious processes. This way the mind is in a better position to anticipate the disorder and, in a way, forestall it. Through concentrated thinking the mind is thus able in a far easier way to determine its contribution in bringing balance back to a malfunctioning unconscious process. The Indian Hakims say, "Feel your breathing and be aware of its importance. Try to influence it by your conscious minds".

Thinking, thus, emerges as a very important process for every spiritual development in the universe. On the level of each electron, this thinking seems to be the proper way of organizing the influx of heterogenous information from the outer world into a meaningful, homogenous body of knowledge that helps one brace up for a future action.

Hence, it is becoming clear for scholars of physics, psychology, biology, and, to some extent, philosophy that the wide gap which previously separated matter from spirit and meaning from structure is gradually narrowing down. Consequently, the artificial gap between body and soul is being bridged in an apparent recognition of the interaction between them especially in the field of medicine with respect to prevention as well as treatment. This recognition is based on the diminishing of the molecules of matter to atoms, then to electrons which has led up to the concept of energy, a point beyond which there are only meanings of abstract notions or mathematical equations. Matter here becomes nothing more than a set of relations and proportions that translate to the mind motions and interacting electro-magnetic energies.

If we envisage the body cells and their ingredients as composed of chemical materials the tiniest of which are the electro-magnetic eons and pure motion, we can easily conceive the great similarity between mental functions and the functions of these physical, infinitesimally small eons and the interaction between body and mind, i.e. between matter and thought. Recognition of this interaction, particularly in the field of medicine, is bound to change our attitudes in trying to maintain a balance between the physical and psychological aspects of the human body, and bring about harmony to the functions of the body and of the soul individually, and then harmony between body and soul as the integrated sum of the human personality.

When we conceive of man as a harmonious composite of body and soul, little wonder will remain in accepting the idea of spiritual treatment and its great physical and psychological efficacy.

There has recently been a time when materialistic thinking prevailed in scientific research leading to a wave of relevant atheism. Under those circumstances it was difficult to pay any attention to spiritual treatment except when it was confined to hypnotism or the distorted practice of boringly slow psycho-analysis based on a distorted conception of the human soul as is well known about the Freudan doctrine and its followers.

This unhappy distortion did not pass without casualties. It resulted in perplexity of minds and perturbation of individual and social behaviour which in turn led to great confusion among the common people and a great rift into various schools of thought among the scholars of medicine, psychology and the humanities. The impervious confinement of man into this stifling mould of matter deprived him of a great portion of his due potentials and deformed his real image. Individuals and societies have been paying a high price for this deformation. The world we live in is suffering from a host of various physical and psychological disorders dubbed by the medical public opinion as "The ailments of civilization" with all the ironical paradox that goes with the term in collocating the two words "ailment" and "civilization"; for if there really was an ideal civilization as dreamed of by mind and heart it would not be so deformed by intellectual and ethical impurities, nor would there be that large number of neuroses and psychoses in addition to disorders in most of our physical organs. What is called modernism now is characterised by the word "pollution" of the environment including the human body besides pollution of souls which reveals itself in reversal of facts, forging of information, ideological terrorism, and the presentation of man in the image of an animal.

In such a turbid atmosphere, when "hearts are locked up", it is hardly expected that the idea of spiritual treatment can be embraced. The image of man that modern medicine is still investigating is one outlined in a set of psychological factors, avoiding any mention of words like spirit or even soul, and another set of physiological factors.

1) Despite these continued efforts, modern medicine admits its inability to solve man's problem especially when it comes to the relation between his body and his soul. How can a doctor believe in what he is doing when he is so confused?

2) Psychologists are following an ostrich-style policy of dodging an adequate definition of the term "soul".

3) Some physicians admit that man in general and man's soul in particular are simultaneously related to the fields of medicine, sciences and philosophy. But the philosophy of medicine runs into contradictions when it is confined to the physical image to the neglect of the spiritual side. It says that man has a body and he is also this body. This is as contradictory as saying that man has a house and he is also this house. Man cannot be what he owns. This philosophical attitude was therefore very unsatisfactory. Modern medicine has finally settled for ignoring the whole issue.

4) The image of man has gradually been shrinking to the point where his meaning has become

purely materialistic and, consequently, vague. This state of affairs has led to psychological crises and serious morbid developments such as the prevalence of rejection, recalcitrance, neurosis, psychosis, aggression, etc. The recession of man's image was engendered by the positivistic movement and monolithic materialism. The value of spiritualism has been lost sight of and its real meaning has gone with the wind. Consequently, the value of the mind has declined after it was described by the materialists as a mere secretion of the brain and particularly after man has completely lost confidence in himself and in his superiority to other creatures as a result of Darwinism. Talk about spiritualism has ceased, and psychologists have disavowed the term "psyche" and started talking about "behaviourism".

Since the materialistic sciences as expounded by the contemporary barren mentality have failed to meet man's essential need of wanting to know his real image, meaning and purpose of living, some thinkers have admitted the futility of such sciences. Jean Paul Sartre, for instance, said, "What do I care about sciences?" So, man is left with no protection against anxiety, boredom, the bitter meaning of absurdity, and the prevalence of depression as happened at the turn of the 19th century when it came to be known in the history of Western literature, particularly in France, as "the malady of the age". Life then, in the words of some writers at that time, became a cadaverous affair based on a dry, heartless and mean trinity of lust for money, selfishness and individualism, which, by the way, was the official motto recommended by government circles for the citizens; "Stay at home and mind your own business". No wonder, then, that the age came to a disastrous end characterised by a spate of suicides after all that chaos and corruption of souls and the sharp rise in the rate of physical and psychological diseases.

5) In recent years, however, medical scientists have come around to admitting the necessity of recognizing certain clear psychological factors that deeply affect the human body such as exhaustion, nervous tension and violent crises.

6) Modern medicine recognizes various trends including the materialistic unilateral view which accepts the body only, and the dichotomous view which does not deny the existence of two factors: the body and the soul as an integrated unit which is the human being or, more accurately, the "person".

7) In every day life, body and soul are closely related. Physical stimuli become psychological responses and vice versa.

All mental faculties including consciousness, attention, telepathy, perception, reasoning, judgement, consideration, understanding, memory, resolutions, decision-making, behaviour, concepts, emotions, desires, passion, feelings, etc. are physically based at least in terms of the good condition of the brain and glands and the effects on the mind of the environment, circumstances, nutrition, narcotics and liquors which cause changes in mental behaviour. By the same token, psychological factors clearly affect the body especially with relation to heart beats, blood pressure, metabolism, shivering, hair standing on end, secretions, fainting, shyness, paleness, etc.

But medical research has not been able so far to explain the process whereby the body affects the mind and vice versa to the extent that the physician-philosopher, Karl Jaspers described this process as "Magie Factice = Factsche Magie". There is also the enigma of sensory perception being turned into abstract conception and a psychological state or attitude.

Modern medicine is also faced with the dilemma of the organic location of the mind or the faculties. The question that eludes answer is: where exactly in the body do the mental processes take place? There is also the question of the particular type the mind has taken which gives the body its unique form throughout the stages of development envisaged by modern scientific research where the body appears as a carrier of sensation and motion, and the mind as a vague image. Is it a substance or just a mean-

ing? Is it part of the body or independent and pre-existent before the body takes shape?, to the rest of these philosophical, religious and medical theories that cannot be expounded here in detail.

The conclusion reached by the American behaviourists, however, is a type of psychology without psyche opting for the materialistic theory to the neglect of other theories. Their view of man is that he is more or less an animal, whose body is a machine worked by its physiological functions. As for the mind, it is nothing more than one aspect of these functions.

8) Then Marxism stepped in and ideologized the rigidity of materialism until it almost became a fanatic creed that aggressively blocked all routes to discussion and honest scientific research. Scientists were gagged, and nature was presented in its material form alone.

9) In the wake of this rigidity, Kretschmer cited the case of a child who is born blind and dumb. Psychologists and physicians began to wonder how such a child could possibly have a full psychological and mental life without access to tactile sensations. How could this happen if matter was really the origin of psychological life and the source of mental processes?

10) The efforts made at present have ended up by creating a situation pervaded by conflicting opinions, multiplicity of theories, and increased difficulties for finding a solution to man's problem and determining the relation between soul and body. All these efforts have so far failed to come up with a clear definition of man's entity with a view to understanding his meaning and elucidating methods of treating his diseases on the basis of this interaction between body and soul. Scientific research today is also trying to understand the relation between body and soul, but Karl Jaspers underscored the difficulty of such a quest, when he said, "The image of man is beyond our reach and eludes scientific research".

II. THE UNITY OF MAN AND HIS COMPONENTS IN THE HERITAGE:

Man is a well-ordered unit each part of which is held accountable for his deeds such as good or bad intentions, moderation in nutrition, chastity of his body extremities, abstinence from sins, and ignorance which leads to wronging oneself and others as well and renders one liable to many physical, mental and psychological disorders.

In Islamic heritage man's image is characterised by cohesion and comprehensiveness. The Quran says:

WE HAVE INDEED CREATED MAN IN THE BEST OF MOULDS.

(S95: V4)

This superior image is made of many components including:

1. *The Body*: It is the point of contact between man and the world as well as between man and himself.
2. *Al-nafs*(The soul): It is man's self which is accountable for his deeds. It is educatable and capable of sublimation and nearness to God.
3. *The mind*: It is the mind that is charged with carrying out man's mission on earth.
4. *The heart*: It is the seat of God's light and canonical laws and faith in them.
5. *Al-Ruh*(The spirit): This is the divine breath that irradiates the whole of man's being at the moment of his creation. It is qualified to do what is outside physical or natural laws.

Our good ancestors were keen to attain self-knowledge, as a means of prevention against individual and social maladies, through strict observation of the Holy Scripture, the Sunna, and the Islamic laws. Islamic literature has elaborated the two components spirit and Soul, often considering them two variants of the same concept though they occur in the Quran and Tradition (Hadith) with various meanings.

In this brief presentation we shall limit ourselves to the following elucidation of man's image from the perspective of a contemplative view of life and Islamic heritage.

The human body is the visible component of man's identity and is different from the animal body in that its members are held accountable for man's deeds because they are created for a noble purpose. In this sense, the body is the total sum of its individual extremities or of the purposes for which they have been created. The unbeliever regards these extremities as nothing more or less than a set of members devoid of any special life of their own. He fails to recognize that each of these members has a noble function to perform and that man should never undermine these members or tamper with their activities, for they are not as instinctively stimulated as the members of an animal's body are. The hand, for instance, is created for fruitful work and not for striking, stealing, aggression, distortion, forgery, etc. Rather, it is a means of production and worship. The same principle applies to each one of the other extremities of the body which are created to behave in the framework of the religious teachings so that man's whole being may be sublimated to the supramundane levels of nobility and charity from the mundane levels of evil, prohibitions, and corruption.

In the course of man's spiritual development, *al-nafs* (the soul) passes through many stages each of which is higher in rank than the one before. These stages include:

1. The vegetal soul:

This is the embryonic stage where, like plants, the soul is marked with stationary life and growth but, again like plants, joins in God's glorification in its own language which we do not comprehend. At this stage, the mother should maintain feelings of reassurance and contentment and strike a balance between material and moral living through rest and stability to ward off any undesirable complications occurring to herself or her baby. The best means of attaining reassurance and serenity is regular prayer, remembrance of God and, as much as possible, avoidance of drugs that may have toxic or deforming effects on the body.

2. The animal soul:

This is the stage of infancy when the suckling which was connected to its mother by the umbilical cord is now tied up to her by the lifepreserving trickle of milk and the warmth-giving embrace of sympathy and love. At this stage when the soul is still living in an atmosphere of innocence and God's glorification, the mother should give her baby a large dose of love, fondling and kindness to shield it against acquired frivolity and privation when later she becomes unavailable through death or when she is away at work leaving her children alone at home exposed to all kinds of physical and psychological perils of a fire breaking out accidentally in the kitchen, or toxic drugs or detergents swallowed. In addition, there are other possible dangers arising from the maid's cruelty, inefficiency or ignorance of proper child care.

At this stage also the mind begins to open up to sensory perceptions and a little later to abstract conceptions when the baby becomes curious about the outer world and wants to know through hearing, seeing, touching and later through its conceiving heart. This gradual development from perceiving the concrete through the senses into conceiving the abstract through the heart and mind should be taken into account by education to cope with the stage of moral development where altruism should be made to prevail over selfishness. This is the stage when seeds of righteousness should be sown so that when the child grows to adulthood he can be expected to respect the rights of others, have confidence in God, think well of people, and hold out against temperamental and psychological maladies to which young people are usually liable such as paranoia, fantasy, infatuation, delusion, depression, etc.

This is especially so because such traits as selfishness, possessiveness, domination, struggle, craze for winning and seizing make their fullest appearance at the stage of life extending from boyhood to puberty and the beginning of adulthood. During this stage another rank of soul is fully conspicuous:

3. Al-nafsul Ammarah: (The evil-inciting soul)

This is man's baser self which always incites him to do evil. The common people say, "The moment a child learns how to clap his hands, he drops the keys of heaven", indicating that the best of moulds in which man is created is taking a gradual downward course to the lowest of the low when selfishness begins to take a grip on him. The only hope for safety lies in Islamic education and the implementation of Islamic laws to combat juvenile delinquency and criminal behaviour. Application of Islamic teachings is the only guarantee for society against anxiety and boredom; pollution of mind, body, and environment; disunity of families and of the whole nation; imbalance, instability, etc. which lead to individual disorder and national deterioration.

Religious upbringing followed and reinforced by proper education that utilizes the natural tendencies will lead to love of truth, good, and beauty giving rise to the higher rank of:

4. Al-nafsul Lawwamah: (self-reproaching soul)

In today's terminology this is the conscience or the scrupulous heart that seeks to attain the three noble aims of truth, piety, and right conduct. Corresponding to physical exercises, these are the strongest spiritual exercises for self-purification, spiritual elevation and personal integrity. This is in sharp contrast with the unsteady personality, characteristic of the invading Western civilization, which is liable to psychological and mental disorders and is notorious for being prone to perversion of facts and distortion of knowledge in the so-called humanities. Such traits are bound to end up with disintegration of both the individual and the whole nation.

5. Al-nafsul-Mutma'innah: (The reassured soul)

A person with such a soul is characterised by stability, equilibrium, moderation, firm opinion and sound judgement based on divine revelation in the Holy Scripture, the Sunna, and the examples set by our good ancestors. Responding positively to the call by God and His apostle (ﷺ) for adopting the right way of honest living, he enjoys a peaceful and good life free from the grip of rank, wealth, greed, lust, passion, and corruption. He knows only too well that God the Almighty is merciful to mankind and that the occasional incidence of such ordeals as fear, hunger, loss of wealth or dear relatives or health is only God's way of testing His servants' fortitude and patience. Those lucky enough to successfully pass the test are promised guidance in this world and paradise in the Hereafter. Physicians' practices have always witnessed severe cases that eventually show remarkable improvement as a result of deep contemplation, patience, and consideration which reveal to the sufferer the real dimensions of human existence and the deep significance of God's ways. This way, man is reconciled to his God and the life He has created, and revels in an atmosphere of optimism, hope, and feelings of happiness that can overcome any hardship. A person with such an attitude is endowed with:

6. Al-nafsul Radhiya: (the contented soul)

He beholds the system of the universe and loves its Creator. He enjoys the delights of truth in this universe and not the tyranny of falsehood which is doomed to be removed and obliterated, because it is inherent in falsehood to vanish.

If contemporary Western civilization had been fully aware of the real significance of this contentment there would never have been a chance for the emergence of this atheistic existentialism with all its con-

comitant restlessness and dissatisfaction, or that discord created by materialistic ideologies whether rightist or leftist. Nor would there have been amongst us those westoxicated young people who have given in to this intellectual invasion and feel they are inferior to their Western counterparts taking Western falsities for indisputable facts and thus jeopardizing their mental health. A contended soul turns to God for everything wanted or done. God responds by accepting it and raising it to a higher status where its conformity with the wider universe is as harmonious as the beats of music. At that level it becomes:

7. Al-nafsul Mardhiyyah: (the well-pleased soul)

At that rank the soul is brought closer to the divine light and acquires the believer's intuitive knowledge and ability to see through things by God's light according to the Tradition. When man reaches that high status in his spiritual development, God reveals for him what is concealed and unknown as he has become now in full control of passions and desires and has entered into the spiritual world where he sheds his human skin and becomes entitled to the acquisition of true knowledge of God. All truth is in itself certain. But as received by men and understood with reference to men's psychology, certainty may have three degrees: there is the probability or certainty resulting from the application of man's power of judgement and his appraisal of evidence. This is "*ilm-ul-yaqeen*", certainty by reasoning or inference. Then there is the certainty of seeing something with our own eyes. "Seeing is believing". This is "*ain-ul-yaqeen*", certainty by personal inspection. Then there is the absolute Truth, with no possibility of error of judgement or error of the eye. This absolute Truth is the "*haqq-ul-yaqeen*".

Now, this vast spiritual world and the beginning of true knowledge of God is only accessible when one has completed the first two degrees of certainty (*yaqeen*) and exerts individual effort of judgement in trying to understand God's signs in the horizons and in oneself until the absolute Truth dawns upon one. Once this is achieved, further up one goes to have:

8. Al-nafsul Arifa Billah: (God-knowing soul)

At this stage one is made aware of the hidden secrets of worships and injunctions and grows vigilant over God's commandments and people's rights as well as over the noble functions of each member of one's body. The ultimate objective is always more knowledge and greater self-purification (this, again, is in sharp contrast with the distorted idea of catharsis in modern psychology). With this purification the spiritual powers for curing is greatly consolidated.

9. Al-nafsul Qudsiyah: (the saintly soul)

At this most elevated rank man becomes God's direct protege and receives God's full support and protection. The way up to God, to knowledge, to action, to full spiritualism is wide open. Man becomes saintly, divine, invested with divine powers of hearing, seeing and acting. This stage is sub-ordered into special ranks for God's closest favourites about whom the Quran says:

THOSE WHO HAVE BELIEVED AND BECOME RIGHTEOUS

Further up there is nothing except:

10. Al-nafsul Kamilah: (The perfect soul)

What is meant here is human perfection and not divine perfection which is the exclusive attribute of God. Of all the human beings since the beginning of creation till the Day of Reckoning, the only person who has attained or will ever attain this supreme rank is Prophet Muhammad (ﷺ) who was protected by God against anyone or anything.

Starting from the rank of saintliness all barriers are lifted for those nearest to God who are entitled

to witness the Inscribed Register. Their souls radiate with divine light and they are invested with the power to act beyond the physical or natural laws.

This ten-point image gives us a completely different view from anything we know in contemporary psychology studied at occidental universities and their oriental blind imitators. Whilst the Islamic view elevates this image to the highest moral sublimation and fullest spiritual development, Western psychology is lost in abstractions and observations made about the human body comparing them with those made about the animals until it hit the lowest level with Watson's behaviourism.

What we stand to gain from the heritage and Islamic view is combining knowledge with action and enhancing the one with the other. The spiritual therapy is thus achieved as a result of contemplation, consideration, prayer, righteousness, piety, patience, fortitude, certainty, hope, supererogatory rites, fasting, alms-giving, Quran reciting, etc. all of which based on perception, understanding and the experiences of the active believers in addition to those contemporary experiments recently carried out involving some clergymen in Asia as will be detailed below.

This wider view requires using the word "mind" in a similarly wider sense than that we find in applied sciences.

III. THE MIND:

It is charged with the noble function of cognition which starts with learning religious and secular sciences until it reaches the highest degree of wisdom. It is the basis of responsibility and personality which is not impaired if the body is injured or attacked by a disease. A one-armed person still maintains all the characteristics of his identity. If a person is badly shaken by a personal calamity or a social disaster or is plagued by a chronic tension he can still go on working though a bit unsatisfactorily. But when a person loses his memory or breaks into hallucination or becomes schizophrenic or melancholic, then his personality will really collapse leaving him with just a name that denotes nothing.

On the other hand, if a person confines his mental activities to the function of learning materialistic and applied sciences without contemplating God's signs he may be said to enjoy intelligence but not a "mind"; for he who has no religion has no mind as the Prophet (ﷺ) says.

Misuse of the mind or impairing it with intoxicants, e.g. drugs, alcohols, false ideas, etc. lowers man to the level of an animal which eats, drinks, mates, and fights until it ends up into meaningless dust.

This uninspiring kind of existence is behind the well known absurdity in the atheistic extential philosophies. It is a kind of disease for which there is no cure except faith.

IN THEIR HEARTS THERE IS A DISEASE.

(Quran, S2: V)

It becomes clear from this definition why in Islam the mind is considered the basis of the mission with which man is entrusted on earth. It is also the only safeguard against psychological and social disorders such as suicides.

Consequently, knowledge, specially in the field of humanities, should be weeded out to safeguard individuals and the whole society against diseases arising from the pursuit of prohibited things. Now, a word about prohibiting all intoxicants in Islam. It is meant to prevent the harm done by them to the body and mind. It is like the red traffic light which saves lives that could be lost in road accidents. As Islam lays such a great stress on the mind it is only natural that it does not allow anything to interfere with its functions or disrupt them. Islam allows only what is essential for growth and for the welfare of the individual and the society as a whole.

IV. THE HEART:

It is the seat of intentions, faith, devotion, inspiration, and the light which, in the words of Imam Ghazzali, God casts into it. What is crucial to the heart is its orientation: is it oriented towards God or is it lured by satanic passions and desires; for the heart is the seat of either divine guidance or devilish misguidance.

It has often been said that the heart, being the source of emotions, denotes changeability and must therefore be strongly supported by the mind and adherence to God, i.e. to the *Shariah*, as the mind is the light of the canonical law and hence the real shield for the heart against error. If this happens then people will have (hearts to understand with) as mentioned in the Quran.

Every deviation from the right course by the mind or the heart leads to the disease of hearts (IN THEIR HEARTS THERE IS A DISEASE), obliteration of mental vision and the domination of distorted ideas disseminated by ideologies and some intellectual philosophical trends which have created the psychological and social maladies prevalent now on a wide scale in this age of crises and explosions. In this connection, some Western physicians are getting interested in studying diseases resulting from misleading knowledge.

What must be mentioned here is that the atheistic philosophical theories are being exploited by the corrupt to promote immorality and licentiousness and reap windfall profits from selling barbiturates to the young misled people. This has created a situation where parents are no longer able to communicate with their sons and daughters who are washed away by the wave of exploitation. Corrupt profiteers are building their wealth on the dead hearts of the young generation who are brainwashed by propagandistic campaigns selling Freudianism, Darwinism, Marxism, and all sorts of atheistic materialism. Proliferation of such misleading ideologies and philosophies is bound to have adverse effects on proper thinking, faith, the right balance, moderation, modesty, and dignity. It also contributes to the spread of all sorts of diseases: venereal, heart, psychological, mental, you name it.

Since the heart is the seat of faith, it is essential that it remain clean and pure; otherwise it will be the origin of all such maladies that affect the rest of the body as evidenced by the fact that psychosomatic diseases account for 60% of the cases under treatment in our modern times.

V. THE SPIRIT:

It is the divine breath in man after he is fashioned by the hands of God:

WHEN I HAVE FASHIONED HIM (IN DUE PROPORTION) AND BREATHED INTO HIM OF MY SPIRIT,

(Quran, S15 : V29)

This is the most effective component of man's image that has been completely ignored by the 20th century though it is the real pivot of man's existence. Thanks to this vital component we understand the significance of ordinary and extraordinary phenomena. It is the point of departure for true knowledge to the most elevated levels. Talk about the spirit is usually limited by the difficulty of explaining this almost inexplicable aspect of man:

THEY ASK THEE CONCERNING THE SPIRIT. SAY: THE SPIRIT (COMETH) BY COMMAND OF MY LORD. OF KNOWLEDGE IT IS ONLY A LITTLE THAT IS COMMUNICATED TO YOU (O MEN!)

(Quran, S17 : V85)

Therefore, we can only refer to certain points in the Islamic heritage that could help us understand the meanings of will, truth, independent judgement, and individual endeavour for spiritual treatment.

1. The spirit is a luminous essence of a fluid nature that differs from anything perceptible through the senses.
2. This fluid is made of atoms that are different from those imagined by physicists. It is more like luminous circles that penetrate bodies and members and spread in them as fire spreads in matter.
3. The luminous essence is a discerning power that is aware of itself and its God to the extent of how much momentum it maintains from its origin. Spirits differ along the same patterns of difference between persons in their talents.
4. The spirit is an indivisible whole and an ethereal secret in communication with the world of secrets because it roams in purity the realm of God's glorification.
5. It is capable of perception and conception in a luminous fashion.
6. Its properties are different from anything we know about matter or perceptual objects.
7. Like bodies, spirits have their distinctive features.
8. Things surrounding a spirit are reflected on it as objects are reflected on a mirror.
9. Bodies originate in the same way as spirits radiate atom by atom.
10. The spirit is a power whose light is the origin of talents.
11. For each spirit there is a certain capacity and a certain form. There are as many various degrees of capacities and forms as there are people created by God. Treatment is greatly affected by a given capacity and form of a person's spirit.
12. Being different from matter, the spirit is able to act supernaturally.
13. Access to the invisible world is gained only by believers endowed with physiognomic powers who can see by the light of God and whose invocations are well received and responded to. For the spirit has the following properties:
 - a) hearing from remote distances.
 - b) Seeing remote places. It also enhances the believer's other senses.

The best illustration of the spirit's visionary and predictive powers and its capability of acting beyond the physical and natural laws is the record of miracles achieved by prophets and God's nearest favourites including the ability to cure the sick. At a lower rank than that, ordinary people can also have various degrees of similar powers and abilities depending on the strength of their faith and will, the extent of their mental concentration, and how profound their submission to God is.

SPIRITUAL TREATMENT

The Prophet Muhammad (ﷺ) said:

“ Make full use of the two cures: honey and the Quran. ”

This means that cure is two-sided: material and moral. Man can benefit from both. Islam, being the religion of moderation, prescribes both ways of treatment without excess in the former or neglect of the latter as man is an integral composite of body and soul. It is this comprehensiveness both in its teachings and in its view of man that characterises Islam and distinguishes it from other religions.

Man needs to penetrate into the core of matter and the essence of things in order to understand the visible world around him. But he also needs to turn his mind to the world of light and the invisible so that he may not get lost in ignorance and blind imitation driven by impetuosity and foolishness of young age.

What most people readily accept is that man is endowed with great potentialities for growth, learning, adjustment, and cure of a host of diseases. These potentialities also include the moral and spiritual powers which the patient can utilize if he knows how to use them. The extent to which he can benefit from these latent powers hinges upon the real value of his faith, persistence of his certainty, cleanness of his heart, purity of his soul, trust in God, and devotion to truth.

The point of departure is the strength of will which is graded upwards from: 1) the wish, 2) clarity of purpose, 3) intention, 4) determination, 5) firmness, 6) perseverance, 7) diligence, which is the highest level attained by the believer who is elevated to the zenith of complete trust in God.

It can be said in general that in the domain of worships strength of will and frequent use of contemplation are basic factors of the act of consideration which ultimately conduces to profound submission to God.

Some physicians have been observing the biological and physiochemical changes that co-occur with absorption in religious consideration and profound submission during worship. The point of interest in these investigations, conducted recently, was: reaction on the will and use of this will in controlling disorders.

It was established that such changes were not observed in other situations such as hypnotism. The changes recorded were biological in terms of electro-waves of the brain.

In the state of relaxation what happens is that the will affects the contraction of muscles, which are connected to nerves in the spinal cord, causing them to relax. This muscle relaxation gives one a feeling of relief that has preventive advantages and can even be useful in heart attacks and at times of intense agitation and excitement. Similar observations about willed relaxation are also found in Yoga. Here, the strength of will is aided by assuming certain physical postures that aim to cause relaxation in specific muscles and joints. The purpose of such Yoga exercises is the reduction of tension in a group of muscles of opposite direction.

Relaxation of muscles accompanied by closure of the eyes systematically affects the electro-encephalogram in the following way:

- 1) Electro-waves are medium with pulses ranging between 9 and 12 waves per second, which is characteristic of alpha waves.
- 2) After opening the eyes, even when one is still relaxed and calm, alpha waves disappear and are replaced by faster, less regular waves called "Basic Waves".
- 3) Scientists agree that alpha waves indicate "calm and stillness", and Basic Waves indicate "activity and movement".
- 4) The effect of light on the retina leads to wakefulness and activity in the cerebral cortex.
- 5) On the contrary, even when the eyes are closed, thinking of a certain subject or problem leads to the disappearance of alpha waves.
- 6) Alpha waves were not observed in worried persons even when they closed their eyes.
- 7) Experimental tests involving Buddhist monks show that when they are in deep meditation they have alpha waves even if their eyes are wide open.
- 8) This situation means that in the case of these monks alpha waves are different in that they do not indicate "calm and stillness" because cerebration here has to do with refined intellectual activity. Alpha waves in this case are not in contravention of cerebral activity.
- 9) The experiments of Dr. Dass and Dr. Gasto consist of recording the electro-encephalogram of the Yogist:

- 9.1 The electro-encephalogram takes the form of alpha waves upon entering into a state of meditation with the eyes closed.
- 9.2 Once the eyes are opened, the alpha waves disappear.
- 9.3 Alpha waves also disappear on cerebration relating to search for an "image" and resulting in telepathy.
- 9.4 Soon alpha waves reappear upon getting into introspection.
- 9.5 These waves do not disappear even when the monk opens his eyes, which shows that something must be happening in his cerebral cortex.
- 9.6 Finally, after a long time, slower waves appear ranging from 7 to 8 pulses per second. These are called "Theta waves" which spread all over the head.
- 9.7 The appearance of Theta Waves may be caused by entering into a state of unoccupiedness in which the mind is completely cut off from its surroundings and freed from "other passions and attachments".
- 9.8 The maintained appearance of alpha waves after the eyes are opened is an evidence of disengagement from the surroundings and related attachments.
- 9.9 This cerebral case is not observed in relaxation, hypnotism, or in conditioning of metabolism.

Observations made during the period of repose after passing through meditation show:

1. Lower blood pressure and slower heart beats and respiration rate.
2. Blood pressure stabilizes but the heart beats go down to less than 30 pulses per minute. Breathing decreases and becomes feeble.
3. Inhalation of oxygen is rapidly reduced from 251 cm³ per minute during the pre-meditation stage of relaxation to 211 cm³, then rises after meditation to 242 cm³ per minute.
4. Exhalation of carbon dioxide goes down from 219 cm³ during relaxation to 187 cm³ during meditation and then up again to 219 cm³ after meditation.

Thus the proportion of: $\frac{\text{exhalation of carbon dioxide}}{\text{inhalation of oxygen}}$ does not change except after meditation when exhalation increases slightly.

5. What really changes is the inhalation of oxygen so that the proportion: $\frac{O_2}{O_2}$ remains constant.
6. This change constitutes less inhalation while exhalation remains constant.
7. The rate of respiration is reduced involuntarily.
8. Voluntary reduction of the respiration rate showed increase in the need for oxygen to offset the carbon dioxide not yet exhaled which could lead to toxemia and possibly asphyxia. The experiment had to be discontinued of course.
9. With meditation, metabolism tends to be aerobic rather than anaerobic. These two processes are conditioned by hormonopoesis that necessitates either one or the other. Anaerobic metabolism increases with the increase of lactic acid.
During the pre-meditation stage of relaxation the secretion of lactic acid is put at 11.4 mgs. per hour for each 100 cm³ of the circulating blood. Then it goes down to 8 mgs. during meditation and even further down to 7.3 mgs. during the immediate post-meditation stage.
10. This lactic acid is known to result from muscular contraction. Reduction of its amount has nothing to do with reduction in muscular tension as one might think at first, for we observe this tension reduc-

tion during relaxation with no change in the amount of secreted lactic acid.

11. The rate of lactic acid secretion is put at 11.4 mgs. at the beginning of relaxation. It goes down to 10.25 mgs. per hour for each 100 cm³ of blood at the end of this stage. Reduction does not begin to precipitate until meditation is well under way.
12. This establishes that meditation makes metabolism tend to be aerobic.
13. This phenomenon occurs at first with reduction in muscular tension of course but then specifically because metabolism itself is affected by meditation.
14. The signal initiating metabolism originates in the brain and is transmitted to the tissues of the body members through the parasympathetic nervous system which helps vasodilation and affects hormonal secretion besides secreting a number of hormones of great importance to the body in general and the brain in particular, one of which is noradrenaline.
15. Aerobic metabolism is of great benefit to the body organs. Some physicians hope to develop a drug that can effect the same result for curing angina pectoris and thrombus.
It is extremely important to remember that cancer is always connected with the anaerobic tendencies of metabolism. This makes us consider oxygen a preventive means against cancer.
16. We can safely say, then, that contemplation and submission affect that portion of the autonomic nervous system known as the parasympathetic system, to the extent of reducing its secretion of noradrenaline known for its vasoconstrictor action.
17. This reduction of activity does not occur as a result of the will factor alone. Drugs, on the other hand, have only a limited effect in this concern.

These findings bear evidence of the close connection between structure and meaning or what is called "matter and spirit". Thus, the clouds that used to shroud the body-soul relationship have been amply dispersed.

Medical thinking has also changed, after the British Philosopher David Hume, from adhering tenaciously to the concept of mechanical inevitability to admitting the existence of moral and spiritual factors that go beyond the visible, material ones and greatly influence them. These would include the factors of will, intention, prayer, invocation of God for oneself as well as for others, in addition to other methods of treatment beyond the circle of the official academic medicine.

These factors are employed by all religions in spiritual treatment. As human beings are almost identical in their physical anatomy, so are they almost made the same way spiritually and psychologically. Their emotional, mental and spiritual functions are also similar. The only advantage Islam has over other creeds and religions is the perfection of the message and completion of God's favour upon Muslims, as the Quran says (5:4).

Islam is also distinguished by its overall scientific view of the universe and existence encompassing finite time and absolute eternity; the visible and the invisible; the past, present and the future.

From the religious point of view, there are several means of spiritual treatment including:

- 1) Will, silence, seclusion, concentration.
- 2) Attention, trust in God, devotion to purpose and action.
- 3) Faith and certainty.
- 4) Prayer, submission, and recitation of the Quran.
- 5) Remembrance and supplication both during prayer and at other times.

- 6) Reflection, consideration, contemplation, heeding God's commandments and discerning through wisdom.
- 7) Knowledge of the Shariah secrets and firm belief in the benefits of worships and the virtues of religious teachings.

Answering prayers and fulfillment of requests depend to a large extent on:

- 1) Purifying the heart from all doubts.
- 2) Refraining from doing evil or committing sins.
- 3) Eliminating pessimism and despair.

These can be achieved when one is close to God so that God may be close to one at moments of trouble. One is never afraid or desperate in the security of God's presence.

This also implies a sort of adjustment, but in a far wider sense than that narrowly used in modern psychology. The "environment" to which man should adjust must be expanded to include:

1. **The External Environment:** Location, climate, geographical situation, fresh or foul air, pure and potable water, the sun and its connection with the material, biological life, etc.
2. **The Internal Environment:** The circulating blood with its well balanced chemical components of proteins, fats, salts, vitamins, hormones, minerals, hematocytes, etc.
3. **The Psychological Environment:** Temperament, emotional life, instinctive and acquired traits, etc.
4. **Socio-economic and Political Environment:** The family, school, street, administration, work, etc. All these are important factors in shaping up man's upbringing and personality.
5. **Moral Environment:** The surrounding atmosphere with positive virtues or negative vices and the influence either have on man's attitudes.
6. **Intellectual Environment:** The ideas, views, trends, philosophies, traditional and scientific or semi-scientific beliefs, ideologies, educational and cultural attitudes, etc.
7. **Spiritual Environment:** This is based on supramundane conceptions in contrast with the mundane perceptions. The former would form the core of the mystic science "of hearts" based on belief in the Unseen World, historical events and evidence, introspection, and consideration of the horizons.

It is this kind of adjustment resulting in safety for man's body, soul, mind, heart, and spirit that gives a clear illustration of Islam's comprehensiveness and unique characteristics which can be summed up in the five life fundamentals: soul, mind, religion, offspring, and wealth, each of which is adequately covered by the Islamic teachings.

Accordingly, obedience, which is religion itself, is synonymous with adjustment; righteousness is the gateway to obedience, and the basic condition for answering prayer.

Man is inherently good as he is created in the best of moulds according to the Quran. Later deviation from the right path is acquired and can be prevented or cured. For the more disobedient man becomes, the farther he drifts from the light of his Creator; and every new sin he commits is in fact a new barrier outcasting him into the world of darkness.

The most striking uniqueness about Islam is the direct relationship between a Muslim and God. In Islam nothing or nobody plays agent or mediator between God and man. And God has promised to respond to whoever calls on Him, provided the call emanates from a pure heart:

*WHEN MY SERVANTS ASK THEE (MUHAMMAD) CONCERNING ME, I AM
INDEED CLOSE (TO THEM): I LISTEN TO THE PRAYER OF EVERY SUPPLIANT
WHEN HE CALLETH ON ME.*

(Quran, S2: V186)

And God does listen, but not to anyone:

AND HE LISTENS TO THOSE WHO BELIEVE AND DO DEEDS OF RIGHTEOUSNESS.

(Quran, S42: V26)

So, the way to God is wide open for anyone who wants to enjoy the bliss of nearness to God. But one cannot begin to step into the road to God until one is completely dedicated to Him with a concentration of will and after one has purified one's heart of all other attachments. These are of three types:

1. Loyalties to others amounting to polytheism whether overt or covert. This is the neo-paganism in our modern times of idolizing leader, rationalism, materialism, Darwinism, Marxism, Freudanism, capitalism, nationalism, the banner, gold, and many other such distractors.
2. Major sins that cut off man's relation with God leaving him with disturbing feelings of insecurity and depriving him from peace of mind. Closeness to God is the highest degree of conformity to the ultimate truth. It makes man live in harmony with himself and with others. On the contrary, getting farther away from God disrupts this harmony and breeds instability and anxiety leading to psychosomatic diseases and social disorders in the form of public upheavals and militancy.
3. Lust for rank, wealth, power, etc., neglect of duties, and failure to heed God's prohibitions. These deviations tend to switch off the light of spiritual potentialities that are latent in man.

All major religions, notwithstanding the impurities that have pervaded them, exhort their followers to turn to God with remembrance, contemplation, and prayer. Remembrance of God is in fact an act of recalling higher truths. This reminds us of Plato's theory of learning which argues that the soul had been knowledgeable until it got into the human body when it forgot, and that by learning it recalls what was forgotten. Remembrance in this sense is a kind of learning and its opposite, neglect, is a kind of ignorance which is either temporary or chronic. Now, ignorance is classified as a disease because it is the gateway to all evils and harms caused by committing prohibited things such as addiction to drugs and alcohols.

The best means of remembrance is reciting the Quran and reading the Traditions (Hadith). But remembrance should not be confined to lipservice. It should extend to include obedience and fear of God at moments of weakness. With remembrance in this wider sense one becomes alert and God-fearing, which is the surest way to good conduct, good health, and peace of mind.

Religion can be summed up in three words: faith, submission, and charity. Failure to stay away from what Islam has prohibited leads to physical disorders caused by venereal diseases, intoxicants, malnutrition whether in the form of over-eating or under-eating, and neglect of such other vital health-preserving factors as fresh water, unpolluted air, exposure to sunlight, physical exercises, fasting, moderation in sleep, and peace of mind attained through contemplation, remembrance and prayer.

Faith and trust in God is man's best shield protecting him against despair and depression. Many physicians have become aware of the great therapeutic effects of remembrance and prayer. Most notable amongst these in the West is Dr. Alexis Curriel, a Nobel prize laureate, and author of: "Man, That Unknown Being". He published a short paper about the medical effect of invocation and prayers in which he says that weakness and atrophy of the sense of veneration and moral obligation is as serious as atrophy of the brain. Moral atrophy has made modern man totally blind from the spiritual point of view. As such he is not capable of forming a community. Alexis adds that it is this low quality of the modern individual that stands behind the decline of our civilization.

The sense of veneration is most apparent in prayer. When prayer, supplication and remembrance

become a daily regular practice, especially if they are carried out in complete submission, the effect becomes tangible. In a way, this effect is similar to that of a ductless gland such as the thyroid or suprarenal gland. So, it leads to mental and organic change which occurs in a gradual manner as if a light has been switched on inside the all-feeling soul.

A moment of truth dawns upon man as he is able to see himself for what he really is: selfish, greedy, proud and arbitrary in judgement. This self-revelation is conducive to moral restoration. Gradually, man regains stability and peace of mind leading to harmony between physical and mental activities and providing him with greater fortitude and forbearance.

Dr. Alexis says in his paper that a doctor should feel happy when he sees his patient pray. For the resulting tranquility of mind will be of great help in bringing about speedy recovery.

The results of supplication are especially striking in cases where all other methods of treatment have proved to be futile.

Dr. Alexis asserts that at times the effect of prayer takes an explosive form when patients with serious diseases such as cancer, nephritis, ulcer, and tuberculosis get cured in almost no time. This phenomenon almost always occurs in the form of unusually acute pain followed by feeling of relief and recovery. Surgeons and physiologists had never seen such quick recoveries in their experiments before.

Elsewhere in the paper the author says that societies which lack the need to turn to God are not a long way from total disintegration and collapse. "We can think of the sense of veneration as very similar to oxygen, and prayer as very similar to breathing".

In their attempts to investigate man's spiritual powers and understand the nature of influence prayer and remembrance have, scientists and thinkers are nearing consensus that there must be a spiritual environment without which the living matter would lose its meaning, value, and purpose. It is the point of contact between man, who is a composite of body and soul, and the Creator, who is unlike anything we know, according to the Holy Quran.

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ANXIETY AND ADDICTION

Dr. Omar Shaheen

EGYPT

INTRODUCTION

The problem of drug addiction remains one that perplexes the politician as well as the physician. Despite the most complex measures aiming at prevention and cure, the phenomenon increases rather than decreases. There are so many research activities including surveys for the size of the problem in different areas. As regards the situation in Egypt, no systematic epidemiological studies of drug abuse have been undertaken to allow the emergence of reliable statistics in this area.

However, on the basis of impressionistic estimates, the major drugs of abuse seem to be hashish and to a much lesser extent opium. Both drugs are for the most part, imported from abroad and a small portion is cultivated in Upper Egypt. Although hashish use is more prevalent, it is opium addiction, that keeps the public treatment resources and facilities busy.

This phenomenon is probably due to several factors, including the following:

1. The physical dependence that results readily from regular use of opium.
2. The opium's greater potency.
3. The more severe health and social consequences usually associated with opium use.
4. Its relative scarcity and high cost which often motivate dependents to seek treatment.
5. Hashish does not produce increased tolerance.
6. Hashish is also used occasionally and not continuously as in the case of opium.

The use of other drugs such as amphetamines and barbiturates is occasionally reported, and the use of heroin and L.S.D. is rarely, if ever, noted.

Pittel S.M. (1971) hypothesized that drug dependence is most likely to occur among individuals who lack psychological resources needed to deal adequately with inner conflicts and or environment frustrations which is also the source of anxiety.

Gold (1980) suggested that the abuse process begins with conflict as a predisposing factor resulting in stress and anxiety reduction.

The hypothesis subjected to assesment in this work is that anxiety plays an important role in motivating the addicts to use drugs to the extent of habit forming. If this is so, then directing the efforts to manage anxiety may alleviate the problem of addiction.

To varify this hypothesis the following objectives were tried to reach.

1. Assesment of the role of anxiety as a motivation either to drug use or relapse.
2. Assesment of anxiety in patient under treatment.

MATERIAL AND METHOD

- A. All addicts frequenting Attaba Center for treatment in the years 1979, 1980 were questioned for the cause of their using drugs. (648 cases)
- B. Fifty male drug-dependent patients (opium type) were selected at random and subjected to the following: -
 - a. A questionnaire with the aim of fetching for anxiety provoking situations they faced.

b. Psychometric test.

- 1 - Middlesex scale.
- 2 - Hamilton's anxiety scale.
- 3 - Taylor's scale for manifest anxiety.

The above tests were applied three times.

- 1 - Before the start of withdrawal.
- 2 - Early in the withdrawal period. (2-3 days from the start).
- 3 - After one month of treatment.

Treatment applied was a multi-dimensional programme including:

- a) Supportive medical therapy (tranquilizers and symptomatic treatment).
- b) Supportive psychotherapy and social therapy.
- c) Explanation of the Islamic attitude towards addiction and the responsibilities of the individual towards himself, his family and his society.

Some of these patients stopped treatment (20 cases) and were termed group (A). The others (30 cases) completed treatment and were termed group (B).

C. A Control group of 40 male individuals were selected from attendants, accompanying the addicts to the clinic, who are not their relatives or addicts themselves. We verified the non use of drugs by urine analysis.

RESULTS

1. *The role of anxiety in motivating drug abuse:* (Table 1)

The criteria we used for the presence of anxiety were the presence of some physical, emotional or social stresses.

From the table we can see the individual's dissatisfaction with his physical activity and with his sexual performance. Besides we can observe a good percentage of family problems.

2. *Anxiety producing factors in early home atmosphere:* (Table 2)

From the table presented we can notice that the factors producing anxiety, were prominent to a statistical significant degree in the group of addicts except for bad relation with mother, unstable conduct of father; and bad relation with siblings. The highest factors were the unstable conduct of mother (72%) and the bad relation with the father (50%) to the extent of feeling over hatredness in 16% of the group and intense fear in 76%. Being a child of an addict represented 68% of cases. So an addict father may provide an immoral model for his child. Also he may be inducing anxiety in the family by his behaviour.

3. *Anxiety producing factors in the nuclear family:* (Table 3)

From the table presented we can notice that all factors suggested to produce anxiety were present to a statistically significant degree in addicts group. The most prominent factors are; problems with friends (68%), difficulties in marital relations — including sexual relations (66%), other problems with wife (50%) and even divorce (24%) — and big families with more than four children (58%).

The addicts came mostly from big families, having four siblings or more in 52% of cases, to be compared with the control group (32.5%).

We can notice that addicts are less conforming in their religious attitudes, as manifested by their being less performing religious rituals (praying and fasting). Whether this low religious standard is a cause or an effect, it is difficult to tell, but definitely it signifies less peace of the mind and more anxiety.

In another work we noticed the same observation in the addicts parents. So we can deduce that religion and faith can act as a preventive measure against addiction.

4. *Anxiety producing situations at work:* (Table 4)

Most of addicts (90%) started to work very early before the age of twenty. This attitude may have caused the youngsters to come in contact with elder workers, who are addicts, giving them the chance to imitate them. Also gaining money by this young age may be another tempting factor. The second important factor was the dissatisfaction at work (40%).

5. *Anxiety as a cause of failure of treatment:* (Table 5)

Factors increasing anxiety behind relapse were the intolerability of side effects (30%) lack of confidence in treatment (20%) emotional crisis (16%) and family problems (16%).

6. *Clinical anxiety:* (Table 6)

On examining the addicts, it was observed that 60% manifested some degree of anxiety. The highest subgroup was the group of moderate anxiety. Manifest anxiety dropped to be in 50% of patients after treatment, with the group of slight anxiety to be the front (33%).

7. *Anxiety determined by psychometry:* (Table 7 & 8)

From the results recorded on the Middlesex test we can observe the following: -

- Addicts group exceeded the normal threshold on the anxiety and somatic and hysteria scales. Who pathologically scored on anxiety amounted to 64 % of the group.
- Subgroup (B) who continued recorded higher on the anxiety scale than subgroup (A) but both were higher to a statistical level than the control group whose average have not reached the pathological threshold (20% of the group showed anxiety).
- Anxiety recorded increased in the withdrawal period to deminish later after treatment.

On the Hamilton's Anxiety Scale, the mean score of the addicts group was 26.4 ± 7.06 i.e pathological anxiety was manifest. Those who scored pathologically amounted to 46% of the group.

On the Taylor Scale the mean of the addicts was pathological (26.44 ± 8.93). Those who recorded pathologically amounted to 64%.

In group (B) the mean expressed pathological anxiety before treatment and increased on withdrawal to deminish after treatment. This was presented on both scales. After treatment, only 33% recorded pathologically on the anxiety scale, on the Hamilton's Scale and only 40% recorded pathologically on the Taylor's Scale after treatment.

DISCUSSION.

The differences between addicts and control group were studied by the following psychometric tests.

- a) Middlesex scale.
- b) Hamilton's anxiety scale.
- c) Taylor's anxiety scale.

The results showed high level of anxiety and personality deviation which proved to be statistically significant in addicts than the control group.

On Middlesex scale it is found that our addicts were suffering from a degree of different neurotic features manifested by the high percentage of subjects scored above level on depression (36%) phobia (20%), obsession (16%), and hysteria (46%) in comparison to the control group, their percentages were (25%, 10%, 30% and 12.5% respectively.)

The fact that addicts suffered more from anxiety is confirmed by many authors.

In researches on chronic hashish consumers, they were found to suffer from some manifestations of anxiety as defined by few items selected from Taylor's anxiety scale (Souieif M., 1967, 1972).

The role played by anxiety as a motive for drug intake was agreed upon by most workers (Klechner, 1968, Rosenberg G. 1969, Cohen S. 1977, Pittel S.M. 1971, Griffith 1980).

Because anxiety is a very uncomfortable emotion it can not be tolerated for a long time. Certain defensive mechanisms including various ways of distorting one's perception of the a situation to make it less threatening, as well as deadening anxiety by means of drugs or alcohol (Hilgard 1975) are always practiced.

However Brill compared marijuana smoking to non-smoking college students, and found no significant difference between the two groups as regards depression or anxiety (Brill 1974).

In this work, the level of anxiety was significantly higher in addicts who completed their treatment to the end (group B), while on the contrary hysterical features were higher in patients who did not complete their treatment to the end as confirmed by the author in another work.

So we can say that neurotics are commonly supposed to use drugs to relieve anxiety "negative euphoria", while those personality deviants use drugs in order to induce related state "positive euphoria".

The individual with personality disorder does not experience much anxiety and has little motivation to change (Hilgard, E.R., 1975). Also a person with some personality disorder does not complain of his symptoms or seek help for them (Lo Virginia, 1980). They are characterised by inability to plan, and inability to delay gratification so his demands must be satisfied immediately because he doesn't believe that the future will provide better result. All these factors prevent those addicts to stand up withdrawal.

It is well known that in all psychiatric disorders, personality disorders make bad prognosis, a typical feature and incomplete therapy.

These results indicate that although some addicts were suffering from increased anxiety which is assumed to be a cause for taking drugs aiming at relieving it, they proved to be more co-operative in treatment and more enthusiastic to continue it till the end.

It also seems that opium intake doesn't relieve anxiety and resolve it completely, that is why the addicts tend to continue and co-operate to get rid of the anxiety they suffer from.

In the early stage of withdrawal from opium the anxiety and neuroticism increased since more addicts reached the pathological limits although the difference in the means was insignificant, which also confirms with Okashe A. (1979), who said that anxiety is one of the early withdrawal symptoms.

At the end of treatment for one month, the anxiety diminished significantly.

This means that one of the withdrawal symptoms especially in the early days (2-3 days) are the increased anxiety and phobia which increased significantly. This may be due to cessation of the tranquilizing effect of opium or due to insecurity sensations, felt by the addicts because of the change in his style of life.

The manifest change after treatment is the diminution of anxiety. This result put more stress and throw light on the importance of measuring the anxiety and considering it a major prognostic criterion.

Our assumption is that the problem of addiction could not be determined by anxiety alone but it appears that it has multidimensions with multifactorial agents, although, anxiety still plays the major role in the problem. It could be considered of importance in the aetiology of addiction and could determine

the line of treatment used for each individual case. Other neurotic features need further research for determination of their role in the problem of addiction.

Measures to alleviate the anxiety in the community including instructions that consolidate religious doctrines will help the individual to attain security with himself and within his family. So we can conclude by the following recommendations: -

1. A national plan to affect public attitude towards addiction to narcotics stressing it as a sin.
2. Special case should be directed to the youngsters.
3. A religion professional should be added to the team of therapy in the addiction problem.

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**CAUSES OF DRUG ABUSE IN 648 CASES
TABLE (1)**

CAUSE	NO.	%
To increase activity	196	30.25
To increase sexual desire	164	25.31
Influence of peers	115	17.74
Curiosity	40	6.17
Family Problems	94	14.41
For treatment	34	5.24
Available excess money	5	0.77
Total	648	100

**ANXIETY PRODUCING FACTORS IN EARLY HOME ATMOSPHERE
TABLE (2)**

FACTORS	Addicts		Control	
	NO.	%	NO.	%
Bad relations with severe problems	19	38	8	20
Early Death of father (Patient less than 20)	16	32	5	12.5
Early death of mother	6	12	3	7.5
Separation of parents (early)	9	18	2	5
Separation of parents (late)	1	2	—	—
Bad relation with father	25	50	9	22.5
Bad relation with mother	6	12	3	7.5
Unstable conduct of father	20	40	18	45
Unstable conduct of mother	36	72	22	55
Intense fear from father	38	76	22	55
Hatredness of father	8	16	1	2.5
Siblings more than 4	26	52	13	32.5
Bad relations with sibs	13	26	8	2.0
Father addict himself	32	68	3	7.5
Total	50	100	40	100

**ANXIETY PRODUCING SITUATIONS IN THE NUCLEAR FAMILY
TABLE (3)**

FACTORS	Addict		Control	
	NO.	%	NO.	%
Early marriage (below 20)	14	28	5	12.5
Several marriages	18	36	3	7.5
Difficulties in sexual relations	33	66	9	22.5
Other problems with wife	25	50	7	17.5
Divorce	12	24	3	7.5
Children more than 4	27	58	14	35
Unsatisfactory house	15	30	6	15
No Friends	16	32	8	20
Problems with friends	34	68	16	40
Not fasting	15	30	8	20
Not praying	24	48	8	20
Total	50	100	40	100

**ANXIETY PRODUCING SITUATIONS AT WORK
TABLE (4)**

Factors	Addict		Control	
	NO.	%	NO.	%
Young age of work (before 20)	45	90	15	37.5
Unsatisfaction with work	20	40	8	20
Insufficient income	5	10	6	15
Problems with chief	5	10	1	2.5
Problems with mates	4	8	1	2.5
Total	50	100	40	100

**CAUSES OF FAILURE OF PREVIOUS TREATMENT
TABLE (5)**

CAUSE	Addicts	
	NO	%
Severe withdrawal symptoms	15	30
No confidence in treatment	10	20
Emotional Crisis	8	16
Family Problems	8	16
Influence of friends	6	12
Other social problems	6	12
Pressure of work	3	6
Change of residence	2	4
Total relapsing addicts	38	72
Total of group	50	100

**LEVEL OF ANXIETY BEFORE AND AFTER TREATMENT
TABLE (6)**

LEVEL OF ANXIETY	Before		After	
	NO.	%	NO.	%
No	20	40	15	50
Slight	10	20	10	33.3
Moderate	18	36	5	16.6
Marked	2	4	—	—
Total	50	100	30	100

**ANXIETY AS DETERMINED BY THE MIDDLESEX TEST
TABLE (7)**

		ANXIETY	PHOBIA	OBSCESS.	SOM.	DEP.	HY.	N.
Cont.	M	6.13	4.02	4.55	5.82	5.25	4.9	30.29
	S.D	± 2.59	± 2.82	± 2.17	± 3.36	± 3.12	± 2.15	± 11.13
Add. bef	M	8.7	5.4	5.44	8.54	7.56	8.18	42.9
	S.D	± 3.11	± 3.01	± 2.31	± 3.58	± 3.45	± 3.71	± 10.6
Group (B)								
Bef.	M	9.3	5.77	5.03	8.13	8.49	6.83	43.23
	S.D	± 2.93	± 2.84	± 1.85	± 3.57	± 3.39	± 3.31	± 3.38
Early	M	10.03	7.17	6.6	9.2	8.37	6.37	47.93
	S.D	± 2.55	± 2.68	± 1.98	± 2.76	± 2.47	± 2.53	± 5.64
After	M	6.8	6.63	5	8	7.53	6.7	40.56
	S.D	± 3.37	± 2.28	± 1.31	± 2.52	± 2.75	± 2.77	± 8.92
Group (A)	M	7.7	4.9	6.05	8.65	5.9	10.2	43.9
	S.D	± 3.01	± 3.26	± 2.8	± 3.44	± 3.55	± 3.55	± 9.29

M: : Mean
S.D. : Standard deviation
Dep. : Depression
Hy. : Hysteria
Som. : Somatic

**ANXIETY DETERMINED BY OTHER TESTS
TABLE (8)**

		HAMILTON	TAYLOR
Control	M	19.93	19.6
	S.D.	±7	±5.96
Add. Before	M	26.4	26.44
	S.D.	± 7.06	± 8.93
Group (B) Bef	M	29.03	29.97
	S.D.	± 7.14	± 7.8
Early	M	32.17	32.87
	S.D.	± 6.54	± 6.51
After	M	24.47	23.73
	S.D.	± 4.9	± 5.36
Group (A)	M	22.45	21.15
	S.D.	± 4.84	± 7.99

COMMENTATOR'S SPEECH

Dr. Adel Al-Sobky

U.K.

Allow me to speak both in Arabic and in English. I do not intend to take much of your time, anyway. I will just review what we have heard in very quick remarks in view of the time limit.

Let me first thank Dr. Abdul Aziz Kamel for his excellent lecture which he began by specifying the four sources: revelation, horizons, the soul, and history. Then he pointed out that faith is an experience that ultimately leads to change in behaviour. We can replace the two words "experience" and "behaviour" by the Sufist phrase: "status leads to a rank". The conference has appealed to Dr. Kamel to embark on the establishment of the "Cure Library" so that it can be a source of information and knowledge to both doctor and layman.

He also gave us an analytic description of disease as a human phenomenon beautifully linked to the story of creation from the Islamic standpoint as well as from the perspective of the Old Testament. Then he took us as far back as the experience undergone by Adam and expounded its repercussions on our present life which can be analysed from this angle. Then he tackled the status of man and his human dignity, and the significance of salvation in Christianity put against its equivalent concept of repentance in Islam. He also talked about man's relation to this earth, to his material and spiritual life, to his functions on earth and the other components of the world.

He then covered the issue of causation and the necessity of applying one's mind from an Islamic point of view as well as applying a practical philosophy within the bounds of absolute faith in God's ability. Dr. Kamel also dealt with the concepts of disease and cure and the legal status of the Prophetic medicine. I think that this last point has a special importance. Then he spoke about prayer and the other duties enjoined by God and the role they play in organizing the life of a human being.

As for our Professor Dr. Osman Najati, he has elucidated the Quranic approach to psychiatry. The first point he mentioned was that modification of behaviour is based on change of thinking and leads to a change towards a sound personality through faith and submission to God. Consequently, a believer is a person who can negotiate with himself his feeling of guilt. A believer in a community of believers enjoys all the advantages of a cohesive society in which all members feel attached to each other, belonging to a certain system of values, and performing the God-enjoined duties either individually or collectively. This state of affairs helps to reduce anxiety and increase the creative powers of man. Dr. Najati also dealt with the similarity between the behavioural therapy and the Islamic philosophy of therapy based on the values of forbearance and remembrance. He pointed out the Quranic approach of gradual treatment.

I thank Dr. Omar Shaheen for his lecture on addiction in which he explained how the problem goes beyond medical definition. His approach was experimental as he has conducted a detailed study of 40 out of 600 cases that were thoroughly screened before. He then subjected them to the various psychological tests for anxiety comparing the results with those of a control group of non-addicts who belong to the same environmental conditions and social class. The study has shown the factors behind anxiety including family disunity and lack of the religious deterrent which bring about such disorder and cause a relapse even after cure. His patients have favourably responded to the pharmacological, social and psychological treatment which also included a new element in this pilot study, namely, the religious support provided by theologians. This gives us, doctors and psychiatrists, a hint about the great advantage of utilizing our relatives and friends of the clergy in our treatment. Dr. Shaheen's study has also indicated the basic role played by the environmental factors.

I would like to add that the new Western trends in treatment, including their special concept of spiritual treatment as well as treatment by touch, are in fact an extension and a further depth of the whole process we are talking about.. So, we should make a point of showing that these emerging methods of treatment in the West represent one of the therapeutic aspects. The best way to evaluate the spiritual or religious side is to stress the fact that spiritual dimensions as we understand them are really lacking and on the decline with regard to man. The wave of rejection that has enveloped the young generations in Europe and America starting from the Hippie movement was bent on rejecting the values, principles, law and order through their boisterous music. These movements have given rise to certain phenomena that did not exist 50 years ago when young people used to adhere to the spiritual values . So we now find a sharp rise in the rates of divorce, drug-addiction, and alcoholism.

Turning back to the spiritual values could therefore be a sound decision for them as it is for us. I am not passing judgements here as to what is better than what, but the prospects for settling this crisis look much brighter if the religious element is introduced whether we are talking about Islam, Hinduism, or any other religion. The problem can be getting worse if emphasis is laid on the material aspect alone.

Concerning the idea of rehabilitating science put forward by a colleague this morning, I have an objection. Instead of saying "rehabilitation of science", I'd rather we said "utilization of science". In this connection, I would like to refer you to three books written by Dr. Zaki Naguib Mahmoud, who was once a Rector of Kuwait University, I think. These books are:

- *Tajdeedul Fikril Arabi* (reviving Arabic thought).
- *Humoum al-Muthaqqafin* (worries of the intelligentsia).
- *Thaqafatuna fi Muwajahatil Fikril Mu'asir* (our culture juxtaposed to modern trends of thought).

Briefly speaking, Dr. Naguib says that after about 500 years of deep slumber, we have been divided into two groups: the knows and the know-nots. The latter group of people are usually prone to indifference, but the former group have branched into three sub-groups. The first may be called "The West-toxicated". They are so intoxicated with the West that they blindly hail everything said or done there whether good or bad. The second sub-group have made a full turn back to the past and adhered to everything said or done by the forefathers to the utter rejection of the present The third group are trying to steer a middle course between the ultra-modern and ultra-conservative attitudes. They are trying to create a situation where we can adopt the products of science achieved by man, whether Western or otherwise, within the framework of our heritage, values and religion.

The implication here is not in favour of the idea of science rehabilitation. What we should really try to do is to implant science, beginning with its basics. Thank you and I wish your conference all success.

COMMENTATOR'S SPEECH

Prof. M.E. Fazly

EGYPT

The last speaker is usually left with nothing or very little to say especially when preceding speakers have covered all aspects of the topic under discussion as fully as my worthy colleagues have done. So, I had only half a mind to make any further comments. Yet, let me try to point out their inclusive coverage of our topic.

The image of a normal human being as depicted by Islam in its two basic sources of the Quran and Sunnah is that of an integrated and harmonious composite of equally important components. His points of contact with himself and with the world at large are multiple and not confined to the mind as Western civilization would have us to believe. In fact, the emotional and psychic realities constitute important parts of man's image and are equally important points of contact. This gives rise to a significant point. If we fully understand the Islamic concepts of a sound mental life, we will find they are exactly the same as part of those established by science. It is our role as Muslims to cast light on the rest of these concepts and put them forward for the benefit of psychiatrists and patients, with only one reservation I have derived from my own experience in practising this kind of treatment. The religious element should be introduced towards the end of treatment rather than at its onset. Beginning with it would hamper an open and multi-sided dialogue, whereas if it is presented towards the end of treatment it will reinforce the good effects of this treatment. This, of course, applies to patients who believe in Islam.

The second important point is that when we talk about Islamic medicine, we must take into account the fact that we may be alienating a group of people who do not believe in Islam or old traditions and do not feel bound by what we believe. In order to win these over to what we mean by the Islamic concepts in the field of spiritual and psychological treatment, we can approach them through the modern studies on such phenomena as the ESP (i.e. Extra Sensory Perception) and other para-psychological phenomena most important of which is telepathy. I am also referring to such newly emerging subjects as psycho-cybernetics which deals with man's conception of his psychological structure and how he can manipulate it through contemplation, mental exercises and bio-feedback. These methods which are increasingly being used now in psychiatry reflect the attempts made by the West to get around the barrier it has imposed upon itself when it emphasised the mind to the total neglect of the spiritual side. Such phenomena are studied nowadays objectively and scientifically. Let me cite only a few of the techniques being applied. There are the encephalograms which are used to show a patient practicing spiritual exercises the changes he undergoes during these exercises so that he can gradually learn how to reach the required stage of mental relaxation. Myography is also used in some of these bio-feedback studies.

Such scientific methods are more appealing and nearer to the understanding of those who are not convinced by the traditional Islamic concepts. If these techniques are applied to show the relaxing effect of Islamic worships we will be addressing them in a language they know very well and can hardly refute. This way, they could be won over to the Islamic values and concepts. Encephalograms can tangibly and unbiasedly show the great difference between the mere act of praying and the true emotional and mental involvement in the performance of prayer. We can thus let those who just do the act of praying learn how to pray properly and effectively.

Furthermore, the new methods of para-psychology and bio-feedback are used now to lure those who yearn for belief in heavenly religions to other kinds of spiritual practices. I know much about the efforts made to attract young people of both sexes to Buddhist and other similar rituals. Drugs are also used as an aid to reaching these stages of contemplation, participation, and mental exercises.. There-

fore, I hope that the recommendations of this conference will include an item about the necessity of deriving the psychological concepts from Islam's basic sources of the Quran and Sunnah. These concepts should then be put forward for psychiatrists to be used in treating their patients. Religious and spiritual phenomena should also be studied in an objective and scientific way so that we may communicate with others in the modern language they can understand.

I would like to say that all the discussions and comments, we have so far heard in this seminar, were direct and to the point. Undoubtedly, the concept of Islamic medicine is quite vast and deep. Its dimensions were previously discussed in the first International Conference held last year. One of these dimensions is care for humanity at large including non-followers of Islam. The two basic sources of Islam, namely, the Quran and the Sunnah, and the subsequent books on Shariah and other branches of knowledge developed by Muslims across the Islamic ages are meant to cover the needs of man, Muslim or non-Muslim, anywhere in the world and at all times.

But in this seminar, stress was laid on the therapeutic importance of the spiritual and religious aspects, and I think it is implied here that it is Islam which is meant by this title. The other aspects will no doubt be dealt with in the other seminars scheduled for the remaining days of this conference.

GENERAL DISCUSSION

Prof. Said Ashour,

I did not want to interfere after I had listened to a good number of papers which have been delivered by an elite of prominent doctors and Psychiatrists and as I am a professor, specialized in history and particularly in the middle age history, my attention has been drawn to a reference which has impelled me to make this comment. My dear brother, Dr. Omar Shaheen is a dear brother and I was his colleague for over 25 years at Cairo University although the distance was great between the Faculty of Arts and Faculty of Medicine. I have to comment on part of his contribution not as criticism but as a running commentary. He said that in treating and curing the addicts, he mentioned the word 'prayer and fasting'. He said those are praying and others are fasting. I remembered immediately, that prayer really keeps man away from sin and that fasting is one of the Commands of God, imposed by God and any body devoted to the religion should keep away from Bar rooms' counter.

But in history we have so many phenomena. For instance, as far as I recollect, when Sufism deviated from the right and some sufis, we cannot undermine Sufism as a big religious phenomenon with its great social, political, and economical impacts, in addition to its spiritual impact, I said, some Sufis at the end of the middle ages deviated from the right path. Though they were devoted to their prayers in the zivias and in their houses, yet they were turned to being addicted to the drugs and I refer to the books of history and the other contemporary sources like, al-Muqrazy Ibn Taghar Baradi Ibn Ilyas, that the Hasheesh plant was called (حشيش الفقراء) the Hasheesh of the poor and the poor in history are the Sufis. Yes, that was the deviation. Why didn't prayer bar them from committing such a sin? And once more, we heard about the group which took a religious faith and they were said to be in their strong holds performing the prayers. They were called the 'Group of Hasheesiens' or as they are historically called in history the Assasins. They took murdering and killing as a profession during Crusades war and they played a very big role. They attempted five times to kill Salahuddin. These people were addicted to the plant of Hasheesh and they were called Hashisheens and as we know from history, they were devoted to prayer. Thus, the question is not a question of praying and fasting because sometimes this thing takes an automatic character. It is a question of faith in the principle of praying. Those who pray are submissive. It takes the faith in praying and how to perform the prayer. If the professors of psychiatry and psychology rely on religion as a way of treatment and cure and there is no doubt it is a very useful way of curing, but there must be some religious preachers in addition. Besides, they must give a charge of faith to the addict, so that his prayer could be right. I do not say, I shall make a census of he who prays and he who does not pray and he who fasts and he who does not fasts.

Dr. Fouad Hifnawi,

It is not a running commentary, but rather a question which I am posing. We have understood from all the lectures which were delivered, the importance of the spiritual aspects of treatment and the religious people were mentioned as an accessory in treatment and cure. My question is, I hope that it will be discussed and examined in future, if the doctor is religious, will the result of his treatment be successful or more successful? And this entails another point which is relevant to the importance of introducing into the medical studies or in psychiatric studies and courses, the necessary approaches, the religious approaches for consolidating the faith of the doctor, so that it could be extended to the patient.

Dr. Ahmed Shawki Al-Fangari,

One of the most important points, which has been raised in this seminar this afternoon is the prayer as one of the factors for abandoning worries and getting rid of psychological problems and I always remember that many of our sons used to come to me and tell me that "you read that word and say that the prayer is the spiritual cure and treatment and we pray but we are not healed despite the fact that we

are diligent in performing our prayers". This is a very delicate point which should be put in the hearts of Muslims that it is not the prayer which can be considered as a worship in itself and there is a difference between devoting oneself to prayer and performing the prayer. As has been said by Dr. Usman Najati, unless man is fully concentrating on prayer in such a manner that he forgets all his problems and he said that in the relaxation or meditation sittings to which psychiatrist have referred, and which are similar to prayer, man forgets his worries and the problems and when he comes back to the normal life his worries and the problems have been medicated. This does not occur through the prayer unless the prayer is made with concentration and for this reason Prophet Mohammed (ﷺ) said "God does not accept invoking from a forgetful heart unless the heart of the Momin (مؤمن), or of the faithful is holy with that worship. Then he will never take advantage of his prayer and it will become automatic and for this reason, we read in the Quranic Verses, "So woe to the worshippers who are forgetful and oblivious in their prayers". Oblivious has been taken not as abandoning some prayers but over-looking or over-sight of the rights of prayer. Unless man so concentrates all his attention on the kind of worship to God that he will be forgetful of all other problems and all other issues, he will never take advantage of his prayer and for this reason some Muslim Juris, say that in prayer one can not address his working to God in the modern jargon. For, as I said that to ask God to resolve my problem that I have such and such problem, because this takes him back to the very same problem which the prayer is supposed to relieve him of and for this reason he must in his prayer, be totally devoted to God, forgetful and oblivious of all the problems from which he suffers. And the Quran always mentions that prayer is peace, that it provides peacefulness to man and then God says, "Those who pray submissively" and submission means concentration in the prayer. And Prophet Mohammed (ﷺ) said :

والرسول عليه السلام يقول بما معناه : « من كان همه الدنيا وكله الله إلى دنياه ، أي أنه إذا صلى وكان في صلاته همه الدنيا ويدعو بالدنيا وكله الله إلى دنياه ، أم من كان همه الآخرة أي أنه يدعو الله تعالى متجرداً من الدنيا فإن الله يكفيه دنياه وآخرته » .

Dr. Salem Najam Salem

Some point has come to my mind, which I wanted to put to my Professors and to proceeding speakers about this important topic. Now, as regards collective physical therapy, it occurs to my mind the re-affirmation by the Prophet Mohammed (ﷺ) , of the collective prayers, communal prayers and how Islam has put the prayers of the glamouration at Mosque, to re-affirm the good set up of a society and good educational society. I wish that issue could be put for examination and for studying the psychological impacts from the Islamic point of collective treatment and cure. Secondly, Dr. Imaduddin Fadly, my colleague, mentioned the electrical charge, which appears in the source of mind, the brain and how the patient can adapt himself in one way or another by relaxation and getting rid of some problems. I wish, we could take a course of making laboratory analysis of some of the patients, particularly regarding the chemical transformation of blood during the course of treatment and treatment by the spiritual and Quranic and Prophetical traditions. How does the patient receive that spiritual cure? Is it effected through blood transformation? Is there another force which comes up as a result of these spiritual charges. This is what we submit to the Conference to re-affirm that positive physical response between the spiritual and physical therapy treatment and the transformations which take place in the body and physique of man.

Dr. Adel Sobky

The point you raised, allow me first of all to try to answer the question. The difference between the physiological and psychological is no longer obvious. We do not talk of the purely physiological and the

purely psychological any more. When we talk of the chemical relationship, we are discovering whole systems including the receptors, transmitters and the enzymes in the brain that relay moods, motivations and they are cross tolerant with purely psychological inducement. The example if I want to give you, there is that the opiate addiction, that Prof. Shaheen has talked about. We know that the opiate addiction is entirely chemical now, we know that there are receptors in the brain and the spinal cord called the opiate receptors and these receptors grow tolerant to long term opiate addiction and they are also cross tolerant to the state of meditation, state of hypnosis and so on. I am trying to argue that the relationship between what used to be seen, as purely physiological and purely psychological, is no longer the case. I do not want to postulate something outrageous, but I imagine that the performance of the prayers and fasting and whatever else, by way of religious duties, can have physiological effect as well as spiritual and psychological effects.

Dr. Omar Shaheen,

No doubt anxiety is in contradiction of faith, and that faith is peace and security. Why the praying does not help? I think that the concept we have in lay man in Egypt is that the drugs are not prohibited by religion. Of course this is what they believe, So I think that is why we find some addicts who do pray, but certainly those who are addicts do not practise religion as much as the sample group, we have used. Dr. Hefnawi asked about the role of the religious man in the therapy. We have talked about this role because we talked about the team, in-charge of the therapy. We have the psychiatrists, we have the psycho-therapists, we have the sociologists and we have the nurse, because she is an executive and also we have added to this team the religious man, because he can help spiritually where the psychiatrist can not probably help as much. Why should the psychiatrist not have the same level as far as religion is concerned, so that he could play the role of a religious man. I say that we go back to the specialist. I think it is much better, it is much easier for the patient to accept the word of the religious man, rather than accepting the work from the psychiatrist, even if he is a Muslim. That is why we appeal to the religious men to become members of our team, when we are in charge of the therapy. We talked also about the praying in common, though we differentiate between that kind of praying and obligatory praying and also we talked about collective therapy. I think this is very difficult and I have the sources because I know some one who was with us at the Azhar University in the field of psychiatry, who has tried for 7 years to introduce a paper on the work of mysticism in psychiatry and he began with an assumption that mysticism is a kind of a psychotherapy and he tried to reach the results, to reach the facts that proved his theory. I say that he has been active and has made great efforts for 7 years and the results were not adequate as far as we think. So we say that the results concerning the question of faith. To reach such results, even in the papers we presented, we aimed at the confirmation of faith. We could not sort out the matter is how much the addict is committed to the rituals and how far he has freed himself from the faith itself. As for the spiritual effects we know that this deals with the problems of psychosomatic symptoms and we hope that soon the psychological effects and psychological factors will be interpreted in a physiological way so that they can be measured. I think that the whole world goes for this trend. That is why we find such a large number of drugs and medicines used in psycho-therapy which have certain effects. They certainly treat definite psychological problems. But of course, this will make the work more difficult as far as the spiritual question is concerned, because spiritual side is very comprehensive and we can not define, we cannot be definite in that respect.

Dr. Francisco Guerra,

The meeting of this afternoon, in my belief, is going to be the backbone of our Conference. Because religious belief is very very important in the symptoms and treatment of the disease. There are anthropological elements. In the beginning of our society, in our religious beliefs, that for millions of

years, the idea of supernatural forces inducing disease remained always in the back of the brain of civilized man, until Hippocrates refused the supernatural causes to have anything to do with natural disease. However, not very long after, even during the days of Hippocrates, all the specialists in psychiatry and psychology know quite well that Aristotle revolted against this idea and said that soul and body get sick together. But over 25 centuries have to elapse until all of us, practitioners and members nowadays of social security services, all over the world, became functionaries of Governments, officers of Governments and forgot all about the anthropological background of disease and devoted ourselves to cure only the physical elements of disease forgetting all these centuries of anthropological elements. All over the world now, not just in the Islamic Nations, there is a revival of the understanding of the religious elements, playing an important role in determining what is Disease. The manifestations of disease in the ways of treatment of the disease? This is not new. In the middle of the last century, Sachinoff, began to understand that there are pathways in the central nervous system that intervene in the development of mental ideas and physical phenomenon in disease. This has been proved in these years which is true. The magnificent presentation of drug addiction's treatment by religious beliefs, and other things which are now coming, we are discovering as we were discussing with Hk. Mohd. Said, that we are going to understand in these days, tomorrow, why Abul Casis was right about cauterization. Because now we know, is not acetylcholine only transmitting the brain. We know the appetizing atropines are playing a tremendous role in acupuncture. After centuries of being used, we found an explanation without knowing how they acted. We know now that in the brain after the production of pain, there are secretions of atropines synthetised, which were not known like it is now known that pain changes the transmission in the central nervous system and I am sure that we are at the threshold of big discoveries and I really congratulate you, because going through the world, we can see people like me who are in Western cultures, where Christianity is ruling the society, we find that you, the Muslims, the members of the Islamic Nations are the ones who still hold very hard to the respectful religion and the practice of religion in every way of life.

Dr. Abdul Muttalib,

I have few words to say to Dr. Mohd. Usman who spoke on Quran and the Psychotherapy. He mentioned almost every aspect reciting from the verses of the Holy Quran. As the previous speaker has mentioned that the words have got effect on the mind and that has got action on the nerves and that acts through the secretions of certain juices in the form of enzymes and catecholamine which may affect the different organs in individual under the stress or anxiety and may respond in different ways. Somebody develops headache and somebody else develops nausea and vomiting and somebody else will develop tachycardia and palpitation and some other lady will develop difficulty in breathing and somebody else will develop loss of appetite and constipation and others will develop insomnia and somebody else will develop aches and pains in the body and legs. Now how anxiety acts in such a large way, affecting each and every organ, each and every system of the body. There must be some mechanism of doing so. And similarly the prayer, the spiritual healing which relieves all these symptoms must be having some mechanism there to stop those reactions or release or stopping the secretions of those enzymes or catecholamines of mind. I cite two examples from the Holy Quran. You might remember that the Prophet Yaqoob became blind when his son Yousuf was lost in Egypt and when his shirt was brought back and thrown on his body, his blindness was cured. Now, how he became blind by anxiety and how his blindness was cured? This is for the believers in the Holy Quran to find out, that it was a psychological blindness, which was cured by the message of arrival of his son in Egypt or the shirt had some medicinal effects on the eye. In the last two chapters of the Sura al-Nass and al-Falaq (سورة الناس وسورة الفلق), Allah has asked man to take refuge in God against the evil deeds of evil, bad men, the Khannas, the Iblis and the Jins (ناس - خناس - ابليہ - جن) in the darkness. Now taking it in practical point of view, a man can take precaution against a bad man by keeping a guard around his house, by keeping

his doors and windows closed at night, by hiring a guard (دربان) in front of his home with a gun, a man can take shelter against Jins, because Jins can be converted into an animal, into a snake or into a tiger. So, man can take shelter against Jin by keeping his doors, windows closed, by keeping guards and keeping surroundings clean and the Khannas can be converted, can enter into human blood and can take any shape and enter human blood and even can go to the cells of the body. Well today, with our scientific knowledge of modern science we see that it is the bacteria, the protozoa, it is the helminths, which can enter the human system, depending upon the size and kind of the organism which can enter the R.B.C., W.B.C., Monocyte, it can enter the somatic cells, intestinal lumen and even can enter into circulation. So, I feel that the Quran is not a Scientific book. As the Quran itself says,

« هدى للمتقين الذين يؤمنون بالغيب » .

It is a guide book, to give us a guidance both for the spiritual life and this preliminary life. So, it is for us to find out what real meaning lies behind it.

Sheikh Moawwad Awad Ibrahim,

We must believe in God. Believing in God is not fictitious, it is not a slogan, it is not something we import, but it is real faith in God, directing our movements and actions and of course, prayers constitute one of the foundations of Islam, because it hardens his heart and allows him to live with his environments in a very proper way, accepting it what ever it may be. Now finally, Mr. Chairman, as we are running short of time, and specially the colleague from Bangladesh, said, that Quran is not a scientific book. In fact Islam is something more sublime in this and once, if science reaches the realm of Islam then at this point it will be a part of it and science is a path through knowledge. That is why we find God saying

« وقل الحمد لله سيرىكم آياته فتعرفونها وما ربك بغافل عما تعملون »

Quran really is not a book of science. One of the rules that is proved today or disproved tomorrow, but it is the true science and a certain knowledge and I hope and ask God, for me and for you, to be one of those who are near Him, to implore Him to enable us to lead a proper life.

We are really grateful to those who have contributed to this conference with their medical researches. This is not the time or place to comment on or add to them. All I can do now is to comment on comments. I wonder how Dr. Said Ashour could say what he said about hasheesh addicts and their likes. It is not the fault of prayer or, for that matter, Islam that such allegedly Muslim people have performed their prayers in the wrong way and have fasted without understanding fasting as God has meant it to be. If I may say anything to this, it is that many people take medicines and drugs without any apparent good results in a day or two, or after one or two stages of treatment. But when they place their faith in God and believe that the doctor is no more than one of the factors behind complete cure and health, they will be rewarded with that cure willed for them by God Who has taught Ibrahim (peace be upon him) to say:

AND WHEN I AM ILL, HE CURES ME

Prayer, in fact, is a duty and a worship. Suffice it to hear what the eminent professors here have said. I do not want to repeat their fine ideas which have fully covered everything relating to this subject. I rest assured that God the Almighty has full control of everything in this whole universe.

Dr. Abdul Hafiz Helmi.

I would like to comment on the valuable lectures in the same way as of my predecessors and within

the time limit given to me. I want to mention two points. First, the distinguished professors from whom I have learned a lot, did not touch upon a very important aspect of medicine which is the preventive medicine, and of course, the main aspect was the treatment and cure. But I would like to expand this subject matter, so that we may concentrate on prevention first. Namely the security of the soul, that a man does not feel he is lost in this world and he has a message to perform even if he was not lucky enough, and that he thinks and makes up his mind; he depends on God and does not exaggerate in happiness or sadness. All this or part of this could lead him to the security of soul and the calmness and quietness. He could thus avoid the psychological diseases and thus we can see that God is addressing the soul and the mind of human being. Thus, I would like to touch upon the upper parts of the brain and the glands. I would like to tell the distinguished physicians that, man is one 'WHOLE' that can not be divided. When we come to address the brain, this could lead to prevention and then to cure, because our religion is not a religion of emotions. It is a religion of mentality that is full of faith. This is the first observation. As for the second, it is a brief one, which is the rehabilitation and interpretation of science in our countries. What I would like to say in this regard is that I welcome those expressions, but I have some reservations to make. Any sample that we take from a sound human being, if we take a kidney from a sound human being and implant it in another person. What I would like to assert is, that we should reach two facts. Dr. Imaduddin Fadly remembers that a few years ago, we were attending one of the seminars and the title was "THE CHALLENGES OF THE AGE". I want to mention two facts. First, we mentioned the gap between religion and science and that there is no such gap and this meaning should be installed in the souls of human beings, without any preassumptions and it is quite natural if we deal with it properly and from the sound proof. If we know that this science has held a high prestige in the religion of Islam and if human being observes his religion quite properly, then he will realize that science is good and it will be returned to us. It is not a foreign commodity It is our own and should be restored to us and we should care for it. This meaning should be established. As for the second point, namely the question of language, if most of the speakers were Arabic speaking persons, of course the distinguished guests could follow us through the interpretations. We should speak our native languages, we should speak our mother tongue. Not only the Arabic language, with regards to those who speak Arabic, so that this science could be original and should not be implanted or imported. This science should be well established and I think it has been thoroughly dealt with. I thank you very much for your kind attention.

Dr. Mohammed Abdul Moneem Abdul Aal,

This is only to make an observation about some of the skin diseases like the nervous exczema. We found that in the faculty of medicine in al-Azhar university, we could not find any religious man who was suffering from this disease and thus we can find that it positively affects non-religious people. This is an observation I wanted to make.

Closing remarks of the Chairman Ahmed Al-Jasser.

As a matter of fact, this seminar has dealt with many good ideas, which will be very difficult for me to summarize. But I think that the organization of this conference is based on collecting all what has been submitted in terms of lectures or comments, to be collected and studied. And recommendations will be made, either included in these lectures or not in a way that could lead to a fruitful conclusion of this conference. These studies and researches will be published in a volume that would include all the lectures that have been presented from the very beginning of this conference to the end of it. So, we ask God Almighty to render these efforts successful and fruitful and for the benefit and good of all the Muslims and for the good of humanity in general. Thank you very much.

ISLAM IN CONNECTION WITH MEDICINE AND BIOLOGY

Part Two: The Importance of Spiritual and Religious Aspects in Therapy.

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A study of Islam in connection with medicine may be justified by the fact that this religion with its teachings, rules and ordinances occupies a special significance from the medical point of view. The Holy Quran and the Muhammadan law comprise a great deal of scientific and scientific data that are comparable with our modern knowledge, especially of medicine.

If we take this discourse as our point of departure we will find that in its practice and various operations it presents the principles, maxims, and judgments with issues for discussion. On the other hand we find that medicine has been closely related to the Arab nation and Islam for more than a millennium.

Consequently, in dealing with "Islam in connection with Medicine and Biology" we find it necessary to compare in detail scientific data with religious data, the latter being taken from their own sources, namely the Quran and Sunna.

At the outset, the first chapter includes the concept of man in the Islamic thought connected with what we find in certain data of this concept. An attempt is made to date deeply into the metaphysical domain where it gives over the Muslims' spiritual and material life.

CHAPTER TWO

(Some Selected Papers — not Presented)

1. ISLAM IN CONNECTION WITH MEDICINE AND BIOLOGY.

Dr. Amal Alami.

The first section of this thesis is the review of the Islamic medical history. The other sections deal with more or less problems of medical practice that have been solved. There are chapters on Islamic medicine about clean-ness, health, prevention and nutrition. We will also consider the teachings relevant to alcohol, drugs, and stimulation with a review of the medical values inherent in the Islamic law. It will deal with the medical ethics, the history of certain diseases, other topics that will help human progress and employment as stated by the Quran, Islamic conception, stimulation, ethical progression, genetics, and Islamic education concerning social relations.

In conclusion we shall look into the heritage of our Islamic medicine from the perspective of an Islamic civilization which developed scientific methods derived from the Quran. I was induced to make this study by a strong desire to bring to light the certain thoughts that have been ingrained in my mind throughout my undergraduate study, preparing them towards the final report.

These thoughts are:

- (1) Islam is a religion of comprehensive principles. It is right view of man and the universe and the relation between them aims to understand the wisdom of man in terms of the psycho-physical and spiritual unity. It also helps to realize his equilibrium and harmony with his environment and universal surroundings.
- (2) A religion such as Islam comprises several medical principles. Its teachings contain the secret and trust with the natural, the medical, the hygienic, the sexual, and the social in other words, what is spiritual in Islam is in complete harmony with what is physical. Such a religion is apt to realize a bal-

ISLAM IN CONNECTION WITH MEDICINE AND BIOLOGY

Dr. Amal Alami

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A study of Islam in connection with medicine may be justified by the fact that this religion with its teachings, rites and ordinances acquires a special significance from the medical point of view. The Holy Quran and the Muhammadan Sunna comprise a great deal of various, pure, scientific data that are compatible with our modern knowledge, especially of medicine.

If we take this discipline as our point of departure we will find that in its practice and various operations it presents the philosophers, moralists, and jurists with issues for discussion. On the other hand, we find that medicine has been closely related to the Arab nation and Islam for more than five centuries.

Consequently, in dealing with "Islam in connection with Medicine and Biology" we find it necessary to compare in detail scientific data with religious data, the latter being taken from their two sources, namely the Quran and Sunna.

At the outset, the first chapter includes the concept of man in the Islamic thought contrasted with what we find in certain data of modern science about this concept. No attempt is made to delve deeply into the metaphysical divine secrets that tower in grace over the Muslims' spiritual and material life casting their lights of chastity and purity into the lives of the benefactors.

The first section of this thesis is devoted to a brief study of the relation between medicine and biology on the one hand and Islam on the other. It also includes the Islamic legal framework within which some problems of medical practice can be solved. The other sections deal in greater detail with more useful and more interesting medical subjects. These are concerned with Islamic teachings about cleanliness, health, prevention, and nutrition. We shall also consider the teachings relevant to alcohol, drugs, and circumcision with a review of the medical values inherent in the Islamic rites: prayer and its medical effects; fasting as curative of certain diseases. Other topics deal with human propagation and embryonic formation as stated by the Quran; abortion, contraception, sterilization, artificial impregnation, genetics, eugenics and Islamic education concerning sexual relations.

In conclusion we shall look into the heritage of our Islamic medicine from the perspective of our medical history reviewing our glorious Arabic history with a view to establishing that the scientific thinking of Arab physicians was deeply rooted in Islam. Since the Middle Ages this thinking has made its mark on human civilization which developed scientific theories derived from the Quran. I was induced to make this study by a strong desire to bring to life certain thoughts that have been lingering in my mind throughout my undergraduate study, pressing hard towards its final stage.

These thoughts are:

- 1) Islam is a religion of comprehensive principles. Its right view of man and the universe and the relation between them helps one to understand the whatness of man in terms of his psycho-physical and spiritual entity. It also helps to realize his equilibrium and harmony with his environmental and universal surroundings.

- 2) A religion such as Islam comprises several medical principles. Its teachings combine the sacred and ritual with the natural, the medical, the hygienic, the sexual, and the social. In other words, what is spiritual in Islam is in complete harmony with what is physical. Such a religion is apt to secure a bal-

anced life for man whenever he is and wherever he is. It is apt to restore equilibrium to modern man. Truly, it is a religion of a nation of moderation with no excess or neglect; so the Holy Quran said:

WE HAVE MADE YOU A NATION OF MODERATION.

(Quran)

3) Islam's great concern under all circumstances is cleanliness and the good health both of the individual and the community. All its prohibitions are warranted by medical considerations. It prohibits only that which proves to be harmful to man's health (whether physical, mental or spiritual; whether individual or social).

4) No wonder that Islam, with its medical principles which run parallel to its rites, has been guiding Muslims' thoughts and actions (especially in the medical field). The flourishing of science, and of medicine in particular, in the Islamic civilization emanated from and was strengthened by religious thought.

5) A fresh study of the Arabic (medical) manuscripts is essential for two purposes: first, bridging a gap in medical history; secondly, listing the technical terms used by the leading Arab physicians (by examining the most important Arabic medical works) with a view to enrich the Arabic scientific dictionary. Arabicizing medical education will undoubtedly be a turning point in the rise of Arabic medicine.

6) The physician in his professional practice and the biologist in his research work will inevitably be confronted by moral and religious problems that could at times be intractable. For instance, there is the problem of death and there are other problems concerning the artificial means of embryonic formation and the creation of man and his generation. Therefore, I deemed it necessary in this study to outline the religious framework within which solutions to these problems may be sought.

7) The fact that both the doctor and his patient share the same culture is psychologically effective in treatment. So, it seems of great benefit that a physician who practises in a Muslim community should be fully acquainted with the relevant Islamic Shari'a. It will make his treatment more effective and equip him with the necessary guidelines for grappling with certain social, moral and religious problems that often test his medical ethics.

That is why we hope to see relevant Islamic teachings incorporated into medical education (at least in our Muslim countries). We also hope that medical ethics will be based on these teachings.

I do not claim to have covered all aspects of the subject. I have dealt, if only in brief, with a variety of aspects in the hope that this study will stimulate medical graduates in the Islamic countries to dig deeper in tackling these subjects and add greater detail to what is briefly mentioned here using more logical and more convincing scientific evidence.

MEDICINE AND BIOLOGY IN CONNECTION WITH ISLAM

A Ph.D. Dissertation

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