

# Beyond bioenergetic therapy to cure depression

### Contents

Introduction	8
CHAPTER I	14
I.1. Human nature	14
I.2. Interdimensional channels	22
I.3. The Soul	25
I.3. Subtle human structures	32
I.3.1. Bioradiation	32
I.3.2. Biofields and aura	35
CHAPTER II	40
II.1. Anatomy and physiology of the central nervous system	40
II.2. Energy centers	51
II.2.1. Balancing the chakras	52
II.2.1.1 Chakra at the base of the spine, Muladhara, root, support	52
II.2.1.2. Chakra below the navel, Svadhisthana, where the self is located	53
II.2.1.3. Solar Plexus Chakra, Manipura, "treasure island"	55
II.2.1.4. Heart chakra, Anahata, unstruck, unhurt, unbeaten	57
II.2.1.5. Throat Chakra, Vishudda, purification	59
II.2.1.6. Forehead Chakra, Ajna, command	60
II.2.1.7. Crown Chakra, Sahasrara, bridge to the cosmos	62
II.2.2. Balancing the seven chakras	63
II.2.3. Let's recap	63
II.3. A different approach of the nervous system	65
II.3.1. Milk and honey	65
II.3.2. Semilunar ganglion	71
II.3.3. Sacred geography	73
II.3.4. The immaculate substance	74
II.3.5. The Oil	75
II.3.6. Skull suture	77
II.3.7. Ida and Pingala	78
II.3.8. Cana	81
II.3.9. The optical thalamus	83
CHAPTER III	86
III.1. The Laws of the Universe	86
III.1.1. The Law of Divine Oneness	86
III.1.2. The Law of Vibration	88

III.1.3. The Law of Action	89
III.1.4. The Law of Correspondence	89
III.1.5. The Law of Cause and Effect	90
III.1.6. The Law of Compensation	90
III.1.7. The Law of Attraction	91
III.1.8. The Law of Perpetual Transmutation of Energy	91
III.1.9. The Law of Relativity	92
III.1.10. The Law of Polarity	93
III.1.11. The Law of Rhythm	93
III.1.12. The Law of Gender	94
III.2. Health and disease	95
III.3. Neurological and psychological diseases leading to depression	97
III.3.1. Alzheimer's and dementia	97
III.3.2. Epilepsy	101
III.3.3. Parkinson's disease	
III.3.4. Stroke	
III.4. Psychological disorders	111
III.4.1. Mood disorders	111
III.4.1.1. Mood disorders and psychosis	112
III.4.1.2. Anxiety disorders	114
III.4.1.3. Schizophrenia	118
III.4.1.4. Disorders caused by exposure to substances	
III.4.1.5. Eating disorders	123
III.4.1.6. Personality disorders	126
CHAPTER IV	129
IV.1. Depression	129
IV.1.1. History of depression	129
IV.1.2. A radiography of depression	135
IV.2. Alternative therapies to cure diseases leading to depression	147
IV.2.1. Oriental therapies	149
IV.2.1.1. Reiki	149
IV.2.1.2. Yoga and qigong	150
IV.2.2. Diet and herbs	151
IV.2.2.1. St. John's Wort	154
IV.2.2.2. Valeriana officinalis	155
IV.2.2.3. Artemisia vulgaris	156
IV.2.2.4. Hyssop	

IV.2.2.5. Basil	159
IV.2.2.6. Passiflora	
IV.2.3. Ancient Dacian creed – a legend	
IV.2.4. Therapies based on the force of the primordial elements	
IV.2.4.1. Spell to banish sadness	
IV.2.5. Know thyself, pain body, inner child	
IV.2.6. Therapies based on faith	
IV.2.6.1. Orthodox faith and bioenergetics	
IV.3. Other types of therapies	
IV.3.1. Use of nutritional supplements	
IV.3.2. Acupuncture and Ayurveda	
IV.3.3. Massage and physical exercises	
IV.3.4. Expressive therapies	
IV.3.4.1. Art and music therapy	
IV.3.4.2. Dance and movement therapy	
What is dance therapy?	
How does dance therapy differ from regular dance?	
The benefits of dance therapy	
Who can practice dance therapy?	
CHAPTER V	
V.1. Research methodology	
V .1.1. The purpose and objectives of the research	
V.1.2. Data collection	
V.2. Discussions	
V.3. Research methodology conclusions	
V.4. Case study	
V.5. Conclusions	
ANNEXES	
ANNEXE 1	
QUESTIONNAIRE	
ANNEX 2	
IR's papers	

### Introduction

Although we have no clear, proven scientific evidence of the invisible human structures at this time in the evolution of mankind, a considerable percentage of the world's population opt for religious beliefs based on the survival of the soul after death. PEW Research Center, in 2010, conducted a study in more than 230 countries. It aimed to record the idea of religion as part of social life. The result is that 84% of the world's population in 2010, both adults and children are religiously affiliated<sup>1</sup>.

On the other hand, 170 member states of the World Health Organization (WHO) have acknowledged that they are resorting to complementary or alternative therapies<sup>2</sup>. We mention that a complementary therapy is used in conjunction with allopathic medication and a therapy used instead of the allopathic one, is called *alternative*.

Bioenergetic therapies start from the idea that a disease occurs first in a subtle human structure, then migrating into the biological body. By eliminating the cause, there is a chance that the physical condition will also disappear. The mechanism of healing seems simple, but it becomes complicated when we realize how complex the structures of man are. Therefore, we believe that a deep approach to working with bioenergy and with subtle human structures, is necessary for definitive restoration of a patient's long-term health.

A collaboration between medicine, alternative / complementary therapies and religion is welcome and even compulsory. We will show this connection throughout the paper, detailed in a chapter dedicated to healing on the territory of ancient Dacia, in the Carpatho-Danubian space where a science of healing, with ancestral roots, was developed by Dacian priests-physicians / therapists, which can be adapted to our modern society.

<sup>&</sup>lt;sup>1</sup> The Pew Research Center is a non-political American think tank concerned with public opinion polls, demographic research, and other research in the field of data-driven social sciences. The information in the text has been taken from the official page of this center, available here: https://www.pewforum.org/2012/12/18/global-religious-landscape-exec/, accessed on 09.Nov.2021, apud Cristina - Elena Popa Tache, Vers un droit de l'âme et des bioénergies du vivant/ Towards a right of the soul and the biofields of life forms, L'Harmattan, 2022, pag. 25

<sup>&</sup>lt;sup>2</sup> The report is available here: https://apps.who.int/iris/bitstream/handle/10665/312342/9789241515436eng.pdf?sequence=1&isAllowed=y, accessed on 02.Sep.2021, apud Cristina - Elena Popa Tache, Vers un droit de l'âme et des bioénergies du vivant/ Towards a right of the soul and the biofields of life forms, L'Harmattan, 2022, pag. 30

The risks of all forms of treatment will be pointed out. We will see that healing can occur only when the patient himself is fully involved in this process and believes in healing, opening his heart to love, getting reconnected to the Source of our Creation.

The subject chosen, namely the treatment of depression by special complementary / alternative methods, reflects the acceptance of a new vision of human healing perceived as a whole, as an expression of the Universe, microscopic and macroscopic. This form of approach is applied in integrative medicine. Much has been written about bioenergetic, complementary / alternative therapies, especially since the notion of *integrative medicine* or *holistic medic*ine (from the Greek language, *holos* = whole) has spread.

Integrative medicine consists of merging evidence-based medicine with complementary and alternative medicine to offer the provider and the actual or potential patient a set of prevention, diagnosis and treatment methods that have the patient as a center of reference, holistically, in all his complexity, and not just the disease, as a detached entity. Thus, patients are seen as a whole consisting of the mental part, the emotional part and the physical part, when the diagnosis and treatment are established. Also, attention is paid to the way of life in particular, to nutrition, exercise, to the quality of rest and sleep, to interpersonal relationships.

The terms *holistic*, *holism* refer to a concept that interprets the idea of irreductibility of the whole to the parts. In this sense, we bring up the conception of the Thracian-Geto-Dacian peoples who were aware that a part cannot be healed without healing the whole. Here is what Plato (427 BC-347 BC) says about a Thracian doctor, "This Thracian said that the Greeks rightly ...held the theories that I just now reported, but Zalmoxis<sup>3</sup> our king, he said, who is a god, says that just as *one ought not attempt to cure eyes without head nor head without body, so neither body without soul*. But this in fact was the reason why most illnesses eluded the Greeks' doctors: they were ignorant of the whole they ought to care for, and of the fact that, if this was not in fine shape..., it was impossible for the part to be well. The reason for this, he said, was that *all things spring from the soul, both what is bad and what is good for the body and the entire human being…* and they flow from there, as they do from the head to the eyes; therefore, it is necessary to treat it first and most of all, if what belongs to the head and the rest of the body is going to be in fine shape<sup>4</sup>."

Therefore, these therapies complement, complete the contribution of the physicians who deal with the physical part, approaching man as a whole: biological and energetic, consisting of visible and invisible structures, cells of coarse matter, but also thoughts, emotions and last but

<sup>&</sup>lt;sup>3</sup> Divinity of the Getae and Dacians (a people of the lower Danube), mentioned by Herodotus (484 BC - 425 BC) in his *Histories* Book IV, 93–96, written before 425 BC.

<sup>&</sup>lt;sup>4</sup> Thomas M. Tuozzo, Plato's Charmides: Positive Elenchus in a 'Socratic' Dialogue, Cambridge University Press, 2011, pp. 118-119

not least, a much more sensitive structure, beyond time, acting as an architect of the physical body, which contains, as negative manifestation, the matrix of diseases, wherefore, depression. This is the structure that can only be healed by reconnecting the patient to the Source that created him, to God!

We chose the theme "Beyond bioenergetic therapy to cure depression" because I consider it a must of the period we live, a time when more and more people are facing this condition.

Depression is one of the most common mental disorders affecting a growing segment of the world's population and is often the leading cause of suicide.

Globally, it is estimated that depression affected approximately 121 million people in 2011. In Europe, about 50 million people suffer from this disease <sup>5</sup>.

In 2009, the global antidepressant market was evaluated at 2 billion euros, and in Romania at 22 million euros  $^{6}$ .

COVID-19 pandemic, officially declared on March 11, 2020, was a global challenge especially in terms of the world population's mental health. The authors of the article quoted reviewed studies on depression during the COVID-19. They approximated the prevalence of depression from January 1, 2020 to May 8, 2020. A number of 12 studies reported rates of depression from 7.45% to 48.30%. If we compare it to a global prevalence of depression of 3.44% predicted in 2017, the prevalence of 25% in 2020 is more than 7 times higher, therefore the COVID-19 outbreak has considerable impact on our mental health<sup>7</sup>.

Depressed patients are overwhelmed with loneliness. That is why a therapist can be a source of hope for the patient encouraging him to fight with his own self. A depressed human being has lost personal balance. He lost touch with God, trust in love. Thus, finding the path to our inner self where God and love are, we take a first step toward restoring health. Man must be approached by the therapist as a unitary being integrated in nature, in the Universe. Faith in God is not an illusion, we have the strength to find our balance within us.

It is said that anyone can get sick unexpectedly and each person perceives their situation, evolution, and path to healing and harmony, depending on wisely chosen treatment. In fact, we don't get sick all of a sudden. Any condition is a consequence of our thoughts and attitudes that we have accumulated over a lifetime.

<sup>&</sup>lt;sup>5</sup> Cum și de ce se sinucid românii/How and why Romanians commit suicide, 28 June 2011, adevarul.ro, accessed on November 9, 2021.

<sup>&</sup>lt;sup>6</sup> Recessiunea ar putea relansa piata de medicamente antidepresive, un business de peste 20 de milioane de euro anual/The recession could revive the antidepressant drug market, a business worth more than 20 million euros a year, 10 Sep 2009, Ioana David, Ziarul financiar, accessed on November 9, 2021.

<sup>&</sup>lt;sup>7</sup> https://www.elsevier.es/en-revista-international-journal-clinical-health-psychology-355-articulo-prevalence-depression-during-covid-19-outbreak-S1697260020300545

The idea of physical illness is good to be approached positively; patients must be supported in the healing process. In this paper, we highlight the possibility of applying therapies depending on disease evolution, age, sex, level of culture, social and religious affiliation. In a chapter on alternative therapies, we will mention that people used these remedies unaware of their mechanism. Nowadays we have the advantage that we understand the working mechanisms of alternative therapies. We will exemplify it by mentioning some ancient therapies used by our ancestors, the Dacians, therapies inherited by Romanians in our villages. We are surprised to find that these ancestral remedies can be explained by quantum physics.

The main objective of this paper is to combine techniques beyond the known alternative / complementary medicine in order to counter depression, reduce stress, prevent and alleviate symptoms and side effects of depression, to ease or even cure this condition.

This goal aims to establish a set of therapies that can be addressed during the treatment of depression, but also immediately after the patient has recovered.

The practical part of the paper is a study whose purpose is to evaluate the prevalence of complementary and alternative therapies use by adults treated in a hospital in Romania, in the Neurology and Psychiatry departments and a depression case study.

The holistic-integrative approach to depression supports patients not only physically but also mentally and emotionally, in order to recover their health. Thus, the therapist does not heal but helps the patient to heal himself, helping him to understand why the condition appeared in his structures, what his stage of evolution is, what the patient needs and what customized method must be applied to eliminate depression. I repeat, the presence of a therapist or a doctor is not enough in severe cases. In this case, collaboration is required between science and religion, between doctors / therapists and priests. To simplify the reading, when I refer, during the paper to the person who helps the patient to heal himself, I will use the term "therapist."

The hypothesis from which this study starts is the following: holistic-integrative bioenergetic methods combined with reconnecting the patient to the Source of Creation contribute to significant improvement of depression symptoms, leading even to its disappearance.

The paper has five chapters. We begin with an interpretation of Creation inspired by an analogy between the Bible and existing scientific theories. In this paradigm we have framed man with all his visible and invisible structures, connected to the Source, without which depression cannot be totally healed.

In the second chapter, we highlight the biological systems affected by neuropsychiatric disorders in general and by depression in particular, not only from the traditionally scientific point of view.

The third chapter approaches the concepts of health and disease from the point of view of the individual's attitude towards himself as part of the Universe, and the society. These concepts depend on treatment methods and the way the patient perceives the condition, often seeing it hopeless, as a blockage in their existence. Furthermore, we review neuropsychiatric disorders that can be treated with allopathic methods, with relevant examples.

Chapter IV is dedicated to the presentation of depression with causes, symptoms and treatment methods recognized so far, allopathic and holistic-integrative. We go on with a list of alternative / complementary therapies, with methods that can be used in healing depression. We find techniques that reflect how a patient is assisted to understand his situation and to collaborate in order to regain his health.

The chapter includes the theoretical framework for methods applied by us with details that can lead to positive results. We emphasize the role of the connection between the patient and the therapist, based on communication, respect and trust.

The paper brings some new elements. A first element is the patient's relationship to his personal belief system. Then we will consider his or her genealogical tree, not only from the point of view of hereditary diseases, but also from the point of view of some inheritances in his or her invisible structures. The healing method aims to guide the patient to the reconstruction of the family tree and the identification of all destabilizing events. We will present how it is possible to cancel the effects of these events through techniques that can be explained by science. For this purpose, I carried out a case study of one of my patients with whom I've been working since 2012.

When it turns out that the family tree does not affect the patient's condition, it is recommended that he follow the aphorism, "Know thyself." The origin of the phrase is Greek - *Gnothi seauton* and is engraved at the entrance of the Temple of Delphi. The approach is difficult and long-lasting but with remarkable results. The method we propose involves guiding the patient to activate in his/her structures the force of love, the strongest force in the Universe, associated with a discipline of the mind so that after reaching a point of psychic balance to activate a protective shield through which these structures are no longer destabilized from the outside.

The first step is the chronological recollection, from the present moment to the first remarkable childhood memories. Reconnecting with the inner child is an important step. We learn to identify our mistakes, the wounds we have been suffering from for many years, and to eliminate them. How? Through discipline / self-discipline of body, emotions and mind, favored by prayer. We learn to pray and benefit from the specialized services of priests, such as the Sacrament of the Holy Anointing in the Orthodox Christian Religion, until our inner balance is

restored. If the patient has a different religion, other than the Orthodox Christian, we look for methods that are based on his/her religion.

In Chapter V, research objectives were meant to clarify the reasons, duration and frequency of complementary therapies, the users' perception in terms of effectiveness, preferred sources of information about complementary therapies.

This is a descriptive study based on a questionnaire distributed between January and July 2022 to patients or relatives of patients hospitalized or treated on an outpatient basis at the Psychiatry and Neurology departments of a hospital in Romania, and diagnosed with depression.

The questionnaire was constructed for the purpose of this study and includes questions about which, if any, complementary therapies were used and for what purpose, what the reason is for using complementary therapies, which symptoms these therapies were used for.

The questionnaire consists of 12 questions, and the application method was face-to-face, with the help of doctors and nurses from the two departments of the hospital; they applied the questionnaire according to the patients or the patients' relatives' ability to respond to the questions.

87 participants answered the questionnaire, of which 63 were patients and 24, patients' relatives.

The paper ends with the conclusions we obtained after studying the bibliographic sources as well as our research and with a research proposal.

A disadvantage of these methods is that it is difficult to find the right words to adapt to the level of understanding of each patient to direct him/her to self-healing.

To holistically heal depressed patients, we sought to combine science with religion and with ancestral beliefs of the Romanian people, and we came to the conclusion that healing is possible only with the patient's openness to self-knowledge, unconditional love, and connection to God, the Source of Creation.

### CHAPTER I I.1. Human nature

Man is not only made up of the body, but of four dimensions/planes that intertwine and influence each other. These are:

1. The spiritual dimension / plane (including the relationship with God)

- 2. The mental dimension
- 3. The physical dimension
- 4. The social dimension (relationships between man and society)<sup>8</sup>

Similarly, medicine is a complex of sciences, rich, valuable, constantly changing, guided by legislation, moral principles and diagnostic and treatment protocols, which always require an interdisciplinary approach in treating a patient because it rarely happens to a patient to have only one disease that can be treated quickly, completely, without side effects and/or without complications.

Since ancient times, the doctor's role has been to help people using natural sciences and discovering natural remedies, surgical treatment methods or medicinal therapies. In this sense we can mention the names of some remarkable medical personalities who have remained in history for their studies and discoveries without which we do not know how the present would have looked or we do not know how we would have treated certain diseases today: Leonardo Da Vinci (1452-1519) through the Vitruvian Man, the Windsor collection with drawings and studies on the muscles of the trunk and thigh, the vessels of the heart and other details anatomical. René Descartes (1596-1650) made his contribution to biology; he called the pineal gland the seat of the soul, explained the notion of reflex; Robert James Graves (1796-1853), described Graves' disease, the exophthalmic goitre. Dominic John Corrigan (1802-1880) described the diastolic murmur characteristic of aortic insufficiency. Robert Koch in 1843-1910 highlighted the tuberculosis bacillus and the protein called tuberculin. He proposed the use of solid media for the growth and observation of bacteria and stated a triad of postulates valid until today. Carol Davila founded in 1855 the school called surgery and built the foundations of pharmaceutical education, in 1857, the national school of medicine and pharmacy. Victor Babes (1854-1926),

<sup>&</sup>lt;sup>8</sup> Richmond, 2005, p. 331

discovered about 50 microbes, analyzed the variability and changes undergone by pathogenic germs, discovered some corpuscles at the level of the diphtheria bacillus which bears the name Babes Ernst. George Emil Palade (1912-2008), discovered ribosomes, 1974, Nobel Prize. Nicolae Paulescu (1869-1931), in 1921 discovers pancreine, the insulin used to lower blood sugar in experiments performed by pancreatectomy in dogs. The practice of medicine is accompanied by a series of ethical principles included in Hippocrates' oath, valid until today. Medicine is a complex of rich and valuable sciences guided by laws and moral principles.

In another vein, Dame Cicely Saunders introduced the concept of "total pain", which refers to the simultaneous damage to the four components of the human being (spiritual, mental, physical, social) together with the onset, manifestation and evolution of diseases/disease<sup>9</sup>.

Moreover, this structure can be compared to a circle divided into four parts of 90 degrees each (4 x 90 = 360 degree circle).

By definition, the circle represents the set of points arranged around the center of the circle.

God is the origin or the center of the circle<sup>10</sup>.

Man contains everything that is in the Universe. Our true self is of cosmic origin. "I have said, Ye are gods; and all of you are children of the most High." (Psalm 82:6)

Because of the genetic inheritance we were born with and because of deviations from the laws of the Universe in our daily lives, we get sick, not only physically, but also mentally. Depression is a condition of the soul. In the following lines, we will point out what the soul might be. Until we get to speak about healing depression, we will show we are intimately connected with what we commonly call *God*, before we are created. We will underline at some point the laws of the Universe that should not be broken.

In the beginning God	"I want to know how God created this world. I
created the heavens and the earth.	am not interested in this or that phenomenon, in the
(Genesis 1:1)	spectrum of this or that element. I want to know his
	thoughts, the rest are details. Quantum mechanics is
	certainly imposing. But an inner voice tells me that it is
	not yet the real thing. The theory says a lot, but does not
	really bring us any closer to the secrets of the Old One.
	I, at any rate, am convinced that He does not play dice
	you believe in the God who plays dice and I in complete

<sup>&</sup>lt;sup>9</sup> Richmond, 2005, p. 331

<sup>&</sup>lt;sup>10</sup> Cicu I., Mareş S., Iacob I., Ceucă R, Băleanu A., 2019, Matematică clasa a 7-a/ Mathematics 7<sup>th</sup> grade, edition 1, Bucharest, Intuitex Publishing House, PP 115-130.

	law and order in the world which objectively exists, and
	which I, in a wildly speculative way, am trying to
	capture. I firmly believe, but I hope that someone will
	discover a more realistic way, or rather a more tangible
	basis that it has been my lot to do." (Albert Einstein -
	1879-1955)
	In this paper, we start from the premise that there
	is a creator, as the physicist Albert Einstein said. He
	created the visible world and the invisible world. Two
	in one. Matter and energy are the same thing: $E = mc^2$ .
In the beginning was the	Euler's formula.
Word, and the Word was with God,	$e^{i\theta} = \cos(\theta) + i\sin(\theta) $ (1)
and the Word was God. John (1:1)	In the 16 <sup>th</sup> century, the Swiss mathematician Leonhard
	Euler (1707-1783) made one of the most important
	discoveries in the history of mathematics. Extending the
	concept of exponential function to the field of complex
	numbers, he discovered their relation to trigonometric
	functions. Euler observed the particular case in which
	the angle has the value $\pi$ . The previous formula
	becomes Euler's identity in which we find the 5 most
	important numbers in mathematics, namely: 0, 1, e, i
	and $\pi$ .
	$e^{i\pi} + 1 = 0$
	The Bible is a cosmic message.
	Gematria is the practice of assigning a numerical value
	to a name, word, or phrase according to an
	alphanumeric number. In Hebrew and Greek, the letters
	have a numerical correspondent.
	We define the algorithm:
	f (v) + (number of letters x product of letters) / (number
	of words x product of words)

where $v = biblical$ verse
f(Gen. 1:1 in Hebrew) = $3.1416 \times 10^{17} = \pi \times 10^{17}$
10 <sup>17</sup> (3)
f(John 1:1 in Greek) = $2.7183 \times 10^{40}$ = e x
$10^{40}$ (4)
The number $\pi$ (often written pi) is a mathematical
constant whose value is the ratio of the circumference
to the diameter of any circle in a Euclidean space; it is
the same value as the ratio of the area of a circle to the
square of its radius.
The mathematical constant e is a transcendental
irrational number with the property that the value of the
derivative of the function $f(x) = e^x$ at point $x = 0$ is
exactly 1.
Surprisingly, the values of two fundamental universal
constants $\pi$ and e with four decimal places are encoded
by the same algorithm in these two basic Bible verses
that present the beginning of the Universe. The
probability of obtaining these values is about $1/10^9$ .
Also, the algorithm is simple, taking into account the
numerical equivalent of the letters.
$e^{\pi i} = -1 (5)$
where
$i^2 = -1$ (6)
i is the imaginary unit
-1 is the first negative integer
— Fig. I.1.1
In the context of natural numbers 1,2,3,, the equation
introduces two new "supernatural" numerical units:

	1
	-1 is before the beginning of the Universe
	i is outside the Universe
	i and -1 are bound so that the constant outside the
	Universe squared is equal to that which existed before
	the beginning of the Universe.
	Curiously, if we square -1, we get 1.
	1 is the first at the beginning and part of the Universe.
	0 is the vacuum before the beginning of the
	Universe <sup>11</sup> .
Now the earth was formless and	We do not know where primordial matter comes from,
empty,	it simply exists. Some sources call it zero point energy.
(Genesis 1:2)	In quantum physics, the energy that fills the cosmos is
	called zero point energy. It has no shape, it is faster than
	light, and is ubiquitous, intelligent, and contains
	everything needed to create perfect shapes. It does not
	oscillate and is not affected by gravitational attraction.
	This is tachyon energy. Tachyon is a hypothetical
	subatomic particle whose speed exceeds the speed of
	light. The difference between tachyon energy and zero
	point energy is that tachyon energy is shaped.
	An analogy can be made between an ocean and zero
	point energy. The ocean contains an infinity of water
	droplets. If we take a drop from the ocean, it contains
	everything that the ocean contains, but it has shape.
	Likewise, a tachyon contains everything that exists at
	the level of zero point energy, but it has a shape.
	The condensation of zero point energy into tachyon
	energy is the beginning of the creation of all forms.
	The ekpyrotic Universe is a cosmological model of the
	early Universe that explains the origin of the large-scale
	structure of the cosmos. The model has also been
	incorporated into the theory of the cyclic Universe,

<sup>&</sup>lt;sup>11</sup> http://timosbiblemath.blogspot.com/2011/06/math-puzzle-pi-e.html

	1
	which proposes a complete cosmological history of both
	the past and the future. The original ekpyrotic model
	was introduced by a team of American physicists in
	$2001^{12}$ .
	Planck <sup>13</sup> epoch begins. The Big Bang occurs in false
	vacuum. All matter and energy of the visible Universe
	is contained in a hot, dense point called gravitational
	singularity. This state has been described as a
	particle desert.
darkness was over the surface of the	The so-called Big Bang seems to have been a huge
deep,	white hole generated by a similar black hole in the
(Genesis 1:2)	middle of a galaxy belonging to our Universe. Based on
	this theory, at the time of genesis we are at the end of a
	Universe and the beginning of a new Universe.
	Weakly interacting massive particles of dark
	matter and dark energy may have appeared as
	catalyst for the expansion of the singularity.
	The Universe cools down. Gravity separates and
	begins operating on the Universe - the remaining
	fundamental forces stabilize into the electronuclear
	force, mediated by the hypothetical X and Y
	bosons which allow early matter at this stage to
	fluctuate between baryon and lepton states <sup>14</sup> .
and the Spirit of God was	The Universe keeps cooling down. The strong
hovering over the waters.	nuclear force becomes distinct from
	the electroweak force perhaps fuelling
(Genesis 1:2)	the inflation of the Universe. A wide array of exotic
	elementary particles result from decay of X and Y

 <sup>&</sup>lt;sup>12</sup> https://arxiv.org/pdf/hep-th/0103239.pdf
 <sup>13</sup> German physicist (1858-1947)
 <sup>14</sup> Cheng, Ta-Pei; Li, Ling-Fong (1983). Gauge Theory of Elementary Particle Physics. Oxford University Press. p. 437

	<ul> <li>bosons which include W and Z bosons and Higgs bosons.</li> <li>Without this particle, the entire Universe would be just an amorphous "soup" of subatomic particles. Matter would not exist at the atomic or macro-atomic level. In a state of quantum superposition, an object would be in several places at once, so we couldn't see anything.</li> <li>"The Higgs boson, physicists believe, originally started out as a tachyon. In the false vacuum, none of the subatomic particles had any mass. But its presence destabilized the vacuum, and the Universe made a tachyon.</li> </ul>
	transition to a new vacuum, in which the Higgs boson turned into an ordinary particle."
	— Michio Kaku <sup>15</sup>
And God said, "Let there be	Familiar elementary particles form quark – gluon
light," and there was light.	plasma.
(Genesis 1:3)	Quark confinement includes formation of protons and neutrons, building blocks of atomic nuclei.
	Nuclear fusion begins as heavy hydrogen (deuterium) and helium nuclei form from protons and neutrons.
	Normal matter consists of hydrogen and helium nuclei – free electrons begin scattering light.

<sup>&</sup>lt;sup>15</sup> American physicist (b. 1947)

The Romanian poet, Mihai Eminescu (1850-1889), wrote the poem "Scrisoarea I / First Epistle" in 1881. Einstein formulated the theory of relativity in 1905. Here is what Mihai Eminescu says:

"To the very first, when being and non-being were nought still, When there was but utter absence of both life-impulse and will, When unopen there was nothing, although everything was hidden, When, by His own self pervaded, resting lay the Allforbidden. Was it abyss? or a chasm? water fields without an end? There was no estate of wisdom, nor a mind to comprehend. For the darkness was as solid as is still the shadows' ocean, And no eyes, had there been any, could have formed of it a notion. Of the unmade things the shadows had not yet begun to gleam And, with its own self-contented, peace eternal reigned supreme. Suddenly, a dot starts moving - the primeval, lonely Other... It becomes the father potent, of the void it makes the mother. Weaker than a drop of water, this small dot that moves and bounds Is the unrestricted ruler of the world's unbounded grounds...."

That dot that Mihai Eminescu talks about is a gravitational singularity. We keep in mind that this poem was written 24 years before the official formulation of Einstein's theory. We mentioned it here as an interesting fact.

The creation occurs gradually from zero-point energy to lower dimensions, but there always remains a connection with a particle of the previous dimension. Everything is interconnected in the worlds, including several Universes, ours being created as a result of the collapse of the previous Universe, so keeping in touch with the Source of our life we will definitely be physically and mentally healthy.

### I.2. Interdimensional channels

"I wonder if I shall fall right *through* the earth! How funny it'll seem to come out among the people that walk with their heads downward! The Antipathies, I think... (and she tried to curtsey as she spoke--fancy *curtseying* as you're falling through the air!" (Lewis Carroll - 1832-1898 – Alice in Wonderland).

Lewis Carroll, by real name Charles Dodgson wrote Alice in Wonderland, apparently for children, to introduce the concept of communication channel with another possible space inside the Earth.

One person who picked up on that idea was Leonhard Euler, whom I already referred to. Euler suggested that the Earth was hollow, without any concentric shells, containing a 600-mile diameter sun in its very center. This inner Earth could be accessed at the Poles, North and South<sup>16</sup> or maybe through portals like Alice's rabbit hole.

There, in the centre, the gravitational force is zero because there's equal mass pulling on you from all sides, and it all cancels. If you built a room there, you could float around freely just like Alice. That's what it means to say that gravity is zero at the center of Earth<sup>17</sup>.

In the traditional cosmology of the primal societies and of the early cultures, there are three worlds: the Over Realm, the Under Realm, and the Middle Realm. If a part of the human structure can be projected in the center of the Earth, let's assume that it can also be projected in the dimensions above the Earth.

These communication channels were also described by Albert Einstein and Nathan Rosen (1909-1995) as Einstein-Rosen bridges. The name *wormhole* comes from the analogy with a worm that, instead of moving to the surface of the apple, moves through the apple, on a shortcut. Such a hole is like a tunnel with two ends in different planes. We do not yet have a complete quantum gravity model, but we do have a few approximate models that can point us in the right direction. One of these models is known as the Einstein-Dirac<sup>18</sup>-Maxwell<sup>19</sup> theory. It is so named because it includes aspects of Einstein's theory of gravity, Maxwell's theory of electromagnetism, and Dirac's quantum particle theory. Recently, a team found a solution for

<sup>&</sup>lt;sup>16</sup> C. Edward Sandifer, How Euler Did Even More, The Mathematical Association of America, 2014

<sup>&</sup>lt;sup>17</sup> https://physics.stackexchange.com/

<sup>&</sup>lt;sup>18</sup> Paul Dirac, British physicist (1902-1984)

<sup>&</sup>lt;sup>19</sup> James Maxwell, Scottish scientist (1831-1879)

the wormhole in the Einstein-Dirac-Maxwell equation. Traversable wormholes in Einstein-Dirac-Maxwell theory<sup>20</sup>. Moreover, the solution does not require negative energy states. In principle, this will allow you to travel through the wormhole without the need for a negative mass. The only problem here is that you should be in a quantum state. So microscopic groups of atoms could travel through this wormhole, but not humans.

If a disease settles in the human body first in the subtle structures it means that, detected, it can be removed following the reverse path and sent somewhere beyond time, as our ancestors used to do. "In my Father's house are many mansions." (John 14:2) The complex human body, including its atomic part might be a structure containing channels that can communicate with other dimensions.

The idea of a tunnel in the wormhole paragraph reminds me of Dr. Raymond Moody<sup>21</sup>'s experiments. He communicated with patients who had returned from clinical death. Many people felt they were attracted very quickly through a dark space, which most of them associated with a tunnel. "This happened to me when I was a little boy of nine years old... One afternoon I became very sick, and they rushed me to the nearest hospital. When I arrived, they decided they were going to have to put me to sleep, but why I don't know, because I was too young. Back in those days they used ether. They gave it to me by putting a cloth over my nose, and when they did, I was told afterwards, my heart stopped beating... I was moving through this - you're going to think this is weird - through this long dark place. It seemed like a sewer or something."

Another patient said, "I had a very bad allergic reaction to a local anesthetic, and I just quit breathing - I had a respiratory arrest. The first thing that happened - it was really quick - was that I went through this dark, black vacuum at super speed. You could compare it to a tunnel, I guess. I felt like I was riding on a roller coaster train at an amusement park, going through this tunnel at a tremendous speed."

"During a severe illness, a man came so near death that his pupils dilated and his body was growing cold. He says, *I was in an utterly black, dark void. It is very difficult to explain, but I felt as if I were moving in a vacuum, just through blackness. Yet, I was quite conscious. It was like being in a cylinder which had no air in it. It was a feeling of limbo; of being half-way here, and half-way somewhere else.*"

"One woman, who was near death following a traffic accident, drew a parallel from a television show.

There was a feeling of utter peace and quiet, no fear at all, and I found myself in a tunnel - a tunnel of concentric circles. Shortly after that, I saw a T.V. program called The Time Tunnel,

<sup>&</sup>lt;sup>20</sup> https://arxiv.org/abs/2010.07317

<sup>&</sup>lt;sup>21</sup> American physician (b. 1944)

## where people go back in time through this spiraling tunnel. Well, that's the closest thing to it that I can think $of^{22}$ ."

From that, we can deduce that the complex structure of man can contain channels through which that conscious part of him that detaches in episodes of clinical death can move. This structure gets out of the biological body through a tunnel, a channel.

The moment of death can be simultaneous with the moment of conception. The force with which the conscious structure leaves the body has the same intensity as the force meant to reconstitute the determining genetic package of a new body.

Man is made up of dense matter, subtle matter but also a conscious structure that does not belong to the physical plane, which enters the womb at the moment of conception and leaves the body through one of its orifices when we die.

"At the moment of death, says one Tibetan doctrine, the four sounds ... are heard: from the vital-force of the earth-element, a sound like the crumbling down of a mountain; from the vital-force of the water-element, a sound like the breaking of ocean waves; from the vital force of the fire-element, a sound as of a jungle afire; from the vital-force of the air-element, a sound like a thousand thunders reverberating simultaneously.

The place that one getteth into in fleeing from these sounds, is the womb<sup>23</sup>."

We have seen so far that man seems to be in the middle between the immaterial world we can reach through a wormhole and the underground world we reach through a rabbit hole. We are surrounded and penetrated by subtle matter through channels of interdimensional communication through which the diseases that destabilize us can enter and leave.

<sup>&</sup>lt;sup>22</sup> Raymond A. Moody, Life after Life, Mockingbird Books, Tracy, California, 1975

<sup>&</sup>lt;sup>23</sup> W. Y. Evans-Wentz: 'The Yoga of the After-Death State', in Tibetan Yoga and Secret Doctrine, p. 242 apud Rodney Collin, The Theory of Eternal Life

### I.3. The Soul

In 1907, Dr. Duncan MacDougall (1866-1920) of Massachusetts tried to prove the existence of the soul. A prestigious medical journal of the time published his theories, which were later popularized in the New York Times. The conclusions of this doctor were not taken seriously by the medical community back then. Dr. MacDougall graduated from Boston University and became the director of Stephen Henry Gale Hospital in Haverhill. He said in an interview with American Medicine reporters that he was intrigued at the priests' statement that the soul does not die with the body but continues to exist. Thus, the doctor considered that the soul should be an entity that occupies a certain space. So, he realized that if he could measure the weight of this entity as it leaves the body, he would provide definitive proof that the soul exists.

The doctor was criticized, not only by his fellow physicians but also by priests who considered the soul to be something intangible, something that could not be measured scientifically. Because he faced opposition from the community, the doctor continued his experiments in secret in the hospital where he worked. He weighed 6 dying people at the time of their death. He found they all lost about 21 grams of body weight.

MacDougall asked permission from terminally ill patients to take part in the experiment. He also had collaborators. Four doctors helped him. Together, they made calculations about the weight lost due to moisture, breathing, sweating, involuntary movements, urine evacuation, expired air from the lungs. The deceased lost about 21 grams, which could not be attributed to any of the causes listed.

Dr. Duncan MacDougall believed that the soul belonged to a category of substance other than the solid, liquid, or gaseous substance known to us.

According to the biostructuralist theory formulated by the Romanian academician Eugen Macovschi (1906-1985), life is not a property of living matter, but is located in the so-called *biostructures*. They have a spongy mass, and in their empty spaces there is an intraplasma solution. Spread throughout the cell mass, the biostructure is a kind of cellular brain that receives, stores, and carries information received by the cell from the environment, and from the changes needed for self-disintegration and self-repair. Biostructured matter exists as long as the body is alive. This hypothesis was theoretically stated in 1958 and was progressively improved in 1965 and 1969. When the electron microscope was perfected, the cell structure was studied in even more detail.

Between 1976 and 1981, researchers at Boulder University in California conducted ultramicroscopic investigations, highlighting cytoplasmic substance based on photographs, a microreticular structure strikingly similar to Eugen Macovschi's intuitive drawings.

The hypothesis of the Romanian scientist emphasized the role of water in the appearance of life and highlighted that the biological fraction of water, the so-called "living water" is the fundamental matter of life.

Eugen Macovschi's work, biostructural conception and molecular theories of living matter was published in the Bucharest Scientific and Encyclopedic Publishing House, in a trilingual edition in 1984. At that moment, the discovery was minimized in Romania because it scientifically demonstrated the existence of the soul, a theory that contradicted dialectical materialism, then in vogue.

Eugen Macovschi proved his theory as follows: he took a section of living matter, which microscopized the presence of interstitial spaces, then compressed it. Under a microscope, the sample no longer showed interstices. He measured the initial weight, then the final weight and the weight of the resulting water and determined that after compression, the total weight of living matter decreased. Thus, the existence of a subtle, disintegrated structure that emerged was highlighted. By pressing, it has been shown that living systems are always porous in terms of physical structure.

Any physical structure can reduce its volume. A dying living system changes its weight. Another experience of Macovschi's was the following: from a quantity of wheat grains, he took a sample which he heated to about 60 degrees Celsius. He then analyzed it under a microscope and determined that no physico-chemical structural changes occurred after heating. He sowed both the heated sample and the initial batch and found that the heated grains had not sprouted. The conclusion was that the batch heated to 60 degrees Celsius, lost its subtle structures.

Eugen Macovschi's theory was syncretized because it shows that in the deceased, the subtle structure remains between 9 and 40 days close to the physical structure. These numbers are found in the Christian-Orthodox traditions from certain areas of Romania, according to which part of a deceased person's structures disintegrate successively in 9 days, respectively 40 days after death. On this occasion, there are some special religious services dedicated to the deceased in order to help their soul to rise.

The survival of the soul after death is also based on evidence in the field of parapsychology. In Romania, Bogdan Petriceicu Haşdeu (1838-1907), historical philosopher and linguist, became a medium, following the death of his daughter, Iulia. This happened in 1888.

"It has been six months since my daughter died. It was March - winter was gone; spring was not yet here. One evening, damp and gloomy, I sat alone in the room by my desk. Before me, as always, there was a piece of paper and more pencils. Unbeknownst to me, my hand picked up a pencil and rested its tip against the gloss of the paper.

I began to feel short and heavy knocks on my left temple, just as if a telegraph had been inserted into it. Suddenly, my hand began to move restlessly. About five seconds at most. When my arm stopped and the pencil fell between my fingers, I felt awake from sleep, though I was sure I hadn't fallen asleep. I looked at the paper and read very clearly: *Je suis heureuse; je t'aime; nous nous reverrons, cela doit te suffire. Julie Haşdeu (I'm happy; I love you; we'll see each other again, that should be enough for you, Julie Haşdeu)*. It was written and signed in my daughter's handwriting."

Iulia Haşdeu (1869-1888) was a special person. At the age of 6, she wrote a study about the life and work of Mihai Viteazu/Michael the Brave (1558-1601), a Romanian ruler. At the age of 8, she spoke fluent French, English, German and graduated from primary school. At the age of 11, she graduated from the piano conservatory and the gymnasium. In 1881, she became the first Romanian student at the Sorbonne. Sick with tuberculosis, she returned to Bucharest, where she died suddenly at the age of 18. After her father started communicating with her, he built the castle of Câmpina, which he completed in 3 years.

The neurologist and psychiatrist Dumitru Constantin Dulcan (b. 1938) claims that life on earth is only a small part of what we have to live. He states that clinical death is a transition between two worlds. His book *Inteligența materiei /The Intelligence of Matter*, scientifically argues that behind all things is a universal reason and this reason is God. The second book, *În căutarea sensului pierdut/ In Search of Lost Meaning*, comes as a wake-up call for mankind who have lost touch with the source of creation. Spiritually confused, we have reached the moral, social and economic stalemate we are in at the moment. His third book, *Mintea de dincolo /The Mind Beyond*, shows that the experience of clinical death pleads for our cosmic origin, an argument supported by at least quantum physics, religion, transpersonal psychology<sup>24</sup>, neurocognitive science. All sources lead to the same conclusion that life on Earth is a lesson we must learn for our cosmic evolution. We are matter and spirit.

<sup>&</sup>lt;sup>24</sup> The *transpersonal* is defined as "experiences in which the sense of identity or self extends beyond (trans) the individual or personal to encompass wider aspects of humankind, life, psyche or cosmos" (Walsh, R. & Vaughan, F. "On transpersonal definitions". Journal of Transpersonal Psychology, 25 (2) 125-182, 1993)

Here are some testimonials of subjects returning from clinical death, reported by the Romanian neurologist, very similar to Dr. Raymond Moody's experiments. At first, the subjects do not understand what is happening to them; any pain stops. Then they realize they are dead and see their body from the outside. They are amazed they cannot be seen or heard by anyone, and at hearing others declare them dead. Dulcan tells us that God does not punish, but there is a cosmic law according to which everything we do to others is reflected on us, sooner or later, through sickness, trouble, and unhappiness. Hell is more of a state of mind, a state of our evilladen consciousness.

It is not the brain that generates consciousness, but consciousness receives a brain that it uses. The human mind is not limited to the biochemical reactions that take place in the brain. Measurements have been made when different areas of the brain are activated, and they show the activations precede awareness by a few thousandths of a second, meaning that the decision to perform a movement seems to be made before the brain is informed. And then if the initiative of the brain somehow precedes our will to act, we naturally ask ourselves: Are we thinking? Or are we put in a situation of thinking? There is still no coherent theory of consciousness. The experience of clinical death advocates the independence of consciousness from the brain.

It has been argued that visions during clinical death may be the effect of anesthetics that most patients are under or that their brain is suffering from epileptic seizure. Well, it can't be about the effect of the anesthetic, because there are people who had these experiences spontaneously without any chemical influence. There are people who developed the ability to extracorporealize in a state of lucidity and good health; their testimonies coincide with the visions of those who experienced clinical death.

There are studies conducted on hundreds of people of different ages, genders, religions and backgrounds. Their visions are similar. One argument for the existence of subtle human structures is that during clinical death, blind at birth see for the first time with the eyes of a subtle body, an energy body. It is a clear proof that we have a physical body, and a subtle body accompanied by consciousness detached from our anatomical brain, which has a different perception of time and space. Experience is about consciousness, not brain. A traumatized brain can, of course, generate hallucinations, but they have no coherence, no logic. Everything that happens during clinical death has coherence, moral sense, deep philosophies, with reference to the life of the person involved.

Another extremely important argument is our memory. The retrospective film of life that is presented to all those who enter another dimension proves that nothing is forgotten from what they lived. Even patients suffering from Alzheimer's, returning from clinical death remember what they could see on their trip out of body. During our life, it is not the memory that is lost, but the neurons atrophy. Memory remains in the field of consciousness that extends beyond us, at the same time as our subtle structures.

As for reincarnation, there are testimonies of people who give us food for thought. American researcher Sandra Anne Taylor (b. 1950) discusses the case of a young Arab, born in the mountains, in Lebanon, who did not leave his home until he was 20 years old. He was occasionally taken to another town hundreds of miles away, immediately recognizing it as the place where he lived another life. On an impulse, he went straight to the house where he was born, identified those who lived there by name, showed them where he remembered he had hidden some money and found it. The family was in the process of establishing a boundary between lands. He remembered where the old border was. He was so persuasive that justice accepted his testimony. He was born in the same season when the old person was killed.

American doctor Michael Newton (1931-2016), author of Destiny of Souls, used hypnosis, but instead of regressing to other lives, he specialized in inducing trance between lives. The fact that thousands of subjects exposed similar experiences could be an argument that the soul and reincarnation are real. Perhaps the most interesting fact in Michael Newton's research is that the soul remains in a higher dimension, and transmits only a part of its essence to the human body. When the body dies, the essence of the soul returns to its source, with memories and experiences. These ideas are in agreement with a pendulum, or cord / wire that ties us to a fixed point.

Dr. Ian Stevenson (1918–2007) a biochemist and professor of psychiatry, until 2002 was the coordinator of the paranormal investigation department at the University of Virginia. He investigated 3,000 cases: children recounting past lives. Numerous incarnations help us gain experience, prepare us for the final stage, of communion with the Source.

Dr. Ian Stevenson, author of Where Reincarnation and Biology Intersect, studied cases in which past injuries correlate with birthmarks, or congenital malformations in modern life. He also wrote about young children, who talk spontaneously about memories of past lives, even in cultures that do not believe in reincarnation. One of the children interviewed had memories before incarnation. He talked about heaven, about choosing the time of birth, even the parents. Some said rebirth is not a punishment for past sins, but an opportunity for the soul to evolve, as confirmed by Michael Newton's research.

Stevenson wrote about a woman who was treated through temporal regression after being raped. She was regressed before her birth, and she said she decided a traumatic incident would be necessary at that point in her life in order to change its course.

After the so-called death, we continue to live in the subtle body made of high frequency light, which we traditionally call *soul*; it has been described by those who can see subtle bodies

as made of millions of bright spots. If as far as our body is concerned, it is said we are made of earth and we will return to earth, as far as the soul is concerned, we are light and we will return to light.

David Bohm<sup>25</sup> says the Universe is a giant hologram. There is only a difference in frequency between the world here and the world in another dimension. What we do not see does not mean it does not exist. We perceive sounds whose frequency is between 16,000 and 20,000 Hz. The bat emits and receives ultrasound with a frequency of up to 150,000 Hz, and dolphins communicate at frequencies above 150,000 Hz. Below a specific frequency threshold, light condenses into physical matter, and above it, light becomes invisible energy. On Earth, we are limited by a wall of frequency that obscures our view. The experience of clinical death was a gift God gave us to urge us to change the wrong path we have taken so far, to learn the lesson of knowledge and love, the true meaning of life; to live in harmony with God, with ourselves, with our fellow men and with nature. Jesus did not accidentally say, "I am the Way, the Truth, and the Life." We have been shown the truth, we have been shown the way, it is our turn to answer the call.

Leaving the field of medicine, we find with surprise that the existence of the soul is also demonstrated mathematically. The mathematician Bernhard Riemann (1826-1866) showed that a sphere on a complex plane has an infinite south pole and an infinite north pole (See Fig. 2). The complex plan has a real and an imaginary axis. Living particles from the first day of creation can be associated with Riemann spheres. The Riemann sphere is balanced in terms of positive and negative real numbers and positive and negative imaginary numbers. The sum of all these numbers is 0, so a living particle like the Riemann sphere is a dimensionless point that contains 0 energy as a total, and yet all the energy is concentrated in it. The Riemann sphere is an eternal 0 as the Universe made up of an infinity of living, primordial particles.

The numbers associated with the Riemann sphere are found in Euler's formula. The Big Bang explosion was actually an explosion of primordial living particles that led to the birth of souls, which we should keep healthy and bright as they were at the moment of Creation.

<sup>&</sup>lt;sup>25</sup> American physicist (1917-1992)



Fig. I.3.1

### I.3. Subtle human structures

#### I.3.1. Bioradiation

Living organisms emit radiation (bioradiation). They create a bioenergetic field that interferes with other fields (gravitational, magnetic) contributing to universal biocommunication. In the last decades, a series of researches on bioradiation have been carried out and here is a classification:

a. *the mitogenetic radiation* discovered by the Russian professor Alexander Gurwitsch (1874-1954) in 1927, which is emitted by active cells of the living tissue and stimulate mitosis in other cells;

Mitosis is the stage of the cell cycle through which the equal distribution process of the genetic material of mother cell between two daughter cells is carried out.

b. *the aura of radiations* surrounding organisms highlighted by Kirlian (1898-1978) effect or by the electronographic technique created in Romania by Ioan Florin Dumitrescu (1937-1999), MD, PhD;

Semion Kirlian managed to capture on photographic film a unique phenomenon: the force fields that surround beings and plants.

Electronography is a method of electromagnetic research of the bodies, without producing negative effects on them.

Bodies are subjected to the action of a continuous electrical impulse (electronography) or alternative (Kirlian) of high intensity, in a very short time.

The response of the system is recorded on the photographic plate or on a pellicle. During processing, it is found that outside the tested system there is a bright area formed by glimmer and aura, different for each system.

Electronography reveals that all systems have at surface an interface zone with thickness of up to about 5 cm. At the level of this area which presents a great variability, radiation is produced in the form of glimmer with luminescence, variable in shape and structure. This glimmer is of two categories: electropositive and electronegative. The amplitude and shape of each type of glimmer differs, though it contains the same information about the characteristics of the electronography beneficiary.

In healthy people, the glimmer is represented by long rays, organized in harmonious way, straight, bright, on the entire surface of the system.

In sick people, dark spots appear (those portions do not respond to the electrical impulse), missing rays, curved rays, low brightness, streaks, etc. Glimmer of living systems manifest a

momentary and temporal variability, which in non-living systems is missing, in their case, the glimmer being uniform in brightness.

During sleep or anesthesia, after excess of coffee or in case of diseases, pathogenic conditions, the striations of the living systems are diminished and are less luminous than those related to the normal state of health.

Electronography provides the simplified image, corresponding to some informationenergy phenomena that occur in physical structures of living or non-living systems. c. the *hallucinatory exogenous radiations* of some patients in crisis studied by Ghenadi Krohalev (1941-1998);

In the 70s of the last century, the psychiatrist Ghenadi Krohalev, using a camera, began to capture on paper the visions of his patients, suffering from mental illnesses. In almost half of the photographed subjects, the images of their hallucinations also appeared on paper. The device used consisted of a camera inserted into a diving mask, to create total darkness between the patient's eyes and the camera lens. The Russian scientist suggested that the photographs are nothing but images of another reality, which can penetrate the brains of people whose energetic aura is very low.

d. bioradiation transmitted in hypnotic states between hypnotist and patient as telepathic signals;
e. the motor radiations of some plants to actions under psychic stress, highlighted by the American scientist Cleve Backster (1924-2013) and studied in our country by Mărioara Godeanu (1938-2014);

Cleve Backster is a pioneer in the field of research who demonstrated that plants or any other living cells have surprising abilities to respond to thoughts and feelings and to communicate in ways that, traditionally, would be incomprehensible.

Cleve Backster was an expert specializing in the operation of lie detectors. In 1966, using a lie detector, he accidentally discovered that plants have activities of emotional nature, similar to those of human beings.

Backster used the lie detector one day on the leaves of the Dracaena plant, also known as a "Dragon Tree." He wanted to see how long it would take for the leaves to react after pouring water on the roots of the plant.

In theory, a plant will increase its conductivity and have low resistance after absorbing water. In this context, the curve recorded on the graph paper should have been upwards. In reality, on the paper with the drawing, the curve is downward.

When a person is connected to the lie detector, the recordings of the curved lines are different, depending on the changes in the person's moods. The reaction of the Dragon Tree plant

was like a wave motion that shows changes in human mood. It seemed that it was happy when it drank water.

Backster went further and wanted to see if the plants showed other reactions. From previous experience, Backster knew a good way to provoke a strong reaction from a person was to threaten them.

So, he thought of putting the plants in hot coffee, but he didn't get any reaction. He then thought of burning the leaves that were connected to the polygraph. Just thinking about this, a curve appeared on the graph paper. When he returned, he saw another peak appearing on the curve. Thus, it was observed that plants were able to distinguish true intentions from false ones.

The research demonstrated plants have close ties with their owners, sensing their intentions even from a distance.

Mrs. Mărioara Godeanu was a distinguished biologist. Her greatest discovery is the reality beyond the boundaries of science, a reality that more and more scientists of the millennium admit: the presence of the Unique Creator in all forms of manifestation of matter in the Universe.

Based on Backster's and Godeanu's findings about plants, we can say it is worth conducting research on plants that interacted with fireflies on specific moments of the year. We are sure communication between humans and plant and animal kingoms is possible for the highest benefit of all the parties concerned.

f. *the dowsing capacity* of some subjects, that is their capacity of extrasensory perception; g. *the psychokinetic phenomena* studied by Victor Adamenko (b. 1938).

Adamenko<sup>26</sup> and several of his colleagues managed to conclude "bioplasma" in a magnetic field not only undergoes radical changes, but also provides certain characteristics leading to the idea that it is concentrated in hundreds of points which seem to correspond to the classical points of Chinese acupuncture.

Centuries ago, the Chinese identified on the surface of the human body landmark points along which a mysterious force travels, which they considered life force or vital energy. It was precisely at these points that they began to painlessly use needles, aimed at correcting imbalances in the energy flow, making disease disappear. Even in Kirlian's photographs, the points on the human body that emit the strongest light seem to correspond exactly to those established by the Chinese in acupuncture.

<sup>&</sup>lt;sup>26</sup> http://popescu-colibasi.go.ro/F\_copy\_paste/cp\_Viata\_secreta\_a\_plantelor-P.Tompkins.html, accessed on 07 September 2022

### I.3.2. Biofields and aura

In 1780, Luigi Galvani<sup>27</sup> observed the phenomenon of contraction of the skeletal muscles in a frog's leg at excitation with electric current, concluding that life is closely related to electricity. Vitali Efimov (b. 1938) discovered that along the excited nerves, a bioelectric field is formed, which envelops it from one end to the other.

Biofields interact and play an important role in the transfer of energy from one molecule to another, from one cell to another, from one organ to another. They can be factors of functional connection between parts of the body, but also with other individuals, connections that, in some situations, can manifest at very long distances (telepathy).

"All living beings, people, animals, plants and even stones emit particles, produce emanations, and these particles and emanations form the aura. (...) Aura is therefore a very broad synthesis of various human tendencies, qualities and virtues. In certain people the aura is very extended, very vast; with intense vibrations and splendid colors; in others, on the contrary, it is small, gray and hazy. The aura possesses the same functions as the skin. It can be said that it is the skin of the soul, it is the one that covers it, that protects it, that gives it sensitivity, and finally the one that allows the cosmic currents to pass allowing exchanges between the human soul and all creatures, up to the stars, between the soul of a creature and the Universal Soul." Omraam Mikhael Aivanhov<sup>28</sup>

The aura of the body has special dynamics depending on a multitude of factors. The shape and color depend on health, mental mood, stress, etc. Moreover, starting from the premise that through culture man intensifies spiritualization, and this influences some physiological processes, it is considered that through the act of culture there are changes in the aura.

Some writings from Indian antiquity mention that there are initiates who can see in the auras areas as vortices they call *energy centers*. The first scientific evidence of energy centers was provided by Dr. Hiroshi Motoyama (1925-2015) of the University of Tokyo, who invented a device for measuring them. The energy centers are described as colorful, circular in shape with rapid dynamics, like lotus flowers with colored petals.

Hiroshi Motoyama was a Japanese parapsychologist, scientist, spiritual instructor and author whose main subject was spiritual self development and the relationship between mind and body. Motoyama emphasized the meditative practices of Yoga, reincarnation and Hindu theories of energy centers.

<sup>&</sup>lt;sup>27</sup> Italian physician (1737-1798)

<sup>&</sup>lt;sup>28</sup> Bulgarian philosopher (1900-1986)

Aura typology does not represent constancy like blood groups, but varies depending on different factors during ontogenesis that is origin and development of an organism:

- a child's aura contains relatively little electronographic information;

- the aura of an adult offers more details;

- the aura of the adult is very rich in signals, characteristically distributed.

So, in ontogenesis, the aura is gradually structured, it becomes more and more complex. The skin of the adult has in the structural memory not only the hereditary potential, but also the sequence of events in concrete existence. It is as if they could be perceived beyond bodily limits in various forms corresponding to the successive states we have gone through.

Another fact that has aroused special interest is the existence of the so-called "electric aura" around the bodies. To show that the Universe is energy, Aivanhov said it is enough to take a tree and set it on fire. After a while, only ash, heat, water vapor and carbon dioxide will remain. That remaining handful of ashes shows that the tree is nothing but light stored in a little earth.

The four elements (water, air, earth and fire) contribute to its creation, photosynthesis being nothing more than a system of solar energy storage (photons). The man is not far from the tree. On a higher stage of living matter, yes, but consisting of the same elements as any animal.

Inforenergetics is a new frontier science that was communicated internationally for the first time on the occasion of the Inter-Mediterranean Medical Entente from September 9-12, 1992 in Mamaia by its founder, Mr. Claudian Dumitriu (b. 1935), member of the Balkan Medical Union, President of the Romanian Society of Radiesthesia and of Inforenergetics Foundation "Sf. Apostol Andrei." It is an interdisciplinary science, having illustrious precursors such as Acad. E. Macovschi with the biostructural theory of living matter.

Inforenergetics deals with the study of phenomena and processes determined by the existence of a quantity of information organized according to a more or less complex algorithm implemented in some energy support (electromagnetic, caloric, chemical, mechanical, etc.), optimal for the goal pursued, to have effects, results, efficiency on material, energetic, informational, etc., predetermined targets. This spiritual science, which includes the teachings of the Holy Scripture and all modern sciences, uses its own research methods. Unique in the world, this approach gives the possibility to perform alpha-numeric measurements and determinations with the help of the main working tool - the dowsing rod with a protractor - having the invention patent RO113710 from 1996.



Fig. I.3.2.1 Dowsing rod and protractor

The term *Inforenergetics* was officially put into circulation for the first time in 1988, through a communication held by Mr. Claudian Dumitriu when the Brăila branch of the Association of Scientists was founded.

In Romania, in this field, there have been applicative concerns since ancient times, consisting of discovery of water, oil or gold sources, through traditional activity of fountain detectors, gas miners or gold seekers. It should be noted that the term designating these professions refers not only to the activity of exploiting and valorizing these resources, but also extends to those who deal with their detection through dowsing means.

According to the theories of Inforenergetics, all living systems are surrounded by an auric field (aura), a field made up of seven distinct physical biofields, which include each other.

These physical biofields are generated and controlled by seven main energy centers. Defining them, we can say that biofields are inforenergetic formations with a distinct character, surrounding a living system, which vary in size and shape both from kingdom to kingdom and from individual to individual. They are made of a quantity of energy in which informational algorithms specific to their functions and activity are implemented.

The biofields of a living system have the same sequence regardless of the nature of the living system (human, animal, plant). In plants, the biofields are placed approximately equally

around the outline of the respective plant. In humans and animals, the biofields keep other proportions compared to the vital needs of the respective living systems.

The biofields of a living system tend to settle permanently according to certain proportions, ratios, which are unique to each one, thus providing absolute individuality. They are measured starting from the outer limit of the living system to the actual limit of the respective biofield. That is, biofields include each other.

1. The vital field is closely related to the life of the living system and its duration.

A vital field that functions below 60% already leads to serious diseases of the living systems. A vital field that functions below 30% generates prelethal states (comas, clinical deaths and ultimately death).

It is generated and controlled by the root energy center, and is red in color.

2. The field of control and surveillance ensures the integrity of the living system and forms the ghost image of a segment that is possibly missing from it. (In a Kirlian image of a leaf where a certain portion is missing, one can still see the entire control and surveillance field surrounding the entire leaf). This field is special because it activates, sets the body to work during the recovery period following an illness, a surgical intervention, a treatment. It also determines measures to return to the initial qualities in case of illness, and when this field intensifies, the anomalies of a pathogenic-energetic nature are reduced.

It is generated and controlled by the sacral energy center, and is orange in color.

3. The protective field senses everything that enters its own space (inforenergetic niche), it announces the subconscious through specific signals which in turn will generate impulses that will be consciously decoded (inner peace is the best protection).

It is generated and controlled by the solar plexus energy center, and is yellow in color.

4. The field of informergetic contact with the earth or telluric informational contact, connects the living system and the planet it lives on.

It is generated and controlled by the heart energy center, and is green in color.

The first four fields, as we have seen, are generated and controlled by the so-called lower energy centers.

Once with biofield no. 4, at the level of the upper energy centers, this place of passage is of connection too, because here, the vital functions intersect with the information of affective states.

5. The emission field is responsible for the energy-inforcing influence of the surrounding environment. It constitutes a part of what is necessary in the development of telepathic phenomena without being sufficient. It obeys the physical structure as well as the spiritual structure. The emission is something beyond words, it is specific and special to altruism and individual benefit.

It is generated and controlled by the throat energy center, and is blue in color.

6. The reception field is the other necessary part of telepathy and is closely related to extrasensory perception.

Once with the reception field, we leave the physical sphere and enter the spiritual sphere.

It is generated and controlled by the brow energy center, and is indigo in color.

7. The field of informational contact with the Universe integrates with the Universe and develops according to spiritual concerns.

It is generated and controlled by the crown energy center, and is purple in color.

Beyond biofields 1-7 is a disruptive zone, an interface between biofields and the surrounding environment.

In the case of humans, the size and inforenergetic density of the biospheres is primarily determined by the internal activity of the living system, then by the nature of the facts and decisions it makes (we are referring here to humans).

When entering into contact with a signal source external to the living system, biofields have two tendencies:

- if the source is aggressive, the biofields tend to retreat in front of it;

- if the source is positive, an interference and response action results.

Biofields fluctuate in size and inforenergetic density depending on various factors. A biofield can expand or decrease until it coincides with the boundary of a neighboring biofield (within the same living system).

The reasons are as follows:

a) the most important, the activity in which the living system is involved (prayer increases the informational contact field with the Universe that draws all other biofields);

b) varies from day to night (various day/night activities);

c) age;

d) seasons;

e) states of fatigue and illness;

f) astrologic context;

g) other living systems.
# **CHAPTER II**

# II.1. Anatomy and physiology of the central nervous system

The nervous system is a complex network that allows an organism to interact with the environment. Sensory components that detect environmental stimuli and motor components that provide skeletal, cardiac, and smooth muscle control, as well as control of glandular secretions, are coordinated in a system to force appropriate motor responses to sensory stimuli or inputs that have been received, stored and processed.

The nervous system is made up of vast neural networks; signaling in these circuits allows thinking, language, feeling, learning, memory and all functions and sensations. It is well established that, through the plasticity of existing cells, our nervous system can adapt to situations not previously encountered, but it has also been shown that neural stem cells are involved in creating new connections in adapting and responding to damage. Neural stem cells play a key role in the development and ability to respond to environmental stimuli and injuries.

The nervous system is divided into the central nervous system and the peripheral nervous system. The central nervous system is the brain and spinal cord. Responsibilities of the central nervous system include receiving, processing, and responding to sensory information.

The central nervous system (CNS) is a division of the nervous system whose function is to analyze and integrate various intra and extrapersonal information, as well as to generate a coordinated response to these stimuli. Simply put, the CNS is the supreme command center of the body.

The CNS consists of two organs that are continuous with each other; the brain and the spinal cord. They are enveloped and protected by three layers of meninges and framed in two bone structures; the skull and the spine, respectively. The brain is made up of subcortical structures, diencephalon, cerebral hemispheres, brainstem and cerebellum. The spinal cord continues from the brainstem into the lower part and extends through the spinal canal.

While analyzing information and preparing appropriate body responses, parts of the brain and spinal cord communicate with each other through many neural pathways. Once the final result is ready, they transmit it to the rest of the body through the nerves of the peripheral nervous system, which come directly from the two organs. Specifically, the brain sends forth 12 cranial nerves that innervate the head, neck, and thoracic and abdominal viscera, while the spinal cord sends forth 31 pairs of spinal nerves. The spinal nerves complete the innervation of the viscera, as well as the rest of the body that is not "supplied" by the cranial nerves (upper and lower limbs).



Fig. II.1.1 Central and peripheral nervous system

The CNS is crucial for the functioning of the body, and any compromise in the brain and spinal cord can lead to severe difficulties. The function of the CNS tissue is crucial for the survival of the body, so the contents of the blood cannot simply pass into the central nervous tissue. To protect the brain and spinal cord from external injuries due to physical trauma and internal damage caused by toxins and pathogens that can circulate through the bloodstream, there are various protective structures that surround the brain and spinal cord. Cranial bones and vertebrae are obvious structures that protect the nerve tissue of the brain and spinal cord from external trauma. However, there are other internal structures that play an important role in protecting and maintaining homeostasis of nerve tissue.

*The brain* is an organ of nervous tissue that is in charge with responses, sensations, movements, emotions, communication, thought processing and memory. The protection of the human brain comes from the skull, meninges and cerebrospinal fluid. The nervous tissue is extremely delicate and can suffer injuries with the least amount of force. In addition, it has a blood-brain barrier that prevents the brain from any harmful substances that could float in the blood.



Fig. II.1.2 The Brain<sup>29</sup>

The brain is divided into two hemispheres, left and right. They are in constant communication, the left and the right hemispheres being responsible for different behaviors. The left hemisphere is more dominant with language, logic and math skills. The right hemisphere is more creative, being dominant in artistic and musical situations, and intuition.

The brain is located inside the skull. It extends from the anterior frontal bone to the posterior occipital bone. Inside the skull, the brain fills the anterior and middle cranial fossae and is located above the inferoposterior cerebellar tentorium.

### Internal structure

The brain is made up of two different types of tissue - gray matter and white matter:

➤ The gray matter forms the surface of each cerebral hemisphere (known as the cerebral cortex) and is associated with processing and cognition.

➤ The white matter forms most of the deep parts of the brain. It consists of glial cells and myelinated axons that connect different areas of gray matter.

### External structure

On the outside, the brain has a very twisted appearance, consisting of grooves (sulci - grooves or fissures, and gyri - bumps or folds). It is divided into two anatomically symmetrical hemispheres of longitudinal fissure - a major groove that develops in the median sagittal plane. The scythe (Falx cerebri) - a fold of the dura mater - descends vertically to fill this fissure. The two cerebral hemispheres are connected by a white matter structure called the *corpus callosum*.

The main fissures are:

<sup>&</sup>lt;sup>29</sup> https://anatomie.romedic.ro/encefalul-creierul

▶ Rolando central fissure - fissure that separates the frontal and parietal lobes.

Sylvius lateral fissure - a groove that separates the frontal and parietal lobes from the temporal lobe.

 $\succ$  transverse occipital groove - groove located in the occipital cortex

The main gyri are:

> Precentral gyrus - the bump directly anterior to the central sulcus, the location of the primary motor cortex.

> Postcentral gyrus - the bump directly posterior to the central groove, the location of the primary somatosensory cortex.

> Upper temporal gyrus - the ridge located below the lateral groove, responsible for receiving and processing sound.

*Cerebral cortex:* The cerebral cortex is the outermost layer that surrounds the brain. It is composed of gray matter and is filled with billions of neurons used to conduct high-level executive functions.<sup>30</sup>

The cerebral cortex is classified into four lobes, named after the corresponding cranial bone that overlaps approximately each side. Each lobe contains various cortical association areas - where information is gathered in different ways for processing. Together, these areas work to give us meaningful perceptual interpretation and experience of the environment.

The frontal lobe is located below the frontal bone and is the anterior region of the brain. It is separated from the posterior parietal lobe by the central groove and from the inferiorposterior temporal lobe by the lateral groove.

The areas of association of the frontal lobe are responsible for: higher intellect, personality, mood, social behavior and language (only the dominant hemisphere).

The parietal lobe is located under the parietal calvarial bone (skull vault), between the anterior frontal lobe and the posterior occipital lobe, from which it is separated by the central groove, respectively the parieto-occipital groove. It is placed higher in relation to the temporal lobe, being separated by the lateral groove.

Its cortical association areas contribute to control: language and computation on the dominant hemisphere side and visual-spatial functions on the non-dominant hemisphere side.

The temporal lobe is located below the temporal calvarial bone, inferior to the frontal and parietal lobes, from which it is separated by the lateral groove.

The cortical association areas of the temporal lobe are responsible for memory and language - this includes hearing, as it is the location of the primary auditory cortex.

<sup>&</sup>lt;sup>30</sup> Shipp S.. Structure and function of the cerebral cortex, Curr Biol. 2007 Jun 19;17(12):R443-9

The occipital lobe is the back of the brain, located below the occipital calvarial bone. Its lower aspect rests on the tentorium cerebelli, which separates the brain from the cerebellum. The parieto-occipital groove previously separates the occipital lobe from the parietal and temporal lobes.

The primary visual cortex is located in the occipital lobe and therefore its area of cortical association is responsible for vision.



Fig. II.1.3 Cerebral cortex lobes <sup>31</sup>

# Subcortical structures

Subcortical structures are a neural group of structures embedded deep in the brain. These include the diencephalon, basal ganglia, limbic system and pituitary gland.

The diencephalon is located deep in the white matter of the brain. It is a collection of four brain structures located on each side of the midline, bilaterally with the third ventricle of the brain. These include:

 $\succ$  The thalamus, which is an ovoid nuclear mass consisting of four groups of nuclei: anterior, medial, lateral and intralaminar nuclei of the thalamus. The thalamus transmits sensory and motor information to and from the cerebral cortex. The thalamus is the relay center of the brain. It receives related impulses from sensory receptors located throughout the body and processes the information to be distributed in the corresponding cortical area. It is also responsible for regulating consciousness and sleep.

<sup>&</sup>lt;sup>31</sup> https://sistemul-nervos.weebly.com/emisferele-cerebrale.html

➤ Epitalamus, which is the back of the diencephalon. It consists of the pineal body, the medullary striae and the habenular trigone. The epitalamus is involved in controlling the sleep-wake cycle (circadian rhythm) and in initiating and controlling movement.

 $\succ$  Subthalamus, which is located ventrally of the thalamus. It includes the subthalamic nucleus, an unclear area (of Forel) and the peripeduncular nucleus. The role of the subthalamus is in the control, integration and accuracy of motor activity.

➢ Hypothalamus, which is positioned inferior to the thalamus. It is divided into three groups of nuclei (anterior, middle, posterior) and three areas (periventricular, medial, lateral). The hypothalamus regulates the response to stress, metabolism and reproduction through various hypothalamic axes and the pituitary portal system. While the hypothalamus is one of the smallest parts of the brain, it is vital for maintaining homeostasis. The hypothalamus connects the central nervous system to the endocrine system. It is responsible for heart rate, blood pressure, appetite, thirst, temperature and the release of various hormones. The hypothalamus also communicates with the pituitary gland to release or inhibit antidiuretic hormone, corticotropin-releasing hormone, gonadotropin-releasing hormone, growth - hormone, prolactin - inhibiting hormone, thyroid - releasing hormone.

The basal ganglia or basal nuclei are a group of gray matter nuclear masses spread to the lower part of the brain, diencephalon, and middle brain. These nuclei include the caudate nucleus, putamen, globus pallidus, the substantia nigra, and the subthalamic nucleus. The caudate nucleus and the putamen collectively form the striatum. The putamen and the pallidus globe form the lentiform nucleus. The basal ganglia are responsible for the movements and coordination of the muscles.<sup>32</sup>

The limbic system is a set of structures that extend to the brain, subcortex, and brainstem. The limbic system is composed of the piriform cortex, hippocampus, septal nuclei, amygdala, nucleus accumbens, hypothalamus and anterior nuclei of the thalamus. It consists of two divisions called *the limbic cortex and deep limbic structures*. The limbic cortex consists of various grooves and cerebral glands of the frontal, temporal, and parietal lobes. The deep part of the limbic system consists of the hippocampus, the amygdala, the diencephalon, the olfactory cortex, the basal ganglia, the basal part of the brain, and the brainstem.

The fornix and the fiber tracts connect parts of the limbic system, allowing them to control emotion, memory and motivation. The piriform cortex is part of the olfactory system and is located in the cortical area of the limbic system. The hypothalamus receives most of its limbic

<sup>&</sup>lt;sup>32</sup> Lanciego JL, Luquin N, Obeso JA., *Functional neuroanatomy of the basal ganglia*, Cold Spring Harb Perspect Med. 2012 Dec 1;2(12):a009621. doi: 10.1101/cshperspect.a009621. PMID: 23071379; PMCID: PMC3543080

production, which explains psychosomatic illness, where emotional stressors cause somatic symptoms.

The general function of the limbic system is to control emotions, smell and homeostasis. A particularly important structure of the limbic system is the formation of the hippocampus involved in long - term memory and space navigation. In addition, the amygdala responds to fear.<sup>33</sup>

The brainstem is the lower part of the brain. It is located in the posterior cranial fossa and consists of three parts: the midbrain, the pons and the medulla oblongata. Internally, it is divided into the basal area, tegmentum and tectum. The brainstem has three main important functions:

> It contains the nuclei of most cranial nerves.

➢ It facilitates the trajectory of neural pathways that travel between the spinal cord and the brain.

> It regulates vegetative functions such as heart rate, blood pressure, respiration and gastrointestinal functions.

The midbrain is the upper part of the brainstem. It is located between the upper thalamus and the lower pons. The midbrain is involved in visual and auditory reflexes, vigilance and temperature control. It is provided by the mesencephalic branches of the basilar artery.

The anterior aspect of the midbrain contains several important structures; two cerebral peduncles, the interpeduncular fossa, the red nucleus and the oculomotor nerve. In turn, the posterior aspect of the midbrain has four protrusions called *colliculus* (upper, lower). These clusters collectively form the quadrigemina plaque (corpora quadrigemina). The trochlear nerve also emerges from the posterior aspect.

The pons is the middle component of the brainstem, located between the midbrain and the medulla oblongata. Pons is involved in various functions such as sleep, hearing, swallowing, taste, breathing, balance and motor actions. The blood supply is from the pons branches of the basilar artery.

The anterior aspect of the pons presents some important landmarks: the pons grooves (upper, lower), the basilar groove, as well as the striations created by the fibers of the corticopontocerebellar tract. Four pairs of cranial nerves protrude from the anterior part of the pons: the trigeminal, abducens, facial and vestibulocochlear nerves. On the opposite side, the posterior aspect of the pons contains the upper half of the rhomboid fossa, the medial eminence, the posterior median groove, the facial colliculus, the medullary striae, the locus coeruleus and the vestibular areas.

<sup>&</sup>lt;sup>33</sup> Rajmohan V., Mohandas E., *The limbic system*. Indian J Psychiatry. 2007 Apr;49(2):132-9. doi: 10.4103/0019-5545.33264. PMID: 20711399; PMCID: PMC2917081

The medulla oblongata is the lower part of the brainstem. It regulates the autonomous activities related to cardiac, respiratory, reflex and vasomotor functions. The medulla oblongata is provided by the inferior cerebellar arteries and the anterior spinal artery.

The anterior aspect of the oblong marrow contains various protuberances and emerging cranial nerves. These include the anterior median fissure, pyramids, olives, hypoglossal nerves, glossopharyngeal nerves, and vagus nerves. The posterior surface of the medulla oblongata is also marked with many important anatomical structures, such as posterior medial sulcus, cuneate fasciculus, gracile fasciculus, cuneate tubercle, gracil tubercle, trigeminal tubercle, lateral funiculus, lower half of rhomboid and obex fossa.

The cerebellum is located in the posterior cranial fossa, posterior to the brainstem and the fourth ventricle. It is separated from the brain by the tentorium cerebelli. In addition, the cerebellum is anchored and communicates with the brainstem through the upper, middle, and lower cerebellar peduncles. The functions of the cerebellum include coordination and precision of motor activities, as well as motor learning. The blood supply to the cerebellum is derived from the inferior posterior, superior, and anterior inferior cerebellar arteries.

The cerebellum consists of three parts; a middle vermis flanked by two hemispheres. The upper (tentorial) surface is facing upwards and the lower (occipital) surface is facing downwards. The cerebellum is divided horizontally into three lobes (anterior, posterior, floculonodular) and about ten lobes.

The cerebellum is in constant communication with the cerebral cortex, taking higherlevel instructions about the brain's intentions, processing them through the cerebellar cortex, and then sending messages to the cerebral motor cortex to make voluntary muscle contractions. These contractions are calculated to determine the force, direction, and momentum needed to ensure that each contraction is smooth and coordinated.

*The spinal cord* is a vital aspect of the CNS found in the spine. The purpose of the spinal cord is to send motor commands from the brain to the peripheral body, as well as to transmit sensory information from the sensory organs to the brain. The protection of the spinal cord is possible through bones, meninges and cerebrospinal fluid.



Fig. II.1.4 Spinal cord

The spinal cord continues inferiorly to the medulla oblongata. It extends from the foramen magnum of the skull to the level of the L1 / L2 vertebrae. The spinal cord consists of five segments (cervical, thoracic, lumbar, sacral, coccygeal) and a total of 31 pairs of spinal nerves protruding from them. There are 8 cervical nerves, 12 thoracic nerves, 5 lumbar nerves, 5 sacral nerves and 1 coccygeal nerve. Each nerve exits the spine through the intervertebral foramen and to its designated location in the body.

The spinal cord has four surfaces, an anterior fissure and three grooves. Inside, it consists of a central gray substance surrounded by white matter. The blood supply to the spinal cord comes from the vertebral and segmental arteries.

Due to the cervical and lumbar enlargements, the spinal cord differs in width throughout its structure. Cervical enlargement occurs at C3 to T1, and lumbar enlargement is from L1 to S2. The white matter is present outside the spinal cord, with gray matter located in the core and cerebrospinal fluid in the central canal. The gray commissure, the dorsal, lateral and ventral horns are all composed of gray matter. The gray commissure surrounds the central canal. The dorsal horns are made up of interneurons, while the ventral horns are somatic motor neurons. Afferent neurons in the dorsal roots carry impulses from the body's sensory receptors to the spinal cord, where information begins to be processed. The ventral horns contain efferent motor neurons, which control the periphery of the body. The axons of motor neurons are found in the skeletal and smooth muscle of the body to regulate both involuntary and voluntary reflexes.

The spinal cord terminates in a cone-shaped structure called *the conus medullaris* and is supported to the end of the terminal filament coccyx. The ligaments are located throughout the spine, securing the spinal cord from top to bottom.

The function of the spinal cord is to transmit information between the brain and the rest of the body. In addition, the spinal cord regulates the lower body's independent brain functions, such as reflexes.

The meninges are three membranes that surround the brain and spinal cord. The meninges of the brain are called *cranial meninges*, while the meninges of the spinal cord are called *spinal meninges*. The cranial and spinal meninges are continuous with each other through the foramen magnum. The function of the meninges is to protect the CNS, support the blood vessels and retain cerebrospinal fluid (CSF). From shallow to deep, the meninges include:<sup>34</sup>

 $\blacktriangleright$  Dura mater - a two-layer sheath consisting of periosteal and meningeal dura mater. The dura mater of the brain is firmly attached to the skull through its periosteal layer. The spinal cord (sheath) envelops the spinal cord and is separated from the spine by the epidural space. The layers of the cranial dura are divergent from each other in several places, forming a space containing the dural venous sinuses.

➢ Arachnoid mater - cranial and spinal arachnoid is located under the dura mater. The space between the dura and the arachnoid is called *the subdural space*.

▷ Pia mater - the cranial and spinal pia mater adheres tightly to the surfaces of the brain and spinal cord, respectively. The pia mater is highly vascularized, containing numerous blood vessels that feed the CNS surfaces. The cranial pia mater envelops the entire brain and is continued inferior to the spinal pia. The spinal pia covers the spinal cord and terminates as a terminal phylum beyond the S2 vertebra. The space between the arachnoid and the pia mater is called *subarachnoid space*. It contains CSF and superficial blood vessels of the brain and spinal cord. Moreover, it has mushroom-like prominences through the overlying dura mater called *arachnoid granules*, the purpose of which is to allow the main path to eliminate CSF.

The cerebrospinal fluid (CSF) is a colorless liquid that bathes the brain and the spinal cord. It is produced by the specialized tissue called *choroid plexus* that is found in the walls of the ventricles of the brain. CSF circulates sequentially through the subarachnoid ventricles and cisterns to be finally reabsorbed into the venous system by the subarachnoid granules. The function of the CSF is to absorb mechanical force, to protect the CNS and to supply it with nutrients.<sup>35</sup>

The ventricles of the brain are the cavities filled with CSF, embedded deep in the parenchyma of the brain. In the brain, there are four ventricles: the two lateral ventricles of the

<sup>&</sup>lt;sup>34</sup> Blumenfeld H., (2018), *Neuroanatomy through clinical cases*, Sunderland, MA: Sinauer

<sup>&</sup>lt;sup>35</sup> Netter F., (2019), Atlas of Human Anatomy, Philadelphia, PA: Saunders

brain lobes, one third ventricle on the midline between the hemispheres, and a fourth ventricle located posterior to the brainstem.<sup>36</sup>

The ventricles communicate through five foramina, which ensures that CSF can circulate through the ventricular system:

> Interventricular foramen (Monro's) between the lateral ventricles and the third ventricle.

> The cerebral aqueduct (of Sylvius) between the third and fourth ventricles.

➤ Two lateral openings (by Luschka) between the fourth ventricle and the cerebellopons cistern.

➢ Median opening (Magendie's) between the fourth ventricle and the great cistern of the subarachnoid space.

Neural pathways are bundles of axons that interconnect different neurons. The pathways can be found exclusively in the brain, connecting its various parts, or they can connect the brain and spinal cord.

The pathways in the brain are called *tracts*. The purpose of the tracts is to share information between different parts of the brain during the process of analyzing and integrating stimuli. The tracts are usually named according to the structures they connect. For example, a tract that connects the cerebral cortex to the nuclei of the cranial nerves is called *corticonuclear tract*.

The neural pathways that connect the brain and spinal cord are called *ascending (sensory) and descending (motor) tracts*. They transmit sensory and motor information between the CNS and the periphery. The spinal cord tracts move within the white matter of the spinal cord. They consist of three order neurons that make synapses sequentially to each other. Spinal cord tracts are classified as follows:

Ascending tracts, consisting of the dorsal spine (fine touch, proprioception), spinothalamic (gross touch, pressure, pain, temperature), spinocerebellar (proprioception, coordination, posture), spino-tectal (spinovisual reflex), spino-reticular (consciousness) and spin-olive pathways (cutaneous, proprioceptive).

Descending tracts, including corticospinal (voluntary movements), corticobulbar (affects cranial nerve activity), reticulospinal (facilitating or inhibiting voluntary and reflex actions), tectospinal (auditory and visual reflexes), rubrospinal (involuntary fine movements), and vestibulo-spinal (balance) ways.

 $<sup>^{36}\,</sup>https://www.kenhub.com/en/library/anatomy/the-central-nervous-system$ 

## **II.2. Energy centers**

The human body is three-dimensionally formed of dense matter. It is made up of vibrating molecules. When we evolve, the vibration of our body's molecules reaches a higher level. The molecules of our body are surrounded by electromagnetic fields. They combine and form the so-called <u>biofield</u>, which has a specific frequency of vibration. The energy that circulates, enters and exits in/out of our biofield, influences it. This energy is also called <u>aura</u>; it is our light, vital body. The interface through which energy enters matter is called <u>a chakra<sup>37</sup></u>.

The chakras correspond physically to small ganglia on either side of the spine, from head to coccyx, the triangular bone at the lower end of the spine. The ganglia of the sympathetic nervous system contain a salt called <u>neurin</u>, which looks like syrup and smells like fish. The resource we use in presenting the chakras is found in the <u>Upanishads</u>.

There are seven main chakras:



Fig. II.2.1

Our cells absorb energy and we are connected to the energy system of the Universe. There is no such thing as negative or positive energy. Energy is neutral, but we personalize it. Illness is accumulation of energy with negative impact on the body. It is essential to be permanently connected to the energy source of the Universe. The easiest way to access this source is through prayer. We don't mean a text read or recited according to tradition. We understand by prayer intimate communication with the cosmic spark within us. God is not to be sought OUTSIDE. It is in us!

<sup>&</sup>lt;sup>37</sup>Derived from Sanskrit *cakram* which translates as *wheel* or *circle* 

### II.2.1. Balancing the chakras

**II.2.1.1** Chakra at the base of the spine, Muladhara, root, support



It represents the connection point with the source of Creation. It is the interface through which vital energy from the Universe is transmitted to us. It is associated with the survival instinct and helps us satisfy our basic needs. Unbalanced chakras can be overactive or underactive.

<u>Symptoms of an overactive chakra:</u> paranoia<sup>38</sup>, offensive attitude, mania<sup>39</sup>, emotionality, fear

### Symptoms of a hypoactive chakra: apathy, weakness, depression, passivity, lethargy

When the chakra is hyperactive, the person has a tendency to eat more than he needs, even if he is not hungry, in order to feel safe. Or he craves unhealthy foods such as fats and sweets, in the desire to remove fear, emotion, anxiety, insecurity. Vulnerable, some resort to alcohol or drugs to eliminate insecurity.

When the chakra is hypoactive, there is a tendency to neglect the body, to stop caring about one's health. The man becomes somewhat irresponsible, depressed, suffers from chronic fatigue, daydreams, is disappointed, anorexic, smokes a lot and has mental disorders.

The hyperactive chakra is associated with addictions too. There are techniques for visualizing our body as we want it, or techniques for strengthening confidence, thought or spoken affirmations, such as: *I am balanced. I am safe. I feel protected. I am healthy. I trust myself. My chakra at the base of my spine, which is like a red wheel, is working properly.* 

Meditation, equivalent to quieting the mind, prayer, healthy eating, sufficient rest through sleep and exercise balance an overactive chakra.

Healthy food positively influences all chakras and consciousness. Food becomes energy. It vibrates with a certain frequency and influences different chakras. Foods/products that stimulate the chakra at the base of the spine:

- Coffee and cola

 <sup>&</sup>lt;sup>38</sup>PARANOIA - Generic name for a group of chronic mental illnesses that are manifested by a lack of logic in thinking, by fixed ideas, by exaggerated pride, by persecution mania, by hallucinations, etc.
 <sup>39</sup>MANIA - Exaggerated concern for something; bizarre habit, caprice, mood

- Hot peppers and spices
- Spinach, due to iron content

If the chakra is hyperactive, these foods will be avoided. If not, these foods help your soul connect with your physical body and increase your vitality.

To balance this chakra, it is good to think or say:

I have a harmonious body. My body is my responsibility. It is a gift from God. I am safe in my body and I take care of myself. The chakra at the base of my spine is open, balanced, I trust myself and feel good in my body.

II.2.1.2. Chakra below the navel, Svadhisthana, where the self is located





Fig. II.2.1.2.2

It is also called *sacral* (L1-L5), *prostatic* or *splenic*. It coordinates the emotional body, feelings, senses. It is the center of sensuality, of pleasure. If this chakra is balanced, we love life, we are optimistic and happy, we enjoy balanced experiences that give us pleasure.

<u>Symptoms of an overactive chakra</u>: greed, addiction, irritability, deviant behavior, frustration

<u>Symptoms of an underactive chakra</u>: disinterest, repressed feelings, self-initiated sexual and other abstinence

This chakra is the center of self-love and creativity. Self-love does not mean selfishness; it does not mean being kind in the hope that your good turn deserves another. Self-love means accepting one's own person as a good friend, it means dignity, it means conviction that there is an eternal particle in us, the God-like spark.

This chakra activates the desire to enjoy life to the fullest and to be creative. It encourages us to make choices that give energy and make us feel protected. Even though some may not believe it, the God particle in us wants us to enjoy our human condition and be creative. We came to Earth to enjoy material existence.

If we are very greedy or addicted to something, or if we seek pleasure in unhealthy pursuits such as drugs, gambling, cigarettes, alcohol, other vices, we are controlled by physical senses, not by conscience. To rebalance this chakra, we imagine it as an orange ball rotating harmoniously. We imagine anxiety and tension disappearing from our body. We must think it is healthy to have fun, to feel good, spreading love around. We must enjoy feeling pleasure, stroking a pet's fur, smelling our favorite perfume, tasting our favorite chocolate, the color of a new dress/shirt, a football match, a bike ride, our favorite song or the lips of the loved one. Pleasure does not replace the energy of unconditional love.

Imagine this chakra calm, inducing positive emotion and creativity, peace and contentment. Inhale and relax. Open your eyes. This exercise should last between 5 and 7 minutes.

If the chakra is hypoactive, we feel we were not loved as a child, our sensitivity is somewhat atrophied. We may be afraid of positive sensations and do not accept beneficial vibrations in life. Often, people who have this chakra hypoactive do not accept sensory pleasure, considering it has no connection with sacredness.

Foods that stimulate this chakra:

- Chocolate
- Bananas, watermelon, pears
- Honey
- Bread and butter
- Milk and dairy products
- Ice cream
- Pasta
- Wine

If our chakra is hyperactive and we have an addiction, we should avoid these foods. If our senses are not active, we should eat more foods from this list. This chakra also reacts positively to other sensory stimuli, such as favorite music, drawing, gardening, flowers, cooking and dancing. All these activities balance the senses. Sex with a loved one balances this chakra. Sex with a person we don't love is not a beneficial experience either for the soul or for this chakra.

People with this chakra unbalanced have atrophied senses and are not creative. For balance, an affirmation can be added to the previous visualization exercise:

*My senses are healthy. It is a miracle to be alive, to feel, to know the world and to explore it with the senses. I know love is superior to pleasure. I can feel without fear. I am guided by my sacred spark, not my body. My body seeks pleasure that heals, healthy and balanced.* 

II.2.1.3. Solar Plexus Chakra, Manipura, "treasure island"



Fig. II.2.1.3.1

It is located at the level of the navel, of the <u>solar plexus</u>, connected to the center of will and independence in the brain. It is the center of concentration, decision, initiative. When this chakra is balanced, man has self-confidence, is determined, focused and involved in what he does.

<u>Symptoms of an overactive chakra</u>: subjectivity, authoritarian attitude, narrow views, harsh character, tendency to be a dictator

<u>Symptoms of an underactive chakra</u>: hesitation, lack of concentration, naivety, passivity, forgetfulness

When we want to motivate, inspire someone, we use the energy of this chakra. It is charismatic energy, which can get them do something beneficial.

This chakra is an opening to higher consciousness. It facilitates out-of-body experiences.



Unlike the first two chakras, it is the first one connected to higher dimensions of consciousness.

The more open this chakra is, the more easily we will perceive the aura, the vibrations of others and the forces of the inner sacred spark. It is the first point of consciousness in the body through which we can become receptive to influences from the sacred spark. If it is open, we can feel the help of beneficial invisible guides. If it is closed, we depend only on our personality in this life as a guide. Fig. II.2.1.3.2

If this chakra is hypoactive or closed, the person is tired and tiring. Life seems hard to live, and we would like to take refuge in sleep. If this chakra is closed, we are not aware of anything obvious in the material world, let alone subtle plans or their energy. When this chakra is hypoactive, we are selfish and insensitive to life in general, we are afraid of responsibility and authority. We are indecisive and try to make others responsible for us, instead of being responsible for ourselves. We do not receive guidance from the soul or from higher dimensions.

If this chakra is unbalanced, we have hesitations, we can't say <u>no</u> and we can't face someone. We can daydream, we can't concentrate, or we have to be supervised by others. We can be anxious all the time, we can relate to events of the past, or we can be afraid of the future. We can be lazy and/or passive-aggressive with the people around us.

Our personality does not allow the voice of the sacred spark to be heard. Foods that stimulate this chakra:

- Fish
- Chicken
- Eggs
- Apricots
- Oranges
- Carrots
- Sweet potatoes
- Blueberry juice
- Papaya
- Zucchini

Consume these foods to activate this chakra. Avoid fish and chicken if you are selfish, or if you wake up more tired in the morning than when you go to bed in the evening.

The appropriate statement for this chakra is:

I receive cosmic energy in every cell in my body. I want to express my creativity, accept my responsibilities, make balanced decisions for my evolution. I am guided and receptive all the time to the will of my higher self.

II.2.1.4. Heart chakra, Anahata, unstruck, unhurt, unbeaten



Fig. II.2.1.4.1



Fig. II.2.1.4.2

The heart chakra is located in the center of the heart and connects us to the vibrations of love, safety, kindness and compassion. It is connected to the soul and is the center of love. Love is calm, generous. It means accepting one's own person and the others.

Indicators of a balanced heart chakra: patience, kindness, generosity, peace, humor, forgiveness, love

Indications of an unbalanced heart chakra: loneliness, suspicion, failures, possessiveness, authoritarianism, greed, jealousy

This chakra coordinates the acceptance of one's own person, of others, trust, well-being, the idea of having what we need, abundance, prosperity and health. It is the point of consciousness through which one feels compassion and empathy, pain, joy and problems of others. This chakra makes us sensitive, concerned with the experience of others, not only our own.

If it is unbalanced, we are irritated. If we give something, we give because we feel indebted, not out of generosity. We don't even like receiving gifts or love from others. We fear that we may be rejected, just as we reject others. We don't care about others, we isolate ourselves.

To activate and balance the heart chakra, close your eyes and become aware of your heart center. Imagine that this chakra is a harmoniously rotating ball of green light, about 13 cm in diameter, the color of freshly cut grass. Breathe in and imagine this ball of energy absorbing healing energy, purifying every cell in your body, healing all wounds and pains and embracing you in a sphere of love. Imagine this energy of love coming from God, helping you feel loved and protected.

Foods that stimulate the heart chakra are:

- Plums
- Cherries
- Strawberries
- Whole grain brown rice
- Couscous, seeds
- Miso<sup>40</sup>, soy and beans
- Green vegetables, especially spinach

Consume these foods if the heart chakra is unbalanced. We can consume as much as we want, because too much love does not hurt.

Through chakras we give and receive energy. When you focus on the feelings that pass through the heart chakra, think about how they go in and out. You can also send love to yourself. Thus, ways are opened through which you receive love from others.

The statement for the heart chakra is:

<sup>&</sup>lt;sup>40</sup>Soybean paste with barley

I am loved, and my sacred spark, who is LOVE, gives me everything I need. Everything I do, I do with love. I am receptive to love. My heart is healed, my needs are met. I don't mind anything. I forgive others and ask for forgiveness, and I happily let go of the past. I let the abundance of the Universe fill my heart. I feel for others, but I don't get attached to their lives.

## II.2.1.5. Throat Chakra, Vishudda, purification

Fig. II.2.1.5.1

Fig. II.2.1.5.2

The throat chakra controls clairaudience awareness. We can clearly capture, we can hear, listen to what others around us think, but also what our inner guides convey to us.

<u>Symptoms of an overactive chakra:</u> inattention, negativity, anger, concern for others but without positive connotation, gullibility

<u>Symptoms of an underactive chakra:</u> dishonesty, stubbornness, hostility, confusion, refusal to express oneself

The throat chakra helps us access the subconscious memory of past lives. If the chakra is unbalanced or closed, we have negative thoughts. We repress our ability to express ourselves, to be honest with others, or to listen carefully to what others are saying. We want to be able to control what we hear. We can hear voices that confuse us, that punish us or upset us. We can access negative astral planes, attracting confusion, or being unable to focus.

We can have negative thoughts about ourselves, we can be very critical of ourselves and self-destructive by what we say, addressing us with words full of malice that affect us. We can hear too many voices at the same time – our own, others', mixed up, leaving us confused, disoriented.

To balance this chakra, close your eyes and visualize it at the level of your neck. Focus on this chakra and imagine it spinning faster than the previous chakra. The color is that of the clear sky at noon. As you focus on this chakra, imagine you are programming it to focus on:

- Conscious mind to higher self
- Inner guides
- *Telepathy (but only if it comes from a loving source wiser than you)*

Imagine a sky-blue orb unfolding like a rotating flower, 13 cm in diameter. Visualize the light and energy of inner guidance illuminating every cell of your being. View the image for 5-7 minutes.

Foods/products that stimulate this chakra:

- Ginseng
- Ginkgo biloba
- Reishi mushrooms<sup>41</sup>
- Barley
- Wheat grass
- Bananas
- Echinacea
- Algae

If the throat chakra is closed and you cannot express yourself, consume these foods/products often. If you don't know how to listen, or you talk more than others, avoid them.

If this chakra is blocked or unbalanced, end the visualization with this affirmation: <u>The only voice that influences my life is the voice of my sacred spark and its wisdom. The</u> rest of the voices, I kindly ask them to leave. I am a pure receiver.

II.2.1.6. Forehead Chakra, Ajna, command



Fig. II.2.1.6.1

<sup>&</sup>lt;sup>41</sup>Ganoderma lucidum reduces stress, fights allergies, increases immunity, prevents formation of tumors, delays the aging process, eliminates toxins, reduces blood sugar, regulates blood pressure, prevents viruses, drains the lymph, tones the heart muscle, having 200 bioactive constituents.

The brow chakra is located at the level of the eyebrows, in the center of the forehead, vibrating in the color of the indigo blue sky. It is related to the third eye, the optic thalamus and controls imagination, brilliant ideas, visualization. Thus, one can see the aura, chakras and inner guides.

<u>Symptoms of an overactive chakra</u>: hallucinations, paranoia, daydreaming, we tend to be disoriented

<u>Symptoms of an underactive chakra:</u> lack of imagination, insensitivity, excessive selfishness, narrow views

Few people have this chakra balanced. To balance it, we need visualization, focus, meditation. With this exercise we can open it more and more.

Inhale deeply, exhale and slowly close your eyes. Focus on the forehead chakra. Imagine it as a vortex in space, indigo-blue with shades of black and purple.

Imagine watching this globe spin; it grows more and more until it becomes a very large sphere. Now imagine this sphere begins to turn into a large screen, and on this screen, you notice a ray of white light entering the center. As you focus on this light, it begins to expand, illuminating the screen.

As it expands, imagine you see yourself - but not the image of the physical body, but of the soul. Imagine the soul is looking at you from this mental screen. Don't force the image. Let your imagination work. Be patient... Look at the image as something wonderful, without judging it. As the image is created, notice all its details, even if they are not clear.

After doing this exercise for a few minutes, relax. Breathe in and very slowly notice how the image disappears. Notice how the light disappears from the screen, and how it returns to deep indigo, towards purple. Observe this screen as a vortex-like globe of light reappearing in the middle of the forehead. Breathe in, relax and open your eyes. Recall the image of your soul.

If the chakra is closed, it will be difficult for you to imagine. You can have a special intellect, but oriented towards the material world, without perceiving the energy beyond the concrete world. You cannot notice the essence of things, what is happening around you. Your life will be linear, rational and monotonous.

If this is your problem, stimulate the forehead chakra with imagination exercises, such as drawing, using colors, painting. You can try to imagine, daydream, create mental images. Try to perceive a situation deeply, not just superficially.

Foods/products that stimulate this chakra:

- Lecithin
- Wheat germ
- Barley

- Vitamin E
- Lucerne
- Chamomile
- Water

II.2.1.7. Crown Chakra, Sahasrara, bridge to the cosmos



Fig. II.2.1.7.1

The Crown Chakra is located at the highest point in the body, at the top of the head. This chakra is linked to the third eye, the optic thalamus, the pineal gland and the pituitary gland, and coordinates evolutionary consciousness, wisdom and enlightenment.

To open the Crown chakra, frequent meditation is necessary to avoid a sudden evolution of consciousness. Prayer is a wonderful way to slowly open this center to unconditional love and inner guidance. Relaxed, while meditating or praying, imagine you see cosmic energy entering through the Crown chakra as a ball of violet-white light spinning very rapidly overhead.

Then imagine golden light entering the chakra, filling your soul with love and wisdom. Let this feeling slowly enter the body, turning into white-golden light of love and enlightenment. Pray for guidance from God. Inhale, relax and slowly open your eyes.

Psychic abilities are maximized if the Crown chakra opens successfully. Evolved people can open other chakras besides those mentioned.

There are no specific foods that stimulate the opening of this chakra. Prayer and meditation are necessary.

## II.2.2. Balancing the seven chakras

Breathe, relax and close your eyes. Focus on your spine. Imagine at this level, in the aura, outside the body, the first chakra. Notice how it rotates smoothly in space, radiating bright red. Imagine a ball of light about 10 cm in diameter, in balance.

Then focus on the area below the navel and imagine the second chakra, spinning a little faster, orange, about 10 cm in diameter, perfectly balanced.

Continue upwards at the level of the navel. Observe there the ball of yellow light, bright, of the 3<sup>rd</sup> chakra, rotating in space, about 10 cm in diameter, perfectly balanced.

Now focus on the heart chakra and imagine it centered, balanced. It is a ball of green light that rotates faster than the other chakras. A raw, spring green.

Continue with the throat chakra. It moves faster than the heart, it is balanced. It is the color of the clear sky at noon, in the summer, with sparkling rays, about 15 cm in diameter, but it is growing.

Continue with the forehead. The globe of light has the color of the midnight sky, blueblack with indigo-violet shades, about 15 cm in diameter.

Finally, let in the glow of the Crown chakra, trying to direct your gaze as much as possible to the top of your head (in popular language it is called <u>rolling your eyes</u>). Notice an orb of light spinning so fast that it appears motionless, glowing purple-white with a golden halo, overhead. Inspire this beauty.

Now, carefully connect these centers, from top to bottom, from purple to red, to the feet and then to the ground.

Breathe in, relax and open your eyes.

This imagination exercise balances the chakras and allows energy to flow easily.

### II.2.3. Let's recap

The first chakra (MULADHARA) is located at the base of the spine. It is associated with the instinct of preservation, survival, physical health, digestion (guts), kidneys. When it is blocked, we are insecure, anxious, constipated, we have problems with the teeth, with the bone system, with the joints, with the spine, we are prone to accidents related to this area of the body.

The second chakra (SVADHISHTANA) is associated with the reproductive system, being located below the navel. When it is activated, we are satisfied, enjoy pleasant sensations, adapt to the new, transmit positive emotions. If it is blocked, we get angry, we can suffer from gall bladder infections, we can have problems with the liver, head, back, hips, sexual dysfunctions, apathy.

Chakra 3 (MANIPURA), at the level of the solar plexus, is the center of digestion, vitality, will, self-respect. If it is inactive, we are sad, selfish, tense and have stomach problems.

Chakra 4 (ANAHATA) is the center of balance, compassion, deep love. If it is inactive, we can have respiratory, dermatological problems, negative thoughts and the difficulty of accepting love.

Chakra 5 (VISHUDDA), behind the pharynx, at the base of the neck, is the center of creativity, communication. Its blockage leads to overweight, communication difficulties, refusal of responsibilities, infections, colds.

Chakra 6 (AJNA) is located in the area of the optic thalamus. When it is open, we can access the invisible world. It is the center of intuition and imagination. When it is blocked, it is difficult for us to concentrate, we may have problems with our eyes, and we will be tempted to criticize.

Chakra 7 (SAHASRARA) is the point of connection between our world and the Other World. It is the place where the Orthodox Christian priest touches us with the Chalice of the Holy Gifts. Its location is the top of the head, in the area of the cerebral cortex. It is our portal to Ascension. Its blockage leads to mistrust, problems with the thyroid gland, parathyroid glands and the glands that secrete adrenaline.

The names in brakets are in Sanskrit42.

To cure depression, it is essential for the energy centres, the chakras to be balanced.

<sup>&</sup>lt;sup>42</sup> http://www.crystalspringshealing.com/holistic-healing-chakra-healing.html, accessed on 26 August 2022

# II.3. A different approach of the nervous system<sup>43</sup> II.3.1. Milk and honey

In this material, the Crown chakra is of particular interest, associated with the pineal gland, pituitary gland and optic thalamus. It is said to be the place through which the soul enters the physical body.

The fir / pine / conifers generally have cones and produce golden resin.



Fig. II.3.1.1<sup>44</sup>

The optical thalamus - which looks like an egg - the microcosmic version of the cosmic egg - the source of all Creation - is consciously fertilized by the fusion of masculine and feminine energies, symbolized by the pineal gland and the pituitary gland.

Through conscious interaction with the optical thalamus, man can access the invisible world.

On either side of the thalamus, in the brain there is the pineal gland, in posterior position, and the pituitary gland, in anterior position.

 <sup>&</sup>lt;sup>43</sup> GOD-MAN - THE WORD MADE FLESH, DR. GEORGE W. CAREY and INEZ EUDORA PERRY, THE CHEMISTRY OF LIFE CO., Los Angeles, Cal., 1920
 <sup>44</sup> http://garyosborn.webs.com/gateofgod.htm



Fig. II.3.1.2<sup>45</sup>

The pineal gland is a small, conical, dark gray body with shades of red, located in the brain, in a place between the cerebral hemispheres, above a cavity filled with sandy matter. The inside of the pineal gland is popularly called the *brain sand*, with phosphate and calcium carbonate. Descartes said that the pineal gland is the shelter of our sacred spark.

The body of a person weighing approximately 68 kg contains the following elements (approx):

- oxygen: 44.18 kg
- carbon: 12.27 kg
- hydrogen: 6.82 kg
- nitrogen: 2.05 kg
- calcium: 1.36 kg
- phosphorus: 0.82 kg
- potassium: 0.14 kg
- sulfur: 0.14 kg
- chlorine: 0.14 kg
- sodium: 0.008 kg
- magnesium: 0.003 kg
- iron: 0.002 kg

<sup>&</sup>lt;sup>45</sup> http://garyosborn.webs.com/gateofgod.htm

- cobalt: 0.0001 kg
- copper: 0.0001 kg
- manganese: 0.00009 kg
- iodine: 0.00002 kg

• traces of zinc, fluorine, chromium, selenium, boron, aluminum, vanadium, molybdenum, silicon<sup>46</sup>

We notice there is very little silicon in the human body. Probably if silicon and carbon were in equal amounts in the human body, man would be aware of the force in his brain<sup>47</sup>. A source of silicon is the plant called *horsetail*.



Fig. II.3.1.3

It is said the pineal gland can be activated by the force of unconditional love. If we want, we can make a conscious effort, trying to decipher and apply what is written in John's Revelation or in other sources, to use these parts of the brain, or activation may occur unconsciously at the right time.



Fig. II.3.1.4<sup>48</sup>

<sup>&</sup>lt;sup>46</sup> The New York Times Almanac 2011, Ed. John W. Wright, Penguin Reference, 2010

<sup>&</sup>lt;sup>47</sup> The apotheosis of carbon is the diamond; carbon and silicon have many similarities. Man is now ready to evolve from carbon-based life to silicon-based life, which enables him to communicate with the invisible world, <u>https://aip.scitation.org/doi/abs/10.1063/1.2827029</u>. Accessed on 26 April 2022.

<sup>&</sup>lt;sup>48</sup> http://garyosborn.webs.com/gateofgod.htm



Cerebellum Medulla Pons

# Fig. II.3.1.5

The cosmic essence is materialized in the cerebrum, the upper brain.



# Fig. II.3.1.1.6

Here, in the cerebrum, two fluids, one golden and one white, have the same source, the cloister, which has the connotation of an isolated space (claustrophobia - fear of closed spaces).

Herefrom, the golden fluid reaches the pineal gland, where it acquires electrical properties. It is an organ with a male polarity.



Fig. II.3.1.1.749

<sup>&</sup>lt;sup>49</sup> http://garyosborn.webs.com/gateofgod.htm

The pituitary gland is an ellipsoid that secretes a milky white substance with magnetic / galactose properties. It is an organ with a feminine polarity, small, reddish, attached to the brain.



As you can see there is a striking similarity between this pineal structure in the brain and the representation of this Bible line.



### Fig. II.3.1.1.11

The cloister is a thin strip of insulated gray matter near Reil's Island (triangular) near the optical thalamus.



# Fig. II.3.1.1.12

If we add to the triangle the idea suggested by the optical thalamus, we obtain the wellknown symbol above. The triangle in the symbol can also be the artistic combination of the pineal gland (male) with the pituitary gland (female) and the optical thalamus (source of Creation).

The fluid descends from the cloister and separates, part passing into the pineal gland and part into the pituitary gland, special laboratories. These fluids are the milk and the honey in the Bible. The optic thalamus is activated by the harmonious fusion of substances secreted by the pineal and pituitary glands.

# II.3.2. Semilunar ganglion



The white and the golden fluid have a path through the human body. They reach the solar plexus (umbilical area) through a crescent ganglion (celiac ganglion), connected to the 12<sup>th</sup> dorsal vertebra.



Fig. II.3.2.2<sup>50</sup>

<sup>&</sup>lt;sup>50</sup> <u>https://pubs.rsna.org/doi/10.1148/rg.316115526</u> accessed on 18 April 2022

Around the age of 12, these fluids together begin to activate the solar plexus chakra. It is the age at which children usually no longer believe in Santa Claus, but pre-adolescence begins with the girls' period too.

Morgain (a witch in Arthurian legends, Arthur's sister, and Lady of the Lake's niece, a female character in Avalon, in the Arthurian legends), in the Mists of Avalon, (Marion Zimmer Bradley's book) was 12 when she went to Avalon with Lady of the Lake to prepare to serve the Great Goddess.

Evolution is not spontaneous. Morgain was past adolescence when the crescent moon on her forehead showed that she could serve the Great Goddess; the two fluids reached the base of the spine where Kundalini (circular, coiled, in Sanskrit) activates, an idea reproduced through a night of love between her and Arthur, associated with his initiation.

Kundalini might be an energetic computer filled with information and programs. In order to work, like any equipment, it must get energy from its owner or from outside. Let's imagine that at the base of the coccyx (sacral area of the spine) we have, each of us, a collection of 7 CDs full of programs, information, routines.

Each CD is formatted to work, download its programs related to a chakra. We may perceive the chakras from this perspective as computer terminals; when, once awakened, the Kundalini reaches, for example, the fourth chakra, Anahata, it downloads its files only from the corresponding CD, according to the principle of resonance.

What are these programs? They might come from two great sources: ancestral, therefore from other lives, and from our own subconscious mind of the current life.

If the programs dowload slowly, the transformation process is long, sometimes imperceptible, and does not produce mental-emotional, physiological and behavioral disturbances. But if this fact happens suddenly, it turns our whole life upside down, literally, and depression is one of the first consequences.

After all subconscious programs are downloaded, all subpersonalities and archetypes are calmed and stabilized, if the multiple emotional and identity crises have been overcome, we have a chance to experience slight Enlightenment. We are overcome by happiness seemingly for no reason, we finally make peace with ourselves and the whole Universe, we begin to understand with our soul concepts and superconcepts we hadn't before. Usually, gifts of the Holy Spirit - begin to appear: clairvoyance, precognition, retrocognition, clairvoyance, clairvoyance, telepathy, telekinesis.

At some point, naturally, or with training and intention, the so-called Kundalini Serpent gets out through the crown chakra, Sahasrara, and turns into a 0, swallowing its tail, becoming Ouroborus. "Zero" represents the whole, the One, the disappearance of YIN-YANG opposites, thus the annihilation of telluric attachments. Some doctrines say it is the supreme moment of Enlightenment, of deification, others are of the opinion that the phenomenon is only a step, it is indeed an important step, on the way of returning to the Source.

However, with Enlightenment or without, uninstalling the *Serpent* programs and then recomposing us as a personality (after we see what remains intact around us - family, boyfriend/girlfriend, friends) leads to the next level of the virtual game: learning to control our Kundalini (or ride the dragon, as the Chinese say). Saint George, the dragon slayer had the power to defeat, through training (killing is a symbol, of course), the *Serpent* in himself, with all the programs of temptations, passions, pettiness, visceralities.

It does not mean that we will suddenly turn into wonder people, untainted by any human drawback, but we will become aware of our weaknesses and flaws, no longer being able to be taken by surprise. "Know thyself" is what it's all about.

# II.3.3. Sacred geography

Genesareth - a crescent-shaped plain on the west coast of the Sea of Galilee (northeast of Israel). The Sea of Galilee is the symbol of the crescent-shaped ganglion through which the two fluids milk-like and honey-like pass to reach the spine. Here they enter the spine, symbolized by the Jordan River, the main place fed by the cloister.



Fig. II.3.3.1

It is the place of Jesus's baptism. The Jordan River is the symbolic starting point of the spine in the cranial area.

Jesus was born in Bethlehem, which means *the House of Bread* in Hebrew. The difference between *bread* and *pie* is not considerable, both are based on dough, and *pie/placinta* in Romanian, a Latin language, sounds similar to *placenta*, Latin. So, *house of bread* is the womb, which after about the age of 12 in girls is ready to shelter a new life, a new soul. The bread of life is the amniotic fluid with which the fetus feeds in the womb.

### II.3.4. The immaculate substance

It is said that when the pregnancy reaches the level of the solar plexus, the soul of the future child enters the mother's womb, and when the fluid in the cloister reaches the spine at the level of the human solar plexus, at the age of 12, its development begins. In the solar plexus of each of us, at the age of 12, a Jesus boy enters the temple, that is, a solar body is born. Every year Jesus' parents went to Jerusalem for the Festival of the Passover. When he was twelve years old, they went up to the festival, according to the custom. (Luke 2:41-42)

The age of 30 is the age at which the soul can be perfected; it is the age at which Jesus was baptized. The risen Jesus, at the age of 33, represents our full solar body.



### Fig. II.3.4.1

The soul descends through the pneumogastric nerve / vagus nerve into the solar plexus (at the level of the umbilicus), inducing consciousness to the embryo. It is said that if a child is conceived as a result of purely physiological sexual intercourse, the descent of the soul into the body of the embryo is delayed.

The oily fluid in the spinal cord, which descends along the spine, has the chemical composition of the egg in combination with the male reproductive cell, which, in the sublimated state, give birth to the Christ body, eternal, light, immaculate substance. When this fluid is refined, it becomes so energized that through the solar body it generates, death can be overcome.

your rod and your staff,
they comfort me.
You prepare a table before me
in the presence of my enemies.
You anoint my head with oil;
my cup overflows.
Surely your goodness and love will follow me
all the days of my life,
and I will dwell in the house of the LORD
forever.

Psalm 23 (4-6)

How is that possible? By absolute purity, which, as simple as it sounds, is as complicated as all the temptations in our lives!

### II.3.5. The Oil





In the cloister, the golden substance is formed, that is the oil that descends in an olivary nucleus. It may not be by chance that olives produce oil.

The cloister is the source of our oil. In the Christian Orthodox religion, oil is myrrh (fragrant oil, used in performing rituals in the Christian church).

Saint Nicholas is invoked as the one who pours precious myrrh on everyone. If we associate the two fluids (electrical and magnetic) with two gifts, we think of Santa Claus (cloister - their source) and of Saint Nicholas. The myrrh is the gift of Saint Nicholas.
In Greek, Nikolaos is derived from a combination of the words  $nik\bar{e} = victory$  and laós = people, a sign that man can overcome human condition. The feet, which wear clean boots, are a symbol of the connection of our sacred spark with purified matter.



Fig. II.3.5.2

The oil, the golden substance of the cloister, is the gift with which the head is anointed. In this special laboratory of the brain there are olive nuclei, infinitesimal protuberances, with a pyramid between them.

Conscious interaction with this area of the brain is equivalent to the initiation of Jesus on the Mount of Olives before the crucifixion. At the crucifixion, which is symbolically a cross, the magnetic and electric fluid meet, materialized by Ida and Pingala nerves.

The moment of Jesus's Resurrection is the moment of the optical thalamus activation, when the oil has traveled the path of the cloister - chakra at the base of the spine - optical thalamus.



Fig. II.3.5.3

Fig. II.3.5.4

Let's not forget Aladdin's lamp ... The oil keeps it burning. Aladdin's lamp closely resembles the stylized representation of the male and female sexual organs yoni-lingam (symbol of the two physically halves of the soul) in tantric rituals.

The Sanskrit word for the male sexual organ is *lingam* and could have the meaning of *light wand* (hence the analogy with the lamp). *Yoni* is a word of Sanskrit origin, meaning *vagina*.

Life was born of a masculine principle and a feminine principle, twinned, of SOUND IN THE PRIMORDIAL SUBSTANCE, PENETRATED BY LIGHT.

## II.3.6. Skull suture

At the level of the skull, perpendicular to the suture, there is Reil's Island, and the cloister, below which there is the thalamus.

The suture of the skull is the point where its bones meet. We can easily see this point on the babies' heads until the fontanelle close, and the vibrations of the brain are felt and even seen.



# Fig. II.3.6.1

Fig. II.3.6.2

In Sanskrit, the point is called *the gate of Brahma*, where the soul enters the body and leaves the body in highly evolved people. It is, metaphorically, Santa's chimney. In this context, the gift of Santa Claus is the soul.

The vertebrae are called *the rod of Brahma*. Under Brahma's gate there is Reil's Island. Reil Island is the central lobe of the cerebrum, the Pole; it is the North Pole of the body, the eternal, symbolic realm, the Island of Patmos where John had the vision of man become sacred spark. It is the equivalent of Avalon.

The island is located between the frontal, parietal and temporal lobes, the development of which, after five months in the uterus, gradually covers it. At the end of the first year of extrauterine life, it is completely covered by the operculum - metaphorically, the mists of Avalon. Nature has endeavored to hide this center.



Fig. II.3.6.3

# II.3.7. Ida and Pingala

The magnetic substance, feminine in nature, from the pituitary gland is the symbol of the Great Virgin Goddess. The capsule containing the pituitary gland is of the same type as the pia mater (pia mater is the membrane that covers the entire surface of the brain and spinal cord). The Pingala nerve is attached to the pineal gland, which crosses the spine at the base of the skull, and descends through the spine to the end.





Fig. II.3.7.2

The Ida nerve, associated with the pituitary gland, crosses the spine in the same place as the Pingala and descends to the left.





Fig. II.3.7.4

In anatomy, Golgotha (the place of the skull, in Hebrew) is the base of the skull, where the spine enters the body.



```
Fig II.3.7.5
```

Fig. II.3.7.6

Here is a double cross, according to its shape, the Cross of St. George and St. Andrew in the shape of a man crucified inside (with an arachnoid appearance). There is a legend that Saint George killed a dragon. The dragon may be a symbol of 12-spiral cosmic DNA, which was partially got deactivated at the time of human materialization by the action of cross-shaped laminin<sup>51</sup> or the sum of the programs a human being is supposed to use throughout millenia, the Kundalini.



Fig. II.3.7.7

Fig. II.3.7.8

Fig. II.3.7.9

Crucifixion means Ascension. Two crossed electrical wires increase the intensity of the electric current.

St. Andrew is said to have been crucified at Patras, near Corinth, Greece, on an X-shaped cross, which was called *the Cross of St. Andrew*. This cross symbolizes the transition from matter to sacred spark. St. Andrew is said to have spread the teachings of Jesus in Romania.

John the Baptist is the symbol of Christ's oil. Before the oil is refined, it is natural. The male reproductive cell oil is coated with a mineral salt substance, which disappears as the

<sup>&</sup>lt;sup>51</sup> Laminins are components of the protein network foundation for most cells and organs.

reproductive cell passes along the spine (Jordan symbol); passing through the double cross at the upper end of the spine, it is purified, removing the salts, to reach the pineal gland cleanly.

If we overlap the two crosses mentioned, we get something equivalent to this image. The author of The Last Supper probably knew a lot about these mysteries ... Leonardo da Vinci (1452 -1519) depicted the Vitruvian Man, a human body inscribed in a circle and square; the circle is connected to the primordial yin / yang sphere, and the square to the cube of the solar city.



Fig. II.3.7.10

# II.3.8. Cana

The Age of Aquarius is said to last 2,160 years. Aquarius can be associated with Danu, the symbol of the primordial water, hence the name of the Tuatha Dé Danann tribe. They may represent the first semi-material humanoid entities on Earth, probably from the first Age of Aquarius, billions of years ago.

2,100 AD might be the current date of transition from the Age of Pisces to the Age of Aquarius.

The Age of Pisces - 2,100 AD - 50 BC

The Age of Aries - 50 BC - 2,200 BC. The drawing can be useful.



In both Greek and Hebrew, any pure fluid was called *water*, and a treated fluid was called *wine*. For example, raindrops were water, but the water absorbed by a plant to grow was called *wine*.



Fig. II.3.8.2

<sup>&</sup>lt;sup>52</sup> <u>http://www.biblewheel.com</u>

The meaning of the word *Galilee* is *circulatory system*. The word *Cana* means *crossroads* or *lungs*.

Biochemists have observed that food is not the organic part of the blood, but provides minerals, salts. The organic part of food, oil, fiber, albumin is digested in the stomach and in the intestinal tract to provide energy and oxygen to the lungs.

The air unites with the minerals and forms the blood that contributes to every heartbeat, metaphorically celebrating the wedding in Cana of Galilee. Air, fluid, associated with water and minerals becomes WINE, THE BLOOD OF THE LORD.

## II.3.9. The optical thalamus

In the central part of the head is the thalamus. The middle part is the site of the smell and the side is associated with sensations and taste, pain and fever.









Fig. II.3.9.3

<sup>53</sup> Source: Life Science Databases

The thalamus is egg-shaped, with a small end in front (photo 1). It is 4 cm long and 2.5 cm wide and thick. In the section it looks like the Egyptian beetle (photo 2), a symbol of immortality. The two structures called *Corpus Callosum* symbolically represent the wings of the beetle (photo 3).

The posterior surface of the central brain is covered by the pia mater. Pia mater in Latin means *loving mother*. The fluid in the spine comes from the pia mater in the brain, and is similar to tears and sweat, saline fluids. Pia Mater is, symbolically, Saint Mary, the Great Goddess.

Through the entry of Brahma, the sublimated substance from the outside is transmitted to the inner eye / optical thalamus. The rays are focused on the third eye, the thalamus. The thalamus is a mass of gray matter at the base of the brain. The essence of life in us, oil, powers the lamp.



Fig. II.3.9.4

At the base of the spine there is a gland larger than a hen's egg, a spongy ganglion, in which a small amount of oil is secreted from the blood, and at the same time, the blood transmits what it refuses into the bladder. The oil has various degrees of consistency: thin, volatile, which evaporates into the air, or fluid, capable of leaving stains on the paper.

Oil globules are in the semen too. It is potassium sulfate with sulfur and oxygen, and is found in seawater and salt springs. The structures that contain the oil are the reservoirs of the pineal gland.

When Kundalini is activated, it "burns" the matter in the spine and reaches the pineal gland, "ignites" this oil and "lights" the eternal lamp. Kundalini and the coccygeal ganglion are found in the symbol of the egg and the snake.

*Come and Get Light*... The symbols of Easter light as well as the eggs painted on this occasion could be related to the mysteries of the brain, nervous system and Kundalini.

In conclusion, the road to Ascension can begin at the age of 12, after we got as kids, gifts from Santa Claus, purity; 12 is the age at which Jesus is found in the temple. It is the time when children become preadolescents, and their bodies are theoretically ready to procreate. Christ oil is at the level of the solar plexus at this age.

The second stage is the equivalent of the Baptism of Jesus in the Jordan, at the age of 30. It is the time when an adult should be perfect, developed in all respects, and the oil in the cloister crosses the spine, associated with a river.

The Crucifixion and Resurrection are the third and fourth stages of Christ's initiation, at the age of 33. The oil reaches the brain again, where it came from, and turns on the lamp, the optical thalamus. At this moment, Man can access the invisible world.

These ages are relative; they are landmarks. It does not mean that if the man is over 33 years old, he can no longer evolve. The desire to know our sacred spark can become intense at any age.

We consider this information important for the purpose of this paper because it points out the importance of our connection with the Source in order to keep our body, mind and soul healthy. Moreover, it demonstrates that religion and science have always worked together and it was only our lack of education that saw them separated.

# **CHAPTER III**

# III.1. The Laws of the Universe

There are a lot of sources available in books and on the internet about laws and principles of the Universe. We picked a set of 12 laws we resonate with, which we consider useful in the treatment of depression.

I mean after the patient is healthy again, in order not to bounce back to the descending spiral of his health, he must be aware of these laws and respect them. We use our intellectual resources to get the patient understand them, through life stories and examples according to each one's level of understanding.

## **III.1.1. The Law of Divine Oneness**

The law of one omnipresent omniscient God. The energy of God is everywhere at once and it flows through everything.

God is the origin or center of the circle.

The ordered multitude of points placed around the center of the circle represents each person, each part of creation, each of us, me, you, mother, father, animals, plants...

The radii of the circle between the origin and each point represent<sup>54</sup> the equality of people before God, regardless of race, ethnicity, socioeconomic status, social position, etc.

There is also reciprocity between man and God marked by the color red.

The other bonds between us and other people illustrate the connections between people.

These are 2D schematic drawings, but they can be made and interpreted in 3D, 4D, etc.

It is observed that any geometric figure can be inscribed in a circle and the circle can be circumscribed to any regular geometric figure <sup>55</sup>.

<sup>&</sup>lt;sup>54</sup> Cicu I., Mareş S., Iacob I., Ceucă R, Băleanu A., 2019, Matematică clasa a 7-a/ Mathematics 7<sup>th</sup> grade, edition 1, Bucharest, Intuitex Publishing House, PP 115-130

<sup>55</sup> ibidem

In conclusion, a delicate and close interpenetration can be observed between God and creation, between God and science, between what is materially visible and what is deep and requires study, living, feeling.

When an error appears in algebra in the algorithm of life, geometry undergoes changes. Consequently, showing the disease state in the body that can be curable or incurable.

One and the same origin in all drawings means

 $1/n + 1/n + 1/n + \dots + 1/n = n/n = 1$ 

1 is present in everything just as the origin is present in all geometry:

The first law states that everything is related to everything else. What we think, say, do or believe will have a corresponding effect on others, as well as on the Universe around us. According to this law, all mankind and God are one. The energy of God is everywhere at once and it flows through everything - living or inanimate. It is said that every soul is part of the energy of God. Have you ever heard the saying that there is a bit of God in all of us? That God made us images of himself? It is because of this law. Everything that exists - both seen and unseen - is related to everything. When we become aware of this law and believe that all is one, the way we think and act in relation to everyone and everything around us will change. We will see our own reflection in the people and things around us. This means that the more we think well of others, the better it comes back to us and becomes us. Everything in this Universe is made of energy - you, your friend, your enemy, the chair you sit on, the laptop you work on, and the phone you make calls on. And this energy is what governs the movement of everything in this Universe.



Fig. III.1.1.1

Colloquially, a fractal is a fragmented or broken geometric figure that can be divided into parts so that each part is (at least approximately) a miniature copy of the whole<sup>56</sup>. The term was introduced by Benoît Mandelbrot (1924- 2010) in 1975 and is derived from the Latin *fractus*, meaning "broken" or "fractured."

As Jean-Luc Martin Lagardette remarked<sup>57</sup>, "this is one of the great positive lessons of Darwinism: all living beings are *one*, all living beings deserve respect and protection. But on the other hand, and in clear contradiction to the unitary vision of life dictated by Darwinism, most scientists chose a Cartesian bias and adopted a dualistic and mechanistic view of nature, separating an unincorporated human reason, a world of inanimate objects, (...) including one's own human body<sup>58</sup>".

### III.1.2. The Law of Vibration

According to this law, everything that exists in our Universe - whether seen or unseen, broken down and analyzed into its purest and most basic form - consists of pure energy or light that resonates and exists as a frequency or vibration pattern. Some people call this *aura*, which is also the color of the magnetic field you reflect. Every thought and every feeling, has its own vibration. These vibrations find similar frequencies when another object, person, thought or feeling emits the same vibration. This is why and how we find and connect with most like-minded people in this Universe, it is because at that exact moment they were on the same page as us, because of a similar vibe. According to science, everything in the manifested Universe is made up of packets of energy whose size is quantified by the amount of vibration and frequency they emit. Quantum physicists say that matter, when viewed through a highpowered microscope, appears to be broken down into tiny molecules, atoms, neutrons, electrons and quanta - the smallest measurable particles in the Universe. It all starts in our thoughts. How you feel now determines your vibration and subsequently, the frequency you are on.

Even when we are compassionate and we attract energy vampires, there is something that vibrates so that it attracts them to us. We usually don't understand why that happens but it's an energetic signature that attracts them to us. It's our guilt or other

<sup>&</sup>lt;sup>56</sup> Mandelbrot, B. B. (1982). The Fractal Geometry of Nature. W. H. Freeman and Company. *ISBN 0-7167-1186-9*.

<sup>&</sup>lt;sup>57</sup> See Lagardette, Jean-Luc Martin, Les droits de l'âme. Pour une reconnaissance politique de la transcendance, L'Harmattan, France, 2008., p. 68.

<sup>&</sup>lt;sup>58</sup> Antony Flew, *Dicționar de filosofie și logică/ Dictionary of philosophy and logic*, 2<sup>nd</sup> edition, Humanitas Publishing House, 1999, pp.327, 328.

apparently harmless feelings like slight envy, jealousy, laziness, pride and other negative feelings built up throughout our life and we are not even aware of them, which attract unwanted people to our life until we learn our lessons.

### III.1.3. The Law of Action

What does not stop in time, spreads. If we want to do a good thing and God is with us and we humble ourselves, the good is eternal and can be propagated from generation to generation, over the ages. On the contrary, if the parents have made mistakes, develop vices, unhealthy habits that they do not notice, do not recognize and do not want to change something for the better, these will propagate over time and more visibly to the next generation.

The law of action is what we need to manifest our thoughts and desires. It is inspired action because the necessity to act on something will not feel like a force at all; it would rather be instinctive. The law further states that we must do something and take proper actions to achieve what we want. Unless we act in harmony with our thoughts and dreams and act in an orderly fashion toward what we want to accomplish, there will be absolutely no results. It is said that this is where most people falter when it comes to applying the laws of the Universe in their lives. Acting on our thoughts and words is almost always the hardest thing to do. Thinking about something and talking about it is different from following it. It is one of the most important laws of the Universe in order to actually manifest the life we intend to live. Action sets our thoughts and desires in motion. Everything from creating a to-do list to accepting an offer on instinct is an action that, in turn, will set our intentions in motion.

## III.1.4. The Law of Correspondence

As above, so below. As inside, so outside. The Universal Law of Correspondence states that the principles or laws of physics which explain the physical world, energy, light, vibration and motion have their corresponding principles in the higher Universe, which is not material. So, if we put it in simpler terms, whatever we think or feel inside is exactly what happens outside of our mind and body. And this concerns every object, place or person with whom we come into contact. If we think of hate, hate is what we get from the outside. According to the law, we get hatred, through a person, a place, an object or a circumstance. Our outer life and our environment are a reflection of what we think and feel inside. If we feel messed up in our head and our heart, it is reflected in the way we work outdoors, the way we keep our office or even our private space. If we are in a calm state of mind internally, our external environment resonates with this feeling of calm. And that is why it is humanly difficult and sometimes even impossible to come into conflict with what we feel inside. Because it's hard to feel happy on the inside and act like we're angry on the outside or to feel depressed on the inside and act like we're and act like. This is also why sometimes most of what we want never manifests because we are constantly lying and in denial of our raw and genuine thoughts and feelings. It relates to everything from our health, to our work, to our money, and even to our relationships.

### III.1.5. The Law of Cause and Effect

Every action has an equal and opposite reaction. This is above all the object of the law of cause and effect. It's the law that is equivalent to what we know to be Karma. Every thought, action or word on our part is a cause and every reaction, feeling or assumption that is created by that cause is an effect. It's like a pendulum or a boomerang. It's like a bouncing ball - the harder we throw it, the higher it bounces. The law of cause-and-effect states that every cause has an effect and every effect becomes the cause of something else, suggesting the Universe is always in motion and has progressed from a chain of events. It's like a pack of dominoes. Like a chain reaction. This law, in its most basic working model, is proof that the world is round and the Universe, too, is indeed in that same spherical shape where if we throw something it will come back to you, full circle. As they say, what goes around comes around.

### III.1.6. The Law of Compensation

It is an extension of the law of cause and effect and therefore of Karma. The law says *you get what you give*. Each person is compensated equally for what they did. The law stipulates that one must always be compensated for the efforts and for the contribution, whatever it is, whatever its value. So, if we only invest for today, we will only benefit for tomorrow. If we invest our whole life, we will never stop reaping the

benefits. If the law of cause and effect ensures that our every thought and action come back to us, the law of compensation ensures the quantity and quality of those returns. It's like running a business where if we market a product that is just a namesake, the revenue from that product will be just as namesake. Now apply that same sense of business strategy to our life and how we live every second. The law of compensation ensures that the Universe remains balanced. It is the perfect balance for all our thoughts and actions. Now we probably see the reason behind the saying, "Give more than you get." There is a reason behind all of this.

### III.1.7. The Law of Attraction

This law alone does not guarantee anything until we implement it in tandem with the rest of the laws. The Law of Attraction, in its most physical understanding, is based on each human's magnetic field. It is based on the simple understanding that if we want something with all our heart and soul, the Universe will conspire to bring it to us. There is always a way. Think of yourself as a magnet. And as a magnet, you constantly attract other magnets to you. The Law of Attraction responds to our truest thoughts and actions, even if we don't know it. Our job is to hold the thoughts of what we want, to make it clear in our mind what we want, and from there we begin to invoke one of the greatest laws in the Universe, and that's the law of attraction. We become what we think about most, but we also attract what we think about most. If we see it in our mind, we will hold it in our hand.

# III.1.8. The Law of Perpetual Transmutation of Energy

It states that each individual has within himself the power to change his situation, whatever it may be. The energy of the formless realm is constantly flowing into the material world, taking shape. This energy is unlimited and inexhaustible. As old forms are depleted, they give way to new forms that emerge from the hidden invisible energy of the Universe. This means that the energy of the Universe is constantly moving from one object or individual to another. If we imagine it, it's actually amazing. We can harness this energy to manifest and create anything we want by emitting the same

vibrations. We can shape this formless energy with the thoughts in our mind. And change is the most fundamental principle on which this law is based. The fact that the energy within us and around us can be molded in any way we want, the fact that we are free to change our current conditions how and when we want it, is proof that change really is the only constant in the Universe and it's never something to worry about. Because change is good and that's the reason behind it all. We are meant to accept change and shape it according to our own wishes.

#### **III.1.9. The Law of Relativity**

It is the most real of the 12 laws and ensures that universal laws are not based on illusions of any kind. It is the law that gives us reason for everything that we and everyone else are going through. It grounds us like no other law. The Law of Relativity states that each person will receive a series of problems (initiation tests/lessons) in an effort to strengthen their inner light. Each of these tests/lessons should be viewed as a challenge to stay connected to our hearts as we proceed to troubleshoot. The law teaches us that we should always compare our problems and grievances with others to give us perspective and a reason for introspection. It goes to show that no matter how bad we may assume our script is, there's always someone else who has it worse than us. The law of relativity shows us that everything is really relative. It's a matter of perspective. Everything in our material world is only made real by relationships or in comparison with other things. So basically, nothing would ever exist until we gave it meaning. In the spiritual realm, however, it becomes the opposite when we take things as they are. In essence, we are neither inferior nor superior to anyone. True self-esteem and true humility come from this realization. In the eyes of the ego, self-esteem and humility are contradictory. In truth, they are identical. Understanding the exact meaning of this, will enlighten us on the relevance of the law of relativity.

### III.1.10. The Law of Polarity

According to this law, everything is in a continuum and has an opposite. Where there is black, there is white, where there is darkness, there is light. Where there is good, there is also evil. This is why we are able to easily change our flow of thoughts or frequencies. If we are on a negative train, we can instantly switch to positive. The law of polarity validates that this is a Universe of duality. Everything exists in pairs. Each soul has a double. Opposites, however, are never absolute. There is no start and end point. This is what marks the polarity of the law. The law states that in fact, these opposites are simply different manifestations of the same thing! Every adversity, every failure, and every heartache carry with it the seed of equal or greater benefit. Every cloud has a silver lining.

### III.1.11. The Law of Rhythm

Everything happens for a reason. Everything happens at the right time. How many times have we heard those words, rolled our eyes and moved on, treating it like another meaningless spoken gibberish. Wrong! These words mean more than we think. Everything flows, goes out and in, everything has its tides, all things rise and fall, the sway is manifested in all, the measure of the sway to the right is the measure of the sway to the left. Each vibration has a certain rhythm and this is how it attracts another vibration that falls into the same pattern, or rhythmic flow. Through these rhythms, cycles, seasons, stages of development are created. The law states that the energy in the Universe is like a pendulum. Whenever something swings to the right, then it must swing to the left. Everything that exists is involved in a dance... swaying, flowing and rocking back and forth. Everything is growing or dying. This is the circle of creation. A high period is always followed by a low period - in life, in savings and in relationships. It is the law of the Universe. It governs everything, including our health. That doesn't mean there's anything wrong, it just means that during this lull or lean

season we need to slow down, rest, and introspect. This is what the law of rhythm is for.

# III.1.12. The Law of Gender

This law stipulates that everything exists in both masculine and feminine. There are two sides of the same coin: yin and yang. It is the law that governs creation. In the animal kingdom, it manifests in the form of sex. The law of gender, in its simplest understanding, states that everything in nature is both masculine and feminine. Both are equally necessary for life to exist. No one is bigger or smaller than the other. And both sides are inhabited within each individual, whether or not one is male or female.

# III.2. Health and disease

I believe that health is a gift; the creative source, in its intelligence and generosity, endowed us with everything we need for our journey in life - map, guides, signs and resources of all kinds. Our health at one point in our life is the effect of our ability to connect to the higher plane of which we are all an important part. Still, sometimes, although we set a target and a good way to reach it, we go astray; an alley that looks shorter, nicer or... cooler than the initially chosen path, attracts us, we follow it and we begin to move away from the original path; we can go only a little further, and when we see the alley does not lead anywhere, we go back; or we drift so far apart that there is no time left to return even if we have resources; or we have time but the resources we were endowed at the beginning of our life journey are limited.

Health ends where disharmony begins, that is conflict with yourself and others, fear, mistrust, unbelief, guilt, resentment, lack of love...

All this begins to manifest in life with the disconnection from the sufficient resources we have been endowed with, ignoring the laws and principles of the Universe. We were created as Body, Mind, Soul. Each of these parts of us are tightly connected to each other and connected to the Source. When the connection between these parts weakens, or when it is destroyed, our being as a whole loses contact with the Source. Then, the only resources we can rely on are the inner ones, the initial gift. When our mind suffers because it does not understand something, because it is exhausted, overworked, insufficiently used, because it is in conflict with the heart or for other reasons, the soul and the body suffer equally. When our heart cries because it feels wounded, because it feels disappointed, because it feels lonely or for other reasons, both body and mind suffer. When our body is sick, because it was neglected, because it was hurt, because it was intoxicated, or for other reasons, the mind and the soul suffer equally. When at least one of these parts is suffering, we manifest, most often and most of us, mistrust, fear, doubt, inner conflict, guilt, that leads to symptoms of disease. We enter a vicious circle, on a downward spiral, in a twisted and dark labyrinth. Once lost and disconnected from the Way and the Source, our supplies become poorer and we become more and more scared. Illness, sickness, keep us looking down, sad, with arms crossed or with them hanging with impotence. We look

for the exit desperately and we often get to wander even more, to worsen our sitution. Not every light is the place where we have to arrive and not every spring water is healing.

To get out of the dead end where we got to, being sick, it is necessary to go back with mind and heart, to remember that decision, that act, that thought, that emotion, that conflict, that weakness, that trauma, that fear, etc. which led us to take the first step away from the right path and health. The exit from the vicious circle can be done by a side step, by no means going on forward. The exit from a dark labyrinth is possible by inspiration, by no means by blindly looking for some landmarks. The exit from a downward spiral is possible through a high jump or through climbing step by step, by no means digging in depth. The exit from a deep abyss, so deep that the echo of your cry reaches nowhere, is possible only by flying...

Healing requires faith in the creative source and confidence in our internal resources. Once you got with mind and heart, at that point where you lost the good way, finding it and resuming the journey is possible. The key is, even when the body's resources to cross the road back are limited or almost non-existent, to have faith and confidence that you will succeed through intuition, through a side step, through a high jump or by flight...

We don't necessarily find healing at the end of a path. Healing is most often even the path. And the path to healing always goes through the point where mind, heart and body unite and become One with the Creative Energy and with Love...

Healing is in You.

We sincerely hope that this work may guide you to that place within yourself where you find the healing resource you were gifted with.

# III.3. Neurological and psychological diseases leading to depression

In this chapter we will present some neurological diseases that are commonly associated with depression.

### III.3.1. Alzheimer's and dementia

Dementia is a deterioration of intellectual function and other cognitive abilities that is severe enough to interfere with social or occupational functioning. Of the many diseases that lead to dementia, Alzheimer's is the most common cause worldwide among people aged 65 and over, followed by vascular dementia, mixed dementia consisting of Alzheimer's plus vascular dementia, and dementia caused by general medical conditions. Although it is important to distinguish Alzheimer's from other causes of dementia, especially for treatment with acetylcholinesterase inhibitors, the causes of dementia are pretty similar.

### Prevalence and incidence rate

More than 100 prevalence studies of Alzheimer's and other dementias have been reported worldwide. The prevalence of dementia generally doubled with each five-year increase in age, from 3% at age 70 to 20 to 30% at age 85<sup>59</sup>. Studies in developing countries have shown a prevalence of dementia ranging from 0.84 to 3.50%<sup>60</sup>. Several studies have reported the incidence rate of Alzheimer's and other dementias in Europe and the United States<sup>61</sup>. Compared with incidence rates in developed countries, very low age-specific incidence rates of Alzheimer's and other dementias have been reported from developing countries for the incidence rates of Alzheimer's and other dementias have been reported from developing countries.

A comparison of data from developed and developing countries raises several important questions. Reported differences in the prevalence of Alzheimer's and other dementias between countries could be partly due to methodological differences, or could be due to real differences caused by variations in diet, education, life expectancy, sociocultural factors and other risk factors. The low incidence reported in some areas of India and Nigeria raises the possibility of environmental factors or gene-environment interactions in the cause of Alzheimer's. At the

<sup>&</sup>lt;sup>59</sup> Henderson, Jorm 2000

<sup>&</sup>lt;sup>60</sup> Chandra et al., 1998

<sup>&</sup>lt;sup>61</sup> Jorm, Jolley, 1998

<sup>&</sup>lt;sup>62</sup> Hendrie et al., 2001

same time, multi-infarct dementia is more common than primary degenerative dementia in China<sup>63</sup>, which also suggests variations in risk factors between countries.

## Risk factors, protection and survival

Three separate genes (APP, PS1, and PS2) are linked to familial early-onset Alzheimer's. Another gene (APO E4) is a risk factor for non-familial late-onset cases<sup>64</sup>. Other genes have been involved but have not been confirmed in large studies. Other risk factors reported in the literature include age, positive family history of dementia, female gender (but this factor is controversial), low level of education, multiple medical conditions, and exposure to environmental factors such as organic solvents and aluminum<sup>65</sup>.

Protective factors reported in the literature include a higher level of education, a specific gene (APO E2), antioxidant intake, and use of anti-inflammatory medications<sup>66</sup>. The use of estrogen supplements for women was thought to be a protective factor for Alzheimer's<sup>67</sup>, but a recent study of women taking a combination of estrogen and progesterone showed that these women had twice the risk of to develop dementia than women taking a placebo<sup>68</sup>.

Studies from developed countries have reported average survival after the onset of dementia symptoms ranging from 5.0 years to 9.3 years<sup>69</sup>. In developing countries, the reported average survival was 3.3 years for all subjects with dementia and 2.7 years for those with Alzheimer's<sup>70</sup>.

Most care for patients with dementia in developing countries is provided by the family at home, where the main caregivers are spouses (36 percent) and children (42 percent)<sup>71</sup>. Women in both developed and developing countries are usually the primary caregivers<sup>72</sup>. Studies from developed countries indicate that the psychological well-being of caregivers is a key factor in the admission of patients to nursing or residential care<sup>73</sup>.

In estimating the overall costs of dementia care, the value of reducing the burden on caregivers should be emphasized. Caregiving can lead to social isolation, psychological

<sup>69</sup> Walsh et al., 1990

<sup>&</sup>lt;sup>63</sup> Li et al., 1991

<sup>&</sup>lt;sup>64</sup> Henderson, Jorm, 2000

<sup>65</sup> ibidem

<sup>66</sup> ibidem

<sup>&</sup>lt;sup>67</sup> Henderson, 1997

<sup>&</sup>lt;sup>68</sup> Shumaker et al., 2003

<sup>&</sup>lt;sup>70</sup> Chandra et al., 1998

<sup>&</sup>lt;sup>71</sup> Prince, 2000

<sup>72</sup> ibidem

<sup>&</sup>lt;sup>73</sup> Levin, Moriarty, Gorbach 1994

distress, and high rates of depression<sup>74</sup>. However, the methodology for estimating the costs of informal care needs to be standardized.

#### Treatment

There is currently no cure for Alzheimer's, but some measures can provide symptomatic relief for patients and caregivers.

Agents that may reduce the risk of the disease include nonsteroidal anti-inflammatory drugs and possibly estrogen replacement therapy. Regarding the use of non-steroidal anti-inflammatory drugs (primarily ibuprofen), several epidemiological studies have suggested a decreased risk with chronic use. Regarding estrogens, some, but not all, studies suggest that in postmenopausal women, estrogen replacement therapy may also reduce the risk. It is unclear whether and to whom these treatments should be recommended, if at all; certainly, with ibuprofen, the risks may outweigh any purported benefits. Pending prospective studies, it may still be reasonable to discuss them with high-risk patients, such as those with a family history of Alzheimer's disease or those with two epsilon-4 alleles of apolipoprotein E.<sup>75</sup>

Agents capable of producing modest symptomatic relief include the acetylcholinesterase inhibitors donepezil, rivastigmine, and galantamine. There is a correlation between the loss of cholinergic neurons in the basal nucleus of Meynert and memory loss, and it is probably through the partial restoration of cholinergic tone that acetylcholinesterase inhibitors exert their therapeutic effect. Another agent to consider is the N-methyl-D-aspartic acid (NMDA) antagonist memantine, which can be used either alone or, more commonly, as an *add-on* drug to one of the cholinesterase inhibitors such as donepezil. Importantly, with a cholinesterase inhibitor treatment or with memantine, not only some cognitive improvement is seen, but also some improvement in other clinical features, such as mood changes and, in some cases, delusions or hallucinations. Finally, some studies suggest benefits from D-cycloserine, and some, but not all, suggest benefits from Ginkgo biloba. The optimal strategy regarding these drugs has not yet been established. In our opinion, it is reasonable to start with a cholinesterase inhibitor e.g., donepezil and then monitor for a few months; if there has been some improvement but, as is usually the case, there is room for further improvement, then memantine can be added. The place of d-cycloserine and Gingko biloba has simply not been

<sup>74</sup> Buck et al., 1997

<sup>&</sup>lt;sup>75</sup> Roberts et al., 2006

elucidated; however, during a period of relative clinical stability, the addition of one of these may be considered.<sup>76</sup>

Other symptoms that may respond to pharmacological treatment include depression, insomnia, apathy, agitation, delusions and hallucinations. Depression may respond to treatment with an antidepressant, and a selective serotonin reuptake inhibitor (SSRI; eg, escitalopram), given their tolerability, should be considered. Insomnia may, of course, be part of a depressive syndrome, and as such may eventually respond to treatment with an antidepressant. In cases where a hypnotic is required, melatonin or zolpidem may be taken into account. Apathy in Alzheimer's disease may respond to methylphenidate. Agitation, may respond to risperidone or olanzapine; in our opinion, it is reasonable to start with a low dose of risperidone (e.g., 0.25-0.5 mg/day) and titrate it slowly and carefully. Although quetiapine has been associated with sedation, as far as we know, this agent, if started at a low dose (e.g., 6.25–12.5 mg) and titrated very carefully, can be extremely helpful. Regarding the use of antipsychotics, concern has been expressed that they may accelerate cognitive decline; however, at least with risperidone, this does not appear to be the case. Carbamazepine is also effective for agitation, although this agent's side effects may impose a pause. Delusions and hallucinations, whether accompanied by agitation or not, may respond to the same antipsychotics as those used for agitation; however, as with all symptoms, you must be sure that these delusions or hallucinations are sufficiently disturbing to justify the risk associated with using antipsychotics.<sup>77</sup>

Behavioral and psychological symptoms of dementia are a major source of stress for family members who provide care to patients. Training family caregivers in behavioral management techniques, including problem solving, memory training, and reality orientation, has been shown to reduce agitation and anxiety in people with dementia<sup>78</sup>. The use of low-dose antipsychotic medications, which calm the patient and reduce symptoms such as aggression and brain fog, have been shown to reduce caregivers' stress, but these improvements have not been quantified<sup>79</sup>.

Treating the underlying disease and risk factors for cardiovascular disease can help prevent future cerebrovascular disease that could lead to multi-infarct dementia. Other conditions, such as hypothyroidism or vitamin B12 deficiency, which could lead to or worsen

<sup>&</sup>lt;sup>76</sup> Cummings et al. 2006

<sup>&</sup>lt;sup>77</sup> Livingston et al., 2007

<sup>&</sup>lt;sup>78</sup> Haupt, Karger, Janner, 2000

<sup>&</sup>lt;sup>79</sup> Melzer et al., 2004

dementia, are easily treated, and the costs of treatment are much lower than the costs of dementia care.

In Western countries, the model of care for patients with moderate to severe dementia is based on skilled, long-term care in institutions. However, such long-term care facilities do not exist in developing countries and, if established, would be extremely expensive and out of reach for most patients and their families. Thus, the model of care in less developed countries should be based on home care, along with providing training and support for family caregivers.

Interventions that should not be pursued include the use of multiple drugs, which may be harmful in adult age groups, particularly unproven drugs such as brain activators and neurotropic agents. Furthermore, in many countries, dementia is still equated with *madness*. Community education has a role to play in eliminating such practices.

## III.3.2. Epilepsy

Epilepsy is a common brain disorder characterized by two or more unprovoked seizures. Seizures are discrete events caused by transient, hypersynchronous, abnormal neural activity. Seizures can occur in close temporal association with a variety of acute medical and neurological illnesses, such as acute stroke, sepsis, or alcohol withdrawal. However, the vast majority of seizures have no immediately identifiable cause.

Epilepsy can be broadly divided into three categories: idiopathic epilepsy (i.e., primary generalized absence epilepsy with childhood onset), which is thought to have a genetic basis; secondary or symptomatic epilepsy, which is caused by a known injury or disorder of the central nervous system, such as infection, stroke, traumatic brain injury, or cerebral dysgenesis; and cryptogenic epilepsy, for which there is no clear evidence of an etiological factor. Idiopathic and cryptogenic cases account for approximately 70 percent of epilepsy cases; the remaining 30 percent are symptomatic (secondary).<sup>80</sup>

### Prevalence, incidence rate, remission and mortality

The generally accepted estimate of the prevalence of active epilepsy globally is in the range of 5 to 8 per 1,000 population, but researchers in African and Latin American countries report at least double the prevalence reported elsewhere<sup>81</sup>.

<sup>&</sup>lt;sup>80</sup> Chandra et al., 2003

<sup>81</sup> Leonardi, Ustun 2002

The incidence rate of epilepsy in developed countries is approximately 43 per 100,000. In developing countries, the incidence rate of epilepsy is higher, averaging 69 per  $100,000^{82}$ .

Based on follow-up of patients treated by general practitioners in the United Kingdom, Cockerell et al (1997) report that after nine years, 86% of epilepsy, patients achieved a threeyear remission and 68% achieved a five-year remission. Thus, data from developed countries suggest a good outcome of seizure control in most patients with treatment. In developing countries, although many people with new-onset seizures do not receive treatment, a proportion of patients go into spontaneous remission even without treatment. However, the actual remission rate in developing countries has yet to be documented in population-based studies.<sup>83</sup>

The risk of premature death in people with epilepsy is two to three times higher than in the general population. In addition to sudden unexplained death, which occurs in up to 1 in 100 patients with severe refractory epilepsy, additional mortality results from accidents and suicide. However, the exact cause of the increased risk is not known in most cases.

### Risk factors

A reported risk factor for idiopathic (presumed genetic) epilepsy is a family history of epilepsy. Reported risk factors for symptomatic epilepsy include prenatal or perinatal causes (obstetric complications, prematurity, low birth weight, neonatal asphyxia). Recent data suggest that the effect of obstetric complications or neonatal asphyxia may have been overstated. Prematurity, low birth weight, and neonatal seizures may be independent risk factors as well as markers of the underlying disease. Other causes include traumatic brain injury, central nervous system infections, cerebrovascular disease, brain tumors, and neurodegenerative diseases. Developmental disabilities are not a risk factor for epilepsy per se, but may be associated with seizure disorder.<sup>84</sup>

## Treatment

The primary goal of care for patients with epilepsy is to prevent further seizures, which may ultimately lead to additional morbidity or even mortality. The goal of treatment should be to maintain a normal lifestyle, preferably without seizures and with minimal side effects of the

<sup>&</sup>lt;sup>82</sup> Kotsopoulos et al., 2002

<sup>&</sup>lt;sup>83</sup> Chandra et al., 2003

<sup>84</sup> Chandra et al., 2003

drug. Up to 70% of people with epilepsy could become seizure-free with antiepileptic treatment.

In 25-30% of people with epilepsy, seizures cannot be controlled with medication. Epilepsy surgery is a safe and effective alternative treatment in selected cases. Investment in epilepsy surgery centers, even in the poorest regions, could greatly reduce the economic and human burden of epilepsy. However, there is a marked treatment gap in epilepsy surgery, even in industrialized countries.<sup>85</sup>

Attention to psychosocial, cognitive, educational and vocational aspects is an important part of comprehensive epilepsy care. Epilepsy imposes economic pressure on both the affected individual and society, e.g., the disorder usually affects young people in the most productive years of their lives, often leading to avoidable unemployment.

In recent years, it has become increasingly apparent that severe epilepsy-related difficulties can be seen in people who have become seizure-free, as well as in those with difficult-to-treat epilepsies. The outcome of rehabilitation programs would be a better quality of life, improved overall social functioning and better functioning, for example, in terms of work performance and improved social contacts.<sup>86</sup>

Anticonvulsants, antiepileptics prevent, stop the occurrence of convulsions.

For grand mal epilepsy, we can use:

1. Sodium channel blockers: carbamazepine, phenytoin.

2. Pharmacological agents that stimulate the activity of the gabaergic system: phenobarbital (omega-r barbiturate class) gabapentin, diazepam (omega-r benzodiazepine class), vigabatrin.

3. Pharmacological agents that decrease the activity of excitatory amino acids in the brain (glutamic acid): Lamotrigine<sup>87</sup>.

For petit mal epilepsy, ethosuximide is used (type T calcium channel blockers).

If the patient suffers from both forms of epilepsy, valproic acid is prescribed.

All anti-epileptic substances have an implicit sedative effect and therefore alcohol consumption is not recommended<sup>88</sup>.

<sup>&</sup>lt;sup>85</sup> Kwan, Brodie, 2002

<sup>&</sup>lt;sup>86</sup> Brodie et al., 2003

 <sup>&</sup>lt;sup>87</sup> Fulga I. (2007) Farmacologie/Pharmacology, Edition I, Bucharest, Medicală Publishing House, PP 220 – 227
<sup>88</sup> Ibidem

### III.3.3. Parkinson's disease

Parkinson's disease, also known as idiopathic parkinsonism or shaking palsy, presents a classic parkinsonism; over time, however, most patients will develop dementia, and a significant minority will also develop depression. In addition, among patients treated with levodopa or direct-acting dopaminergics, the majority will develop significant neuropsychiatric side effects, particularly visual hallucinations.

This is a common disease with a prevalence of about 0.2% in the general population; it is slightly more common in men than in women, with a ratio of about 1.5:1.

The onset of Parkinson's disease is gradual and insidious, with symptoms generally appearing in the mid-50s; the range, however, is wide, from 20 to 80 years.

In Parkinson's disease, patients usually develop asymmetric tremors or stiffness affecting an upper or, less commonly, a lower extremity. Over time, the opposite side becomes involved and eventually all four limbs are affected.

Once fully established, Parkinson's disease leaves a mark on patients that, once recognized, is almost unforgettable. Patients sit in a stooped, "flexion" position with arms and knees flexed. A rhythmic resting tremor of 3–7 cycles per second (cps) is present, most noticeable in the hands, but also evident when seated, in the legs; the jaw is often trembling; the tremor usually resolves with sleep. The face is often "masked" and expressionless, and there is a reduced blink rate; there may also be abundant salivation. Speech is hypophonic, soft, monotonous and lacking in emotional inflection. Handwriting undergoes a "micrographic" change, producing small, scratchy letters. Passive extension of the limbs reveals stiffness, which, although often of the "cogwheel" type, can sometimes have a "lead pipe" character.

During walking, arm swing is reduced and patients often show "marche à petits pas", when they take small, shuffling steps; in addition, they often exhibit "festination" in which, as they walk, their steps become faster and more closely spaced, to the point where a catastrophic fall on their face seems almost inevitable. When assessing the station of these patients, retropulsion is usually found, where a gentle push on the patient's chest will induce a gradual roll back, with which the patient cannot keep up with backward steps. Another important symptom is bradykinesia, which manifests itself as slowness in almost any activity. For example, even in the absence of significant tremors or stiffness, it may take many minutes to

fasten a button. A related phenomenon is bradyphrenia, in which thoughts, although coherent and logical, unfold very slowly.<sup>89</sup>

Another curious phenomenon is "freezing": in this sense, patients on the verge of an intentional act suddenly become "frozen" and unable to move at all. For example, a patient who is standing in a doorway and wants to walk down the hall may not be able to lift a leg, take a step, or move at all. Amazingly, however, such *freezing* can be prevented by providing adequate visual *cues*. For example, if the hallway is marked with pieces of tape placed about a step apart, the patient may very well be able to start and finish walking down the hallway without any difficulty. In addition, in some cases, patients may be able to lyse their own freezing state by simply imagining such cues<sup>90</sup>.

Finally, akathisia can occur in Parkinson's disease and can occur early in the course of the disease, before any pharmacological treatment.

Autonomic symptoms such as dysphagia, constipation, urinary frequency or incontinence, and nocturia are common, being observed in more than half of patients after 10 or more years of illness<sup>91</sup>.

The prevalence of dementia in Parkinson's disease increases with age. Importantly, dementia appears after motor symptoms are well established, with onset of dementia occurring on average 13 years after the onset of motor symptoms, with a range of 6–21 years. Interestingly, James Parkinson (1755-1824), who described this disease in 1817, argued that dementia did not occur, an opinion that was echoed in textbooks for over a century and a half. This mistake of his can be forgiven, based on the observation of only six patients, two of whom were only "occasionally" encountered and one of them "only seen from a distance." Dementia itself is quite non-specific: patients may have difficulty with memory and concentration, and, less commonly, such focal deficits as aphasia or apraxia may occur.<sup>92</sup>

Depressive symptoms of sufficient severity to meet the criteria for a depressive episode as set forth in DSM-III (American Psychiatric Association 1980) were observed in an average of 3% to 5%, minor depressive symptomatology can be encountered in approximately 20% of patients. As expected, the presence of depression exacerbates cognitive deficits in the demented patient as well. It appears that in patients with primarily unilateral motor symptoms, depressive

<sup>&</sup>lt;sup>89</sup> Moore, 2008

<sup>&</sup>lt;sup>90</sup> Morris et al., 2002

<sup>&</sup>lt;sup>91</sup> Moore, 2008

<sup>92</sup> Ibidem

symptoms are more likely when the right side of the body is affected compared to the left, indicating a left hemisphere involvement in the genesis of depression<sup>93</sup>.

Rapid eye movement (REM) sleep behavior disorder is quite common in patients with Parkinson's disease and may either precede or follow the onset of motor symptoms<sup>94</sup>.

Untreated, most patients become disabled within 8-10 years, with death often due to pneumonia; with treatment, however, a survival of 15 or more years can be expected.

### Etiology

The cause of Parkinson's disease is unknown. No specific environmental risk factor was identified. Pure genetic forms account for 10 to 15% of cases or less. Increasing age and male gender are risk factors worldwide. Exposure to toxins, head trauma, frequent infections, diets high in animal fat, and obesity in midlife have all been reported to increase the risk of Parkinson's, but none do so consistently. The most consistent association is an inverse association with cigarette smoking and caffeine consumption, suggesting a protective effect<sup>95</sup>.

Macroscopically, there is depigmentation of the substantia nigra and locus ceruleus. Microscopically, neuronal loss is present not only in these structures, but also in the dorsal raphe nucleus, pedunculopons nucleus, dorsal motor nucleus of the vagus, thalamus, hypothalamus, basal nucleus of Meynert, amygdala, and in various areas of the cortex, including the temporal cortex, insular and cingulate. The remaining neurons usually show the hallmark of Parkinson's disease, the Lewy body, which is an intracytoplasmic inclusion composed of alpha-synuclein, neurofilaments, and ubiquitin.

Motor symptoms correlate with the loss of cells in the substantia nigra and generally do not appear until 60% or more of these cells have been lost. Dementia correlates with loss of cells and Lewy bodies in the cortex and depression with similar changes in the locus ceruleus and dorsal raphe nucleus<sup>96</sup>.

#### Treatment

Treatment of Parkinson's disease begins with its motor symptoms; over time, as mentioned earlier, dementia and depression usually occur and require their own treatments. Each aspect of treatment is discussed in turn, beginning with motor symptoms.

<sup>&</sup>lt;sup>93</sup> Starkstein et al., 1990

<sup>&</sup>lt;sup>94</sup> Moore, 2008

<sup>&</sup>lt;sup>95</sup> Ascherio et al., 2001

<sup>&</sup>lt;sup>96</sup> Moore, 2008

Motor symptoms can be treated with a variety of agents, including monoamine oxidase inhibitors (e.g., selegiline and rasagiline), anticholinergics (e.g., benztropine and trihexyphenidyl), amantadine, levodopa/carbidopa (with or without entacapone), and dopaminergic agonists direct (bromocriptine, cabergoline, pramipexole and ropinirole). Each of these agents will be discussed in turn, followed by a discussion of an overall treatment strategy. Treatment with levodopa or dopaminergic agonists eventually causes significant neuropsychiatric side effects (e.g., visual hallucinations) in most patients, and these are discussed below.<sup>97</sup>

The monoamine oxidase inhibitors selegiline (used in doses of 10 mg or less daily) and rasagiline are both selective against type B monoamine oxidase and as such inhibit the intracellular metabolism of levodopa, thereby increasing the amount available in the striatum and thus exerting a modest therapeutic effect.

Anticholinergics, although useful for tremors, have limited effect on bradykinesia and rigidity, and in some patients may cause confusion or memory deficits. Thus, they are generally reserved for cases where tremor is prominent, taking into account any emerging cognitive deficit.

Levodopa is the most effective treatment for the motor symptoms of Parkinson's disease and is generally given in combination with a peripheral aromatic amino acid decarboxylase inhibitor (carbidopa or benzaride) to prolong its effect: both regular-release and extended-release preparations are available. The initial response to levodopa/carbidopa is generally quite gratifying, but as levodopa does not delay disease progression, an increase in dose over time is required, and most patients eventually develop motor fluctuations: such fluctuations may be *dose peak* with dyskinesia, *end of dose* with early or unpredictable decline in efficacy. When fluctuations occur, using lower and closer doses of levodopa can help.

Dopaminergic agonists include a number of different agents: although bromocriptine is the oldest member of this group, problematic side effects, combined with the fact that newer agents may be more effective, have limited its use. Dopaminergic agonists have been used as monotherapy in early mild Parkinson's disease. Dopaminergic agonists are also used as "addon" drugs to levodopa, both to smooth out fluctuations in levodopa and to allow the levodopa dose to be reduced. When using dopaminergic agonists, patients should be warned that drowsiness may occur.

97 ibidem

In general, pharmacological treatment should not be initiated until motor symptoms significantly interfere with the patient's ability to function. In mild cases, one can start with one of the monoamine oxidase inhibitors, and when tremor is prominent, some clinicians advocate the use of an anticholinergic. As the disease progresses, however, either levodopa or a dopamine agonist must be added at some point.

Most patients treated with levodopa or dopaminergic agonists will eventually develop significant neuropsychiatric side effects. The most common of these are visual hallucinations; others include psychosis, anxiety (while taking levodopa), and certain other, much less common, phenomena, including impulsive behaviors, stereotypies, euphoria (with, rarely, mania) and delirium. Each of these is discussed in turn.<sup>98</sup>

## III.3.4. Stroke

Stroke, also known as cerebrovascular accident, is a syndrome caused by an interruption of blood flow to part of the brain caused by either the occlusion of a blood vessel (ischemic stroke) or the rupture of a blood vessel (haemorrhagic cerebrovascular accident). The interruption of blood flow deprives the brain of nutrients and oxygen, leading to damage to cells in the affected vascular territory of the brain. The occlusion of a blood vessel can sometimes be temporary and present as a reversible neurological deficit, which is called *transient ischemic attack*. Even though stroke is a clinical diagnosis, brain imaging is necessary to distinguish ischemic stroke from hemorrhagic stroke. When imaging is not available, clinical scores may be useful to identify patients with intracerebral hemorrhage<sup>99</sup>.

Frequency of stroke types, prevalence, incidence rate, mortality and disability after stroke

In most parts of the world, about 70 percent of strokes are due to ischemia, 27 percent are due to hemorrhage, and 3 percent are of unknown cause. About 25% of all ischemic strokes are due to cardioembolic causes, with the proportion being higher among younger people. In some parts of the world, for example China and Japan, hemorrhagic strokes account for a higher proportion of all strokes, ranging from 17.1 to 39.4% in China to 38.7% in Japan.<sup>100</sup>

<sup>&</sup>lt;sup>98</sup> Moore, 2008

<sup>&</sup>lt;sup>99</sup> Poungvarin et al., 1991

<sup>&</sup>lt;sup>100</sup> Chandra et al., 2003

In India, the prevalence of stroke was estimated at 203 per 100,000 population over 20 years of age. The male to female ratio was one to seven. In Taiwan, China, the crude point prevalence was 592 per 100,000.<sup>101</sup>

The annual incidence of stroke in China is reported to have increased in both men and women, with an average annual percentage change of 4.5 and 4.2%, respectively. In Japan, the annual age-adjusted incidence of stroke was 105 per 100,000. Wide variation has been reported in these countries and a high risk of death after first stroke in the first year in Japan. The investigators believe that these observations are due to variations in the prevalence of hypertension and, consequently, a higher proportion of hemorrhagic stroke<sup>102</sup>.

About 15% of patients die shortly after a stroke. Of the remaining 85 percent, about 10 percent recover almost completely, and 25 percent recover with minor impairment. Thus, approximately 40 percent experience moderate to severe impairments that require special rehabilitation care. About 10% will require care in a nursing home or other long-term facility.<sup>103</sup>

### Risk factors

Risk factors for stroke in general are similar to those for cardiovascular disease. In addition, the risk factors for the first stroke and the recurrence of stroke are also similar if they remain uncontrolled after the first attack.

Increasing age, especially after age 55, is one of the most important risk factors for stroke. Although stroke is more prevalent among men, stroke-related death rates are higher among women. Hypertension is the most important modifiable determinant of both first and recurrent stroke. The association between blood pressure and stroke in East Asian populations appears stronger than in the West. Other risk factors include smoking, environmental exposure to tobacco, dyslipidemia, atrial fibrillation, diabetes and impaired glucose tolerance, generalized and abdominal obesity, physical inactivity, excessive alcohol consumption, elevated homocysteine levels, drug abuse, hemostatic factors and existing cerebrovascular diseases.<sup>104</sup>

<sup>&</sup>lt;sup>101</sup> Ibidem

<sup>&</sup>lt;sup>102</sup> Kiyohara et al., 2003

<sup>&</sup>lt;sup>103</sup> Chandra et al., 2003

<sup>104</sup> Ibidem

#### Treatment, management and rehabilitation

Ischemic stroke is caused by the interruption of the blood supply to a localized area of the brain. This leads to the cessation of the supply of oxygen and glucose to the brain, with subsequent breakdown of metabolic processes in the affected territory. The infarct process can take several hours to complete, creating a window of time in which it may be possible to restore blood supply to the ischemic area and interrupt or reverse the process. Accomplishing that, has been shown to minimize subsequent neurologic deficit, disability, and secondary complications. Therefore, acute ischemic stroke should be viewed as a treatable condition requiring urgent attention in the therapeutic interval when hypoxic tissue is still recoverable<sup>105</sup>.

Recent advances in the management of ischemic stroke involve the implementation of thrombolytic therapy that restores circulation to areas of critical ischemia, thereby allowing minimization, or even reversal, of neurological deficit. Thrombolysis is effective for strokes caused by acute cerebral ischemia when given within three hours of the onset of symptoms.

Intravenous thrombolysis has been approved by regulatory agencies in many parts of the world and has been established or is in development in many areas. The therapy is associated with a small but definite increase in the risk of intracerebral hemorrhagic complications, which emphasizes the need for careful patient selection. Currently, less than 5% of all stroke patients are treated with thrombolysis in most areas where the therapy has been implemented. One-half to two-thirds of all stroke patients cannot be considered for intravenous thrombolytic therapy within a three-hour interval because of patient delays in seeking emergency care. Changing the behavior of patients with suspected acute stroke remains a major challenge. More studies are underway on the possibility of extending the current criteria for thrombolysis to larger groups of patients, including beyond the three-hour interval.

In cases of acute stroke, aspirin is given as soon as CT or MRI has ruled out intracranial hemorrhage. Immediate treatment with aspirin slightly lowers the risk of early recurrent stroke and increases the chance of survival without disability: about one less patient die or become dependent in 100 treated. However, because aspirin is applicable to so many stroke patients, it has the potential to have a substantial effect on public health. Aspirin is also likely to reduce the risk of venous thromboembolism<sup>106</sup>.

Heparins or heparinoids reduce the risk of arterial and venous thromboembolism, but these benefits are offset by a similar risk of symptomatic intracranial hemorrhage, and such

<sup>&</sup>lt;sup>105</sup> Brott, Bogousslavsky, 2000

<sup>&</sup>lt;sup>106</sup> WHO, 2006

therapy is therefore generally not recommended. For patients at increased risk of deep vein thrombosis, low-dose subcutaneous heparin or graded compression stockings are currently being evaluated in clinical trials.

More progress is being made with endovascular treatment of intracranial aneurysms by detachable coils. Recent evidence suggests that endovascular intervention is at least as effective as open surgery, with fewer complications.

# **III.4. Psychological disorders**

### **III.4.1. Mood disorders**

Moods are our emotions. They affect us every day. Sometimes, we are sad, sometimes we are happy. We might even be sad and happy on the same day. But sometimes people's mood can get "stuck" on sadness. Or moods could change a lot or become extreme. When this happens, it affects our lives. And it could be caused by a group of mental illnesses called *mood disorders*.

Mood disorders are a group of mental illnesses that affect the way you feel and think about yourself, other people, and life in general. There are several different types of mood disorders: depression, dysthymic disorder, and bipolar disorder.

*Depression* is the feeling of sadness. Some people experience depression as being "numb" or without feeling. Depression can make you feel irritable, hopeless, and guilty. Many people living with depression lose interest in things they used to enjoy or often isolate themselves from family and friends. But depression can affect more than just your mood: You may have trouble concentrating or remembering. You may sleep or eat less than usual or more than usual. You may feel tired all the time.<sup>107</sup>

*Seasonal affective disorder* is a type of depression that is affected by the seasons. It usually affects people in the winter months when there is less natural light.

*Postpartum depression* is a type of depression that affects a mother after giving birth. Postpartum depression is likely caused by various biological changes as well as social and emotional changes in the parents' lives.

*Dysthymic disorder* (also called dysthymia) is similar to depression. In dysthymic disorder, the symptoms of depression are milder but last for a longer period of time.

<sup>&</sup>lt;sup>107</sup> DeRubeis, 2016
*Bipolar disorder* is made up of three different parts: depression, mania, and normal feelings. Depression in bipolar disorder is like depression in any mood disorder. Mania is what makes bipolar disorder different. Some people feel very happy, but others feel very irritable or angry during a manic episode. Common symptoms of mania include feelings of power, not needing much sleep, and racing thoughts. During a manic episode, many people also do things they wouldn't normally do, such as go on expensive shopping sprees they can't afford, have risky sex, or use alcohol and other substances more than usual. Bipolar disorder can look different for each person, depending on how long the episodes of mania and depression last, how severe they are, how quickly a person's mood changes, and how long a person has a normal mood in between.

## III.4.1.1. Mood disorders and psychosis

Some people experience psychosis during an episode of severe depression or mania. There are two parts to psychosis: delusions and hallucinations. Delusions are strong beliefs that are not true, such as believing that you have special powers. Hallucinations are things you feel that are not real.<sup>108</sup>

Mood disorders are among the most common mental illnesses. It is more likely to affect the following groups of people:

Women: Women are more likely to be diagnosed with depression and dysthymic disorder. But bipolar disorder seems to affect men and women equally.

Young people: While mood disorders can affect at any point in life, many people begin to experience symptoms in their teens and twenties. About 3.5% of children and 3% to 7% of teenagers are diagnosed with depression. Many people are diagnosed with bipolar disorder between the ages of 15 and 19.<sup>109</sup>

Family members: Having a close relative who has a mood disorder increases your risk of having one.

People with substance use problems: Some substances can cause a mood disorder, trigger an episode of mania or depression, or make a mood disorder worse.

People living with other health and mental health problems: People with long-term health problems such as cancer, AIDS, heart disease or Alzheimer's disease are more likely to

<sup>&</sup>lt;sup>108</sup> DeRubeis, 2016

<sup>109</sup> Ibidem

suffer from depression. People living with an anxiety disorder or an eating disorder are also more likely to experience depression.<sup>110</sup>

Mood disorders are treatable. With the right treatment, about 80% of people experience no symptoms at all. Some common treatments, used alone or in combination, are:

Counseling: The most common forms of counseling for people living with a mood disorder are cognitive behavioral therapy and interpersonal therapy:

Cognitive-behavioral therapy can help a depressed person to change his way of thinking and of course his behavior starting from the algorithm: thought, word, deed because it is believed that certain negative actions maintain the depressive state. There are also situations in which a person with harmful behavior can be depressed despite the fact that he knows what risks he is exposed to (addiction to alcohol and tobacco, drugs of abuse, persistent thoughts about negative experiences<sup>111</sup>.

Interpersonal psychotherapy starts from the idea of defective existences from childhood, even in the family<sup>112</sup>.

Cognitive psychotherapy is based on the fact that if the patient thinks about the worst, then he will feel depressed. In other words, cognitive psychotherapy starts from the assumption that the way we think dictates / attracts the way we feel. The goal is to change the pessimistic way of thinking to an optimistic one<sup>113</sup>.

Cognitive behavioral therapy is the most common therapeutic treatment for mood disorders. Cognitive behavioral therapy helps you understand the relationship between your mood, thoughts, and behaviors. They also learn skills such as problem solving that can help prevent symptoms from reoccurring in the future.

In cases of depression, relationships with others often suffer. Interpersonal therapy can lead to learning skills to improve how you interact with other people.

Medication: Depression is usually treated with a group of medications called *antidepressants*, and bipolar disorder is usually treated with a group of medications called *mood stabilizers*. Other drugs for psychosis or anxiety may also be prescribed.<sup>114</sup>

Electroconvulsive therapy:

<sup>&</sup>lt;sup>110</sup> DeRubeis, 2016

<sup>&</sup>lt;sup>111</sup> Ifteni P., Țăran L. (2011) Elemente de diagnostic și tratament în tulburările depresive/ Diagnostic and treatment elements in depressive disorders, publishing house of Transilvania University Brașov.

<sup>&</sup>lt;sup>112</sup> Ibidem

<sup>113</sup> Ibidem

<sup>&</sup>lt;sup>114</sup> DeRubeis, 2016

Electroconvulsive therapy can help people with severe depression or bipolar disorder, especially when treatments such as counseling and medication have not helped. The treatment is done in hospital and involves passing an electric current through your brain for a few seconds while you are under general anaesthetic. Modern electroconvulsive therapy is very safe, fast acting and effective.

Light therapy:

Light therapy uses a special type of light that is much brighter than indoor lighting. But this may not be a good option for everyone.

Self-management:

There are some things that everyone can do to help themselves feel better. Exercising regularly, eating well, getting enough sleep and maintaining a consistent sleep schedule, managing stress, spending time with friends and family, spirituality, monitoring alcohol and other substance use can help manage mood problems.

About 7% of people living with a mood disorder die by suicide, so it's important to take suicide seriously.

## III.4.1.2. Anxiety disorders

People with anxiety disorders experience excessive fear, or worry, causing them to either avoid situations that might precipitate anxiety or develop compulsive rituals that lessen anxiety. Everyone feels anxious in response to specific events - but individuals with an anxiety disorder have excessive and unrealistic feelings that interfere with their lives in their relationships, school and work performance, social activities, and recreation.<sup>115</sup>

<sup>&</sup>lt;sup>115</sup> Weems, Silverman, 2013

## Types of anxiety disorders

#### Generalized anxiety disorder

Excessive anxiety and worry about a number of events or activities occurring for more days than not occurring, over a period of at least 6 months with associated symptoms (such as fatigue and poor concentration).

## Specific phobia

Marked and persistent fear of clearly perceptible objects or situations (such as flying, heights, and animals).

#### Post traumatic stress

Flashbacks, persistent frightening thoughts and memories, anger, or irritability in response to a terrifying experience in which physical harm occurred or threatened (such as rape, child abuse, war, or natural disaster).

#### Social phobia, also known as social anxiety disorder

Exposure to social or performance situations almost invariably causes an immediate anxiety response that may include palpitations, tremors, sweating, gastrointestinal discomfort, diarrhea, muscle tension, flushing, or confusion, and may meet the criteria for a panic attack in severe cases.

#### Obsessive-compulsive disorder

Obsessions: Persistent thoughts, ideas, impulses, or images that are intrusive and inappropriate and cause heightened anxiety or stress. Individuals with obsessions usually try to ignore or suppress such thoughts or impulses, or to counteract them with other thoughts or actions (compulsions).

Compulsions: Repetitive behaviors (such as hand washing, tidying, or checking) or mental acts (such as praying, counting, or repeating words) that occur in response to an obsession or in a ritualistic fashion.

## Panic disorder

The presence of recurrent, unexpected panic attacks followed by at least 1 month of persistent worry about having additional attacks, worry about the implication of the attack or its consequences, or a significant change in behavior related to the attacks. There are three clusters of symptoms: reexperiencing, avoidance, numbness and arousal. Panic disorders are sometimes associated with agoraphobia - anxiety or avoidance of places or situations from which escape may be difficult or embarrassing, or where help may not be available in the event of a panic attack or panic-like symptoms. The essential characteristic of a panic attack is a discrete period of intense fear or discomfort that is accompanied by at least 4 of 13 physical symptoms, such as: palpitations, increased heart rate; sweating; trembling or shaking; feelings of difficult breathing or suffocation; feeling of choking; chest pain or discomfort; nausea or abdominal pain; dizziness, loss of balance, or fainting; depersonalization; fear of losing control or going crazy; fear of dying; paresthesias (numbness or tingling sensation); chills or hot flashes.<sup>116</sup>

Combined anxiety disorders affect about 12% of Canadians: about 9% of men and 16% of women over a one-year period. As a group, anxiety disorders are the most common of all mental illnesses.

#### Prevalence

Women report and are diagnosed with some anxiety disorders more frequently than men. However, this may reflect differences between men and women in their health-seeking behaviors rather than true differences in prevalence.

#### Symptoms

Symptoms of anxiety disorders often develop in early adulthood. Although most people have little or no impairment, anxiety disorders can seriously restrict an individual's education, work, recreation, and social activities because he/she avoids situations that precipitate symptoms.

Individuals severely affected by anxiety disorders are also more likely to have either another type of anxiety disorder, major depression or dysthymia, alcohol or substance abuse,

<sup>&</sup>lt;sup>116</sup> Weems, Silverman, 2013

or a personality disorder. That worsens the impact of the disorder and present challenges for effective treatment.

## Causes of anxiety disorders

The development of anxiety disorders appears to result from a complex interplay of genetic, biological, developmental, and other factors such as socioeconomic and workplace stress. A variety of theories have been proposed to explain how these factors contribute to the development of the disorder.<sup>117</sup>

The first is experiential: people can learn their fear from an initial experience, such as an embarrassing situation, physical or sexual abuse, or witnessing a violent act. Subsequent similar experiences serve to reinforce the fear.

A second theory relates to cognition or thinking, in that people believe or predict that the outcome of a specific situation will be embarrassing or harmful. This can happen, for example, if parents are overprotective and constantly warn against potential problems.

A third theory focuses on a biological basis. Research suggests that the amygdala, a structure deep in the brain, serves as a communication center that signals the presence of a threat and triggers a fear or anxiety response. It also stores emotional memories and may play a role in the development of anxiety disorders. Children of adults with anxiety disorders are at a much higher risk of developing an anxiety disorder than the general population, which may involve a genetic factor, an effect of parenting practices, or both.

## Treatment of anxiety disorders

Early recognition and appropriate management are imperative to improve life quality in people with anxiety disorders. Proper recognition and management also help prevent common secondary disorders such as depression and drug and alcohol abuse.

Delay in seeking and receiving diagnosis and treatment can be due to a number of factors, such as stigma, lack of human resources, restrictive government funding systems and lack of knowledge. In addition, family physicians may not always recognize the pattern of symptoms in an individual that would lead them to a correct diagnosis. Too often, the symptoms are not taken seriously and a person with an anxiety disorder is labeled as emotionally unstable.

<sup>&</sup>lt;sup>117</sup> Millon et al., 1999

Education of both the public and GPs would help to solve this problem.

A recent review of anxiety disorders suggests that effective treatments include drug therapy (with antidepressants or anti-anxiety drugs) and cognitive-behavioral therapy, which helps people transform their anxious thoughts into more rational and less anxiety-producing ones.<sup>118</sup> Support groups for individuals and families can also help develop tools to minimize and cope with symptoms.

Anxiety disorders can be well managed in primary care. Creating access to experts in cognitive behavioral therapy through a shared care model can help family physicians provide optimal care for the people they treat.

#### III.4.1.3. Schizophrenia

Schizophrenia is a serious mental illness that interferes with a person's ability to think clearly, manage emotions, make decisions and relate to others. It is a complex, long-term medical illness that affects about 1% of Americans. Although schizophrenia can occur at any age, the average age of onset tends to be late teens to early twenties for men and late twenties to early thirties for women. It is unusual for a person younger than 12 or older than 40 to be diagnosed with schizophrenia.<sup>119</sup>

#### *Symptoms*

As with any mental illness, people with schizophrenia experience symptoms differently. Symptoms include:

Hallucinations, which may include a person hearing voices, seeing things, or smelling things that others cannot perceive.

Delusions, which are false beliefs that do not change even when the person holding them is presented with new ideas or facts.

Disorganized thinking, such as struggling to remember things, organize thoughts, or complete tasks.

Anosognosia, which means they are not aware they have an illness.

Negative symptoms such as being emotionally flat or speaking in a dull, disconnected manner.

<sup>&</sup>lt;sup>118</sup> Antony, Swinson, 1996

<sup>&</sup>lt;sup>119</sup> Farah, 2018

## Cause

Research suggests that schizophrenia may have several possible causes:

Genetics. Schizophrenia is not caused by a single genetic variation, but by a complex interaction of genetic and environmental influences. While schizophrenia occurs in 1% of the general population, having a family history of psychosis greatly increases the risk. Schizophrenia occurs in about 10% of people who have a first-degree relative with the disorder, such as a parent or sibling.<sup>120</sup>

Environment. Exposure to viruses or malnutrition before birth, especially in the first and second trimesters, has been shown to increase the risk of schizophrenia. Inflammation or autoimmune diseases can also cause the immune system to grow.

Brain chemistry. Problems with certain brain chemicals, including neurotransmitters called *dopamine* and *glutamate*, can contribute to schizophrenia. Neurotransmitters allow brain cells to communicate with each other. Networks of neurons are probably also involved.

Drug use. Some studies have suggested that taking mind-altering drugs during adolescence and young adulthood may increase the risk of schizophrenia. A growing body of evidence indicates that smoking marijuana increases the risk of psychotic episodes and the risk of ongoing psychotic experiences. The younger and more frequent the use, the greater the risk. Another study found that smoking marijuana led to an earlier onset of schizophrenia and often preceded the onset of the disease.

#### Diagnostic

Diagnosing schizophrenia is not easy. The difficulty in diagnosing this disease is the fact that many people who are diagnosed do not think they have it. Lack of awareness is a common symptom of people diagnosed with schizophrenia and greatly complicates treatment. To be diagnosed with schizophrenia, a person must have two or more of the following symptoms that occur persistently in the context of reduced function: Illusions; Hallucinations; Disorganized speech; Disorganized or catatonic behavior; Negative symptoms.<sup>121</sup>

#### Treatment

With medication, psychosocial rehabilitation, and family support, the symptoms of schizophrenia can be reduced. People with schizophrenia should receive treatment as soon as

<sup>120</sup> Farah, 2018

<sup>&</sup>lt;sup>121</sup> ibidem

the illness begins to manifest, as early detection can reduce the severity of their symptoms. Treatment options include:

Antipsychotic drugs. A healthcare provider will usually prescribe antipsychotics to relieve symptoms of psychosis, such as delusions and hallucinations. Because of the lack of awareness of the disease and the serious side effects of the drugs used to treat schizophrenia, people who are prescribed them are often reluctant to take them.

Psychotherapy, such as cognitive behavioral therapy or cognitive enhancement therapy.

Psychosocial treatments. People who engage in therapeutic interventions often see improvements and experience greater mental stability. Psychosocial treatments allow people to compensate or remove the barriers caused by their schizophrenia and learn to live successfully. If a person participates in psychosocial rehabilitation, they are more likely to continue taking their medication and are less likely to relapse. Some of the most common psychosocial treatments include assertive community treatment.<sup>122</sup>

## III.4.1.4. Disorders caused by exposure to substances

Alcoholism is a medical condition that involves frequent or heavy drinking of alcohol. People with such disorders cannot stop drinking alcohol, even when it causes problems, emotional distress, or physical harm to themselves or others.<sup>123</sup>

Alcoholism is a medical condition. It is a disease of brain function and requires medical and psychological treatments to control it.

Alcoholism can be mild, moderate or severe. It can develop quickly or over a long period of time. It is also called *alcohol dependence*, or *alcohol abuse*.

Drinking too much alcohol can affect your health. It is associated with:

- Brain damage, including dementia.
- Despair, depression and suicide.
- ➢ Breast, liver, colon and mouth cancer.
- > Fetal alcohol syndrome (if exposed to alcohol before birth).
- Accidents (such as falls or burns) and injuries (such as fractures or drowning).
- $\blacktriangleright$  Liver problems such as cirrhosis, hepatitis and fatty liver.

<sup>&</sup>lt;sup>122</sup> Farah, 2018

<sup>&</sup>lt;sup>123</sup> Sher et al., 2005

Frequent or heavy drinking can also lead to personal problems, such as problems with: money, personal relationships, work.

What causes alcohol use disorder?

Scientists are still trying to understand what causes alcohol use disorder. It appears to be a combination of one or more of the following: genetics, early childhood events, attempts to relieve emotional pain.

#### *Symptoms*

- $\succ$  Short term memory loss.
- Continuing to drink alcohol even if it causes suffering or harm to yourself or others.
- Drinking more than planned.
- ➤ Irritability and nervousness in the absence of alcohol.
- ➤ Frequent hangovers.
- Entering dangerous situations.
- Giving up activities to be able to drink.
- Craving for alcohol.
- > Repeated problems with work, school, relationships, or the law because of alcohol

use.

- > The need to drink more and more to get the same effect.
- Lack of ability to stop after starting to drink.
- $\blacktriangleright$  The inability to reduce consumption even if he wants to.
- ➢ Alcohol addiction.

A person with alcohol use disorder may also experience withdrawal symptoms when they reduce or stop drinking, such as: anxiety, depression, irritability, nausea, dryness, restlessness, tremors, sweating, trouble sleeping, seizures, seeing things that are not there (hallucinations), withdrawal, coma and death.

## Treatment may include a combination of:

Behavioral therapies: Counseling or talk therapy with a health care provider, such as a psychologist or mental health counselor, can teach you ways to change your behavior. Motivational, cognitive-behavioral, contingency, and 12-step facilitation are the most commonly used techniques.

## Drugs

Support groups: Group meetings with other people with alcohol use disorders can help you quit drinking.

*Chronic drug* abuse is the habitual abuse of licit or illicit drugs to the extent that the abuse substantially harms a person's health or substantially interferes with their social or economic functioning. Furthermore, any person who has lost the power of self-control over drug use is considered a chronic drug user.<sup>124</sup>

Many chronic drug users — the individuals we usually think of as addicts — often suffer simultaneously from a serious mental disorder. Drug treatment and medical professionals call this condition a co-occurring disorder or dual diagnosis.

Chronic drug abuse can co-occur with any mental illness. Some common serious mental disorders associated with chronic drug abuse include schizophrenia, bipolar disorder, manic depression, attention deficit hyperactivity disorder (ADHD), generalized anxiety disorder, obsessive-compulsive disorder, post-traumatic stress disorder, panic disorder, and antisocial personality disorder. Some of these disorders carry with them an increased risk of drug abuse.

In some cases, people suffering from serious (often undiagnosed) mental disorders take medication to alleviate their symptoms - a practice known as self-medication. People with schizophrenia sometimes use substances like marijuana to alleviate the negative symptoms of the disorder (depression, apathy, and social withdrawal), to combat auditory hallucinations and paranoid delusions, or to lessen the side effects of their medications, which can include depression and anxiety.<sup>125</sup>

In other cases, mental disorders are caused by drug abuse. For example, MDMA (3,4methylenedioxyamphetamine, commonly known as *ecstasy*) produces long-term deficits in serotonin function in the brain, leading to mental disorders such as depression and anxiety. Chronic drug abuse by adolescents during their formative years is of particular concern because it can interfere with normal socialization and cognitive development and therefore frequently contributes to the development of mental disorders.<sup>126</sup>

Researchers are currently investigating the most effective way to treat drug users with mental illness, and especially whether or not treating both conditions at the same time leads to better recovery. Currently, the two conditions are often treated separately or without regard to

<sup>&</sup>lt;sup>124</sup> Baldacchino et al., 2014

<sup>&</sup>lt;sup>125</sup> Ibidem

<sup>126</sup> Ibidem

each other. As a result, many individuals with co-occurring disorders are shuttled back and forth between substance abuse and mental health treatment settings.<sup>127</sup>

#### III.4.1.5. Eating disorders

Whether it is the effect of the media, family or friends, the number of eating disorders has increased significantly and they are becoming more and more widespread. There are five classifications of eating disorders: anorexia, bulimia, binge eating disorder, eating disorders not otherwise specified, and night eating syndrome. More than seven million girls and women and one million boys and men suffer from an eating disorder in their lifetime. Up to 3.7% of women are diagnosed with anorexia nervosa and an estimated 4.2% with bulimia nervosa. Most adolescent patients seen in referral centers fall into a third category, eating disorders not otherwise specified, and do not meet strict criteria for anorexia or bulimia. 19% of college-aged women are bulimic; many go undiagnosed until much later. At the other end of the spectrum, 1% to 5% of the population falls under the category of binge eating disorder, which is not yet an approved psychiatric diagnosis. Anorexics are more likely to be women (90%-95%); 80% of bulimics are female. Eating disorders start early, with 10% diagnosed in children under 10. One third of patients are diagnosed as preadolescents and adolescents up to the age of 15. In total, 86% of patients are diagnosed with eating disorders before the age of 20.<sup>128</sup>

## Anorexia nervosa

Anorexia nervosa is a very distinct serious mental disorder. It can affect individuals of all ages, genders, sexual orientations, races and ethnicities; however, adolescent girls and young adult women are particularly at risk. The disorder involves fear of gaining weight, a distorted body image, a refusal to maintain a normal weight, and the use of extreme measures to maintain weight. Anorexia is usually diagnosed after a person is 25-30% below normal weight for three months or more. In addition, cognitive and emotional functioning is significantly impaired in individuals with this disorder.<sup>129</sup>

Bulimia nervosa

<sup>&</sup>lt;sup>127</sup> Ibidem

<sup>&</sup>lt;sup>128</sup> Zam et al., 2018

<sup>&</sup>lt;sup>129</sup> Zipfel et al., 2015

Bulimia nervosa is a serious, potentially life-threatening eating disorder. It is characterized by a cycle of compulsive and compensatory behaviors, such as self-induced vomiting, designed to reverse or compensate for the effects of overeating. Patients diagnosed with bulimia nervosa closely follow patients diagnosed with binge-purge anorexia. Bulimia is diagnosed if the binge-purge cycle occurs at least twice a week. The act of purging can cause severe damage to the esophagus and teeth and also make the gag reflex less sensitive.

The non-purging type of bulimia is also diagnosed and is characterized by the use of other inappropriate methods of compensating for binge episodes, such as excessive exercise or fasting. In these cases, typical forms of purging, such as self-induced vomiting, are not regularly used.<sup>130</sup>

#### Binge eating disorders

Binge eating disorder is defined by several criteria. Individuals must report eating an amount of food that is certainly greater than what most people would eat in a similar period of time under similar circumstances, in addition to losing control over eating behavior during this time. In addition, at least three of the following characteristics must be present: eating much more quickly than normal; eating until uncomfortably full; eating large amounts of food when there is no physical hunger; eating alone to avoid embarrassment; or feeling disgusted, depressed, or guilty after the eating event. The diagnosis also requires that a significant amount of distress be associated with the binge episodes, which must occur at least once a week for 3 months or more. Finally, the disorder need not be accompanied by any regular compensatory behavior, nor should binge eating occur only during an episode of bulimia nervosa or anorexia nervosa<sup>131</sup>.

## Eating disorders not otherwise specified

Eating disorders not otherwise specified are widely used by clinicians but largely ignored by researchers. It is the category of disorders that do not meet the criteria for any other specific eating disorder and accounts for approximately 50% of eating disorders. Although patients with this type of disorder do not meet the diagnostic criteria for anorexia or bulimia, if the disordered behaviors continue, they may progress to them. Although patients may not

<sup>&</sup>lt;sup>130</sup> Zam et al., 2018

<sup>&</sup>lt;sup>131</sup> Stice, Bohon, 2012

experience medical complications, they often have medical concerns, and treatment depends on the severity of the condition and symptoms.<sup>132</sup>

#### Night eating syndrome

The other prominent form of disordered eating linked to overweight and obesity is binge eating syndrome. It was first described by Stunkard et al. among a group of obese individuals seeking treatment for weight loss. They reported that patients with the syndrome consumed a large majority of their caloric intake (25% or more) at a time when non-obese people would not. In addition, patients experienced insomnia and morning anorexia.<sup>133</sup>

Nocturnal eating syndrome is characterized by recurrent episodes of nocturnal eating, which is described either as excessive food consumption in the evening (after dinner time, i.e., evening hyperphagia) or as eating after awakening from sleep (i.e., nocturnal ingestions). Night eating syndrome is also characterized by at least three of the following symptoms: morning anorexia, the presence of a strong urge to eat between dinner and sleep and/or during the night, insomnia at the beginning of sleep and/or the maintenance of insomnia, frequent depressed mood or worsening mood in the evening and the belief that one cannot fall asleep without eating.<sup>134</sup>

#### *Types of treatment for eating disorders*

#### Pharmacological treatments

Medications are generally helpful for patients with bulimia nervosa and binge eating disorder. Common forms of pharmacotherapy include antidepressants, antiepileptic drugs, antiobesity drugs, and stimulant drugs.

For anorexia nervosa, there is limited evidence to support the benefits of medication, and various treatments have been used to treat accompanying symptoms.<sup>135</sup>

#### *Family therapy*

Although early models of family therapy for anorexia nervosa focused on addressing problematic aspects of the family believed to contribute to the development and maintenance of anorexia, more recent models have focused on reducing guilt and using the family as a

<sup>&</sup>lt;sup>132</sup> Zam et al., 2018

<sup>&</sup>lt;sup>133</sup> Stunkard et al., 1955

<sup>&</sup>lt;sup>134</sup> Zam et al., 2018

<sup>135</sup> Ibidem

resource for recovery. In this type of therapy, parents play a central role in restoring their child's health, and siblings are encouraged to provide emotional support to their sick sibling. Family therapy should take place in the home during the parents' meal and needs the support of both parents. If parents don't have a shared understanding of how to accomplish these tasks, they can unintentionally undermine each other.

## Admission to hospital

Hospitalization is usually for very seriously ill patients, who are usually those with severe cardiac or psychological problems who may need special medical care throughout treatment. These patients are fed through nasogastric tubes to reduce the risk of re-feeding syndrome and insulin spikes that can cause serious problems. Patients also reported having fewer episodes of abdominal distension, nausea, and bloating. By being fed this way, doctors can add more needed fat to the diet without the patient objecting, resulting in a shorter hospital stay.

#### Ambulatory cure

The standard nutritional treatment for outpatients is oral progressive bolus feeding. This is when the patient has a nutritionist who sets up a plan for what to eat to meet their caloric intake goal as well as nutritional needs. But some patients experienced digestive problems such as nausea, bloating and pain from returning to normal eating too quickly. The biggest consequence of this form of treatment is that it can lead to re-feeding syndrome and refusal to eat at all. Many patients will struggle with the idea of eating solid food again, especially enough to meet the caloric intake goal needed to make them healthy.<sup>136</sup>

## **III.4.1.6.** Personality disorders

Personality disorders determine enduring patterns of inner experience and behavior that deviate from societal expectations, are pervasive, inflexible, and stable over time, and lead to stress or impairment.

"Personality is seen today as a complex pattern of deeply ingrained psychological characteristics that are largely unconscious and not easily modified, that express themselves automatically in almost every area of functioning."137

<sup>&</sup>lt;sup>136</sup> Zam et al., 2018 <sup>137</sup> Millon et al., 1999

Personality characteristics or traits are expressed on a continuum of social functioning. Personality disorders reflect personality traits that are used inappropriately and become maladaptive.

Some disorders may be quite mild and may interfere very little with the individual's home or work life; others can cause great disruption in both family and society. Specific situations or events trigger the behaviors of a personality disorder. In general, individuals with personality disorders have difficulty getting along with others and may be irritable, demanding, hostile, fearful, or manipulative.

There is a gender difference in the types of personality disorders. For example, antisocial personality disorder is more common among men, while borderline personality disorder is more common among women. Dependent and hysterical personality disorders are also more common among women. Labeling bias among health professionals may account for some of the gender differences.

Among both women and men, the highest rates of hospitalization for personality disorders were among people ages 15 to 44. More than three-quarters (78%) of all cases were between these ages and the rates were higher among women than among men<sup>138</sup>.

Although the onset of personality disorders usually occurs in adolescence or early adulthood, they can also become apparent in mid-adulthood. To some extent, the timing depends on the type of personality disorder and the situation or events surrounding the individual. For example, borderline personality disorder typically peaks in adolescence and early adulthood, and then becomes less prominent in mid-adulthood. On the other hand, narcissistic personality disorder may not be identified until middle age, when the individual experiences a sense of opportunity loss or experiences personal limitations.

Because personality disorders typically develop in adolescence or early adulthood, they appear at a time when most people are developing adult relationship skills, getting an education, establishing careers, and generally "building equity" in their life. The use of maladaptive behaviors at this stage of life has life-long implications.

A history of alcohol abuse, drug abuse, sexual dysfunction, generalized anxiety disorder, bipolar disorder, obsessive-compulsive disorder, depressive disorder, eating disorder, and suicidal thoughts or attempts often accompany personality disorders. Other social

<sup>&</sup>lt;sup>138</sup> Millon et al., 1999

consequences of personality disorders include: marital violence; child abuse; poor work performance; suicide; gambling.<sup>139</sup>

## Causes of personality disorders

Personality disorders likely result from the complex interaction of early life experience, genetic and environmental factors. In principle, genetic factors contribute to the biological basis of brain function and the basic structure of personality. This structure then influences how individuals respond to and interact with life experiences and the social environment. Over time, each person develops distinctive patterns or ways of perceiving the world and feeling, thinking, coping, and behaving.

For biologically predisposed individuals, major developmental challenges that are a normal part of adolescence and early adulthood — separation from family, self-identity, and independence — may be alarming factors for the development of personality disorder. This may explain why personality disorders usually begin during these years.

## Treatment of personality disorders

Personality disorders are difficult to treat because of self-denial of the problem and pessimism of health professionals based on lack of success in previous efforts.

Intensive individual and group psychotherapy combined with antidepressants and mood stabilizers can be at least partially effective for some people. Difficulties arise both from the persistence of symptoms and from the negative impact of these symptoms on the therapeutic relationship.

People with borderline personality disorder have more frequent hospitalizations, use outpatient psychotherapy more often, and make more emergency room visits than people with other personality disorders.<sup>140</sup>

<sup>&</sup>lt;sup>139</sup> Samuels et al., 1994

<sup>140</sup> Bender et al., 2001

# CHAPTER IV IV.1. Depression

## **IV.1.1.** History of depression

Depression has always been a health problem of humanity. Why a history of such a problem? If we accept that we can chart a historical course of how cancer has been diagnosed and treated over time, why can't the same be done for depression?

Somehow, in the West, we've come to view depression almost like any other physical illness, the comparison being tempting because it lessens the stigma associated with mental illness. If a patient wouldn't feel embarrassed about seeking treatment to treat a tumor in the spleen, for example, why would they feel embarrassed about seeking help to treat an invisible brain tumor?

Still, as much as we'd like to simplify things, mental illness in general and depression in particular are far from simple. In their case, we are talking about a mixture of genetics and environment, physical and mental, biological and psychological, individual and cultural. In other words, how everyone experiences depression and how we interpret what happens to us is generated not only by our feelings, but also by what our culture tells us those feelings should mean. And this system of interpretation has varied considerably over time and space and continues to differ today as well. The challenge is to know how it manifests itself and why it happens.

If we look back through the pages of human history, the documents written by healers, philosophers, writers throughout the ages indicate the millennial existence of depression as a health problem and the continuous and sometimes ingenious struggles of people to find a cure for this disease.

Originally called "melancholy", depression appears in ancient Mesopotamian texts in the second millennium BC. At that time, all mental illnesses were considered to have a "demonic" origin, so the priests dealt with them. By comparison, "doctors" treated physical injuries. Thus, depression was considered a spiritual (or mental) illness rather than a physical one.

Regarding the causes of melancholy, the visions of the ancient Greeks and Romans describe a slight evolution. If literature from the ancient period contains many references to mental illness caused by spirits or demons, over time references of a psychological or biological nature also appear. Thus, if in the 5<sup>th</sup> century BC, the Greek historian Herodotus wrote of a

king who was driven mad by evil spirits, and early Babylonian, Chinese, and Egyptian civilizations also saw mental illness as a form of demonic possession, and exorcism techniques (such as beatings or starvation) were used as treatments, Roman and early Greek physicians considered depression to be both a biological and a psychological illness.

For them, gymnastics, massage, special diets, music and baths, along with a mixture of poppy extract and donkey milk became the remedies used to alleviate depressive symptoms.

Hippocrates, a Greek physician, suggested that personality traits and mental illnesses are related to bodily fluids, called *humors*, which can be balanced or unbalanced. He mentions four such humors: yellow bile, black bile, phlegm, and blood. Hippocrates classified mental illness into categories that included mania, melancholy (depression), and brain fever. He believed that melancholy was caused by too much black bile in the spleen. For this he used the following as treatment: the supposedly therapeutic technique of removing blood from the body, baths, exercise and diet.

Unlike Hippocrates, the famous Roman philosopher and statesman Cicero argued that melancholy is caused by violent anger, fear and grief; an explanation based on mental imbalances rather than physical ones. Even Hippocrates concluded that mental illnesses such as severe melancholy have something to do with the brain.

In the last years before Christ, the influence of Hippocrates' view faded, with the prevailing theory among educated Romans that mental illness, such as depression, was caused by demons and the wrath of the gods. For example, Cornelius Celsus (25 BC-50 AD) recommended starvation, shackles (leg chains) and beatings as "treatments." In contrast, Persian physicians such as Rhazes (865-925 AD), chief physician at the hospital in Baghdad, proved to be representatives of a school of thought that saw the brain as the origin of mental illness and melancholy. For him, treatments for mental illness contained hydrotherapy (baths) and early forms of behavioral therapy (rewards for appropriate behavior).

Galen, a 2<sup>nd</sup> century Roman physician, is credited with having outlined the theory that some people who suffer from melancholy and other mental illnesses are born with a temperament that predisposes them to such suffering and that treatments can do very little for such people.

Furthermore, Roman Stoic philosophers came up with a philosophical approach to melancholy and argued that mental and emotional disorders are caused by a misperception of one's own experiences and life situations. These philosophers believed that the way in which disastrous or stressful events are perceived, could accentuate or repress anxiety (and consequently melancholy). Thus, they argued that changing the cognitive perception of life circumstances could alleviate mental anguish.

After the fall of the Roman Empire in the 5<sup>th</sup> century, scientific thinking about the causes of mental illness regressed again. During the Middle Ages, explanations of mental illness were preeminently religious. Most people believed that mentally ill people were possessed by the devil, demons or witches and were capable of infecting other people with their madness. "Treatments" consisted of exorcism and other barbaric strategies such as drowning and burning at the stake. Only a small minority of physicians continued to believe that a mental illness was caused by imbalanced bodily humors, poor diet, or pain.

During the Renaissance, which began in Italy in the 14<sup>th</sup> century and spread throughout Europe in the 16<sup>th</sup> and 17<sup>th</sup> centuries, thinking about mental illness was characterized in equal measure by regression and progress. On the one hand, witch hunts and executions of the mentally ill were quite common throughout Europe. On the other hand, some doctors returned to the beliefs of Hippocrates, stating that mental illness was generated by natural causes and that witches were, in fact, people with mental problems in need for treatment. Moreover, the treatments for melancholy used in ancient Greece would make a comeback today – walking, philosophical reflection, prayer, potions, sleeping in hammocks and breast milk.

Also significant for the Renaissance is the fact that writers and philosophers of the period saw depressive states through Aristotelian perspective – as a possible catalyst for genius and greatness. The Italian Renaissance philosopher Marsilio Ficino considered that melancholics get their condition because they strive to understand the mystery and glory of God, but realize they have no way of attaining it here on Earth. What brings them to despair is the gap between their high potential and their deep connection with matter. "As long as we are God's representatives on earth, we are continually disturbed by nostalgia for the heavenly homeland," wrote Ficino. Therefore, for the European Renaissance, melancholy became a sign of quality, depth and intellectual complexity.

To be melancholic in Renaissance Europe became a sign of elitism. Aristocrats and writers begin to proudly assume a bit of melancholic temperament. In literature or theater, grumpy and capricious characters become fashionable. The most famous of them was probably Shakespeare's Hamlet.

In his book on the subject – *The Anatomy of Melancholy* – published in 1621, the English scholar Robert Burton outlines the history, causes and possible treatments of the condition. He also emphasizes the creative blessings that come with it. An encyclopedic work of over 1,000 pages, the book describes the psychological and social causes (such as poverty,

fear, and loneliness), but also the remedies — diet, exercise, distraction, travel, purgatives, phlebotomy, herbal remedies, marriage, even music therapy.

At the beginning of the Age of Enlightenment (18<sup>th</sup> and early 19<sup>th</sup> centuries), depression was believed to be inherited, an unchangeable weakness linked to temperament, leading to the idea that those affected should either be avoided or locked away. As a result, most of the mentally ill ended up homeless and poor, and some were locked up in institutions.

The English physician George Cheyne (18<sup>th</sup> century) developed the theory that melancholy is caused by the increasing comfort and luxury generated by industrialization and proposed a spartan vegetarian diet as a treatment. The best remedy for mental illnesses such as depression is physical exercise or work, believed Samuel Johnson, a melancholic himself. He asserted that rural life produces hearty and emotionally robust people, while city life saps their resilience and makes them vulnerable to depression.

Romanticism, the period of the first half of the 19<sup>th</sup> revived the idea that dark moods were the environment for creative genius and perceptive wisdom.

In *Lincoln's Melancholy*, Joshua Wolf Shenk noted that the American president's melancholic disposition was "characterized not only by moroseness, asceticism, and misanthropy, but also by deep reflection, perseverance, and great energy for action."

Poets such as John Keats and Samuel Taylor Coleridge wrote odes to melancholy and depression. Lord Byron called his dark states "a dreaded gift," and philosophers like Schopenhauer and Kierkegaard found comfort and even pleasure in their despair and anxiety. The latter wrote, "In my great melancholy, I loved life, because I loved my melancholy."

Yet, the revival of melancholy was short-lived. Advances in biology and psychology in the second half of the 19<sup>th</sup> century laid the foundation for the modern view of depression — a mental illness that impedes, rather than facilitates, authentic self-expression.

Psychologists began to build up the theory according to which melancholy is caused by an overworked nervous system. Symptoms such as restlessness, lethargy and depression were signs of an increasing pace of industrialization and technology, according to American neurologist George Miller Beard (1839-1883). He coined the term "neurasthenia" to describe the condition generated by "nervous excitement" brought on by modern life. Those showing the first symptoms were advised to avoid alcohol and meat consumption, extended work hours and the company of toxic people.

This period represents a turning point in thinking about the nature of melancholy. If until then, it was thought to be a defect of the intellect, brain or body, it is now beginning to be regarded as an emotional disorder. In 1895, the German psychiatrist Emil Kraepelin significantly contributed to the approach and treatment of mental health. He is the first to separate manic depression and schizophrenia and formally classify various types of melancholy according to their severity. He also proposed a biological and genetic basis for the "depressive state" and argued that treating melancholy requires medical intervention.

Also during this period, slowly, the term "depression" began to be used together with that of "melancholy" and definitely replaced it in the middle of the 20<sup>th</sup> century.

The beginning of the 20<sup>th</sup> century is dominated by Freud's psychoanalytic approach. Departing from Kraepelin's psychobiological approach, in his essay "Mourning and Melancholy", Sigmund Freud argues that while mourning (defined as grief following loss) and melancholy share the same symptoms, melancholy is a depressive state without a specific cause, or at least with an unknown, unconscious cause. Therefore, psychoanalysis is necessary to search for its subliminal roots.

Other Freudian psychoanalysts have argued that melancholy is based on a type of narcissism. Sandor Rado (1890-1972) believed that melancholics are simply people who seek approval and affection, and when love is not reciprocated, melancholy arises. Melanie Klein (1882-1960) and others hypothesized that melancholy is the result of rejection by the mother; the more intense the hostility on the part of the mother, the more intense the depression will be.

The one who bridged the gap between Freud's psychoanalytic perspective and Kraepelin's psychobiological point of view was Adolf Meyer (1866-1950). He stated that childhood experiences as well as genetics can increase one's predisposition to melancholy. However, he believed that past experience and genetics do not represent a person's destiny. He also believed that the term "depression" and not "melancholy" should be used to describe the severe and prolonged condition of low mood.

The middle of the 20<sup>th</sup> century, through advances in neuroscience, brought unprecedented insights into how the mind works. For example, psychiatrists and psychologists learned that both chemicals and electricity stimulate brain activity, that different parts of the brain are responsible for different behaviors, and changes in the brain can change the way a person acts or feels. Thus, treatments such as electro-shock therapy and lobotomies were performed in hope of curing or at least lessening the severity of depressive states.

Another major development of the 20<sup>th</sup> century is the creation of formal categories to classify various mental illnesses. To help standardize and treat mental illness as closely as possible to biological illness, psychologists and psychiatrists jointly developed the American

Diagnostic and Statistical Manual of Mental Disorders (DSM) in 1952. In the first edition of the DSM, the term "melancholy" was replaced by *depressive reaction* to describe the state of severe low mood resulting from an internal conflict or an identifiable event such as a job loss or divorce.

The 1950s also brought developments in the pharmaceutical world, with tranquilizers becoming popular treatments for anxiety. Henceforth, the idea that drugs could be used to alter undesirable mental states paved the way for their development and acceptance in the treatment of depression, in addition to the psychotherapeutic solution that had prevailed up to that point. In their bid to gain ground, pharmaceutical companies and psychology researchers claimed that depression is just a chemical imbalance in the brain and certain drugs can fix it. They often make the analogy to diabetes, where insulin intake balances blood sugar in a similar way to brain rebalancing, with the help of anti-depressant drugs.

The effect of this battle was that, in just 30 years, the number of Americans taking antidepressants increased from 2.5 million in 1980 to 40 million in 2010 (a 1500% increase).

Seen through the lens of this development, the DSM-III version is often viewed by historians of psychology as a victory for psychobiologists and a great defeat for psychoanalysts. It includes the so-called Major Depressive Disorder (MDD) which differs from anxiety or neurosis.

To be diagnosed with MDD, a patient must meet three criteria:

1) a dysphoric state (sad, to feel hopeless),

2) at least four symptoms from a list that includes lack of appetite, sleepiness, low energy, loss of interest in normal activities, and excessive guilt, and

3) symptoms must persist for at least two weeks. In addition to MDD, other depressive categories have been adopted, including dysthymic disorder, which is characterized by a less severe but persistent low mood.

The problem is that DSM-III does not make a clear distinction between sadness and depression. As a result, many people have begun seeking treatment for depression, even for "normal" sadness brought on by a common life situation like a divorce or job loss. Finally, while the medicalization of depression somehow reduces stigma, it transfers otherwise normal emotions and behaviors into the realm of the pathological.

However, the second half of the 20<sup>th</sup> century also brings progress in the psycho-analytic camp.

The most prominent is the new treatment developed by the psychiatrist Aaron Beck from the University of Pennsylvania in the 1960s. Called *cognitive behavioral therapy* (CBT),

this form of therapy is based on the premise that depression is caused by negative, faulty cognitions. The goal of CBT is to help the depressed individual identify faulty thoughts and replace them with ones that are more consistent with reality. While CBT and others like it have gained ground, few people suffering from depression turn to them because they are expensive in both money and time. Therefore, for many people, drugs are more convenient and effective.

Released in 2000, the DSM-IV made some changes to the diagnosis of depression by adding levels or stages. Thus, a person might be diagnosed with mild depressive disorder if they had two of the symptoms of major depression instead of four. It also eliminated the MDD diagnosis of a bereaved person. The DSM-V, published in 2013, made some re-classifications to help alleviate possible over-diagnosis of depression.

As it can be seen from this history of depression (in the West), society's views on its nature and treatment have varied widely over time and have often been cyclical. From balancing humors to balancing neurotransmitters. From the right thinking of the Stoics to corrected thinking through cognitive behavioral therapy. Conception of depression is a roller-coaster ride through the Universe of the human condition, and its understanding can hardly be defined as stable, definitive, or linear.

## IV.1.2. A radiography of depression

In the following lines, we present depression viewed by a person who lives in the 21<sup>st</sup> century.

Many people who have come to accept healing in their life and to embrace spiritual evolution do not end up being healed in a short time.

Depression might be a spiritual coma. That is, a state in which we break away from ourselves, from God, and we no longer have the strength to enjoy anything, because we do not love ourselves and this is reflected around us like in a mirror. We get to live governed by the mind, the soul being numb.

Here is what a depressed person confesses:

In the last 7 years, I always had a pretty good reason to be depressed. I think now that maybe I suffered from this disease since childhood, but I didn't realize then because I hadn't even heard of the word that designates it. What I remember is that I was a rather sad child and suffered very easily, isolating myself and wishing for a different life. From scandals in the family, to disappointments caused by friends, to disappointments in couple relationships, to school or work failures, to household failures, to security, to boredom, to arguments with those around me, to unfulfilled desires, and unanswered questions - all of these constituted over time for me, strong enough to slip into depression and let myself be completely overwhelmed by this condition.

The eternal questions: "Why me?" "Why is this happening to me?" "Why don't I have another life?" "What is my purpose on earth?" "Why is everyone being mean to me?" "Why doesn't anyone love me?" "Why can't I do anything good?" "Why am I alone?", found answers such as: <u>because you are stupid</u>, <u>because you know nothing</u>, <u>because you are not worth</u> <u>it, because you are good for nothing</u>, <u>you have no purpose</u>, <u>you are not useful</u>, <u>you are not</u> <u>capable</u>, <u>you don't deserve love</u>, <u>you're ugly</u>.

There has always been a voice in my head that scolded me, that oppressed me, that put me against the wall, that minimized me until I felt like I didn't even exist.

And all this from ignorance, from lack of self-love, from misunderstanding of divinity and the world, from lack of connection with God, from cowardice.

In fact, it all began when I started looking for a meaning in life and a purpose for myself and I didn't understand anything, I found no meaning in life and no meaning for myself. As it happens with all those who were and are in my situation, a normal phase of the depressive cycle followed: I started to hate life and to hate myself. I felt deep inside that the world is wonderful, but I could only see the unpleasant situations and the bad people in it, and I knew I could do more, but I had neither the courage nor the strength to overcome the condition. And so, day after day, I manifested more and more hatred. For everything and everyone. Because I didn't want the life I used to live (who would like a life where you judge yourself harshly every day and don't take a break to see the beauty in yourself?) I started thinking about suicide with one thought: to get rid of the nightmare I lived. I knew in my soul that it would have been a huge mistake, and I thought I would end up in hell. I was smart enough to choose to cure my inner hell instead of embracing a much worse hell, namely, a very heavy karma to transform, to repair, during who knows how many lifetimes with infinitely harder lessons. God existed in me and somehow kept me afloat, although I did not hear Him and did not want to know about Him. I considered Him evil and selfish, because He created me and let me suffer. Often, speaking to people about God, I said that He is "a kind of sadistic puppeteer, and we are His puppets." Can you see how the perception of God influences a whole life?

Then, at some point, when I entered college, I thought I would finally do something with my life. However, that "something" was delayed. In the end, I realized that no miracle would

happen. My depression deepened. I hated going to a place where change and satisfaction did not come.

I graduated and got a full-time job. I thought I would finally show who I am and make myself useful. I thought that by working 12 hours a day and being the best among the employees, I would prove to myself and to the others that I am good at something. But even though the results at work were successful, I still did not find satisfaction and I sank deeper into depression because I had become a slave to a cold and inflexible organization, in which no one cared about my feelings and ideas, only about the efficiency of my repetitive and robotic actions. I changed several jobs, believing that the policy of the company I worked for was to blame, but everywhere I went, the feeling persisted that I was not doing the right thing. My depression deepened because I was looking for perfection through a job that didn't suit me and didn't offer me spiritual satisfaction. I understood that I would never find myself on the outside, and I needed the freedom to look for myself on the inside, that's where the frustrations and problems, sadness and dissatisfaction come from.

Discovering reiki<sup>141</sup>, I removed a veil from my eyes and opened myself to cosmic wisdom. Then I realized I hated myself because I never understood myself and because I always valued myself compared to the crazy standards and expectations of the environment in which I lived. I had collected all the frustrations caused by the mistakes for which I have not forgiven myself. I realized that my depression was caused by a lack of trust in God, lack of self-love, hatred of life, unforgiveness and regrets. Depression was actually a spiritual coma. Once open to light and healing energy, once communication with God is restored, the first brick in the wall of the pain fortress has been removed. Oh! And you can't even imagine how high this wall is and how hard I fight against it. Too many times it defeats me, but the important thing is that now I see it and I want to change, to live in love and peace.

<sup>&</sup>lt;sup>141</sup> Reiki, a traditional Japanese method of relaxation for faster healing and recovery of the whole being in case of illness or suffering. The word "Reiki" consists of two Japanese characters (kanji): "Rei", which means "universal" and "Ki", "spirit", "energy", "vital force"; according to the great masters, "I am a pure and perfect channel through which the healing Light of the Universe flows, I am the purity that The Supreme Creator wants! All my energy structures work in total beneficial resonance, perfect and unperturbed, and in total sympathy with my best thoughts; my mind is clean and pure, relaxed like an infinite blue sky of spring; my soul is whole, bright and harmonious. All negative thoughts are now burned in my mind and are replaced by the Light, and the Light induces the upcoming of positive, beneficial and constructive thoughts. All my energy meridians are clean and bright, all my chakras are becoming cleaner and brighter so that the energy exchange with the environment is now optimal for my needs here and now." (see the rules of reiki practice that come from the father of this practice, Sensei Mikao Usui), Cristina - Elena Popa Tache, Vers un droit de l'âme et des bioénergies du vivant/ Towards a right of the soul and the biofields of life forms, L'Harmattan, 2022 Cristina - Elena Popa Tache, Vers un droit de l'âme et des bioénergies du vivant/ Towards a right of the soul and the biofields of life forms, L'Harmattan, 2022, pag. 31

We think it is necessary to explain, medically and psychologically, what depression is, so that you know how to recognize it. Maybe from what we explained to you, you think that the symptoms, states, experiences, are strictly personal and relative, maybe singular... but you make the connection between the signs of depression in most people and what we have told you so far, and what we say, and then, you understand why depression really has spiritual causes, not material, psychological, medical, visible ones...

From a psychological point of view, depression is a mental state of sadness/bitterness that persists for long periods. (Therefore, it affects the mental, including thinking, the energies transmitted by the brain to the organs, the emotions. Sadness and bitterness appear in dissatisfied people, who cannot enjoy life for various reasons. Not loving life means not being grateful to God for creating you, giving you a body, life. Not being grateful to God means not loving God. Not loving God leads to cutting off communication with the Source of life from which vitality, optimism, health, joy, prosperity, success, wisdom come. By not loving God, you will not love yourself either, because you are part of God, and God is in you. You block yourself from divine generosity, from divine love, from happiness. You seek happiness, but in fact, without knowing it, you reject it at a subconscious level.

Symptoms:

- Feelings of anxiety or worry without an obvious reason (= fear of being, feeling of uselessness, disconnection from the divine Source, distrust in one's own strength and in God)
- The feeling of being overwhelmed (even by ordinary activities) (= lack of will, deprivation of vital energy, draining body's energy)
- Lack of appetite with weight loss, or excessive increase in appetite (= seeking satisfaction in food, the desire to fill oneself by putting food in the stomach, self-hatred and hatred of physical appearance, lack of willingness to live)
- Insomnia, but also increase in sleep duration (= mind overloaded with useless and chaotic thoughts or taking refuge in sleep, escape from oneself and reality)
- Easy crying (= overwhelming negative feelings, fragile personality, self-doubt, accumulated nervous and emotional tension, unforgiveness)
- Low frustration tolerance (= the need for confirmation of one's own qualities, the need for internal approval of efforts, lack of vital energy, unforgiveness)

- State of melancholy (=looking for happiness in the past, looking for personal appreciation in the reconfirmation of successful moments from the past, or looking for evidence that you were abused and therefore your state of victimization is justified)
- Loss of interest in activities that used to produce pleasure (= self-stigmatization, punishment, isolation)
- Inability to feel positive emotions (= connecting to low energies, living in a lower dimension of fear)
- Fear (= mistrust in divine support and divine generosity)
- Self-blame (= not loving oneself, not accepting one's own mistakes, not forgiving)
- Self-pity (= the feeling of being a victim of others, of fate, of God, gives comfort and feeds the need for attention, wrongly continuing to seek attention and help from the outside)
- Feeling of helplessness (= mistrust in God and in one's own strength, underestimation of personal mission and personal capabilities)
- Low self-esteem (= lack of self-love)
- Thoughts about death or suicide (= lack of love for oneself, for life, mistaken desire to have the chance of a new beginning, or to end the pain, as if after death there would be nothing, getting lost in nothingness and ignorance).

It is good to remember that all these states and emotions are only projections of a mind anchored in low energies, due to the disconnection from the divine source from which we receive love, wisdom, vitality, healing and happiness. Living freely and carefree and embracing divinity, we open ourselves to abundance, joy, spiritual evolution, and move towards other, higher, beneficial energy vibrations.

## Causes

What exactly causes depression is an intensively studied topic at present. Experts believe that genetic predisposition, together with stressful life events, medical conditions, medication administration or other factors, can cause imbalance of certain chemical substances in the brain, called *neurotransmitters*, leading to depression. The situations that can trigger an episode of depression are:

- some drugs, such as narcotics used to relieve pain or steroids; depressive symptoms usually disappear once the drug is stopped. (Here, we consider there are two possible situations that can be explained energetically:

1. it is well known that most drugs have in their energetic structure programs for the deterioration of people's health and mental control in favor of the development of the pharmaceutical industry (about conspiracy theories, mind control through the mass media, pharmaceuticals and food you can find a lot of information on the internet or in books in bookstores) or

2. some drugs produce adverse effects on the brain or produce cracks or blockages in our energy fields, letting entities of depression penetrate and settle in

- disorders of hormonal secretion, such as imbalance of the thyroid or adrenal gland (thyroid gland conditions are present in people who are afraid to express themselves, to ask, to people who think that in order to be appreciated, you have to please and to be in the background; they either self-censor, or exaggerate and create masks to please others

- hypothyroidism/hyperthyroidism

- chemical imbalances, such as blood calcium imbalances or low iron levels (anemia) (anemia is characteristic of those who have given up on life and who wish they no longer exist. Chemical imbalances are caused by energy imbalances, energy not circulating through the body and not supplying it with vital elements.)

– long-term (chronic) ailments, such as heart disease or cancer (heart disease is caused by the accumulation of sadness at the level the heart and the production of blockages due to keeping this sadness, hatred, unforgiveness. Cancer mostly has the same energetic cause, namely, unforgiveness. Or, it can be a karmic disease, through which the negative energy accumulated along other lives is released.)

– major stress factors, such as the death of a loved one (Actually the cause is misunderstanding and non-acceptance of life and its meaning, as well as the manifestation of emotional attachments and dependencies.)

- chronic stress factors, such as poverty, family difficulties, serious medical problems of one's own or of a close person (getting stuck in fear, lack of trust in divine power, ignorance, misunderstanding of the element of karma, make it difficult to accept and bear the personal mission).

- the adults who pass from an independent life to a life in which they depend on others often develop depression (due to the manifestation of pride).

- pressure on children and adolescents, from society or from their peers (which equates to dependence on the environment in which they live, seeking self-esteem in the eyes of others, out of insecurity and lack of self-love.)

- chronic premenstrual syndrome (it usually occurs in women who have problems of accepting their sexuality, of loving themselves, of accepting themselves physically and emotionally. The pain can cause the feeling of being punished by being born a woman, hence hatred of sexuality.)
- menopause (the feeling that the woman is no longer precious, interesting, that she is getting old, which shows there is no self-love)

- stress (when we do things against our nature and our mission, when we are on the wrong path, when we do not find pleasure in the activities carried out because they do not represent us or are against our principles, stress sets in. The solution is to listen to our heart and intuition.) - recent birth. (It is considered that at birth, the mother gives to the child a part of her soul, out of excess of giving and motherhood, out of excessive identification of her life with that of the child. With an incomplete soul, the mother feels lost, confused, weakened, disoriented, incomplete. Not understanding these states, she gets depressed. Or, there are mothers who are not completely prepared to dedicate themselves to raising a child and give up concern for their own pleasures, although on a rational, conscious level they wanted the pregnancy. So, having the feeling of achieving something against her subconscious wishes, the woman considers that she is giving up her life, and what will follow is a kind of death of her identity. Hence, the depression. The solution is the awareness that the child's life is separate from mother's life, and the mother only takes care of and educates the child, loving him. But between the two there is only a physical connection, not a spiritual one, they being independent spirits, with thier own ascension and fate. The mother must also understand that being a mother is not what defines her, becoming her new and only identity, and the baby is part of her life, but it is not her life. It is true that a child requires a lot of time and attention, but forgetting about one's own person in this case only causes frustration and affects not only the mother's life, but also the child's, on whom she projects her frustrations and emotional tension.)

Symptoms that last more than two weeks, of a severity that begins to prevent the normal development of daily activities already mean clinical depression. (That is, a strong state of depression, which transforms behavior and thinking.)

It is assumed that one in five individuals on the planet suffers from depression at least once in their life. (A sad statistic, but not amazing, considering how many people really understand, accept and love themselves, how many people are open to life, how many people really know who God is and what He does, how many people communicate with the divinity, and how many people know how to forgive from the heart.)

It is also assumed that 1 out of 10 individuals who suffer from depression become aware that they are depressed and undergo any type of treatment, generally medicinal or psychiatric (which only annihilate certain mental capacities, induce temporary and artificial euphoric states, deepen the depression, to create a temporary placebo effect of healing, which, however, bursts like a soap bubble when the drug treatment or psychiatric therapy ends. The reasons why they do not submit to treatment are fear of social stigma, personal pride, ignorance. (In a world where many do not hesitate to put labels, to judge, to throw stones, the personal image is important all the more for a depressive, because he has no value in his eyes, but he looks for it in the eyes of others. So, a cycle of weakness begins. Some people end up in depression because they are looking for appreciation in society, and refuse to get out of depression from the same reason. Ignorance and mistrust in alternative healing therapies make many people not see the emotional, energetic, spiritual causes of their depression, and seek healing in solutions that only offer a temporary improvement in their condition).

You will find information everywhere that associate the state of depression to a number of physical causes, like poor diet, lack of physical exercise or some diseases, such as the flu, the use of stimulants and drugs due to the destruction of the brain's chemical reactions. (The idea is that these are not causes of depression, but effects of energy blockages and problems of a spiritual nature, which cause depression to the same extent.

Ignorance causes a poor diet - because man does not understand what the body needs or, because he does not understand that eating does not mean feeding you, as he puts taste and pleasure above the quality of life and health, etc.

In the same way, ignorance and laziness (born from lack of love for life) cause lack of physical exercises. Ignorance means lack of access to the divine intelligence that contains all the teachings necessary for evolution as human beings.

The flu occurs as a result of decrease in immunity to some viruses. Low immunity is the result of weak functioning of the 3<sup>rd</sup> chakra. The basic instinct of this chakra is power. Through it, we express ourselves in the world, and the world approves or rejects us. The seeds in this chakra are related to: autonomy, longevity, vital force, individuality, fulfillment of dreams. As you can see, a simple flu is actually caused by a problem/blockage of one of these subjects. As ailments of the 3<sup>rd</sup> chakra, the following can appear: anorexia, feeling bad, victim mentality, low energy, shame (Sounds like depression, doesn't it? Coincidence?)

Chakra 3 is associated with the pancreas, the body's energy bank, and glucose is the *currency*. Insulin takes glucose from the blood to the cells that use it as fuel. When this system is working properly, we have energy for all our activities. Chakra 3 balance is essential for clear thinking. Those with problems in chakra 3 have no energy, they develop chronic fatigue. They are not getting enough nutrients from the food they eat. On an emotional and spiritual

level, they don't have the necessary fuel to fulfill their dreams, they always start many things, but they don't have the strength to finish their projects.

Power can be used to manifest our dreams in the world, but also destructively, through symptoms such as shame and guilt. The age associated with this chakra is 14-21, just before adulthood, when in search of answers and individuality, most young people fall into depression. Usually between these ages, from a psychological point of view, the personality develops and we, trying to define it as clearly as possible, start looking for answers about who we are and what we represent.

It is believed in alternative healing therapies and in some religions and systems, that each disease is represented by an entity that controls the respective organ. Thus, depression would take over the mind. It sits on the mind like an octopus and rules it. It induces destructive ideas, of blame, of victimization, of aggression. It cuts off its access to life-giving and healing energies and thus, a sick mind creates negative ideas and thoughts, which turn into negative actions and influence the reality in which we live. Basically, you build by oppressing your own being, a reality that oppresses you and feeds your fears, paranoia, worries, hatred, disgust, passivity, isolation. It is a dark entity that feeds on your vitality and goes hand in hand very well with your shadow.

From my experience and that of other people who suffer from depression, but also from the recommendations of some specialist therapists, the main cause of depression is lack of selflove. And of course, not loving yourself means not loving God.

The treatment we recommend is:

- Accepting yourself as you are now. Maybe you want to be better, wiser, more educated, more spiritual, etc., but you will only acquire these qualities in time, following the lessons you will learn, so at the moment all you have to do is accept yourself and work with yourself with love and gentleness, with patience and sincerity.

- Appreciating the things you do, because even from mistakes you learn lessons and grow spiritually. And a law of the butterfly effect says that a small beat of a butterfly's wings can cause a hurricane on the other side of the planet. That is, your smallest gesture can produce extraordinary effects over time, even if you don't imagine it. Move, act, don't stay. Whatever you do, you increase your chances of fulfilling your role on Earth.

- As often as you look in the mirror, appreciate your beauty and try to see beyond the physical, the wonderful person in you who went through so many difficulties, and who came out victorious, for you are still here, right? And then what does it matter how you look? If you looked different, would you have a different life? NO! You'd be the same spirit, with the same

fate and the same qualities! You have to take care of your body and love it because it is a great tool that you have at hand to express yourself as a human being. By projecting negative thoughts on it in the mirror, you fail to see yourself as a being composed of a system of organs, of cells, which work perfectly and which day by day, even though you do not encourage them and do not feed them properly, still continue to work for you. What if one day they go on strike and refuse to work for you because you tell them every day that they are not fine? Align with your cells and think and act as they do. You have something to learn! Your cells are hardworking, beautiful, perfect, active, generous, loving, open to exchange with the outside.... If you are composed of these cells, you are exactly like them, but you don't see that because your mind is confused with depression, dissatisfaction, unlove.

- Forgiveness meditation (ask for forgiveness from yourself for what you have done wrong now and in other lives, every day. Ask others for forgiveness and ask them to forgive you on a personal level. Ask forgiveness from relatives now, relatives of the past, ancestors, beings of light, nature, the Universe. If these people forgive you, they will no longer project on you a negative image distorted by hatred, which will affect you because it disturbs your energy fields, and emitting forgiveness in the Universe, you will harmonize with Everything that exists and you will attract the peace and the harmony of the Universe into your life.)

- Go to group therapy and spiritual personal development workshops, where you learn to love yourself, to trust yourself and to express yourself.

- If you can accept and understand, receive energy therapy, and why not, become a practitioner yourself - you can then treat yourself.

- Do something every day that you like and that shows your qualities, reward yourself for it. If it helps you, write down all these things like in a calendar and read them from time to time so you don't forget how many things you can achieve.

- Go out into nature, connect to the earth, to the trees, and ask them to take over your negative energy (upset, frustration, sadness, fear, unforgiveness) and fill you with naturalness, joy, strength, energy. Nature is just waiting to help us, because she loves us.

When you make a mistake, don't get mad at yourself. See where you went wrong and learn the lesson. Be happy you are smarter now. If you weren't wrong, you didn't get the knowledge.
Positive thinking. Instead of saying *I can't*, tell yourself: *I can*. You can do anything. If you can't today, it doesn't mean you never can. Some actions require repeated effort and evolution. Be patient, persevere. Those who give up easily never do anything. When something "bad" happens to you, try to see the good side: is it something you learned? did it put you in a better situation? did you meet a person you are glad to have met after that experience? did you even

have fun? did you at least have an element of novelty in your life? did you at least break monotony?... There must be something good in the whole thing!

- Talk to God. Even if you don't believe or feel that He listens to you. He does, you must know that. Talk as if you were good friends, tell Him everything that's on your mind. Tell Him even what upsets you about HIM. What did He disappoint you with? You will realize that HE never gets angry and He is very full of love. You will realize that the things that bother you about Him are actually small flaws of yours that you can fix.

- Remember the nice things you did for others. Aren't you able to bring a smile to many people's faces? Haven't you made at least one person laugh? Haven't you also helped a few people? You are not useless. See? You will certainly have the opportunity to do something more today. Mother Teresa said the world changes with small steps. Take it easy. I'm sure you've heard stories of people who were once simple and had no idea what to do with their lives and who are now changing lives.

For example, Eckhart Tolle<sup>142</sup>. At 29, he was on the verge of suicide, when he had a revelation and changed his life. He realized who he was and what he had to do. And now his inspirational books and videos open hearts and change lives. And he found his peace. I am sure that when he thought about suicide, he didn't imagine that in 20 years he would be a balanced, happy man, who would help other people to be the same! Aren't you curious to see when your moment will be and what will follow?

- Pray! Call for help all the beings and entities that can help you and in which you believe... Tell them you want to get rid of depression. They will be happy to help you.

- Look for a spiritual guide, to support and guide you, if you feel you cannot do it alone. He will certainly help you, because all enlightened people went through the shock of depression before waking up to the Truth.

- If you feel like crying, cry! If you want to scream, scream! If you feel like saying everything that's on your mind, say it! Just don't accumulate dissatisfaction in yourself! Just be yourself and express all that you are. What if others judge? Do they live for you? Will they take you to the waterline when it's hard for you? Are they happier than you? If they judge you, believe me, they don't know anything about love and life, and they don't even deserve to be taken into account. They are still at school; they still have to learn. And if what you have to say bothers them, that's their problem. It means you have reached a sensitive point. If you tell a smart

<sup>&</sup>lt;sup>142</sup> b. 1948, is a German-born spiritual teacher

person he is stupid, he will not get angry, because he knows he is smart. But if you call a fool, fool, he will realize his ignorance and you will open a frustration for him.

- Surround yourself with positive people who encourage you. Beware of the paranoid, fearful, hateful ones. They will not make your life better. They will never like you if you have the courage to rise above them and venture into life. Because they are stuck in fear, they will envy you and hinder you. Let them learn their lesson by themselves.

- Love yourself and think about your good. If you won't do it, no one will.

- Understand that God never makes mistakes. If He created you the way you are, He has a reason and because He loves you, this reason is for your beenefit. Surely you have something to learn from this. Or it will surely be useful to you someday.

For example, I know a person who was always lazy and liked to stay at home and keep busy. Everyone criticized him for that. Many times, he refused to go to the mountains with his friends and they criticized him. But once, he refused to go and escaped an accident in which three out of four of them died. It's a macabre example, I know, but look at him, his occasional anti-socialism kept him alive. You don't have certain flaws by accident. You have something to learn from them or they will help you somehow one day. Be patient!

- Love your life! You don't have another one right now, but you will when this is over. The more gratefully and joyfully and courageously you live this one, the more beautiful and easier the next one will be. And then, if you don't love it, what do you think you can do? You get even sadder for nothing. You cannot change the fact that you live (which is a wonderful gift - you will see), except with a price that is not worth paying (spiritual decay and a great karmic burden), so simply live! You don't know what comes your way.

- When you feel sad, don't be alone! Look for company. In other people or in God.

- You don't have the hardest life. You are not the most oppressed. You are not a victim. Nobody has the hardest life, nobody is a victim. Everything happens exactly as it should, so that you can learn and evolve, and if you can accept that, you will open the doors to better energies.

And whatever you do, Love yourself! You are part of God. If He created everything that exists, do you realize what you can create too? Try to see who you are in your purest and most beautiful form. Wake up from your coma! You are missing your own life! Life is more interesting if you do that!

## IV.2. Alternative therapies to cure diseases leading to depression

We have often heard of "alternative" or "complementary" medicine. Although the term seems a bit complicated at first, alternative medicine covers several types of therapies. They try to use the "natural" healing of the body through its "powers" with the help of natural substances, often plant extracts, massage techniques, acupuncture, etc.

The history of alternative medicine is quite old and turbulent.

In Ancient Greece, the Hippocratic movement supported the development of modern naturopathy. Restoring the body's natural balance was the goal of alternative medicine in the past, and this balance was only achieved through the correct diet and a healthy lifestyle.

Chemical medicines were only used to support healing, they were not meant to cure diseases. Many practices of complementary medicine really developed only in the 19<sup>th</sup> century as alternatives to the rather dangerous practices of the medicine of those times, purgation and "letting" of blood.

In many parts of the world, healers and followers of alternative medicine were viewed with skepticism, criticized and avoided. Things have changed in modern times, when the world understood that alternative medicine can always be an... alternative to traditional medicine.

At one instant, medical practice was limited only to the use of plants, spells and prayers. The Romans were the ones who used a lot of herbs and brought to people's attention the concept of *hospital*, the place where you could receive specialized treatment in the best conditions.

For example, hydrotherapy was founded by Romans; it was a form of alternative medicine that gave results.

A little closer to the present, in the 14<sup>th</sup>-17<sup>th</sup> centuries, the tradition of "healers" and followers of alternative medicine faded a bit, at least in certain countries, for example in England. Emigration from Europe to North America in the 18<sup>th</sup> -19<sup>th</sup> centuries led to the use of alternative medicine in many parts of the modern world.

Homeopathy, as we know it today, was only for the aristocracy at one time, in England, for example, in the 1830s, it became popular among the aristocrats thanks to Dr Frederick Hervey Foster Quin (1799-1878).

Immigration from the Indian sub-continent in the 1850s brought another form of alternative medicine, Ayurveda, 2,500 years old, to the attention of those interested in alternatives to traditional medicine. It was about Indian naturopathy, with holistic practices and natural remedies, its popularity growing more and more especially after the Second World War.
Osteopathy and chiropractic developed mainly in the USA in the 19<sup>th</sup> century, but they were also spread in England, where the school of osteopathy began to function as early as 1917. It was only in the 1960s that the first chiropractic college opened in England.

With the arrival of the Chinese on the European continent, traditional Chinese medicine was also adopted as alternative medicine. The age of this type of medicine is old - in the Bronze Age, even before acupuncture, herbs of all kinds were used, diets, various exercises.

The main areas of practice in complementary / alternative medicine according to the classification developed by the World Health Organization are: natural and artificial light treatments, electroacupuncture and acupuncture, electromagnetic fields, electrical and neuromagnetic stimulation, magnetic field therapy, holographic therapy, spectroscopy, Reiki, MRI, radiant technique, biofield therapy, biorhythmology, crystal therapy, chromotherapy, traditional Chinese medicine - TCM, astrology, Qigong, Yoga, Feng Shui, etc.. All this is based on the theory that any disease first settles in the energy field of a life form, from where it later migrates to the physical body.

Some of the techniques outlined above have been experienced for thousands of years. For example, acupuncture dates back to prehistoric times. According to the theory of Traditional Chinese Medicine, life and health are sustained by an energy called Qi, any imbalance or disturbance of this Qi energy leading to disease. The information we can identify about acupuncture shows that it has the role of unlocking and regulating the circulation of this energy, thus restoring the energy balance.

Therefore, acupuncture addresses the energetic part of the body and is based on the principle that human energy flows in the body through channels called *meridians*, feeding the various corresponding organs and coming to the surface of the skin where it interacts with the outside. At this level the energy can be influenced by stimulating points (acupoints) with low resistance and low vibration, by introducing special fine acupuncture needles. The presence of a normal flow of energy is a sign of a healthy body. Disruption of the energy flow from the meridians leads to the occurrence of a disease.

# **IV.2.1.** Oriental therapies

### IV.2.1.1. Reiki

More recently, another technique is reiki; this is also a Japanese form of alternative medicine called *energy healing*, through which a "universal energy" is transferred through the practitioner's palms to the patient, to encourage emotional or physical healing. Considered a pseudoscience in scientific texts and articles in academic journals, more and more people are turning to reiki.

The practice is based on qi ("chi"), which practitioners say is a universal life force. Although the practice of universal energy circulating through the hands (palms) is challenged by Christianity (the Catholic Church), we cannot help but draw a parallel between touching the hands we find in the Holy Scriptures under what we know as blessing and the same form of touch found in reiki. We can exemplify with passages from the Bible<sup>143</sup>:

Leviticus - the third book of Moses<sup>144</sup> Chap. 1. 4. "You are to lay your hand on the head of the burnt offering, and it will be accepted on your behalf to make atonement for you."

Genesis 48:14. "But Israel reached out his right hand and put it on Ephraim's head, though he was the younger, and crossing his arms, he put his left hand on Manasseh's head, even though Manasseh was the firstborn."

Exodus. The Second Book of Moses.

Chap. 3. 20. "So I will stretch out my hand and strike the Egyptians with all the wonders that I will perform among them. After that, he will let you go."

Chap. 9.35. "So the heart of Pharaoh was hardened, and he did not let the people of Israel go, just as the Lord had spoken through Moses."

Here we have the parts where Moses stretched out his hand to heaven, over the waters, etc.

The Holy Gospel of Matthew. Chap. 8.3. "Jesus reached out his hand and touched the man. 'I am willing,' he said. 'Be clean!' Immediately he was cleansed of his leprosy."

Chap. 9.18. "While he was saying this, a synagogue leader came and knelt before him and said, My daughter has just died. But come and put your hand on her, and she will live."

<sup>&</sup>lt;sup>143</sup> The Romanian Orthodox Bible is known as the Bucharest Bible. The text of the Orthodox Bible was finalized on the initiative of Şerban Cantacuzino, lord of Muntenia between 1678-1688. The printing of the Orthodox Bible began on November 5, 1687 and ended on November 10, 1688.

<sup>&</sup>lt;sup>144</sup> Chap. 4.4. He must bring the bull to the LORD at the entrance of the Tabernacle, lay his *hand* on the bull's head, and slaughter it before the LORD.

The Holy Gospel of Mark. Chapter 1.41. "Moved with pity, he stretched out his hand and touched him and said to him, be clean."

Both the other gospels and other biblical passages depict the power of the hands through the healing and empowering flow of divine energy<sup>145</sup>.

## IV.2.1.2. Yoga and qigong

A number of Oriental alternative therapies use the same energy of the Universe in healing. The proper study of energy fields for life forms involves the study of their ancient history.

Practitioners of yoga, the ancient Indian system of health care, use breathing exercises, posture, stretching and meditation to balance the body's energy centers. Mindful exercise is a special type of exercise with an added element that focuses on the state of mind. It has recently emerged as a therapeutic intervention to improve the psychosocial well-being of individuals.

Yoga and qigong are two major streams of mindful physical exercise based on literature. Yoga is used in combination with other treatments for depression, anxiety and stress-related disorders. The principle of yoga is to achieve the integration of mind, body and spirit. There are 22 types of yoga and many more derivatives.<sup>146</sup>

Qigong exercise is a self-practicing physical exercise system that includes healing posture, movement, self-massage, breathing and meditation. All forms of qigong are presented on balance, relaxation, breathing and good posture. Qigong movements are performed at very low levels of energy expenditure. Scientific evidence demonstrates that medical conditions such as high blood pressure, cardiovascular disease, insulin resistance, depression, and anxiety disorders respond favorably to mindful exercise.<sup>147</sup>

Qigong as a very old form of healing, has been described as, "This spiritual and energetic form then acts as a blueprint upon which the entire Universe of space and time, energy and matter is based.<sup>148</sup>"

Dr Igor Micunovic, president of the Association of Acupuncturists of Montenegro and a leading member of the World Society of Traditional Chinese Medicine Societies, shows in his studies that TCM clinics use ancient healing exercises recorded as Dao Yin (Dao Yin is an exercise in

<sup>&</sup>lt;sup>145</sup> Cristina - Elena Popa Tache, Vers un droit de l'âme et des bioénergies du vivant/ Towards a right of the soul and the biofields of life forms, L'Harmattan, 2022, pp 146-147

<sup>&</sup>lt;sup>146</sup> Lavretsky, 2009

<sup>&</sup>lt;sup>147</sup> Khalsa, 2004

<sup>&</sup>lt;sup>148</sup>See Johnson, JA, *Chinese Medical Qigong Therapy*, Part 1, First published in March 2002 by The International Institute of Medical Qigong, pp. 127, 131.

breathing of Qigong precursors, usually in sitting and lying position, derived from a long history of experience in preventive medicine). Historically, Qigong exercises date back to the Shang Dynasty (1600-1046 BC), and there are plenty of descriptive drawings and texts of Qigong training exercises and meditations.

It is interesting I. Micunovic's note according to which the first medical Qigong exercises were created by analyzing the movements of animals. Archaeological discoveries have proven the tradition of this practice. The tombs of the Han Mawangdui dynasty (206 BC - 220 AD) can be exemplified with forty-four drawings of classical ancient Qigong illustrations, with descriptions of therapeutic movements and corresponding diseases, as evidenced by archaeological resources that in ancient China, Qigong prescriptions have turned into a system of Yin and Yang energies.

The clinical effects of meditation impact a wide spectrum of physical and psychological symptoms and syndromes, including reduction of anxiety, pain and depression, improvement of mood and self-esteem, and reduction of stress. Meditation has been studied in populations with fibromyalgia, cancer, high blood pressure, and psoriasis. The practice of meditation can positively influence the experience of chronic disease and serve as a primary, secondary, and/or tertiary prevention strategy.<sup>149</sup>

# IV.2.2. Diet and herbs

Adjusting both diet and nutrition can help some people with neuropsychiatric illness manage their symptoms and promote recovery. For example, research suggests that eliminating milk and wheat products can reduce the severity of symptoms for some people with schizophrenia and some children with autism. Similarly, some holistic practitioners use herbal treatments, B vitamins, riboflavin, magnesium, and thiamine to treat anxiety, depression, drug-induced psychoses, and memory loss.<sup>150</sup>

A number of herbs and dietary supplements have demonstrable effects on mood, memory and insomnia. There is a significant amount of evidence supporting the use of St. John's wort for depression and omega-3 fatty acids and gingko biloba for dementia.<sup>151</sup>

Although herbal preparations are commonly believed to be safer than synthetic ones, many of them have limiting side effects. St. John's wort is useful for the treatment of mild to

<sup>&</sup>lt;sup>149</sup> Norton et al., 2008

<sup>&</sup>lt;sup>150</sup> Garvey, 2002

<sup>&</sup>lt;sup>151</sup> Fugh-Berman, Cott, 1999

moderate depression, but has multiple potentially dangerous and lethal drug interactions due to monoamine oxidase inhibition demonstrated in vitro.<sup>152</sup>

Additionally, concomitant use of drugs metabolized by the hepatic cytochrome CYP450 enzyme system may result in altered therapeutic levels due to enzyme induction or inhibition by St. John's wort, which may preclude its use in adult patients who take multiple medications because of potential drug interactions.

Various herbal products (e.g., Japanese hornwort, goji, Pinelliae rhizome or Rehmanniae radix) are used in the treatment of depression in different parts of the world, even though most have not been scientifically evaluated.

Ginkgo biloba leaf extract is among the best-selling herbal dietary supplements. Its purported biological effects include: elimination of free radicals; reduction of oxidative stress; reduction of neuronal damage, reduction of platelet aggregation; anti-inflammation; antitumor activities; and antiaging. Clinically, it has been prescribed to treat CNS disorders such as Alzheimer's and cognitive deficits. It exerts allergy and alters bleeding time. Although its mutagenicity or carcinogenic activity has not been reported, its components, quercetin, kaempferol and rutin, have been shown to be genotoxic. There are no standards or guidelines governing the constituents of ginkgo biloba leaf extract, nor are there any exposure limits.

Ginkgo biloba extract appears to be little or no different from placebo in the treatment of Alzheimer's. Recommended doses vary widely, but in the recent Alzheimer's Prevention Study, gingko biloba at 120 mg twice daily was not effective in reducing the overall incidence rate of dementia or the incidence of Alzheimer's in adult people with normal cognition. Its short-term use is acceptable under certain conditions, but the potential risk of bleeding must be considered. Gingko has been reported to reduce depression in dementia patients and counteract the sexual side effects of antidepressants.<sup>153</sup>

In the Apuseni Mountains, in Romania, there is a tradition that on Christmas Eve, at the end of Lent, the name of God should be written on a clay vessel, in all the known languages of the earth, then it should be filled with fresh water and master herbs should be placed there to ward off evil spirits. They used to put in a pot allheal, valeriana officinalis, which was supposed to drive away erotic fantasies, basil taken from the holy icons, to protect the love of the young and the peace of the homes, wormwood from the wreath of St. John's Day, and other magical herbs. After a few hours, the resulting water was drunk by everyone, old and young, to renew

<sup>&</sup>lt;sup>152</sup> ibidem

<sup>&</sup>lt;sup>153</sup> DeKosky et al., 2008

their soul and body. We find this ritual from Apuseni, in different forms, in all areas of the country, although its effect is difficult to digest today, for minds fed with atheism or, worse, with clichés from horror movies: exorcism.

According to Romanian dictionaries, exorcism is that process by which a person "is freed from the devil through prayers, incantations, etc." - a brief and somewhat brutal definition, but which contains an extremely useful key verb: *to free, to release*. From time immemorial, people have felt the need to free themselves from bad influences, bad habits, negative thinking and feeling. For this purpose, fasting, prayers, incantations and rituals were created, steps that, in Romanian folk medicine, have a role of healing the soul, being repeated cyclically, not only for the purpose of healing, but also for the prevention of psycho-emotional troubles. In fact, the process of exorcism was something well known to the Romanian people, being part of the daily life routine of our peasants. Wreaths made of Galium Verum were rolled on the hills in midsummer, to drive away evil spirits, in the fire of Saint Dumitru, all the troubles of the previous year were symbolically thrown; during the Christmas fast, with its countless rituals and customs, the aim is to clear the consciousness of the participants from harmful influences.

In all these rituals, two elements are present: prayers (with pre-Christian influences, such as incantations) and medicinal plants, the latter being credited with miraculous soul-relieving and soul-healing properties.

Spectacular and downright brutal exorcism phenomena, mediatized today persistenty, until recently were almost unknown, because elimination of evil in its various forms was a daily practice, it was a form of hygiene, today too little known - the hygiene of the soul.

The soul, and with it the consciousness, being always kept pure, deep evil could not set in. Through a tradition handed down for millennia, our peasants always knew how to manage their lives, so that they did not need sophisticated psychotropic drugs, dark spells or spectacular exorcisms.

Can the existence of good or bad influences, possibly from other worlds, on the human soul be proven scientifically? Can it be proven, for example, the existence of the devil, the ghosts, the undead, the dragons, the wind fairies and many such entities known in Romanian magical medicine? The answer is difficult to give, because religion and popular tradition, on the one hand, and science, on the other hand, belong, for now, to totally different worlds, totally different ways of thinking.

Filmed evidence about spectacular exorcisms performed in various corners of the world can be doubted, as well as the statements of witnesses, and the macabre spectacle aspect of these exorcisms is another element that comes to add more doubt.

We will speak about popular traditions related to freeing the soul from bad influences. These traditions also hold up too little in front of current thinking, based on material, scientific, rational evidence.

However, in this context, there is a field where the traditions related to exorcism are supported by scientific experiments, that of medicinal plants, used for thousands of years to get rid of bad influences and for soul balancing, which later came under the scrutiny of science, which studied them.

### IV.2.2.1. St. John's Wort

In winter, the bouquets with yellow flowers of St. John's wort, Hypericum perforatum, were indispensable in the kitchens of our country houses. In the first days after the fast, it was administered as a decoction to protect the liver and internal organs from the effects of a much heavier diet. Moreover, it was taken prophylactically, before the meal, to maintain moderation in the face of the abundance of food and drink at the Christmas table. In magical medicine, it was used, together with basil, against "possessions" or, in terms more accessible today, against serious mental disorders. Its buds, picked on Saint John the Baptist (June 24), were used against heartbreaks (deceptions in love).

### What scientific studies say

An impressive number of studies on human patients, of a smaller or larger scale, show that St. John's Wort is extremely effective in the fight against various forms of depression, as well as its psycho-emotional complications. It is difficult to put a sign of equivalence between the manifestations of depression and the various evil influences from folk medicine, treated with St. John's wort, but it is certain that the extract from this plant has become the most administered anti-depressant drug in the European Union. Even in America, where the chemical-pharmaceutical industry has an overwhelming influence, the prescription of this plant in the form of an extract has become the first therapeutic option for many psychiatrists with depressive patients. What exactly does the extract of St. John's wort do? First of all, it causes the cerebral cortex to release certain neurotransmitters, i.e. natural substances that induce certain emotional states, such as optimism, enthusiasm, mental tone. Then, this plant alleviates, through only partially known neurological mechanisms, the feelings of pessimism, inner emptiness, paralyzing guilt.

### Mode of administration

The studies conducted on depressed patients who took St. John's wort showed that, already after two weeks of treatment, most of them overcome the state of asthenia, begin to gain confidence in their own strength, giving up that negative self-evaluation which is one of the the main characteristics of this condition. During the cure with St. John's wort, the extract is administered, associated, for a better effect and to avoid adverse reactions, with the powder of the plant, in equal proportions. The daily dose of the extract will be between 600 and 1200 mg, administered in three installments, for a period of four to six weeks, followed by two more weeks of rest.

# IV.2.2.2. Valeriana officinalis

Its main "specialty" was rejection of evil influences on an erotic level. In the past, its root was put in wheat cakes, taken by teenagers gone with the cattle to graze, to "protect them from erotic dragons, which took away their energy and the minds, but also to protect them from other temptations."

It was consumed and worn by young men, in order to protect them from the evil eye, but also by marriageable girls, in order not to give in to impure temptations. During the winter, between fasting periods, the girls had to keep a little bunch of valeriana hidden in their bosom, to protect them from the evil eye. It was believed that marriage binding charms and those with erotic connotations have no power over those who consume the root of this medicinal weed. In the Romanian fairy tales, it was also said that dragon flocks pass through the sky, above houses they cannot approach because of valeriana kept in the porch, which chases them away, and then they sang, "We don't have a life, a way/ As your herbs chase us away." In the mountainous area of Oltenia, crushed valeriana root was given for 49 days to those possessed by the devil. At sunrise and at sunset, a pinch (approximately 1.5 grams) of valeriana was taken, which was

swallowed with holy water. At night, they slept with a bundle of valeriana, lovage and mint under the pillow, to drive away all the impurities from soul and body.

## What scientific studies say

Clinical studies show that this plant is a strong anxiolytic, improves sleep and, importantly, reduces mental and sexual excitability. People who suffer from anxiety, who face panic attacks or sleep disorders have obtained very good results with the help of this plant. Also, valeriana gives results in an area where synthetic medication is often powerless, namely, sexual dynamics disorders. Whether we are talking about sexual hyperexcitability or various phobias and fears related to eroticism, valeriana has very good effects. Therefore, from the point of view of the therapeutic effects, there is a practically perfect match between the traditional uses of valeriana, to ward off evil influences on an erotic and psychological level, and the medicinal properties, highlighted through clinical and laboratory studies.

## Mode of administration

One teaspoon of valeriana powder is administered three times a day, in cures of 30-60 days, with a 7–10-day break.

#### IV.2.2.3. Artemisia vulgaris

It is one of the most widespread medicinal plants in our country, the tradition of its use in medicine and folk magic being very extensive.

Its action is milder than that of Artemisia annua, and, for this reason, it has been used on a very large scale. In most areas of the country, it was drunk in wine to stimulate the central nervous system and to combat asthenia. It was also believed that those who suffer from somnambulism or epilepsy were under the influence of evil spirits or were possessed by evil spirits, which could be banished with the help of Artemisia vulgaris. Fresh Artemisia vulgaris branches were tied into wreaths, through which epileptic children were passed. The symbolic brooms, obtained from Artemisia vulgaris stems, were used for a ritual cleaning of houses, before the big holidays, but also in rooms where the seriously ill stayed, who were thus protected from hallucinations and visions. On Saint Basil the Great, considered to be the saint with the most powerful exorcising powers, villagers placed in the corners of haunted houses Artemisia vulgaris and basil taken from the church, to scare away all devilish creatures.

### What scientific studies say

Medical research has shown that Artemisia vulgaris is an alert tonic, which combats asthenic conditions and mental anorexia. The active principles of Artemisia vulgaris are a strong stimulant of the central nervous system, inducing a state of mental tone and good mood, combating certain forms of depression. The type of depressed person that responds best to the treatment with Artemisia vulgaris is the one whose depression is accompanied by loss of appetite, sedentary lifestyle, heavy sleep and unclear dreams, with difficult awakening and accompanied by states of stupor.

Also, Artemisia vulgaris is a good insecticide and has the ability to eliminate almost all parasites from the body, be they worms or protozoa, which cannot resist the action of its aromatic active principles. This effect of expelling parasites from the human body seems to have an equivalent on a spiritual level as well, from where - it was said - it repels all evil influences.

#### Mode of administration

The powder is administered, half a teaspoon four times a day, in cures of two weeks, followed by another two weeks of rest. Angelica archangelica

It is also called "herb of the seven angels", and it was believed, throughout Europe, that it has the power to attract the protection of angels. Our folklore, especially that of the mountain villages, is full of enchanting beliefs related to this medicinal plant. It is said, for example, that it can be picked and used for healing only by people with a clean conscience and soul. If she feels that an evil or greedy man approaches her, she loses her strength, because the angels leave her. Angelica can only be picked in the afternoon, because, feeling sorry for the places where she was born and grew up, it is good to be picked only after she "falls asleep", in the evening. Her scientific name itself, *Angelica archangelica*, shows that this plant attracts, through resonance, the help and protection of angels. In Romanian magical medicine, angelica plays, from this point of view, a unique role, that of a "magnet" for beneficial magical influences and not just a simple exorcist.

#### What scientific studies say

From the point of view of pharmacodynamic action, angelica is an excellent regulator of the neuro-vegetative system, having, at the same time, nerve stimulating properties (due to the volatile substances it contains) and calming (due to the furanocoumarins in its composition). These compounds with an antagonistic effect on the central nervous system explain its regulatory action. Due to its tonic and psychotropic qualities, the administration of this plant is able to eliminate the mental blockage states of the seriously ill, states characterized by lack of appetite, vomiting, apathy, pessimism and the absence of the desire to live, to fight the disease. There are many cases in which, although the disease is curable, the patient is not able to sustain the fight with his own states of pessimism and resignation, which is, in fact, the hardest. Angelica, together with prayer, seems to be a truly magical remedy in these borderline states, in which adequate support is needed, so that the patient can overcome the critical threshold.

#### Mode of administration

It is recommended in powder form: one teaspoon three times a day, before meals. If it is given to patients who are facing a very strong feeling of vomiting, then it can be mixed with a little mint, and if the power of digestion is very low, a little Artemisia vulgaris or artichoke powder is added.

### IV.2.2.4. Hyssop

It is one of the most important biblical plants. In Psalm 50 it is said, "Purge me with hyssop, and I shall be clean: wash me, and I shall be whiter than snow." In Romanian folk medicine, hyssop (Hyssopus officinalis) is considered a mental purifier, a plant that banishes dark thoughts and awakens optimism. Like Artemisia vulgaris, it is credited with a strong effect of cleaning houses and people from evil influences, being a means of emotional and spiritual purification, as the quoted psalm shows. As such, in Romania, but also in the entire Christian world, it has been used since ancient times as an exorcistic remedy, alone or in combinations, in a very wide range of psycho-emotional disorders.

What scientific studies say

Scientific studies have shown that the aerial part of the hyssop contains active substances with a strong psychic tonic, which stimulates cognitive abilities such as attention, also having an antidepressant effect. The volatile oils that this plant contains and that give it its characteristic, fresh smell, have the qualities of stimulating the appetite, fighting asthenia and drowsiness.

# Mode of administration

Put a teaspoon of the crushed plant in a glass of water and leave it to macerate at room temperature, from evening to morning, when it is filtered. Drink 1-2 glasses a day, à jeun, usually before meals.

### IV.2.2.5. Basil

It is a plant with exorcistic properties, very strong among Orthodox Christians. The bunch of basil, which is placed on holy icons or which is used for sprinkling with holy water during services, is a true symbol of soul purification, spiritual renewal and liberation from "worldly" evils. On Christmas Eve, the visit of the priest with the bunch of basil, used for sprinkling both the house and the believers, gave birth to a series of popular traditions. In the villages in the north of Transylvania, there is a custom for the priest to drop, by mistake, a sprig of basil, in the houses with young girls, the sprig bringing good luck and happiness in love, if it was worn in the hair, during the holidays. The same sprig was kept in the place of honor to the holy icons, to remove evil and misfortunes from the house.

For internal administration, in Romanian folk and magical medicine, most of the time, basil is associated with St. John's wort, this combination being unbeatable for soul and spiritual balancing.

What scientific studies say

According to clinical observations, basil is a stimulant of attention, induces states of psychic and mental tone, normalizes the appetite, and on some patients, it even has the gift of inducing states of good mood and mild euphoria. The mechanisms by which basil protects our psyche from the harmful effects of stress and intense emotional tension are still unknown. Some researchers claim that the active principles in basil help to improve cellular oxygenation, which allows the body, and especially the central nervous system, to adapt to stressful conditions. The clinical observations of many specialists show, however, that in many patients, basil induces a state of optimism and confidence, which cannot be explained only by simple oxygenation.

Mode of administration

It is recommended to mix, in equal proportions, basil powder and St. John's wort, of which we must take one teaspoon each, 4-6 times a day. The treatment is done for eight weeks, followed by another two weeks of break, after which it can be resumed.

# IV.2.2.6. Passiflora

It is the only plant in this presentation that is not specific to Romanian popular and magical medicine. The translation of its name is not "the flower of passion", as it is wrongly called in various advertising materials, but the Flower of Christ's Passion. Why did Jesuit monks who discovered this flower of incredible and luxuriant beauty choose to associate with Passion? Some believe that because of the shades of blood that this plant acquires, others see the purifying action at the psychic level of this medicinal plant as a heavenly help, reminiscent of the Divine Help received by people from Jesus, through sacrifice, through Suffering. Passiflora is known as the plant that drives away fear, anxiety, urging the mind and psyche to prayer, meditation and contemplation.

What scientific studies say

This plant is as effective in therapy as it is complex in its chemical composition and therapeutic action. There is no single active principle that explains the calming and balancing actions of this medicinal flower and, as such, obtaining semi-synthetic drugs from passiflora is not possible, the whole plant being much more effective. If St. John's wort is the number one remedy against depression, passiflora is, by virtue of its excellence, effective against anxiety and insomnia, being a true plant of calmness. Comparative studies, carried out in specialized hospitals, have shown that the extract from this plant has anxiety-calming effects as strong as benzodiazepines (a group of synthetic sedatives, which includes Diazepam), but without their side effects. Patients treated with passiflora extract recorded a decrease in the intensity and frequency of states of anxiety and fear for no apparent reason, an improvement in sleep and overall psycho-affective life. Against insomnia, passiflora is the most used natural remedy. Unlike synthetic sleeping pills, this plant induces a light sleep, with clear dreams, with normal, easy breathing, and with reduced neurological and mental depression. After waking up, patients do not have unpleasant symptoms, such as states of mental confusion, dizziness, difficulty in breathing, melancholy or orientation problems, as in the case of those who take artificial sleeping pills.

### Mode of administration

Passiflora extract is administered 250-300 mg three times a day, in cures of 90 days. The treatment can be effective right from the beginning, but even if the first doses do not seem to give the expected effects, we must not give up. This, because, according to the researchers, the clearest results are seen after a 30-day cure with Passiflora, its effects of improving emotional life and sleep settling in slowly but thoroughly.

Medicinal plants are not the only or even the most powerful exorcising means, but they have the quality that their therapeutic action on the soul can be objectified through scientific studies. However, we must know that, even without the influence of these plants, the exorcism, the banishment of evil influences from our lives, takes place - without us realizing it - practically every day in the lives of each of us. How? For example, through the power of a sincere smile, coming from the soul, which erases in an instant all the pain, revolt or upset.

Then, the evil in us does not last too long when we give with all our heart. It is about that gift, no matter how small, which is not required of us, but which we need to give. We give a kind word, we give a book that is dear to us or maybe just a few minutes of our time, in which we listen patiently to someone we love. This repeated giving will free our soul from sadness, intolerance, from the prison of anger or despair.

We must not forget prayer, which - for those who can do it honestly and directly - is an exceptional means of relieving the soul, cleansing and raising consciousness. Prayer, over time, changes the character for the better, banishes the evil from us and reveals unsuspected treasures, being a means of exorcism, but also much more than that. But what remains to be done for those who cannot smile, who cannot gift and can't even pray, literally? Well, even for such a desperate case there is a precious treasure of hope, also the most important means of exorcism: LOVE.

No, it is not about passion, nor about that game of attraction and repulsion with erotic connotation, but about that purely soulful, altruistic, disinterested love, in which we manage to put the good of someone above ourselves, even for a few moments. As long as there is a speck, no matter how small, of love, banishing of evil, is possible much faster than we could imagine.

### IV.2.3. Ancient Dacian creed – a legend

Hercules was born in the northern part of the Danube. As a child, he was different from the others and was raised by a priestess of the mountains, when she saw him as brave as no adult was. He had unbridled curiosity in knowledge, he felt the life of nature, he was attracted and delighted by the heavenly vault. Then he traveled a lot. In that life, his soul had to pass a series of tests, that's why he had a life full of hard work. To be able to help, you have to be prepared as a human being with certain qualities, then you have to know, see, find out.

He was prepared for another purpose that he would have in the next life in which he was called *Zalmoxe*.

In the former life, his first test was the killing of the lion of Nemea, and its purpose was not only a service to people, or the establishment of the Nemean games, but it was mastering the forces of the body, of defeating pride, of mastering physical powers.

The second test, was killing the hydra of Lerna, which meant destruction of

passions, from the depths of the being, which make man have something of the reactions of animals.

The third work, of catching, without killing it, the beautiful deer with golden horns, chased throughout Thrace, Istria, crossing the mountains, reaching Hyperborea. It was the test in which all his forces inside and outside were used to turn darkness into light.

The fourth test, catching the boar on Mount Erymanthus, with all its incidents, was the test in which he had to overcome his pleasure of wealth, of corrupting power, of carnal pleasures. The elixir of immortality is not obtained from what is seen, from what is mortal and perishable. Thus, the greatest power resides in the soul, not in the physical body.

The fifth test, namely cleaning the stables of Augias, meant directing the forces, energies, clearing blockages; he showed he could control both the mind and the soul but also the forces of nature with earth, water, air, fire.

The sixth test, with the destruction of the Stymphalid birds, actually meant the hardest work, the fight with himself, with his thoughts, the work of mastering them. Fighting the evil parts of us is the hardest battle. Bad thoughts appear as a result of fears, lack of connection with divinity, and we can hardly control them.

The seventh test, catching the Cretan bull, was the power of overcoming traditions, when necessary, for becoming (evolution). Even though traditions and customs are good for feeling that you are with a people, which gives the shape of your roots and is what holds it together. However, if you do not respect the tradition, you will be criticized or punished in one form or another, so they are based on fear. The fear related to the limits of traditions, is what does not allow you to be free inside you, but also outside of you. People can be caught in the labyrinth of certain traditions as if they were in the labyrinth of the minotaur.

The eighth was the taming of the mares of Diomede, king of Thrace. The four mares were actually swiftness, brilliance, seduction and terribleness, which are exactly the inner states of man in beauty and fame. They are specific states, which must be kept under control by temperance, moderation and wisdom.

The ninth test, acquiring the girdle worn by Hippolyte, queen of the Amazons. It is the embodiment of combat at a high level of pretense. He succeeded by changing his thinking, along with unleashing in his soul powerful states of mind.

The tenth test is bringing Gerion's oxen. It's the calling to all forces within and

without to bind a new collective goal, or a new path, a new life. All together, the desires of the three parts of man, body, mind, soul.

The last two tests were his decision. For all the other tests according to the judgment of the priestess of the mountain it was decided that he is a god who took his earthly body.

The eleventh was the picking of golden apples from the garden of the Hesperides which was also in Hyperborea north of the Danube.

The acquisition of the golden apples meant the acquisition of knowledge, from bodily senses to knowledge through the higher senses and powers, through thought and reason by which he would recognize good and evil.

The twelfth test is the fetching of Cerberus from the underworld of shadows, considered the most difficult one.

By capturing the three-headed Cerberus, Hercules would master, gain the infinity within him. This is possible only by mastering and removing fears, having the three components, fear of disease, poverty and death. By breaking free from the shackles of matter, the ego that blocks the penetration of the inner infinity is removed.

# **IV.2.4.** Therapies based on the force of the primordial elements

For a long time, magic spells were considered by materialistic science just a childish superstition. Even now, Romanian researchers do not consider them worthy of in-depth study.

Classical physics, which arose from the theories of René Descartes and Newton, considers the elements of the world to be isolated and the Universe is seen as a machine. Man is situated outside this Universe. Newton and Descartes "removed the heart and soul from the Universe, leaving behind a series of lifeless components that synchronized with each other<sup>154</sup>". Between these components there might be empty space that Newtonian physicists called cosmic vacuum.

This view of the world "as a collection of isolated things" was outdated when frontier physicists began to study subatomic particles. They found an amazing thing: at a fundamental level, matter cannot be broken down into units that exist independently. What Newtonian

<sup>&</sup>lt;sup>154</sup> Lynne McTaggart, "Câmpul. Căutarea forței secrete a Universului / The Field. The quest for the secret force of the Universe", Adevăr Divin Publishing House, Brașov, 2009, p. 17. Not having the opportunity to quote the works of specialists in frontier quantum physics, we quote them after the books of the American investigative journalist Lynne McTaggart, who, in "The Field" and "The Intention Experiment", from interviews with the most prominent representatives of frontier quantum physics and from reading the books published by them, made an excellent synthesis of the latest discoveries in this area.

physicists called empty space "is in reality a cauldron of bubbling energies<sup>155</sup>". It is generated "by the endless flow of energy, back and forth, between all subatomic particles<sup>156</sup>". These particles are "little bundles of vibrating energy" that constantly feed each other, giving rise to this unimaginably large ocean of energy that scientists have called the Zero Point Field. "Information about all aspects of life, from cellular communication to the vast array of the DNA, would rely on the exchange of information at the quantum level<sup>157</sup>". Our very thinking and feeling are due to the interaction between the subatomic particles in our brains and the ocean of quantum energy.

On the other hand, it has been found that at the deepest level of matter, the world and its relations are in a state of pure potentiality and infinite possibility<sup>158</sup>. In the subatomic world there is a phenomenon called *nonlocalization*. A quantum entity, such as an electron, can instantaneously influence another quantum particle at any distance<sup>159</sup>. But "the most essential element of this interconnected Universe is the living consciousness that observes it<sup>160</sup>". Between the observer and the observed phenomena there is a participatory relationship. "The moment we look at an electron or make a measurement, we help it determine its final state<sup>161</sup>".

So, our consciousness is more than a result of the brain's biochemical activity. It is a substance outside our body – an ordered energy that has the ability to change physical matter<sup>162</sup>.

The question is: How? By what mechanism?

"Science has only recently begun to prove what ancient myths and religions have always claimed: that there may be a life force<sup>163</sup>". This life force has been called: collective consciousness, the Holy Spirit. For frontier physicists it is Zero Field Energy. Ultimately, this force decides whether we are healthy or ill, and we must connect to it to heal<sup>164</sup>.

Through the magic of word and directed intention, folk charmers do just that: connect us to the life force of the quantum field.

<sup>&</sup>lt;sup>155</sup> Artur C. Clarke, cf. Lynne McTaggart, "Câmpul. Căutarea forței secrete a Universului/ The Field. The search for the secret force of the Universe", Adevăr Divin Publishing House, Brașov, 2009, p. 77

<sup>&</sup>lt;sup>156</sup> Lynne McTaggart, "Experimentul intenție/ The Intention Experiment", Adevăr Divin Publishing House, Brașov, 2010, p. 17

<sup>&</sup>lt;sup>157</sup> Lynne McTaggart, "Câmpul. Căutarea forței secrete a Universului/ The Field. The quest for the secret force of the Universe", Adevăr Divin Publishing House, Brașov, 2009, p. 22

<sup>&</sup>lt;sup>158</sup> *Ibidem*, p. 40

<sup>&</sup>lt;sup>159</sup> *Ibidem*, p. 40

<sup>&</sup>lt;sup>160</sup> *Ibidem*, p. 41

<sup>&</sup>lt;sup>161</sup> *Ibidem*, p. 28

<sup>&</sup>lt;sup>162</sup> *Ibidem*, p. 17

<sup>&</sup>lt;sup>163</sup> Artur C. Clarke, cf. Lynne McTaggart, "Câmpul. Căutarea forței secrete a Universului// The Field. The quest for the secret force of the Universe", Adevăr Divin Publishing House, Brașov, 2009, cover 4

<sup>&</sup>lt;sup>164</sup> Lynne McTaggart, "Câmpul. Căutarea forței secrete a Universului/ The Field. The quest for the secret force of the Universe", Adevăr Divin Publishing House, Brașov, 2009, p. 16

As quantum frontier physics has proven that "we are connected to each other and to the world in the depths of our being<sup>165</sup>" and even our minds "operate according to quantum processes<sup>166</sup>", it is clear why alternative medicine - in in our case, the charms – are effective.

Yugoslavian Vlatko Vedral believes that the magic of quantum interconnection may well be the key to life itself<sup>167</sup>.

In conclusion, we could say that the magic spells are based on quantum interconnection, and its effect is explained by the quantum nature of our thoughts and intentions. Thus, quantum physics agrees with the Geto-Dacian Zamolxe, who claimed, through his holistic medicine, that you cannot treat the body without first treating the soul. "At our most basic level, the human mind and body are not distinct and separate from their environment, but constitute a 'package' of pulsating power that constantly interacts with this vast sea of energy<sup>168</sup>". At its infinitesimal level, the world appears to be "a huge network of quantum information, in which all the component parts are always on the phone with each other<sup>169</sup>".

On the other hand, most spells are done with the help of water. Japanese researcher Masaru Emoto, who studied water, noticed that it receives and carries information, changing its quality depending on its nature. Moreover, water understands words. He would stick notes with various information on a bottle and then freeze the water and study the crystals. He noticed that the water on which he wrote "happiness", "thank you", "angel", "peace" formed beautiful crystals. Conversely, when negative words ("unhappiness," "stupid," "war") were transmitted to it, the crystals were out of balance or absent at all.

So, our consciousness has the power to change the water. This, in turn, has the ability to transmit our messages. With the help of water, we can change ourselves or we can change others. How does this happen? The scientist discovered that water is sensitive to that subtle form of energy in the Universe that he calls *hado*. All things have vibrations, or hado, including subatomic particles. Our mind and body are affected by the vibrations we resonate with. Based on this phenomenon, as well as the Japanese belief that "the words of the soul exist in a spirit called *kotodama*, or the spirit of words, and the act of speaking words has the power to change the world<sup>170</sup>", Masaru Emoto devised the hado medicine. By measuring the vibrations of the person with the help of a device, he prepared the hado water in which he transferred the

<sup>&</sup>lt;sup>165</sup> *Ibidem*, p. 22

<sup>&</sup>lt;sup>166</sup> *Ibidem*, p. 22

<sup>&</sup>lt;sup>167</sup> *Ibidem*, p. 22

<sup>&</sup>lt;sup>168</sup> *Ibidem*, p. 53

<sup>&</sup>lt;sup>169</sup> Artur C. Clarke, cf. Lynne McTaggart, "Câmpul. Căutarea forței secrete a Universului// The Field. The quest for the secret force of the Universe", Adevăr Divin Publishing House, Brașov, 2009, cover 4

necessary information for their correction. The essence of earthly beings is water, our body being made up of approximately 70% water. Therefore, by influencing water, we also influence other beings. By penetrating the subatomic particles of the body, water stops the effect of negative vibrations.

Much the same mechanism is also at the basis of our magic spells. Words are a form of vibration. "Although the words of different languages may have different sound or graphic appearance, they are all formed according to the principles of nature<sup>171</sup>." These are the old, fundamental words of a language. "Knowing that all words come from the vibrations of the Universe should help us see that we are all one and the same<sup>172</sup>." The Geto-Dacian initiate Zamolxe knew that, and his holistic medicine was based entirely on it. The enchantress from the countryside, although she has no idea about "energy packets", "vibration" and "quantum interconnection", has been acting in their spirit since time immemorial. She holds the jug in her hand and conjures the water. At that moment, she communicates to the water, with the help of words, i.e. vibrations, a positive message of healing. After which the patient is given to drink from it or it is sprinkled over his body. Masaru Emoto even issued a theory of his own, based on the vibration of words and the crystals formed by water, "Disastrous phenomena are the result of imbalances in the energy of love and gratitude<sup>173</sup>." It seems that a witch, with the power of ancient words, restores the balance of these energies, which, according to the Japanese researcher, "constitute the essential forces in our life<sup>174</sup>", and when they are whispered to the water, it forms the most beautiful crystals.

When water is not used, intention or directed thought is used. The enchantress recites a magical formula inherited from her Neolithic ancestor. The rest is quantum physics. Little bundles of vibrational energy and their ability to influence each other from any distance. "New models of consciousness describe intention as an entity capable of transcending physical boundaries of any kind. The intention seems to be something like a tuning fork, which makes the ranges of other things in the Universe resonate on the same frequency<sup>175</sup>." After learning that, we are no longer surprised that the old Ileana Vaman from the village of Frumosu, the last weasel charmer in Bucovina, used to say her charm over the bowl of still water near the hearth of her own house, and the horse recovered at the other end of the village, in its master's stable.

<sup>&</sup>lt;sup>171</sup> Masaru Emoto, "Mesajele ascunse din apă/ Messages from water", Adevăr Divin Publishing House, Braşov, 2006, p. 27

<sup>&</sup>lt;sup>172</sup> Masaru Emoto, "Miracolul apei/The miracle of water", Adevăr Divin Publishing House, Brașov, 2007, p. 22

<sup>&</sup>lt;sup>173</sup> *Ibidem*, p. 19

<sup>&</sup>lt;sup>174</sup> *Ibidem*, p. 13

<sup>&</sup>lt;sup>175</sup> *Ibidem*, p. 12

Here is an example of magic spell, translated from Romanian by me, for telepathic suggestion.

IV.2.4.1. Spell to banish sadness

There are days when you feel completely down: unlucky moments pile up and disturbing thoughts attack you from all sides.

Then with a little incense fumigation, say:

Flee impure thoughts Into desert spots

Into distant plots! Run away vain distress Here I don't need any stress Towards the four winds Where deep sea begins! Come my gentle thoughts With flowery gloss Untie the knots Make a sign of cross Run away! Get lost Calm down, fingers crossed! Dissolve the clots Black and gloomy halts Anger, go, just run away! Don't come to me every day! Come to me, good intuition. Be at once my definition Don't be late for my fruition! Become healing means For me and my genes!

When you cast your spell yourself, you will find that the preparations and the casting of the spell make you feel better. You thought about something else than what was pressing you before and you were relieved. If you don't believe in such a thing, but your mother or another woman in the house casts the spell for you, while you make fun of her superstitions, you changed the direction of your thoughts and still took advantage of the spell.

This is the content of a popular Romanian spell, in which the power of the words is used for telepathical suggestion.

# IV.2.5. Know thyself, pain body, inner child

It is often said that the care and affection a child receives is the foundation on which tomorrow's adult can develop harmoniously. In other words, if a child discovers the world in a safe and balanced environment, which offers him freedom and healthy limits at the same time, he is much more likely to form a correct perception of things and to have a good selfimage.

However, it happens that, being adults, we face difficulties that have their roots in early experiences. Some of these difficulties are kept by what we call the *inner child* and can manifest in important areas of our lives (including within the roles of parent or partner in a couple), so they are often worth exploring, in order to find new ways to manage them and improve the way we feel inside.

### What is the inner child?

The "inner child" is difficult to define empirically. In general, it refers to parts of our unconscious that influence the way we currently function, parts formed under the influence of lived experiences and emotional imprints from childhood.

The two "identities" of the inner child, to which each of us relates, being closer to one or the other, are:

 "wounded child" - manifested as a result of difficulties in different stages of development and/or unfulfilled needs or blockages. The phrase refers to the self-image developed as a result of some traumatic events and to the fear developed, adjacent to the trauma. • the "ideal child" (*divine* or *miraculous*), who was untouched by abuse. Here we are talking about the resilient inner child, which potentiates our creative, spontaneous, uncensored side.

How does today's adult "keep" the difficult situations from childhood?

Even if we don't always realize it, we are very connected with the "facets" of the inner child, which can manifest in several situations.

- Most of the time, the way we see ourselves and the way we represent our relationships between people are based on the first models of relationships we have. For example, there are people who startle or feel tense when they are around people who talk loudly because in their childhood, they witnessed conflicts between their parents and in those moments they did not receive security or consolation from a close person.
- The relationships we build often bear the marks of significant events from the past. Some people may have difficulties in forming healthy relationships, in which they can really get involved, for fear of being disappointed and hurt, if they had significant traumatic losses in childhood.
- The inner child can sometimes add points of view from childhood to the perspective of an adult. If a child has been excessively criticized by his parents, it is very likely that, as an adult, he will fear criticism and experience the same emotions as in childhood when, for example, he is faced with an employer who minimizes his work or who makes critical comments. Similarly, an overdisciplined child can become an inflexible adult who finds it difficult to set limits or say *no* without feeling guilty, and a child who has not been given healthy limits will have difficulty integrating, and set and follow the goals.

How can we heal our wounded inner child?

For many people, connecting to the inner child can be a difficult process – because it often involves accessing less pleasant memories.

On the other hand, when we work consciously and constantly to solve childhood problems, we have the opportunity to discover and use the qualities of the inner child: playful spirit, enthusiasm, creativity, spontaneity, physical and mental resilience, imagination, love of life, curiosity, innocence, optimism, free expression of emotions and feelings.

There are several ways in which we can explore the Universe of the inner child:

- Through **psychotherapy**, together with a psychotherapist who can help us discover the inner child and heal him of the things that generate imbalances in adult life;
- Through guided meditation/ <u>hypnotic trance (together with a specialist);</u>
- Through play and recreational activities specific to childhood;
- Looking at photos or various objects that remind us of our childhood and analyzing the emotions that encompass us with the recollection of the respective events.

Getting to know your inner child can be an extraordinary opportunity for healing and growth. In other words, paying attention to the things we feel or say, trying to find patterns of behavior, we can find the source of some difficulties and, further, we can discover unexpected inner resources.

We all keep a childish self inside us. That is the self that for the first time perceived how to interpret the world. Our experiences and interpretations change as we become adults, but the child inside is still there, wondering, exploring and responding.

# Why is the inner child important?

The inner child keeps the memories from childhood and at the same time represents the divine manifestation of the emotions existing in the heart. The inner child is rather "energetic" than physical. The inner child is the purest, most naive, sensitive and vulnerable part of our Soul. The inner child keeps all the traumas, problems, fears that you had in childhood and that you think you forgot... or not.

The child in you represents all your emotional baggage, he is also the one who helps you develop your gifts: knowledge, clairvoyance, clairaudience or clairsentience. The child in you exists on an energetic level and acts as such. It is extremely sensitive to the energies in your body and outside, to the divine energies, from the Universe, from other realms. If you are in harmony with the child in you and you encourage him, then you too will be fine, you will be a unified whole, you will speak with one voice.

The child in you behaves exactly like a child. When you are angry the child in you is angry, and he feels the pain much stronger. When someone hurts you in any way, the child in you feels exactly how a child would feel in reality. The child in you keeps all the memories that affected your childhood to a greater or lesser extent. These memories remain in the subconscious and have an effect on your present life, without you understanding why. It is important to heal these memories from the past in order to move forward on your path. But, in order to be able to heal them, you need to know what exactly you need to heal and then you search deep into your soul, in your heart, communicate with the child in you and ask him to show you what you need to heal. Memories will come to your mind that may seem childish to you, an adult, but to the child you were then, they were powerful.

# IV.2.6. Therapies based on faith

Some people prefer to seek help for mental health problems from their pastor, rabbi, or priest rather than from therapists who are not affiliated with a religious community. Counselors working within traditional faith communities increasingly recognize the need to include psychotherapy and/or medication along with prayer and spirituality to effectively help some people with mental disorders. Both religiosity and social support do influence depression outcome; however, some researchers have theorized that religiosity largely reflects social support.<sup>176</sup>

Man's life has always unfolded between social, economic, cultural, moral mechanisms that were a guide and directed him towards an end.

The history of the world, the history of religion, of culture, are testimonies for all the struggles of man to conquer a better and stabler place on Earth. How these struggles were, how the place that man managed to occupy over the centuries was, if he ever reached his ideals in time, we can learn from history.

Unfortunately, for the modern/neomodern and postmodern man, such guiding mechanisms have shattered or been removed by him, in the fierce fight for freedom. This is because man, the whole of humanity after all, has risked everything to reach the pinnacle of total freedom, manifesting itself on all fronts.

Basically, to achieve "absolute freedom."

Nevertheless, he did not always analyze the risks of this freedom, the road or the final goal to which such freedom leads.

That is why modern times, starting from the 20<sup>th</sup> century, have caused man to lose more and more the balance of his own life, of the society/world in which he lives. FREEDOM has turned into FREEDOMS, and man has not even noticed it.

<sup>176</sup> Lavretsky, 2009

These not understood/misunderstood freedoms of the time we live in today (the beginning of the third millennium) have led to many interpretations regarding man's life in the Universe, his relationship with the Universe and with God.

Researching, already for many years, the word of the Holy Scripture, the Trinity of God, the relationship of man with God - the Creator, seekers tried to find answers to the great problems/interpretations of the current time. Because...existential logic tells us that in order to live vertically, to live balanced and, why not, beautifully, man must have a fixed target to move towards a landmark to follow so that life remains normal.

Sciences developed unprecedentedly in these years, artificial intelligence appeared, man began to be increasingly replaced by robots. The thing is visible on a large scale!

In this context, the human soul is in danger!

The unlimited freedoms we live in today also opened the way for the development of psychology, as a science that can help the human soul. Nothing wrong so far.

Still, researching the issue of the influence of psychologists /psychotherapists/ psychiatrists on the soul, seekers wanted to understand the methods by which these new sciences work on the human psyche, how much they respect the values of the soul, as a gift received from God, having eternal character.

We respect the biblical exhortations, the Christian teachings regarding the development of the soul in unity with Christ - the Savior of our lives!

Whoever is not coordinated in his searches by the Holy Spirit (hypostasis - person of the Trinitarian God), cannot know God! About the Spirit of God, Christ the Messiah, tells us through the Holy Gospel, "And so I tell you, every sin and blasphemy will be forgiven men, but the blasphemy against the Spirit will not be forgiven." (Matthew 12, 31)

The holy apostle Paul, that one of the apostles, known for the high schools made in his time in Israel, said, "See to it that no one takes you captive through hollow and deceptive philosophy, which depends on human tradition and the elemental spiritual forces of this world rather than on Christ." (Colossians 2)

And Christ said, drawing the attention of the people, "All you need to say is simply 'Yes' or 'No'; anything beyond this comes from the evil one." (Matthew 5, 37)

God is not pantheistic, but there are sacred sparks of God everywhere in the Universe and inside our human structures. God is One and the same forever. He is the Creator and Lord of the Universe without merging with it. He is without beginning, therefore above all and everything. He coordinates His creation according to His laws, to lead our souls to the Kingdom lost by disobedience of the first people. His laws are love and forgiveness, and man must know and obey them, not according to his will, but through the teachings transmitted by the Scriptures, the same from the beginning of the world to eternal life!

"What joy is ours that the Lord not only forgives our sins, but allows the Soul to know Him, so soon as she humbles herself. The poorest wretch can humble himself and know God in the Holy Spirit. There is no need of money or possessions in order to know God, only humility. The Lord gives Himself freely, for His Mercy's sake alone. I did not know this before but now every day and every hour every minute, I see clearly the Mercy of God. The Lord gives peace even in sleep, but without God there is no peace in the Soul." (Saint Siluan the Athonite)<sup>177</sup>

Professor Dumitru Constantin Dulcan about Jesus... "For me, Jesus is the greatest teacher of all time. I don't believe in Jesus just because I was educated by my parents. I'm an intellectual who went through school, who tries to explain the world to himself. But of all the great spirits who lived on Earth (Buddha, Confucius, Pythagoras, etc.), Jesus has the perfect scientific coverage. Because absolutely all His words are perfectly superimposed on the current sciences. Do you know what Jesus brings more than Buddha? Not only Love, but also Forgiveness. It's extraordinary! What does Forgiveness mean ? From a spiritual point of view, it means peace and harmony. Scientifically, do you know what Forgiveness means? It simply means changes at the level of DNA, that is, of our genetic foundation. It means deletion of the pathological program (pathological disease model). Through Forgiveness, at the DNA level, the negative pattern is simply erased and a good chemistry and energy balance is installed in the body. It's fantastic, it's just like resetting a computer. This can only be erased by Forgiveness. Simply put... do you want to cure yourself of a serious illness? Make peace with all those who hate you! It is exactly the message of the Savior given to those who came and asked him for healing. Jesus could have said "I have healed you", but he chose to say "your faith has healed you." When you believe, you mobilize all your healing mechanisms. To be aware that God exists is not enough. Only religion allows you to experience the transforming emotion, that opening of the soul through which you truly experience the relationship with God. Not only going to church is important, but also the power of prayer that you can do anywhere. Here, after 2000 years, this fantastic exhortation of Jesus, Forgiveness through genetics is explained. Do you realize that what I am saying is true, that Jesus is the greatest

<sup>&</sup>lt;sup>177</sup> Voichița Tulcan Macovei, Terapia prin credință, Psihologie după modelul lui Iisus Hristos / Faith therapy, Psychology according to the model of Jesus Christ, ePublishers, Bucharest, 2022

Teacher of all time? I discuss about Jesus not from a theological point of view, because it is neither my competence nor my duty; I discuss about Jesus from the point of view of a man of science, of scientific knowledge. The fact that today we can explain all the words of Jesus through the terms of modern science seems to me extraordinarily important. After 400 years of disputes between science and religion, the new science comes to confirm religion, the existence of Deities ..."

Somewhere I read an ordinary person's confession, "There comes a time when you understand that it is not necessary to fight, that everything happens by itself, you understand that life flows smoothly, it is not an effort but a joy...'

In this complicated world, I met an 85-year-old monk, considered to have grace according to the terminology used by his confreres.

I asked him how healings occur, what happens when someone comes to him.

"I don't think that I have anything to do, I open up and let the Holy Spirit flow through me. I never ask someone why he came to me, what problem he has, I just feel his soul, how heavy it is, and then I pray to God. That's all I do - I pray with him. And I tell him that it is a great joy when two come together in His Name..., as then He is also with us. It is a blessing for me when someone opens my door. I don't see the man entering, but the God in that man.

At the end, I feel the man is lighter, more serene. I don't need to know what burden he is carrying; God knows, I just keep my soul open and pray with all my heart. Everything is our prayer to God, ...

Sometimes, I hold his hands in mine, sometimes I put my hands on the crown of his head.

Sometimes, I feel they need to come back, other times I know the work is done. And the miracle, I don't call it *healing*, I call it the AWAKENING of Man in God..."

I asked him why it was more difficult for me to pray in an agitated, tense, nervous crowd, and he answered:

"As long as you see God as being outside of you, you find reasons outside of you. The cause is not those around you... but how you perceive God. If you have faith that He is in you, you realize that NO ONE can come between you and God.

To pray ... you go down into yourself, close your eyes and ... in your heart you find peace. God is waiting for you there...

The mind either is the first to open up, and through your thoughts, lets Him manifest in you, or the mind holds you back. The mind weaves labyrinths and sometimes gets lost in its own fabric.

If you let the love in your heart fill your mind, you will see how your thoughts find their own way to Heaven."

I asked him why people struggle to get the Light:

"You struggle to get closer to God when you have fear, anxiety, doubt about your relationship with God. Then you always find that you still have something to do, that you haven't done enough, there is still something..., and that something will bring you closer, ... and you search... and you search incessantly... But if you stop from the fuss, from the turmoil, from the search, you allow yourself to discover it in yourself.

You can live a whole life concerned only with looking for Him outside yourself, but you are not looking in the right place. The outer struggle is a sign of the struggle in the soul of those people, their aspiration, their striving, their seeking, and that is the way they reflect it."

I asked him how after hours spent on his feet, in an uncomfortable position, he didn't show even a sign of fatigue and the people around him were very quiet, calm. He was spreading a vibe of PEACE around.... which calmed the crowd...

"Fatigue comes from the struggle of the being with life. When you resist life, judging, criticizing, getting angry, you lose the life in yourself and get tired, and that's normal... because you're going against the flow. Love is the flow of life. Peace, tranquility, is achieved when you let life flow through you and stop resisting..."

And he asked me, "Have you ever gotten tired while you were rejoicing, while you were loving, while you were praying really, deeply? Then you let yourself go with the flow of life; you didn't resist. Then you opened up through your heart. You get tired when you search only with the mind, the heart never gets tired. And the mind is constantly searching, always finding something else to cling to, but in essence ... it is looking for peace.

So the fight is not between us and those around us, or the happenings in life, but it is between us and us, it is that inner struggle that exhausts..."

I asked him how you can get out of this struggle:

"You don't have to struggle to get out, because you sink even worse. And there comes a time when you understand that it is not necessary to struggle, that everything happens by itself, you understand that life flows smoothly, it is not a perpetual effort. Struggle and effort only take place until this understanding, this PEACE descends in your heart.

Stop running after God, stay calm and let Him express himself through you..."

I asked him how he reached this state of PEACE, in my opinion of ENLIGHTENMENT..., and he told me that he prayed to God to enlighten him so that he could give something to those around him, and he did it through a firm belief that his request is heard

and fulfilled, and then he let himself be carried away by life, he opened himself ... and .... little by little the prayers came to him helping him to feel with the soul. He never doubted for a moment that he would succeed and his prayer to God was only to give him this grace to give as long as he lived on Earth. This he considered to be the greatest blessing in life - to enjoy the spiritual wealth of the heart.

I told him that people have moved away from God, they have lost touch, and somehow the connection between Heaven and Earth has been severed.

"Man moved away from his peers. And that, out of fear. What you can do as a human is to seek to restore this soul connection between people, to feel Him in each person, to read and choose those prayers that you feel with the Soul, because if you just say them without your soul, they are just sounds. Through prayer, man rises through the Word that becomes act, not only through thought but also through experience. These three must go together to lift you up. It is not our duty to judge our fellows by feeling separated, but to find for ourselves the Way through which we can unite and talk with God."

He told me that it is very important to listen to the SILENCE... "SEEK SILENCE, don't just follow my words, listen to God in my speech and in my silence..."

And every time he stopped talking, I would sit with my eyes closed and hear, feel something like ... the sound of a flapping of wings, and I seemed to see something like a huge ball of light above his head.

This BEING addressed everyone around with special respect, with reverence... I asked him what he feels when he talks to a man:

"When I talk to a man, I see the Holy Spirit in him. To be disrespectful to a man is like being disrespectful to the THRONE OF GOD. It is not enough to see God in an angel or in His Son, look around and DISCOVER Him here too, in every man, in every being... Say every word respectfully, slowly,..., don't rush to speak. Words are made up of the Holy Spirit (...), and when you speak ..., speak slowly and with respect, aware that at that moment the Holy Spirit manifests through you in this world. Let every word come from your soul, feel it before you say it, only then will it touch the soul of the person you speak to. What you say, if it is devoid of the light of your soul, will spring from the mind, and sooner or later anyone will forget it, but if what you say comes from the soul, that man will keep in his soul not what I or you said, but the memory of the joy in his soul when God spoke to him through you..."

When I left, I wanted to give him something, I didn't know what, and he answered my unspoken question by telling me to bless him. I wondered how I can make this gesture towards him who is in this world but not belonging to it... and he explained to me: "When you do something with all your heart, you let the divine power of the Holy Spirit descend through you and manifest itself to the being you address, man does not bless with the power of man but with that of the Holy Spirit, and in His FACE, we are all equal."

## IV.2.6.1. Orthodox faith and bioenergetics

The specialists came to the conclusion that there is a close connection between the Orthodox Christian faith and bioenergetics. The two fields of human knowledge, apparently so different, are closely related, complement each other and enrich each other. Their opinion is that in Orthodox faith we have not only a religion and a philosophy, but also an ancestral faith, which is something normal, an energetic habit for our bodies, because it comes from the faith of our ancestors, just as we are used to the light of day, which can only do us good.

We can say that the Orthodox faith has a beneficial energetic action on our body and brings us a feeling of well-being and comfort. Where does this come from and how should we use it better, more appropriately?

### IV.2.6.1.1. Holy places concentrate energy

The holy forest, the holy mountain, etc. are very often encountered. These, along with numerous other sacred places, concentrate a mysterious force in them, which allows people to come into contact with God. Using this secret power correctly, joining it to our own inner power, we can achieve what we want, making our prayers reach where they are addressed, and the Lord fulfill them.

#### IV.2.6.1.2. Where we enter into a relationship with divinity

Numerous researchers of the Earth's bioenergetic field consider that our planet is crisscrossed by a huge amount of energy channels. The points where these channels intersect represent the points where the terrestrial energy field comes into contact with that of the Universe. In these areas, true unique energy accumulations are formed, beneficial for people, on large areas. Here it is much easier to get in touch with the Supreme Force, with the Divinity.

Our ancestors often noticed the strange phenomena in these places and, therefore, places of worship often appeared here. For example, after Christianity was founded, the building of churches on the sites of old sanctuaries was sought, because the magical properties

of these places were known. They are arranged along two distinct lines, which represent the energy channels of the place.

It's said that *It is the person who sanctifies where he lives*. There are sacred and evil spots all over the world. Those evil spots could be sanctified through a church whose geometry has the property to annihilate low frequencies.

When human life and activity take place in areas subject to telluric stress, chronic diseases develop. Telluric networks cover the Earth's surface. They are electromagnetic emissions, but they cannot be detected with devices for measuring electric or magnetic fields, but by dowsing methods, or by dogs. The mechanism that generates them is not known, but they are considered energy walls that come from underground, from unknown depth.

According to the legend, Negru Vodă / The Dark Lord appears as a character who, in 1290, crossed the Carpathians, from Făgăraș and settled at Curtea de Argeș.

A buckle discovered in the tomb of Negru Vodă represents a castle with four towers which, in the center, below the entrance shows the image of a swan with a woman's head. The Swan is a symbol of Ascension among the Celts - Igraine/Swan-mother of Arthur, and among the Hindus.

Mănăstirea Argeșului/ Argeș Monastery is a representative creation for Romanian spirituality. It was published by Vasile Alecsandri in the first collection of popular Romanian creations from 1852, Poezii populare/Folk poems.

"Proud shepherd, Have you heard Up the Argeş river Down th river shimmer You took sheep to graze In the golden rays On your daily way Through flowers bouquet Have you seen a wall Unfinished and tall Somewhere up the hill Hazel trees are chill But dogs become mad Bark and howl, sad Yes, my Lord, I've seen Where the meadow's green I have seen a wall Unfinished and tall Somewhere up the hill Hazel trees are chill But dogs become mad Bark and howl, sad Hearing the boy The Lord jumps with joy With his nine craftsmen Masons, aids and then He tells them to build Because they are skilled Up there, holy cloister The world is his oyster

My conclusion is that the place where Curtea de Argeş monastery was built had been affected by telluric stress, which disturbs the dogs.

They are also sensitive before earthquakes, when someone dies or when bells ring or roosters crow, at certain frequencies of sounds.

The cross-shaped structure annihilated the effect of telluric stress, but after Ana, the best mason's wife was built, along with their unborn child. If there was no human sacrifice, probably the telluric stress brought down the walls during the night.

Telluric stress is annihilated by the geometry of the monastery. Whoever controlled geological radiation network that generates telluric stress knew very well that man would not notice their intention.

Dogs can bark for a variety of reasons. One is that they are disturbed by certain frequencies. So, we can't think telluric stress has any influence on dogs who bark even at the wheels of cars, because they are probably disturbed by the frequency of the noise made by the brake pads.

The fact that they rushed to those walls and barked can only be taken as something curious.

But unfortunately, geological radiation exists. The Earth is in a natural climate with radiation, responsible for everyone's life. Radiation has been insufficiently researched,

however, there is no doubt that underground waters, Earth's residues, cracks and ore storage sites (coal, oil...) affect natural radiation and can have harmful effects on the inhabitants.

For thousands of years, in China, for example, a house can only be built on suitable land.

Although there are currently no scientific devices that can accurately determine the disturbances of the Earth's radiation, it is known that plants and animals do not live in places that can cause diseases. Dogs, sheep, and birds are among those who feel the radiation. There are also radiation seekers, for example cats or bees.

Symptoms of a disease caused by telluric stress can be: insomnia, headaches, fatigue, depression. Other diseases could also appear: allergies, infectious diseases, heart diseases, cancer<sup>178</sup>.

We do not take into account the place where we can build a house. The developers who build housing areas do not take that into account. They buy at low price and sell at high price, they don't care about telluric stress.

As Earth inhabitants we should be let to sacralize our lives and our place so that we can live happily.

### IV.2.6.1.3. The Orthodox Church and its energetic influence

Orthodox Christianity is closely related to the church. It can be said that, in fact, this is where Orthodoxy originates. The church exerts the strongest energetic influence on the believers. Here there is an overlap of several energetic factors, which influence our bioenergetic field.

First of all, the layout of the holy place plays an important role. Usually, it is a beautiful place, beneficial from the point of view of the energy concentrated in it. Often, in addition to energy channels, underground water courses intersect under the foundation of the church, waters that carry with them a huge volume of energy and information.

Secondly, the energy of the church is amplified due to the geometric peculiarities of its interior space.

<sup>&</sup>lt;sup>178</sup> http://www.ansonia.ro/SA%20CONSTUIESTI%20ECOLOGIC.pdf, accessed on 28 May 2022

### IV.2.6.1.4. Biolocation in churches

The biolocation research undertaken inside many Orthodox churches revealed that their special architecture favored the formation of centers of positive energy.

Nothing disappears without a trace. This refers both to the material aspects and, above all, to the spiritual ones. Thoughts - good or bad - and wishes gather in the places where they were formed. That's why, in the ancient places of death or where sacrifice altars of victims were located, we feel depressing pressure. In contrast to these, in the Orthodox Christian churches, especially in the old ones, within the walls of which, for centuries, the priests called for love and understanding, and the believers prayed for the good and health of their peers, we feel something completely different.

### IV.2.6.1.5. The role of natural energy exchange

In nature, there is a permanent exchange of energy and information between living beings and the environment. The surrounding space is saturated with various types of energies, including higher organized fields and energetic entities. Those initiated in esotericism and occultism know the existence of beneficial or not entities (energy vampires, astral<sup>179</sup> beings, etc.). The Orthodox Church has a vast experience in the fight against these forces of evil - the evil entities. Therefore, when we enter a church, let us think that real rivers of divine energy come and wash our biosphere of everything that is impure and tries to affect us. While listening to the service, we must banish any outside thought and concentrate on the performance of the service dedicated to God and the boundless power that takes care of us. Maybe in this way we will be able to receive the Lord's blessing on us as well. We will then be overwhelmed by euphoria, we will feel that we are becoming strong and, at the same time, light, but also with the soul and heart filled with unexpected joy. At that moment, connection with God is established and the true energy purification takes place, with body and soul.

In the cases where the evil entity managed to penetrate deep and stick like a tick in the energy shell of the person, the main symptom will be a feeling of discomfort upon entering the

<sup>&</sup>lt;sup>179</sup> It is the world of the <u>celestial spheres</u>, crossed by the soul in its <u>astral body</u> on the way to being born and <u>after</u> <u>death</u>, and is generally believed to be populated by <u>angels</u>, spirits or other immaterial beings, Plato, *The Republic*, trans. Desmond Lee, Harmondsworth.

House of God, sometimes up to nervous breakdowns and fainting during the holy service. Then the intervention of the priest is necessary, who will know how to expel the forces of the evil from the person.

### IV.2.6.1.6. The role of holy water

Water has a special place in the Orthodox religion. With the baptism performed with the help of holy water, the Christian's new life begins, which is devoted to Jesus. The holy water in the church was considered since ancient times as a cure for many diseases. The elimination of evil brought by spells or evil eye, the sanctification of the new house is also performed with the help of holy water and prayers. The holy water at Epiphany enjoys a special appreciation, because it has more power; a universally recognized property of holy water is the fact that it is kept fresh, without getting spoiled in any way, for a long time.

Scientists believe that water is not a simple liquid. Under certain conditions, water acquires the properties of a crystal. Also, water is, according to the experts in esotericism, the best accumulator and transmitter of bioenergetic information (and not only bio-, but also of energy in general). This is why water is used by different healers for curative purposes. In comparison to holy water, which is affected by both the holy mysteries performed by the priest and the beneficial, holy influence of the place where it is consecrated, the water energized by the healer often depends on the mental state and health, on the healer's mood, being able to be influenced by people nearby - sick or healthy, with different energy potential.

Therefore, the procedures with energizing water require extra attention, in order not to turn it from living water into lifeless water, bringing new sufferings instead of the desired healing.

# IV.2.6.1.7. Holy icons and regulation of human bioenergy

Holy icons, since their appearance, have a special role in regulating people's bioenergy.

First, let's remember how the holy icons are created. Before moving on to making a holy icon, the painter (the holy icon painter, as he was called) purified himself, cleaned his body and soul thoroughly and for quite a long time. He put worldly passions aside, fasted, prayed and strove to reach that specific state, in which it was not him, but the will of God guided his brush on the holy wood. That is why, in the holy icons, the energy charge of the grace that descended on their creator is accumulated.

Let's enter a church and observe a little the behavior of the parishioners. Those who come permanently (frequently) to the church are immediately distinguished from the others -
the occasional visitors. Frequent visitors have a certain route: they stop in front of some icons for a long time, in front of others they just bow, and they pass by a third category without stopping. Everyone finds their holy face or the holy icons with which their soul resonates most strongly. Those who remain and pray for a long time in front of these holy icons of the soul succeed in perfecting and healing their own bioenergetic field.

### IV.2.6.1.8. The sign of the cross corrects the energy field

Entering the church, people partake of the energy specific to the holy place and, at the same time, correct their own energy field. It is an extremely important aspect for the health of each of us. The sign of the cross opens the main energy centers, and the influx of positive energy that forms during the service, through the blessings of the priests and with the help of the holy icons in the church, together with the purification achieved by the fire and the light of the lit lamps and candles, gradually succeed in correcting the deformed aspects of the hard and unfair life or the energetic aura of people.

#### IV.2.6.1.9. Prayer as flow and vibration

Prayer is the obligatory element of most current religions. In all teachings, the notion of mantras is present - holy, magical words that determine the appearance of the so-called flows of vibrations. Usually, mantras are related to the names of the Lord, of the saints, which help us connect to what is called the energy-informational field of the Earth.

#### IV.2.6.1.10. A bioenergetic fact

Prayer accompanied and accompanies man throughout his entire life. Even if we consider prayer not as a religious fact, but as a fact in the field of modern bioenergetics, it is amazing how appropriate this formula of addressing the divinity is for the purpose. It seems that a superior force or reason has marked the man with precise milestones the path that leads him to achieve what he wants, perfection.

For example, if a person eats, the food he consumes is only useful to the extent that the person is prepared for the assimilation of the food. The understanding of this fact was once given to man, in ancient times, but he forgot it, lost this precious knowledge, like many others. Only the little ones have kept this atavism: they will never grab the first apple, by chance, from a plate full of apples, but will run carefully only to that apple that is for them. Then they will play with the apple for a while, admire it, tuning in to be in resonance with the energy of the fruit and only then will they eat it.

#### IV.2.6.1.11. First we pray and then we eat

The same thing - preparing the body energetically to feed itself - is achieved by the prayer said before eating. This prayer is especially necessary for adults, who do not act according to the infallible instinct, as children and animals do, but according to reason, which often obliges them to many gestures and actions that prove harmful to their own body. While we say the prayer in which we give thanks for what the Lord has put on our table, our attention is switched from the countless daily problems, from the harmful stress to the food in front of us. And, slowly, eating will no longer be just a quantity of calories that we have to swallow, willy-nilly, but the means by which man becomes part of the unique universal bioenergetics.

When it gets dark, it's time for the evening prayer. As the energy therapists advise us, in the evening it is good to relax, to free ourselves from the agitation of chaotic thoughts during the day. Let's focus on what we really need. We can easily achieve this goal through the evening prayer. Prayer takes us out of the daily hustle and bustle, frees us from the dark thoughts that do not give us peace and disturb our conscience.

Christ said simply, but extremely precisely: if we are honest with God and with ourselves, the prayer to the Lord will not remain unanswered.

#### IV.2.6.1.12. The energy footprint of objects

In the teaching of the Church, a lot of space is given to explain why the accumulation of material goods prevents the approach to God. But the modern theory regarding informational energy also fully agrees with this principle: every object used by man for a long time gets his energetic imprint. Objects without this imprint are not necessary for him, because they cannot be used. Then the question arises: what is the use of gathering useless piles of material goods?

Moreover, man leaves his mark on things, but at the same time, things also leave their mark on man; gradually entering the energetic aura of man, the imprint of various objects with which he comes in contact prevents man from living as he should. This unnecessary task drags him down, to the lower level of existence, does not allow him to advance, develop, evolve as he should. Jesus Christ warned people about this danger, when he said that it is easier for a camel to pass through the eye of a needle than for a rich man to enter the Kingdom of Heaven.

Man's uniqueness is given by the possibility he has to choose the path he wants. Man must decide which path he will take in life, whether to continue or not the path followed by his parents and ancestors (a path transformed, little by little, in energetic, informational and physical fields), or a person who let himself be lured by the illusion of rapid perfection and destroyed the treasures left by the ancestors of the nation.

It will never be enough to know and master bioenergy. We must know how to direct it, because otherwise the energy will direct us, turning us into worthless, useless automatons.

#### IV.2.6.1.13. The Sacrament of the Holy Anointing

The Holy Oil is a mystery, one of the seven mysteries of the Orthodox church. This sacrament is performed by seven priests, three or two. It is done on fasting days, on Wednesday and on Friday, or during the four fasting periods in the Orthodox calendar. The sick, the disabled and even those who are healthy can take part in this service. It is good for the healthy participants to confess regularly during the four fasting periods.

The Holy Oil has the divine power to heal the sick and the power to forgive sins, and that is why it is also recommended to the healthy, so that they are protected from temporal and eternal torments. For patients, 1, 3, 7, 9 sessions are recommended, depending on the case. From the point of view of the grace he has, even one priest can perform the sacrament. There is, however, the tradition that there should be at least two priests at the performance of this Holy Mystery, and it is good to keep this tradition. This is also indicated by the book that contains the ritual of this service, the Euchologion.

The biblical foundations of the Mystery of Holy Oil

The Sacrament of Anointing is the holy work performed in the name of the Holy Trinity, by the priests of the Church, through which the unseen grace of healing or alleviating bodily suffering, strengthening the soul, and forgiving sins is shared with the sick believer. The visible part consists of anointing with consecrated oil, after invoking the mercy of God through the power of the Holy Spirit on the sick person through special prayers.

The Holy Oil Sacrament cannot be confused with the mystery of the Holy Myrrh nor with the act of Anointing with Myrrh. The mystery of the Holy Myrrh imparts to the believer the grace for spiritual growth. The Sacrament of the Holy Oil is performed at the request of the patient or his relatives, friends - in order to recover or in the eschatological perspective: the forgiveness of the sins that led to suffering, to the disturbance of the soul, or for a good response to the right judgment (private judgment and then public judgment). In the Holy Gospels and in all the prayers (seven) in the Sacrament Mass, God is invoked as "the doctor of our souls and bodies, whose mercy is immeasurable...", and after each prayer and invocation, the chorus sing, "Lord, Christ, Merciful, have mercy on your child (children). The song itself shows Christ the Savior as "the Healer and helper of those who are in pain." It is asked of God, "healing His helpless child... the one who has sinned a lot...."

Healing of the sick is requested by prayer from God, because even His Son took human body. In its capacity as a "temple of the Holy Spirit" (I Cor., 6, 19), the body has the ability to be healed and cleansed through the substance seen and sanctified, the oil. Disease is not only a result of unconfessed personal sins, but also a natural consequence of heredity. It is known that children with malformations can be born from vicious parents. "Up to the seventh generation I will punish iniquity" (Lev., 26, 31); "parents eat sour food and children's teeth grind" (Jer., 31, 29). Before the Sacrament of Holy Oil, the sick person is asked to confess his sins for forgiveness in the Sacrament of Confession so that he can then be worthy of the Holy Communion. There are also cases when those around the sick person must also confess their sins in the Sacrament of Confession in order to pray together with the suffering person for healing. The Holy Oil Sacrament is a mystery of common participation in healing of the sick, a communion of prayer for the soul of the sufferer. For this, the help of the Blessed Virgin, of the Holy Cross, the help of the saints and angels, of all servants living in Christ and in communion with the saints is invoked.

The mystery of the anointment is not isolated, but preceded by special services: at the Holy Liturgy, bits of holy bread are brought for the sick, akathistes and parakleses are performed for the forgiveness of sins and the healing of the suffering.

The constitutive and concrete elements of this Mystery: performing priests - as those who carry the grace of healing from the priesthood and the service of the Savior Christ, its recipients, who are especially the physically sick, but also the spiritually sick, are received with goodwill and treated as brothers, because they bear the face of God and the wounds of the Savior's suffering. The consecrated matter is oil and flour (Mark 7, 22-25), etc. The immediate effect is the strengthening of the faith of the hopeless, through sincere and total repentance; the reception of strengthening grace and forgiveness, the certainty of the Savior's mercy at the particular and general Judgment.

This Sacrament was performed by the holy apostles after the resurrection of the Lord, immediately after Pentecost, as a Sacrament of the Church, according to the words of the Savior, "... In my name shall they cast out devils... they shall lay hands on the sick, and they shall recover...." (Mark, 16, 17-18).

Saint Jacob tells us about the practice of this holy Mystery, "Is anyone among you sick? Let them call the elders of the church to pray over them and anoint them with oil in the name of the Lord. And the prayer offered in faith will make the sick person well; the Lord will raise them up. If they have sinned, they will be forgiven... The prayer of a righteous person is powerful and effective..." (Jacob, 5, 14-16). From the words of the apostle Jacob, it appears that the anointing is a sacred work, which was known and practiced by the Church before he wrote the epistle. This work was done "in the name of God." St. Jacob assures us that through the Sacrament of the Holy Oil, the healing grace for bodily and soul diseases is shared with the Christian. The Holy Anointment is therefore a visible work, performed by the priests of the Church, through which unseen grace is shared.

According to Orthodox teaching, through the sacrament of the Holy Oil, the grace that heals bodily and soul diseases is shared and sins are forgiven (Orthodox Confession I, 119), "and the prayer of faith will heal him who is sick, and the Lord will raise him up. If he has committed sins, he will be forgiven" (Jacob 5, 15).

In conclusion, the anointing is a work of Christ in the church, that is, a Sacrament, from the seven Sacraments instituted by Him, through which the grace of the Holy Spirit is shared with us for the healing of bodily and spiritual diseases and the strengthening of the soul facing man's tests on Earth.

# IV.3. Other types of therapies IV.3.1. Use of nutritional supplements

In addition to herbal remedies, consumers use a variety of nutritional supplements (including vitamins, amino acids, and fish oil) that can affect mood and functioning. Although the evidence for the use of vitamins, antioxidants, and amino acids as single agents for the treatment of psychiatric symptoms is not as strong, there is some preliminary evidence for the use of folate, tryptophan, and phenylalanine as adjuvants to enhance the effectiveness of conventional antidepressants in the treatment of depression. SAMe (S-Adenosylmethionine) appears to have antidepressant effects, and omega-3 polyunsaturated fatty acids, especially docosahexaenoic acid, may have mood-stabilizing effects. More research should be conducted on the role of these and other natural products in the prevention and treatment of psychiatric symptoms.

Depression is associated with poor nutrition, with severely compromised cognition and functioning as a result of malnutrition. Early recognition and intervention can prevent poor nutrition in these disorders. For example, the role of L-tryptophan in neuropsychiatric disorders appears to be profound. Tryptophan is an essential amino acid precursor for serotonin synthesis in the brain. Dietary supplementation with tryptophan has been used with variable success in psychiatric patients<sup>180</sup>.

Elevated plasma concentrations of homocysteine have been implicated in the risk of cognitive impairment and dementia, but it is unclear whether low levels of vitamin B12 or folic acid are responsible for or prevent cognitive decline. Most studies reporting associations between cognitive function and homocysteine or B vitamins used a cross-sectional or case-control design and could not rule out the possibility that such associations are a result of the disease rather than being causal. The homocysteine hypothesis of dementia has attracted considerable interest because homocysteine can be easily lowered by folic acid and vitamin B12, raising the prospect that B vitamin supplementation might reduce the risk of dementia. Incident dementia is more strongly associated with changes in folic acid, vitamin B12, and homocysteine than with previous concentrations. These changes may be related to other somatic manifestations of early dementia, such as weight loss.<sup>181</sup>

Other common dietary supplements are fish oil and omega-3 fatty acids. Reductions in cardiovascular risk, depression, and rheumatoid arthritis symptoms have been linked to omega-3 fatty acid intake, and there is increased interest in the use of omega-3 fatty acid supplements for other psychiatric diseases and AD prevention. Omega-3 fatty acids are mainly found in fish and seafood, although some can be derived from green vegetables. Instead, omega-6 fatty acids are found in soft margarine, most vegetable oils, and animal fats. Omega-6 is abundant in most modern Western diets, while omega-3 is quite low. A high dietary ratio of omega-6 to omega-3 has been linked to vulnerability to many physical and mental disorders. Reported health benefits include mood improvements in unipolar and bipolar disorders as well as dementia.<sup>182</sup>

### IV.3.2. Acupuncture and Ayurveda

The Chinese practice of inserting needles into the body at specific points manipulates the body's energy flow to balance the endocrine system. This manipulation regulates functions

<sup>&</sup>lt;sup>180</sup> Lowe et al., 2006

<sup>&</sup>lt;sup>181</sup> Lavretsky, 2009

<sup>&</sup>lt;sup>182</sup> Freeman, 2000

such as heart rate, body temperature and breathing, as well as sleep patterns and emotional changes. Acupuncture has been used in clinics to help people with substance abuse disorders through detoxification; to relieve stress and anxiety; to treat attention deficit and hyperactivity disorder in children; to reduce symptoms of depression; and to help people with physical ailments. Compared to other empirically validated treatments, acupuncture designed specifically to treat major depression has produced results that are comparable in terms of response and relapse or recurrence rates.<sup>183</sup>

Ayurveda is a comprehensive natural health care system that originated in India more than 5000 years ago and has been used for antiaging, memory enhancement, and as nerve tonic, anxiolytic, anti-inflammatory, and immunopotent remedies. It is still widely used in India as a primary care system, and interest in it is also growing worldwide. Ayurvedic medicine incorporates an individualized regimen such as diet, meditation, herbal preparations, or other techniques to treat a variety of conditions, including depression, facilitate lifestyle changes, and teach people how to release stress and tension through yoga or transcendental meditation. There are some encouraging preliminary results for its effectiveness in treating various conditions, including chronic disorders associated with the aging process. The part of the Ayurvedic system that provides an approach to the prevention and treatment of degenerative diseases is known as Rasayana, and the herbs used for this purpose are classified as rejuvenative. Traditional medicinal plants from different countries, especially India, have been used for centuries for various ailments.<sup>184</sup>

# IV.3.3. Massage and physical exercises

The basic principle of this approach is that rubbing, kneading, brushing and hitting a person's muscles can help release tension and pent-up emotions. It has been used to treat depression and stress caused by trauma. The potential of massage therapy to promote adults' perceptions of well-being and reduce perceived stress has not been studied, nor is it known whether massage might be superior to guided relaxation in affecting these perceptions. Hirakawa et al. in a 2005 study of rehabilitation massage therapy at home, did not demonstrate a positive effect on the bedridden adult, either mentally or physically.

<sup>183</sup> Lavretsky, 2009

<sup>184</sup> ibidem

Studies show that exercise targets many aspects of brain function, providing broad effects on overall brain health. The benefits of exercise have been best defined for learning and memory, protection against neurodegeneration, and alleviation of depression, particularly in adult populations. Exercise increases synaptic plasticity by directly affecting synaptic structure potentiating synaptic strength and by strengthening the underlying systems that support plasticity, including neurogenesis, metabolism, and vascular function. Such exercise-induced structural and functional change has been documented in various brain regions, but has been best studied in the hippocampus.<sup>185</sup>

# **IV.3.4. Expressive therapies**

Creativity interventions have been shown to positively affect indicators of mental and physiological health in adult adults. Developing creative coping strategies may enable adults to adapt more effectively to the physical, psychological, and psychosocial changes that occur during old age. The process of creation and one's attitude towards life can be more important than the actual product or tangible result. Creativity is an asset in adulthood, given the number of health, functional, and financial limitations that can arise. Many adults may not describe themselves as creative and would be reluctant to engage in typical creative endeavors such as painting or drawing.<sup>186</sup>

#### IV.3.4.1. Art and music therapy

Drawing, painting and sculpture help many people to reconcile inner conflicts, release deeply repressed emotions and promote self-awareness and personal growth. Some mental health providers use art therapy both as a diagnostic tool and as a way to help treat disorders such as depression, abuse trauma, and schizophrenia. Music or sound therapy has been used to treat disorders such as stress, pain, depression, loneliness, and cognitive and functional decline.<sup>187</sup>

<sup>&</sup>lt;sup>185</sup> Lavretsky, 2009

<sup>&</sup>lt;sup>186</sup> Flood, Phillips, 2007

<sup>187</sup> Lavretsky, 2009

#### IV.3.4.2. Dance and movement therapy

The basic premise of dance/movement therapy is that it can help a person integrate the emotional, physical, and cognitive facets of the "self."

Dance therapy specialists use movement to address a patient's health holistically, working with people of different ages, such as teenagers dealing with anxiety, trauma patients, and the elderly suffering from diseases such as Alzheimer's.

Dance therapy is used in a variety of settings, such as hospitals, classrooms, nursing homes, and rehabilitation centers, with many types of patients, including children, adults, and the elderly, combining the work of a traditional therapist with a deep knowledge of the body and how movement is connected to general health.

#### What is dance therapy?

Specialists define dance therapy as the psychotherapeutic use of movement to promote the emotional, social, cognitive and physical integration of the individual. There is a holistic approach to healing, based on the statement that mind, body and spirit are inseparable and interconnected, changes in the body reflect changes in the mind and vice versa.

Movement is both an evaluation tool and a main mode of intervention.

Also called *movement psychotherapy*, there is no single fixed type of movement style used in this therapeutic exposure. The programs vary from traditional dances to more subtle forms of movement such as yoga and stretching to calm the body.

How does dance therapy differ from regular dance?

Movement in a dance therapy setting is more than a simple exercise. Actions, fluidity and movement are interpreted more like a language. People who use dance therapy as part of a treatment use movement to communicate conscious and unconscious feelings through dance.

The therapist responds to movements, evaluates body language, non-verbal behaviors and emotional expressions in order to develop interventions to meet the specific needs of the patient. Movement is the main way that dance therapists observe, evaluate and implement therapeutic intervention. A therapist will use movement and dance to help a patient achieve emotional, cognitive, physical and social integration. Benefits include stress reduction and mood management in particular.

In the recovery of eating disorders, dance therapy can also contribute to improving body image and self-esteem. Based on the idea that movement and emotion are interconnected, this creative expression can also help improve communication skills for better relationships. Movement can express aspects of a personality that a licensed therapist can tune into for a deeper connection in recovery therapy.

It is a well-known fact that movement is good for the body and mind. The mental and emotional benefits of movement are abundant. The same endorphins that make us feel better when we move, help us concentrate and sleep better, have more energy and become more resilient when we face the mental or emotional challenges of life.

One of the most expressive ways to integrate movement in the recovery of disorders of any kind is dance therapy.

#### Who can practice dance therapy?

Therapists who help patients through dance are not dance teachers, but medical personnel and specialists who use body movement in treating the patient. Dance therapists consider that non-verbal language is as important as verbal language and use both forms of communication in the therapeutic process. Using these premises to guide their activity, therapists use body movement, the basic component of dance, as the main inner path of their psychotherapeutic activity.

Therapists approach individual, couple, family and group sessions to observe and evaluate both clients and their own movements, using verbal and non-verbal communication to create and implement interventions that will address emotional, social, physical and cognitive of a patient.

Many eating disorder treatment centers across the country offer this therapy option. Be sure to ask during your research about all the therapeutic exposures that may be available to you. There is no single approach for all types of ailments and recovery programs, therefore it is important to analyze the patient and offer him a suitable dance therapy program.

# CHAPTER V V.1. Research methodology V.1.1. The purpose and objectives of the research

Depression and any mental and neurological disorders represent a serious public health challenge globally.

Complementary therapies are widespread, but have different rates of use depending on the country and the condition of the patients. In general, complementary therapies are more commonly used in diseases that do not have a clear method of treatment in conventional medicine. Therefore, a high rate of use of complementary therapies in neuropsychiatric diseases can be assumed, but few studies have investigated their use.

*The purpose* of this study is to evaluate the prevalence of the use of complementary and alternative therapies by adults diagnosed with depression treated in a Hospital in Romania at the Neurology and Psychiatry departments.

*The primary objective* is to assess the prevalence of use of complementary therapies by adults reporting neuropsychiatric symptoms and whether this prevalence changes as a function of the number of symptoms reported.

Additional objectives of research are:

> What are the reasons, duration and frequency of use of complementary therapies?

> What is the consumer's perception of the effectiveness of complementary therapies?

> What are your favorite sources of information about complementary therapies?

This is a descriptive study based on a questionnaire distributed between January and July to patients or relatives of patients diagnosed with depression hospitalized or treated on an outpatient basis in a hospital in Romania at the Neurology and Psychiatry departments.

The questionnaire was constructed for the purpose of this study and included questions about which, if any, complementary therapies were used and for what purpose, what the reason is for using complementary therapies, for which symptoms these therapies were used.

The first section was designed to collect general information about the study participants, including gender, age, most common neuropsychiatric symptoms which included anxiety, insomnia, regular headaches, excessive sleepiness, attention deficit, memory loss, depression, mobility problems.

The second part of the questionnaire included questions about the complementary therapies used, so that we could follow the objective of our study. A number of types of

complementary therapies were listed and respondents were asked to indicate whether or not they had used it. The methods listed were massage/tactile stimulation, acupuncture, yoga/meditation, physical therapy, light therapy, music/dance/art therapy/drama, horticultural therapy, animal-assisted therapy and traditional medicine methods (Ayurveda), dietary supplements on herbal, vitamin/mineral based dietary supplements. Most of the survey questions were multiple-choice, while some provided space for open-ended responses. It took about 6 minutes to complete the questionnaire.

#### V.1.2. Data collection

The questionnaire included 12 questions, and the application method was face-to-face, with the help of doctors and nurses from the two departments of the hospital, applying the questionnaire according to their ability to respond to the patients or to the patients' relatives.

87 participants answered the questionnaire, of which 63 were patients and 24 relatives of the patients.

Symptoms analyzed in this study included self-reported anxiety, mobility problems, depression, insomnia, headaches, memory deficits, attention deficits, and excessive sleepiness. The use of complementary therapies was defined as the use of mind-body therapies (e.g., meditation, yoga), biological therapies (e.g., supplements), or manipulative therapies (e.g., massage/physical therapy), or alternative medical systems (e.g., Ayurveda /acupuncture).

We analyzed the data obtained as a result of the research using the graphic representation with the help of MS Excel.

Data analysis and interpretation Demographic analysis Analysis of participants according to gender:



Fig. V.1.2.1 Gender distribution of participants

It can be observed that the participants in the study were mostly men in the proportion of 58.62% of the total participants, and women were 41.38%.

Analysis of participants according to age group:



Fig. V.1.2.2. Age distribution of the participants

Following the analysis, it is found that the participants were from the 60-69 age group, 32.18%, followed by the 50-59 age group, 20.69%, 17.24% were from the 40 - 49, 12.64% were over 70 years old, and the fewest participants were from the 30-39 and 18-29 age groups, 9.20% and 8.05%, respectively.

Analysis of participants according to the environment of residence:



Fig. V.1.2.3. Distribution of the participants by residence

Among the participants in the study, 70.11% were from the urban environment and 29.89% from the rural environment.



Fig. V.1.2.4. Distribution of answers to question 4

We find that in the 4<sup>th</sup> question, if they are patients or relatives, the majority of study participants are patients, that is 72.41%, while the remaining 27.59% are relatives.

Analysis of question number 5

Do you use or have you used complementary therapies in addition to the recommended medical treatments?



Fig. V.1.2.5. Distribution of answers to question 5

Following the analysis of the answers to the question Do *you use or have you used complementary therapies in addition to the recommended medical treatments?* we observe that most of the participants declare that they use complementary therapies, i.e. 65.52%, while 34.48% of them do not use or have not used any kind of complementary therapy.

According to the answers to question 5, the questionnaire was completed starting with question 6 only by 57 of the participants, those who answered "yes" to this question.

Analysis of question 6 - For what reasons do you use complementary therapies?



Fig. V.1.2.6. Distribution of answers to question 6

After analyzing the answers to this question, it can be seen that most of them used complementary therapies because they alleviate symptoms, 45.61%, for 24.56% it helped to reduce allopathic medication, 15.79% use this type of therapy because the family wants it, because there is good evidence that it helps with their medical problems, 8.77% of the study participants use complementary therapies, and 5.26% have other reasons than those presented.

Analysis of question 7

For what symptoms do you use complementary therapies? (multiple answers can be chosen)



Fig. V.1.2.7. Distribution of answers to question 7

The majority of study participants used or are using complementary therapies for anxiety (50.88%), followed by those who suffer from regular headaches or depression, 42.11% of study participants, 36.84% for insomnia, 33 .33% for mobility problems, 28.07% for attention deficit, 19.30% for memory loss and 14.04% for excessive sleepiness.

Analysis of question 8 - What complementary therapies are used? (multiple answers can be chosen)



Fig. V.1.2.8 Distribution of answers to question 8

The majority of study participants report using dietary supplements based on vitamins or minerals, 45.61%, followed by those who use massage/physical therapy, 43.86%, 36.84% of respondents use herbal dietary supplements, and 28.07% use yoga/meditation. The least participants in the study stated that they use acupuncture or Ayurveda, i.e. 7.02% and 5.26% respectively.



Analysis of question 9 - How long have you been using complementary therapies?



#### Fig. V.1.2.9. Distribution of answers to question 9

Analyzing the responses of subjects who use or have used complementary therapies, it was found that 47.37% have been using them for less than 6 months, 26.32% between 6 months and a year, 14.04% have been using this type of therapy for 1 - 2 years, and 8.77% have been using them for more than 2 years. Among the study participants, 3.51% did not know or did not want to answer this question.



Analysis of question 10 - How do you feel after using complementary therapies?

Fig. V.1.2.10. Distribution of answers to question 10

The majority of respondents declared that after using complementary therapies they feel very well, 28.07%, followed by those who declare that they feel a little better, 24.56%, 22.81% feel well after complementary therapies and 21.05 % stated that they did not feel very well after using them. Among the study participants, 3.51% did not know or did not want to answer.

Analysis of question 11 - How did you learn about complementary therapies?



Fig. V.1.2.11. Distribution of answers to question 11

Among the 57 subjects who use or have used complementary therapies, 27 people (47.37%) stated that complementary therapies were recommended to them by medical personnel, 36.84% of them received the recommendation to use them from family or friends (21 people), and 9 of the participants (15.79%) found out from the Internet.

Analysis of question 12 - *If you answered "no" to question 5, please specify the reason why you do not use complementary therapies?* 



Fig. V.1.2.12. Distribution of answers to question 12

Of the 87 subjects participating in the study, 30 answered question 5 that they do not use complementary therapies, and they only answered the question "... *please specify the reason why you do not use complementary therapies*?". The main reason for not using these therapies is lack of confidence, 36.67%, followed by the fact that it takes a long time to see the effects, 26.67%, lack of time was the reason stated by 20% of the participants, high costs 13.33%, and 3.33% stated that they have other reasons for not using complementary therapies.

# V.2. Discussions

QA

87 people participated in the study, mostly men, 58.62% of the total participants, and 41.38% were women. The 60-69 age group predominated, 32.18%, followed by the 50-59 age group, 20.69%, 17.24% were from the 40-49 age group, 12.64% were over 70 years old, and the fewest participants were from the 30-39 and 18-29 age groups, 9.20% and 8.05%, respectively. Among the participants in the study, 70.11% were from the urban environment and 29.89% from the rural environment.

We find that in the 4<sup>th</sup> question, if they are patients or relatives, the majority of study participants are patients, that is 72.41%, while the remaining 27.59% are relatives.

Following the analysis of the answers to the question *Do you use or have you used complementary therapies in addition to the recommended medical treatments?* we observe that most of the participants declare that they use complementary therapies, i.e. 65.52%, while 34.48% of them do not use or have not used any kind of complementary therapy.

The estimated prevalence of complementary therapy use among the sample of adults with neuropsychiatric symptoms (65.52%) is higher than published prevalence rates of complementary therapy use in the general population  $(38.3\%)^{188}$ .

The closest approximation we could find to our study in terms of patient population was a study evaluating the use of CAM/ Complementary and alternative medicine among patients with an "anxiety attack" and severe depression; the prevalence of CAM use was 56.7% and 53.6%, respectively<sup>189</sup>. Unfortunately, we could not find a comparable study that assessed prevalence among patients with neuropsychiatric symptoms.

According to the answers to question 5, the questionnaire was completed starting with question 6 only by 57 of the participants, those who answered "yes" to this question.

After analyzing the answers to this question, it can be seen that most of them used complementary therapies because they alleviate symptoms, 45.61%, for 24.56% it helped to reduce allopathic medication, 15.79% use this type of therapy because their family want it, because there is good evidence that it helps with their medical problems, 8.77% of the study participants use complementary therapies, and 5.26% have other reasons than those presented.

The majority of study participants used or are using complementary therapies for anxiety (50.88%), followed by those who suffer from regular headaches or depression, 42.11%

<sup>&</sup>lt;sup>188</sup> Lavretsky, 2009

<sup>&</sup>lt;sup>189</sup> Kessler, 2001

of study participants, 36.84% for insomnia, 33.33% for mobility problems, 28.07% for attention deficit, 19.30% for memory loss and 14.04% for excessive sleepiness.

The majority of study participants report using dietary supplements based on vitamins or minerals, 45.61%, followed by those who use massage/physical therapy, 43.86%, 36.84% of respondents use herbal dietary supplements, and 28.07% use yoga/meditation. The least participants in the study stated that they use acupuncture or Ayurveda, i.e. 7.02% and 5.26% respectively.

Analyzing the responses of subjects who use or have used complementary therapies, it was found that 47.37% have been using them for less than 6 months, 26.32% between 6 months and a year, 14.04% have been using them for 1 - 2 years, and 8.77% have been using them for more than 2 years.

The majority of respondents declared that after using complementary therapies they feel very well, 28.07%, followed by those who declare they feel a little better, 24.56%, 22.81% feel well after complementary therapies and 21.05 % stated they did not feel very well after using them.

Of the 57 subjects who use or have used complementary therapies, 27 people (47.37%) stated that complementary therapies were recommended to them by medical personnel, 36.84% of them received the recommendation to use them from family or friends (21 people), and 9 of the participants (15.79%) found out about them from the Internet.

Of the 87 subjects participating in the study, 30 answered question 5 that they do not use complementary therapies, and they only answered the question "... *please specify the reason why you do not use complementary therapies?*". The main reason for not using these therapies is lack of confidence, 36.67%, followed by the fact that it takes a long time to see the effects, 26.67%, lack of time was the reason stated by 20% of the participants, high costs 13.33%, and 3.33% stated they have other reasons for not using complementary therapies.

Although investigators have shown promising evidence for neuropsychiatric symptoms in a few pilot studies, further research is needed to evaluate the effectiveness of complementary therapies in this type of condition. These studies, although well designed, had small sample sizes or limited control groups. It is important to be cautious because certain complementary therapies can have unwanted consequences, especially when combined with conventional treatments, such as the use of certain herbal medicines (e.g., ginkgo biloba and St. John's wort) in combination with antiplatelet agents or serotonergic<sup>190</sup>.

<sup>&</sup>lt;sup>190</sup> Lavretsky, 2009

Our study has several limitations. Since the research is conducted only with adults from the Psychiatry and Neurology departments of a Hospital in Romania, it is possible that the results cannot be generalized to other populations. Being a cross-sectional study, it relies on self-report and is subject to recall bias and misclassification of information. However, the survey uses measures such as face-to-face interviews with medical staff to minimize these issues.

Understanding the use of complementary therapies is important for several reasons. From a research perspective, if patients perceive certain therapies to be beneficial, it is important to study them to determine their efficacy and safety. Even though a complementary therapy may not actually cure, it may provide other benefits, such as improved quality of life, that is important to overall care. In addition, patient demand for treatments outside of standard care may also highlight patient limitations and dissatisfaction with traditional care, which may provide a potential area for research and improvement. From a clinical point of view, knowledge of the use of complementary therapies is important to be able to monitor potential interactions with standard treatments and to provide patient counseling. Given the high prevalence of use of complementary therapies, it is important for a provider to have an open and honest discussion with patients regarding safety and efficacy.

# V.3. Research methodology conclusions

An alternative approach to health care is one that emphasizes the interrelationship of mind, body, and spirit.

Neuropsychiatric diseases, leading to depression, of the third age, are the most common reasons for the use of complementary and alternative therapies. The amount of rigorous scientific data supporting the effectiveness of complementary therapies in the treatment of neuropsychiatric illnesses is extremely limited. The areas with the most evidence of beneficial effects, are exercise, herbal therapy (St. John's wort), the use of fish oil and, to a lesser extent, acupuncture and relaxation therapies. Further research is needed on the effectiveness of complementary and alternative therapies in the treatment of neuropsychiatric diseases, physical cognitive impairment in the 3<sup>rd</sup> age in particular, and the development of effective treatment approaches for these serious conditions.

The public health significance of neuropsychiatric diseases is increasing rapidly with the increasing number of adult people. The cost of care for patients with mental and cognitive illnesses will increase exponentially in the coming decades. Available standard treatments and preventive strategies have only limited efficacy. At the same time, interest and use of complementary therapies is increasing among adult people. The currently available evidence for the effectiveness of complementary therapies is limited due to serious methodological limitations and a lack of understanding of this type of therapy.

Despite the increasing use of complementary therapies by individuals, scientific support for their effectiveness is limited.

Main uses in adults include stress reduction, anti-aging effects of complementary therapies to prevent aging diseases, memory enhancement and treatment of various neuropsychiatric disorders such as depression, anxiety, insomnia, pain and many other specific indications.

Mood disorders and cognitive impairment are the most common psychiatric syndromes in adults. Mood disturbances are commonly seen in patients with neurodegenerative disorders, including Alzheimer's disease, Parkinson's disease, and post-stroke depression.

Adjusting both diet and nutrition can help some people with neuropsychiatric disorders manage their symptoms and promote recovery. Herbal supplements, B vitamins, riboflavin,

magnesium, and thiamine are used to treat anxiety, depression, and memory loss. There is a significant amount of evidence supporting the use of St. John's wort for depression and omega-3 fatty acids and gingko biloba for dementia.

Ginkgo biloba leaf extract is among the best-selling herbal dietary supplements in the world. Its purported biological effects include: elimination of free radicals; reduction of oxidative stress; reduction of neuronal damage, reduction of platelet aggregation; antiinflammation; antitumor activities; and antiaging. Ginkgo biloba has been widely used for many years by people with symptoms attributed to "brain failure," but results are inconsistent.

Folate, tryptophan, and phenylalanine have been used and studied as adjuncts to enhance the effectiveness of conventional antidepressants in the treatment of depression.

A high dietary ratio of omega-6 to omega-3 has been linked to vulnerability to many physical and mental disorders. Reported health benefits include mood improvements in unipolar and bipolar disorders as well as dementia. Fish oil and omega-3 fatty acids lead to reduced cardiovascular risk and depression. There is increased interest in the use of omega-3 fatty acid supplements for other omega psychiatric diseases and the prevention of Alzheimer's disease.

S-adenosylmethionine is derived from the amino acid L-methionine via the one-carbon ring and is a methyl donor involved in the synthesis of monoaminergic neurotransmitters. The same doses of 200-1600 mg/day (oral or parenteral) have been shown to be superior to placebo and as effective as tricyclic antidepressants in alleviating depression, although some individuals may require higher doses. SAMe may have a faster onset of action than conventional antidepressants and may potentiate the effect of tricyclic antidepressants or serotonin reuptake inhibitors.

Culture-based healing includes traditional Asian medicine (such as acupuncture, shiatsu, a form of therapeutic bodywork from Japan. It uses kneading, pressing, soothing, tapping, and stretching techniques and reiki) and Indian health care systems (such as Ayurveda and yoga). All incorporate wellness as a state of balance between spiritual, physical, and mental/emotional "selves"; an imbalance of forces within the body is the cause of disease; herbal/natural remedies combined with healthy nutrition, exercise and meditation/prayer will correct this imbalance.

Ayurveda is a comprehensive natural health care system that originated in India more than 5000 years ago. Ayurvedic medicine is described as "the knowledge of how to live." It incorporates an individualized regimen such as diet, meditation, herbal preparations, or other techniques to treat a variety of conditions, including depression, facilitate lifestyle changes, and teach people how to release stress and tension through yoga or transcendental meditation. There are encouraging results for its effectiveness in treating various conditions, including chronic disorders associated with the aging process. Pilot studies on depression, anxiety, sleep disorders, hypertension, diabetes, Parkinson's and Alzheimer's diseases have given positive results.

Acupuncture is the Chinese practice of inserting needles into the body at specific points to manipulate the body's energy flow to balance the endocrine system. This manipulation regulates functions such as heart rate, body temperature and breathing, as well as sleep patterns and emotional changes. Compared to other empirically validated treatments, acupuncture designed specifically to treat major depression has produced results that are comparable in terms of response and relapse or recurrence rates.

Yoga, the ancient Indian system of health care, uses breathing exercises, postures, stretches and meditation to balance the body's energy centers. Mindful exercise is a special type of exercise with an added mood element. It has recently emerged as a therapeutic intervention to improve the psychosocial well-being of eldery people. Scientific evidence shows that medical conditions such as high blood pressure, cardiovascular disease, insulin resistance, depression, and anxiety disorders respond favorably to mindful exercise.

Studies on humans demonstrate that exercise targets many aspects of brain function, providing broad effects on overall brain health. The benefits of exercise have been best defined for learning and memory, protection against neurodegeneration, and alleviation of depression, particularly in adult populations.

Expressive therapies use creativity interventions that have been shown to positively affect indicators of mental and physiological health in adults. Developing creative coping strategies may enable adults to adapt more effectively to the physical, psychosocial, and psychosocial changes that occur during old age.

Drawing, painting, and sculpture help many adults reconcile inner conflicts, release deeply repressed emotions, and promote self-awareness and personal growth. Some mental health providers use art therapy both as a diagnostic tool and as a way to help treat disorders such as depression. Music or sound therapy has been used to treat disorders such as stress, pain, depression, loneliness, cognitive and functional decline.

Dance and movement therapy can help a person integrate the emotional, physical and cognitive facets of the "self" aiming for physical, mental and spiritual well-being. Interventions included rhythm and dance exercises; general physical exercises; recreational outdoor exercise;

relaxation exercises; a creativity enhancement seminar; a psychology and philosophy of life seminar; and a seminar on contact with other people and communication.

Understanding the use of complementary therapies is important for several reasons. From a research perspective, if patients perceive certain therapies to be beneficial, it is important to study those therapies to determine efficacy and safety. Even though a complementary therapy may not actually cure, it may provide other benefits, such as improved quality of life, that is important to overall care. In addition, patient demand for treatments outside of standard care may also highlight patient limitations and dissatisfaction with traditional care, which may provide a potential area for research and improvement. From a clinical point of view, knowledge of the complementary therapies use is important to be able to monitor potential interactions with standard treatments and to provide patient counseling. Given the high prevalence of use of complementary therapies, it is important for a provider to have an open and honest discussion with patients regarding safety and efficacy.

# V.4. Case study

The case study considers the situation of the patient IR, a 25 years old young woman, whose evolution we have observed since 2012.

Depression represents one of the most serious mental illnesses and has the following defining elements: change in mood (moral pain) sadness, slowing down of cognitive processes frequently associated with anxiety.

Anxiety is fear without an object. The patient subjectively describes a general impression of pain, helplessness, exaggerated guilt, decreased self-esteem culminating in the idea of suicide. The feeling of uselessness, of guilt can include negative assessments of one's own values that do not correspond to reality. They usually appear in early adulthood. At the base of that is discouragement, lack of joy, unhappiness, actualization of unpleasant, sad and threatening experiences.

The depressive syndrome slows down, involves the slowing down of ideational processes and psychomotor idleness with somatic symptoms. There is a triad consisting of depressed mood, psychomotor inhibition, and impairment of psychomotor function. Depression is an emotional disorder. Depressive disorders include: major depressive disorder, dystonic disorder, depressive disorder not otherwise specified.

In the case of IR, we talk about psychogenic depression with mild, medium depressive episodes. Women are twice as affected as men. IR's main treatment was alfa alprazolam, for anxiety states associated with depression, combined with interpersonal psychotherapy.

Types of psychotherapy for IR as a child: cognitive psychotherapy, even 6-8 sessions per week. Children's therapy is based on the idea: if a person who thinks about the worst then he will feel depressed.

More generally, cognitive therapy starts from the assumption that the way we think determines the way we feel. The goal of cognitive therapy is to change a too pessimistic way of thinking with a positive one.

Cognitive-behavioral psychotherapy can help a person, change the way of thinking and the behavior because, according to this theory, the behavior could contribute to the initiation or maintenance of depression. More precisely, related to behavior, if a person has gotten used to behaving in a certain way, even if that behavior does not bring him anything good and can displease him, depress him, that person will persist in behaving in that way until he is completely depressed. For example, the consumption of alcohol, tobacco and drugs. Therapy tries to identify and change that way of behavior that only depresses us. Interpersonal psychotherapy - this therapy starts from the assumption:

- 1) That depression is due to difficulties in terms of relationships with those close to you
- That these difficulties originate in not quite functional and harmonious childhood relationships; the result is the acquisition of communication and social interaction skills in 12-16 weeks.

The role of genetic factors: recent multicenter research has presented results that showed the familial nature of anxiety-depressive disorders. The interfamilial prevalence of depression was clearly higher than their prevalence in the general population - the risk increases by 20% for 1<sup>st</sup> degree relatives<sup>191</sup>.

Degree of kinship 1. In IR's family, her father, his sister and their parents suffered and are suffering from anxiety and depressive disorders. IR's mother works in a stressful environment and her mother's mother suffers from iatrogenic Cushing's disease in association with depressive disorder.

It is well known from classic authors as well as from studies conducted on groups, therapies, and therapeutic groups and population groups that depression and anxiety frequently appear together or in association with other psychiatric disorders.

The diagnosis of depressive disorder involves the triad: sadness, slowing down of thought processes and psychomotor slowness, disturbance of normal mood with sad mood, without hope, pessimism, feelings are lost, humiliation, crying, fear of life and duties.

The collapse of the affective life based on the loss of self-knowledge, dark perspectives, despair. Affecting thinking and focus, frequent thoughts about death and suicide, monotonous unproductive thinking process. Loss of initiative, affectivity, fatigue, physical symptoms that do not respond to treatment. Gastrointestinal disorders, headaches, sexual dynamics disorders and sleep disorders.

Since there is a genetic predisposition for familial, genetic, multifactorial diseases, the offspring inherit from the parents together with the usually similar or similar environmental factors, lead to the appearance of these mental and somatic disorders earlier and more aggressively in the offspring.

The chances of treatment from the 4 perspectives decrease with age and with the formation of beliefs, they increase the faster you intervene if the patient and the relatives want that and if there is openness to communication.

<sup>191</sup> Ibidem

What does not stop in time, spreads. If we want to do a good thing and God is with us, good is eternal and propagates from generation to generation. On the contrary, if the parents have certain starts, unhealthy habits that they do not notice, do not recognize and do not want to change something for the better, these will propagate earlier and more visibly to the next generation.

As a child, IR had the best time to know God, to discover the Orthodox faith, to go to church and feel joy and warmth, peace of mind. Her grandmother on her mother's side guided them, the whole family, to church, prayer, understanding and practicing the rituals, the mysteries especially addressed to the dead ones, the ancestors.

IR grew up and proved through education and good results a God-given intellectual potential, a fine hearing, a special resistance for hard work that does not require dexterity. IR also felt social isolation, she didn't understand how she should respond to her classmates in general school, she took over the anxieties of her parents and grandparents and she submitted to an extremely protective and limiting parental affection.

In high school, after long prayers, tears and insistence, she managed to learn to manage on her own, to become independent, to make her family happy with her achievements on all levels.

In December 2013 she consciously started, voluntarily, and guided by the priest to get closer to God, to express her ideas through writing and to strengthen, to build positive thoughts, words, deeds with the help of God and with prayer before and after writing.

She gave up for good on medical recovery in favor of prayer and writing discipline. After 6-7 months of prayer and discipline, she managed to walk straight, fast and free for the first time at 16 years and 10 months.

After 4 years from this happy event, she was admitted to the Faculty of Medicine in Brasov. She wanted that because she felt that the healing given by God should be used for the teaching of others.

The algorithms learned at the national college of informatics Grigore Moisil Braşov was the cornerstone for deepening the medical sciences and putting them into practice in medical life. In the first years of college, a professor of genetics hypothesized that IR would have medical roots in her family tree, at one point IR arrived at an abandoned house where she was not allowed to go.

On a day of August 15, the Assumption of the Mother of God. IR discovered a painting of dizygotic twin brothers who died young in suspicious circumstances, but also many other photos, documents, things that are many generations old that only God knows. Everything was full of showcases and the brothers' tableau was reflected in almost every one of them. In the

middle was an icon of the Mother of God polished with gold and very shiny. In a corner towards the east was placed the gentle shepherd in life size and in a spiral starting from IR were placed the pictures of 4 generations that lived in the respective house. IR's father and she were sitting vertically parallel to the twin brothers and the diagonals between them formed an hourglass of time across generations. For almost 7 years IR heard voices, laughter, screams and saw blood, gallows, knife, rope and all the horrors that a person can imagine or not. At that moment IR realized that if there was a dizygotic twin brother of her paternal grandfather, it means that there is definitely another person in the genealogical tree about whom IR knew little or nothing. IR started going to church services, especially on Saturdays during Lent, commemorating the dead ones that she had recently learned about, even if IR had never met them in this life. Surprisingly, the horrible images and voices in her mind disappeared over time.

Over the years of studying medicine, IR discovered that certain multifactorial polygenic diseases were inherited for 3 generations in her family: arthrosis, high blood pressure, anxiety associated with alcohol consumption, restlessness, electrical conduction of heartbeats, predisposition to stress by increasing cortisol.

Currently, IR thanks God from the bottom of her heart for perfecting the efforts of the good doctors who treated her as if they were themselves. God sent her the most suitable people to be with her in this journey from suffering to healing and IR wants to highlight the fact that forgiveness is what ennobles the soul, elevates it, humbles it and helps it to climb further.

Through a simple exercise of imagination, we can deduce the fact that responding badly to a peer's mistake only consumes resources unnecessarily, wasting the good ones and creating vicious circles.

We generate some of them and especially condemn the entire human existence. On the contrary, if we propose to forgive with God's help, the malice stops and comes peace in the soul, which can sometimes even lead to the change for the better of the one who made a mistake. Learning to forgive with God's help, we learn to do an eternal good covered by humility that brings with it wisdom, joy, peace.

In December 2021, IR had a work accident followed by the almost complete rupture of the anterior cruciate ligaments in her right knee. IR escaped surgery, but received the best advice from the orthopedic doctor. *You are only allowed to sit in the bank and write*. Going home that day, IR wondered what he meant, then she found the discipline book abandoned and a work started several years ago under the coordination of her genetics professor, also abandoned. due to the high demands of the internship in internal medicine and cardiology, IR forgot about the discipline for more than 6 months. She slowly started to return to the coordinated discipline of

prayer and she felt how God held and continues to hold her feet so that she doesn't fall. He supports her progress in difficult internships in general surgery or in various jobs in which other people considered healthy do not do.

Rupture of the anterior cruciate ligament is part of the knee sprains produced traumatically by anteroposterior shock with the position of the knee joint in hyperextension with the symptomatology of pain, sometimes of high intensity on a visual analog scale from 1 to 10 and a feeling of instability or the knee sliding forward.

Regarding starting a family and finding a person of the opposite sex suitable for this, IR always thought that he should be a deep person, to see beyond appearances, to appreciate true human values and faith in God. Over time, IR have met other children with locomotor problems who also want a new attachment to life based on trust, respect and mutual support.

A great advantage of suffering is the fact that it matures those who experience it, prompting them to think more deeply, to enjoy simple things and gestures, to be satisfied withto be satisfied with what they have and what they are at a given moment.

This way of looking at things brings the emotional balance and inner peace necessary for good functioning in everyday life. We can cite *Cărarea împărăției*/The path to the kingdom by Arsenie Boca<sup>192</sup>, as a bibliographic source.

Healing does not happen overnight and not the way we want or imagine it. Healing comes after a long process of getting closer to God and inner maturation by accepting suffering and seeing it as a blessing, as a good opportunity for spiritual fulfillment.

This gift of great price must be maintained because at any time we can fall into various more or less correctable mistakes. We have free will, through maintenance, prayer and discipline to reach the fulfillment of God's will through us and implicitly to a fulfilled life from all points of view, leaving behind our descendants both a material inheritance and a spiritual inheritance which is always new and eternal.

In conclusion, God has always helped IR and He perfects the medical act for the benefit of the patient. Forgiveness stops evil and brings peace to the soul, to families all over the world and is indispensable for healing and a fulfilled life. Humility puts man in his place in the circle and maintains the other virtues in man. Humility improves good.

Drug therapies and surgeries are a solution but in the short term, not in the long term because of the possible adverse reactions that interfere in this sense. The prayer spoken with love

 $<sup>^{192}</sup>$  Arsenie Boca (1910 –1989) was a Romanian theologian, mystic, and artist. He was persecuted by the Communists.

towards God and people has no adverse reactions or unwanted consequences in the long term, so it is recommended to maintain the balance between the 4 dimensions of man in the long term: social, spiritual, physical and mental.

Through the hourglass, the hourglass drawn between the paintings, time flows from the grandparents to the next generations and the spiral that starts from IR to her father, to her grandparents and great-grandmother can be a continuity between generations but also an DNA spiral, the one from the father's side. East - sunrise, father the origin, IR, west, sunset great-grandmother, brothers, grandparents, hourglass of time.

In conclusion, anxiety and depression are the long-term result of multiple medical, social, spiritual, educational factors, the repetition of unhealthy habits over a period of time, years in a row or having psychological consequences, arthrosis, hypertension, arrhythmias, are common in generations 1, 2, 3, the same people suffer from arthrosis, hypertension and arrhythmias.

IR, patient born with cervical myelomeningocele operated on at two weeks of age (main diagnosis), secondary diagnosis:

- 1. Stable internal stationary secondary hydrocephalus
- 2. Symptomatic primary generalized epilepsy (see neurological disorders)
- 3. Spastic hemiparesis predominantly right brachial, accentuated form.
- 4. Congenital equinus clubfoot<sup>193</sup>

Description from the medical literature

Myelomeningocele is a neural tube defect characterized by the lack of bonding of a spinous process of a vertebra with the protrusion / herniation of the meningeal sheets, cerebrospinal fluid, nerves and vessels located in the respective region of the spine, being a severe form of spina bifida<sup>194</sup>

The clinical manifestations and the degree of neurological damage are all the more serious as its location is higher along the spine. Sacral localization may be of little clinical significance. The lumbar situation can manifest itself with paraparesis or paraplegia, bladder and/or external anal sphincter incontinence, spastic megadolico-colon, etc. depending on the affected nerves and pathways.

This congenital malformation occurs in the first month<sup>195</sup> of intrauterine life (the first 4 weeks of the first trimester of pregnancy), it can be observed by ultrasound, the increase of

<sup>&</sup>lt;sup>193</sup> see pdf documents

<sup>&</sup>lt;sup>194</sup> Kliegman R., Mark Dante K, 2019, Nelson Essentials of Paedriatics, Eighth edition Philadelphia Elsevier, PP. 175-176, 716, 707-709

<sup>195</sup> Ibidem

fetoprotein (afp) in the maternal serum accompanied by an excessively large placenta, can raise the suspicion of myelomeningocele<sup>196</sup>.

The prevention of this malformation is achieved in most cases by administering folic acid during pregnancy. The treatment is neurosurgical by correcting the inutero or post partum defect<sup>197</sup>. It can also be associated with hydrocephalus (because the cerebrospinal fluid comes out and can no longer be drained normally), epilepsy or even relapses and normal or subaverage intelligence<sup>198</sup>. It has been demonstrated over time that there is a difference in the incidence of this variable malformation with ethnicity. In the British Isles in 1990, the incidence was 1:250 newborn, while in Asia, the incidence was 1:4000 newborn, which suggests the importance of a certain genetic component specific to ethnicity<sup>199</sup>. The environmental factors analyzed in the US, in relation to this malformation, illustrate an environmental component in the genotypic expression of the phenotype<sup>200</sup>. A more or less effective response to folic acid was assumed, based on some mutations of the genes that encode enzymes responsible for the metabolism of folic acid, according to the principles of pharmacogenetics and pharmacogenomics<sup>201</sup>. Parents who have a child born with a neural tube defect have a 20-40 times higher risk in the second child for recurrence. The recommended genetic advice is to stop procreating<sup>202</sup>.

Hydrocephalus occurs as a result of an obstruction in the flow path of the cerebrospinal fluid. The congenital form occurs in:

- malformations of the central nervous system
- intrauterine infections
- coming into contact with teratogenic agents<sup>203</sup>

When there is an imbalance between the production and reabsorption of cerebrospinal fluid, hydrocephalus or, more seriously, brain tumors occur<sup>204</sup>. The consequences are the damage to certain sensory motor centers with various manifestations discovered following the neurological evaluation:

- Paresis
- Muscle hypotomies
- Hearing loss

198 Ibidem

<sup>196</sup> Ibidem

<sup>&</sup>lt;sup>197</sup> Ibidem

<sup>199</sup> Ibidem

<sup>&</sup>lt;sup>200</sup> Ibidem

<sup>&</sup>lt;sup>201</sup> Ibidem

<sup>&</sup>lt;sup>202</sup> Ibidem

<sup>&</sup>lt;sup>203</sup> Ibidem <sup>204</sup> Ibidem

<sup>&</sup>lt;sup>204</sup> Ibidem

• Decreased visual acuity<sup>205</sup>

Treatment can be:

- Medical by administering acetazolamide
- Neurosurgical by fitting ventriculo-peritoneal sound and adjusting with age<sup>206</sup>. Hydrocephalus is also associated with increased intracranial pressure. It involves aggressive headaches and the appearance of hemiparesis with stiffness, muscle pain and limitation of movements<sup>207</sup>.

Congenital equinus clubfoot involves the impairment of walking with the foot "inside"<sup>208</sup>. The plant is always in flexion, Equin<sup>209</sup>.

- The talo-calcaneal joint is internally rotated – Varus<sup>210</sup>.

Subluxation of the calcaneo-cuboid and astra-gallo-scaphoid joints is added

- Adductus + associated left convex scoliosis<sup>211</sup>.

IR's evolution over 25 years and what complementary methods we used to treat anxiety and associated depression:

IR's evolution was generally good, favorable, from year to year according to periodic (annual) checks.

The cervical myelo-meningocele operation was successful, the hydrocephalus stopped after the treatment with acetazolamide, the recovery was without results until the tendon lengthening intervention on the right leg (at the age of 6). The intellect has always been normal, the educational path good, the myelomeningocele has not recurred, nor has the post-operative clubfoot. Currently, she suffers from cervical spine pain, right hemiparesis and a megadolicspastic colon.

In general, locomotor problems are seen, they are difficult to treat (months, years) either through neuromotor recovery, or through orthopedic surgery or both. Children with locomotor problems and/or who need a companion tend to be labeled by society, other healthy children may make fun of their infirmities, parents may become too protective or, on the contrary, may abandon these children, leaving them in the care of other families, of the state or locked in their room.

209 Ibidem

<sup>&</sup>lt;sup>205</sup> Ibidem

<sup>&</sup>lt;sup>206</sup> Ibidem

<sup>&</sup>lt;sup>207</sup> Ibidem

<sup>&</sup>lt;sup>208</sup> Kliedman R. Marco-Dante K. 2019 (Nelson essentials of pediatric eighth edition, Philadelphia, Elsevier, PP. 739, 753, 756 – 759)

<sup>&</sup>lt;sup>210</sup> Ibidem

<sup>&</sup>lt;sup>211</sup> Kliegman R., Mark Dante K, 2019, Nelson Essentials of Paedriatics, Eighth edition Philadelphia Elsevier, PP. 175-176, 716, 707-709
Deficient education and the difficulty of social integration lead to social isolation, which leads to anxiety and depression. Lack of empathy, not listening to the point of view of the suffering child, the feeling of devaluation, abandonment, uselessness, guilt that is created around the neurological context have repercussions both on the mental and spiritual level in the form of anxiety, depression or other disorders psychic.

Placing on the child's shoulders some expectations, responsibilities that he cannot fulfill can be a negative factor on the psyche, as well as placing on the child's shoulders the failures, the non-fulfillment of the parents' problems. Over time, she took phenobarbital for grand mal epilepsy, alprazolam for anxious-depressive states with all the symptoms and signs described in mood disorders, and she got out of this vicious circle through prayer, discipline of the mind, through writing, following daily what disturbs her and building every day at least 7 times, good thoughts supported by prayer, concern for the benefit of her peers, which always kept her legs, fasting (religious rituals) and a diet as natural as possible, B complex supplements, classical, relaxation, instrumental, church music, regular weekly participation in the Holy Liturgy, confession and communion under the guidance of a priest.

She read the book Healing of Family Tree by Dr. Kenneth McCall. The first book that got her out from under the influence of alprazolam was "Stresul. Cum Se Naşte Şi Cum Se Vindecă / Stress - how it is born and how it heals" written by Archimandrite Simeon Kraiopoulos, published in 2014 by the Byzantine publishing house.

She was 17 to 18. Other useful books for her were and are: the Bible, "Puţine cuvinte, multă iubire / Few words, much love" by Hrisostom Filipescu, "A iubi înseamnă a ierta/To love means to forgive" by Savatie Baştovoi.

She realized that the reason why she took alprazolam was the difficulty of integration (it is impossible for some born healthy and atheist people to understand her way of being) and perhaps the ambition to always be noticed through the results at school.

She is currently a medical student, a volunteer at Hospice House of Hope and she thanks God from the bottom of her heart for his help and care towards her. In collaboration with a genetics teacher, she managed to write her tree and with the help of the book "Healing the Family Tree" by Dr. Kenneth McCall, her father's tree for 4 generations and to discover that they need parastases, certain relatives who died unreconciled with God and whose voices and unnatural presence she felt a lot in the last 8 years (2014-2022). The empirical risk increases with each generation<sup>212</sup>. The same individuals also have other multifactorial polygenic diseases: Hypertension, arrhythmias, arthrosis, the empirical risk for the next child in the case of the birth of a previous one with a neural tube defect is 3-5%, 0.5% in boys, 6.3% in girls<sup>213</sup>.

### V.5. Conclusions

The sick hope that God could help them even when their defense and healing mechanisms have been surpassed by the possibilities of modern medicine. Gustave Le Bon<sup>214</sup> shows that faith is an absolutely necessary need of the human being, so demanded by the environment.

Man must always believe in something. He has a deep religious feeling. Faith is the best way to approach God, with whom everything is possible. Faith is not only helpful, but also uplifting. That is why, as the Holy Apostle Mark points out, "If you can believe, all things *are* possible to him who believes." (Mark, 9, 23). And sickness and troubles are usually a means of strengthening our faith.

When the sick believe in God, they see life differently. They start to hope more. They begin to pray, fast, go to church and holy places, where they believe they will be healed. Prayer is the simplest way to talk to God, to praise Him, to thank Him for all that He has given us. And when he is in trouble or when he is sick, man asks for God's help. Obviously, faith in God is at the basis of prayer. And Jesus Christ said to trust, to ask and it will be given to us; seek and you will find; knock and the door will be opened to you. (Luke 11, 9-13).

That is why man prays to God. In this sense, some authors have shown that prayer can lead to the decrease of pro-inflammatory markers that are at the basis of inflammatory diseases. Studying a group of patients who were spontaneously cured of cancer, Y. Ikemi and S. Nakagawa<sup>215</sup> found that the cure was accompanied by a radical change in their spiritual life. That is, they strongly believed in a divine force. And the more they believed, the more their

<sup>&</sup>lt;sup>212</sup> Ibidem

<sup>&</sup>lt;sup>213</sup> Ibidem

<sup>&</sup>lt;sup>214</sup> Bon G. Opinii și credințe/Opinions and faith, Științifică Publishing House, 1995

<sup>&</sup>lt;sup>215</sup> Ikemi Y, Nakagawa S. Psychosomatic consideration on cancer patients who have made a narrow escape from death. Dynamische Psychiatrie 1975, 8(2), 77-92.

healing increased. And the well-known clinician William Osler showed that healing does not only depend on drugs, but also on the patient's faith to heal.

Research has shown that patients who prayed to God had much better results than patients who only benefited from psychotherapy. And the patients who prayed in a group had even better results than those who prayed in isolation<sup>216</sup>. And other authors have shown that prayer can have favorable effects even when other people pray for us from a distance<sup>217</sup>. That is, faith in God gives results even when our healing capacities have been exceeded. That is why, when the two blind men asked Jesus Christ to heal them, He asked them: "Do you think I can do this?". And they answered him: "Yes, Lord, You can do it". Then, Jesus Christ touched their eyes and said: "According to your faith, let it be done" (Matthew 9, 23-28). And when the woman who had been bleeding for 12 years approached Jesus Christ with the faith to be healed, He said to her: "Your faith has healed you" (Matthew 9, 22).

As far as a research proposal is concerned, there are certain plants that are harvested at specific times of the year, especially between the spring equinox and the summer solstice, covering the mating season of fireflies. These creatures emit substances called luciferin and luciferase that can give the plants on which the fireflies sit, healing properties. There is one special day in Romania, 24<sup>th</sup> June when it is said that the plants harvested following specific steps have increased benefits in healing depression. On the longest day of the year, medicinal flowers have their maximum power. For the cure of diseases that cannot be cured, flowers of Galium verum are picked, as well as other flowers or plants with a pleasant smell. Some years ago, the old woman Berci Ileana Grigoreanca from Călinești, then 87 years old, told to a reporter of Formula As magazine how she cured a mother of seven children from madness, whom no doctor could help. I am reproducing her account in literary form, to be accessible: "On the Day of Faires, you go without eating, good morning and pick Galium verum. You don't talk to anyone (the fast of silence). You pray walking, picking, coming. You bring the flowers home and take them Sunday at church. You put them on the icons. After they get old, you put them in the attic of the church to dry. Those are good cures for anger (depression). For an angry man, you put a handful of flowers on the coals and make him smoke. Only in three evenings, his anger fades, and you make them human again." So the research theme that I propose is The influence of fireflies on herbs harvested on 24 June in Romania.

<sup>&</sup>lt;sup>216</sup> Parker WR, Johns ES. Prayer can change your life. Prentice Hall Press, New York, 1957.

<sup>&</sup>lt;sup>217</sup> Byrd RC. Positive therapeutic effects of intercessory prayer in a coronary care unit population. South Med J. 1988 Jul; 81(7):826-9

#### BIBLIOGRAPHY

- 1. Antony MM, Swinson RP, (1996), Anxiety disorders and their treatment: a critical review of the evidencebased literature, HealthCanada
- Ascherio A., Zhang SM, Hernan MA, Kawachi I., Colditz GA, Speizer FE, et al., (2001), Prospective Study of Caffeine Consumption and Risk of Parkinson's Disease in Men and Women, Annals of Neurology 50 (1): 56–63
- Baldacchino A., Arpalli V., Oshun A., Tolomeo S., (2014), Substance-Induced Mental Disorders, 10.1007/978-88-470-5322-9\_88.
- Bender DS, Dolan RT, Skodol AE, Sanislow CA, Dyck IR, McGlashan TH, Shea MT, Zanarini MC, Oldham JM, Gunderson JG, (2001), *Treatment utilization by patients* with personality disorders, Am J Psychiatry, 158:295-302
- 5. Bergland, Christopher. How Do Neuroplasticity and Neurogenesis Rewire Your Brain?
- 6. Blumenfeld H., (2018), Neuroanatomy through clinical cases, Sunderland, MA: Sinauer
- Brodie MJ, de Boer HM Johannessen SI, (2003), *European White Paper on epilepsy*, Epilepsia, 44(Suppl. 6):1–88
- Brott T., Bogousslavsky J., (2000), *Treatment of acute ischemic stroke*, New England Journal of Medicine, 343:710–722
- Buck D., Gregson BA, Bamford CH, McNamee P., Farrow GN, Bond J., et al., (1997), *Psychological Distress among Informal Supporters of Frail Adult People at Home and in Institutions*, International Journal of Geriatric Psychiatry 12 (7): 737–44
- Canedo A., (1997), Primary motor cortex influences on the descending and ascending systems, Prog Neurobiol., 51(3):287-33
- Chandra V., Ganguli M., Pandav R., Johnston J., Belle S., DeKosky ST, (1998), *Prevalence of Alzheimer's Disease and Other Dementias in Rural India: The Indo-US Study*, Neurology 51 (4): 1000–8
- Chandra V., Pandav R., Dodge HH, Johnston JM, Belle SH, DeKosky ST, et al., (2003), Incidence of Alzheimer's Disease in a Rural Community in India: The Indo-US Study, Neurology 57 (6) : 985–89
- 13. Cummings JL, Schneider E., Tariot PN, et al., (2006), *Behavioral effects of memantine in Alzheimer disease patients receiving donepezil treatment*, Neurology; 67:57–63

- 14. DeKosky ST, Williamson JD, Fitzpatrick AL, et al., (2008), *Ginkgo biloba for prevention of dementia: a randomized controlled trial*, JAMA, 300:2253–2262
- DeRubeis R., Strunk D., Lorenzo-Luaces L., (2016), *Mood disorders*, 10.1037/14862-002
- 16. Farah F., (2018), Schizophrenia: An Overview, Asian Journal of Pharmaceutics, 12. 77
- 17. Flood M., Phillips KD, (2007), Creativity in adult adults: a plethora of possibilities, Issues Ment Health Nurs, 28:389–411
- Foster NL, Petersen RC, Gracon SI, Lewis K., (1996), An EnrichedPopulation, Double-Blind, Placebo-Controlled, Crossover Study of Tacrine and Lecithin in Alzheimer's Disease: The Tacrine 970-6 Study Group, Dementia 7 (5): 260–66
- 19. Freeman MP, (2000), *Omega-3 fatty acids in psychiatry: a review*, Ann Clin Psychiatry, 12:159–165
- 20. Fugh-Berman A., Cott JM, (1999), *Dietary supplements and natural products as psychotherapeutic agents*, Psychosom Med , 61:712–728
- 21. Garvey J., (2002), *Diet in autism and associated disorders*, J Fam Health Care, 12:34–38
- 22. Gentleman SM, Graham DI, Roberts GW, (1993), Molecular Pathology of Head Trauma: Altered Beta APP Metabolism and the Aetiology of Alzheimer's Disease, Progress in Brain Research 96: 237–46
- 23. Haupt M., Karger A., Janner M., (2000), Improvement of Agitation and Anxiety in Demented Patients after Psychoeducative Group Intervention with Their Caregivers, International Journal of Geriatric Psychiatry 15 (12): 1125–29
- 24. Henderson AS, Jorm AF, (2000), *Definition of Epidemiology of Dementia: A Review,* in *Dementia*, ed. M. Mario and N. Sartorius, 1–34, West Sussex, UK
- 25. Henderson VW, (1997), *The Epidemiology of Estrogen Replacement Therapy and Alzheimer's Disease*, Neurology 48 (5 Suppl. 7): S27–35
- 26. Hendrie HC, Ogunniyi A., Hall KS, Baiyewu O., Unverzagt FW, Gureje O., et al., (2001), Incidence of Dementia and Alzheimer Disease in 2 Communities: Yoruba Residing in Ibadan, Nigeria, and African Americans Residing in Indianapolis, Indiana, Journal of the American Medical Association 285 (6): 739–47
- 27. Hirakawa Y., Masuda Y., Kimata T., Uemura K., Kuzuya M., Iguchi A., (2005), *Effects* of home massage rehabilitation therapy for the bed-ridden adult: a pilot trial with a three-month follow-up -up, Clin Rehabil, 19:20–27
- 28. Jorm AF, Jolley D., (1998), The Incidence of Dementia: A MetaAnalysis, Neurology 51

(3): 728–33

- 29. Kessler RC, Soukup J., Davis RB, et al., (2001), *The use of complementary and alternative therapies to treat anxiety and depression in the United States*, Am J Psychiatry, 158:289–294
- 30. Khalsa SB, (2004), Yoga as a therapeutic intervention: a bibliometric analysis of published research studies, Indian J Physiol Pharmacol, 48:269–285
- 31. Kiyohara Y., Kubo M., Kato I., Tanizaki Y., Tanaka K., Okubo K., et al., (2003), Ten-Year Prognosis of Stroke and Risk Factors for Death in a Japanese Community: The Hisayama Study, Stroke 34 (10): 2343–47
- 32. Kotsopoulos IA, van Merode T., Kessels FG, de Krom MC, Knottnerus JA, (2002), Systematic Review and Meta-Analysis of Incidence Studies of Epilepsy and Unprovoked Seizures, Epilepsia 43 (11): 1402–9
- 33. Kwan P., Brodie MJ, (2002), *Refractory epilepsy: a progressive, intractable but preventable condition?*, Seizures, 11:77–84
- 34. Lagardette, Jean-Luc Martin, Les droits de l'âme. Pour une reconnaissance politique de la transcendance, L'Harmattan, France
- 35. Lanciego JL, Luquin N., Obeso JA., (2012), *Functional neuroanatomy of the basal ganglia*, Cold Spring Harb Perspect Med. 1;2(12):a009621
- 36. Lavretsky H., (2009), *Complementary and alternative medicine use for treatment and prevention of late-life mood and cognitive disorders*, Aging health, 1;5(1):61-78
- 37. Lavretsky H., (2009), *Complementary and alternative medicine use for treatment and prevention of late-life mood and cognitive disorders*, Aging health, 5(1):61-78
- 38. Leonardi M., Ustun TB, (2002), *The Global Burden of Epilepsy*, Epilepsia 43 (Suppl. 6): 21–25
- Levin E., Moriarty J., Gorbach P., (1994), *Better for the Break*, London: Her Majesty's Stationery Office, National Institute of Social Work Research Unit
- 40. Li G., Shen YC, Chen CH, Zhau YW, Li SR, Lu M., (1991), A Three-Year Follow-up Study of Age-Related Dementia in an Urban Area of Beijing, Acta Psychiatrica Scandanavica 83 (2): 99–104
- 41. Livingston G., Walker AE, Katona CLE, et al., (2007), Antipsychotics and cognitive decline in Alzheimer's disease: the LASERAlzheimer's disease longitudinal study, J Neurol Neurosurg Psychiatry; 78:25–9
- 42. Lowe SL, Yeo KP, Teng L., et al., (2006), *L-5-hydroxytryptophan augments the neuroendocrine response to a SSRI*, Psychoneuroendocrinology, 31:473–484

- 43. Melzer D., Pearce K., Cooper B., Brayne C., (2004), *Alzheimer's Disease and Other Dementias*, available at http://hcna.radcliffeoxford.com/dementiaframe.htm
- 44. Millon T., Blaneyu PH, Davis R., (1999), OxfordTextbook of Psychopathology, Oxford UniversityPress
- 45. Moore DP, (2008), *Textbook of Clinical Neuropsychiatry*, available at https://brainmaster.com/software/pubs/brain/Text%20of%20Clinical%20Neuropsychi atry.pdf
- 46. Morris HR, Gibb G., Katzenschlager R., et al., (2002), *Pathological, clinical and genetic heterogeneity in progressive supranuclear palsy*, Brain; 125:969–75
- 47. Nattie E., Li A., (2012), *Central chemoreceptors: locations and functions*, Compr Physiol, 2(1):221-54
- 48. Neff, K. D. (2009). *The role of self-compassion in development: A healthier way to relate to oneself*. Human Development, 52, 211-214
- 49. Netter F., (2019), Atlas of Human Anatomy, PhilAlzheimerelphia, PA: Saunders
- 50. Norton MC, Singh A., Skoog I., et al., (2008), Church attendance and new episodes of major depression in a community study of adult adults: the Cache County Study, J Gerontol B Psychol Sci Soc Sci, 63:P129–37
- 51. Poungvarin N., Viriyavejakul A., Komontri C., (1991), Siriraj Stroke Score and Validation Study to Distinguish Supratentorial Intracerebral Haemorrhage from Infarction, British Medical Journal 302: 1565–67
- 52. Prince M., (2000), Dementia in Developing Countries: A Consensus Statement from the 10/66 Dementia Research Group, International Journal of Geriatric Psychiatry 15 (1): 14–20
- 53. Rajmohan V., Mohandas E., (2007), *The limbic system*. Indian J Psychiatry, 49(2):1329
- 54. Reschke, Kathy. <u>Who am I? Developing a Sense of Self and Belonging</u>
- 55. Richmond, S. (2005) "Dame Cicely Saunders" BMJ (Online) p. 331 (7510) 238, PMCID: PMC 1179787 available at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1179787/
- 56. Roberts RO, Cha RH, Knopman DS, et al., (2006), Postmenopausal estrogen therapy and Alzheimer disease: overall negative findings, Alzheimer Dis Assoc Disord; 20:141–6
- 57. Samuels JF, Nestadt G., Romanoski AJ, Folstein MF, McHugh PR, (1994), *DSM-III* personality disorders in the community, Am J Psychiatry, 151:1055-1062

- 58. Schwartz, RC (2021). No Bad Parts: Healing Trauma and Restoring Wholeness with the Internal Family Systems Model. Sounds True.
- Sher K., Grekin E., Williams N., (2005), *The Development of Alcohol Use Disorders*, Annual review of clinical psychology, 1. 493-523
- 60. Shipp S., (2007), Structure and function of the cerebral cortex, Curr Biol. 19;17(12):R443-9
- Shumaker SA, Legault C., Rapp SR, Thal L., Wallace RB, Ockene JK, et al., (2003), Estrogen Plus Progestin and the Incidence of Dementia and Mild Cognitive Impairment in Postmenopausal Women: The Women's Health Initiative Memory Study —A Randomized Controlled Trial, Journal of the American Medical Association 289 (20): 2651–62
- 62. Snell RS, (2018), *Clinical neuroanatomy*, PhilAlzheimerelphia: Wolters Kluwer Health/Lippincott Williams & Wilkins
- 63. Starkstein SE, Preziosi TJ, Bolduc PL, et al., (1990), *Depression in Parkinson's disease*, J Nerv Ment Dis; 178:27–31
- 64. Stice E., Bohon C., (2012), *Eating Disorders. In: Child and Adolescent Psychopathology*, New York: Wiley, 912
- 65. Stunkard J., Grace WJ, Wolff HG, (1955), *The night eating syndrome: a pattern of food intake among certain obese patients*, Am. J. Med, (19): 78–86
- 66. Walsh JS, Welch HG, Larson EB, (1990), Survival of Outpatients with Alzheimer-Type Dementia, Annals of Internal Medicine 113 (6): 429–34
- 67. Weems C., Silverman W., (2013), Anxiety Disorders.
- 68. World Health Organization, (2006), Neurological disorders: public health challenges
- 69. Zam W., Saijari R., Sijari Z., (2018), *Overview on eating disorders*, Progress in Nutrition, 20. 29-35
- 70. Zipfel S., Giel K., Bulik C., Hay P., Schmidt Um (2015), Anorexia nervosa: aetiology, assessment, and treatment, Lancet psychiatry, 2(12): 1099-111
- 71. Leadbeater, 1927, Les centres de force dans l'homme les chakras, Paris;
  Guja, 2000, Aura coprului uman. Introducere in antropologia individului, Editura Polirom, Iasi;
- 72. Mustata, 2001, Origine, evolutie si evolutionism, Vasile Goldis University press, Arad

# Webography

- 1. https://anatomie.romedic.ro/encefalul-creierul
- 2. <u>http://sacredcenters.com/</u>.
- 3. https://sistemul-nervos.weebly.com/emisferele-cerebrale.html
- 4. https://view.livresq.com/view/60362402a08ebe00072c4f0e/
- 5. https://www.kenhub.com/en/library/anatomy/the-central-nervous-system
- 6. http://www.artofmanliness.com/2015/03/16/the-history-of-depression/
- 7. https://www.mentalhelp.net/articles/historical-understandings-of-depression/
- 8. http://www.historytoday.com/blog/2012/08/history-depression
- 9. https://www.easistent.ro/?p=4095
- 10. https://luminarasaritului.wordpress.com/tag/tristete/

# ANNEXES

## **ANNEXE 1**

## QUESTIONNAIRE

- 1. Your gender?
  - a. female
  - b. male
- 2. What is your age category?
  - a. 18 29 years
  - b. 30 39 years
  - c. 40-49 years
  - d. 50 59 years
  - e. 60-69 years
  - f. more than 70 years
- 3. What is your background?
  - a. urban
  - b. rural
- 4. Are you a patient or a relative?
  - a. Patient
  - b. Belonging

5. Do you currently use or have you used complementary therapies in addition to the recommended medical treatments?

- a. Yes
- b. No
- c. I don't know/I don't answer

If you answered "Yes" to question 5, please continue to answer the following questions,

if you answered "No", go to question 12

- 6. Why do you use complementary therapies?
  - a. It relieves symptoms
  - b. Reduces medication
  - c. I read testimonies
  - d. My family wants it
  - e. Other reasons

7. What symptoms do you use complementary therapies for? (multiple answers can be chosen)

- a. Anxiety
- b. Insomnia
- c. Regular headaches
- d. Excessive sleepiness
- e. Attention deficit
- f. Memory loss
- g. Depression
- h. Mobility problems
- 8. What complementary therapies are used? (multiple answers can be chosen)
  - a. massage/tactile stimulation/kinesiotherapy
  - b. acupuncture
  - c. yoga/meditation
  - d. light therapy
  - e. music/dance/art therapy/drama
  - f. Ayurveda
  - g. herbal food supplements
  - h. food supplements based on vitamins/minerals
- 9. How long have you been using complementary therapies?
  - a. Less than 6 months
  - b. Between 6 months and 1 year
  - c. Between 1-2 years
  - d. Between 2-5 years
  - e. I don't know/I don't answer
- 10. How do you feel after using complementary therapies?
  - a. Very good
  - b. Good
  - c. Slightly better
  - d. Not very good
  - e. I don't know/I don't answer
- 11. How did you hear about complementary therapies?
  - a. Medical personnel
  - b. Family/friends

- c. Internet
- 12. If you answered "no" to question 5, please specify the reason why you do not use complementary therapies?
  - a. Lack of trust in complementary therapies
  - b. Lack of time
  - c. It takes longer to take effect
  - d. They can be expensive
  - e. Other reasons

### ANNEX 2

#### IR's papers

Relații sociale reciproce (cu colegii, cu profesorii, cu personalul auxiliar din scoală). Persone Ce physical Indeplining turner response fultities ediscational. Aprecieri asupra modului de pregătire a lecțiilor elevului (cu sprijin/fără sprijin) Relinic, in temperate, In agreens topic services fair Interventile uniquitar latoria Comportantentul in alara scolii ferrernata , un are preteni, cade de Asmensure le timidibles chadilor à stanfacio une atitus is preveate a atitudure meani timerata. Recomandări pentru forme de scolarizare a copilului : grădiniță, grădiniță specială școală generală, școală generală cu profesor de sprijin, scoală generală cu curriculum adaptat, școală specială, școlarizare la domiciliu, frecvența redusă în grupa sau clasa specială compactă în scoala generală, alte servicii/programme educaționale (se specifică care)

Reciprocal social relations (with colleagues, with teachers, with school auxiliary staff) Reserved, communication is limited to a small group of colleagues due to excessive shyness. Compared to her colleagues, she shows a precocious maturity.

The level of adaptation to the requirements of school activities - There are no problems regarding the fulfillment of all educational responsibilities.

Assessments on the way of preparing the student's lessons (with support/without support)

She prepares daily, with tenacity, in almost all tasks without the intervention of external help.

Behavior outside of school: Reserved, has no friends, the means of communication with other colleagues are not used in all dimensions, the shyness of discussions and the awkwardness of some attitudes cause a sometimes timid attitude.

Recommendations for forms of schooling of the child: kindergarten, special kindergarten, general school, general school with support teacher, general school with adapted

curriculum, special school, home schooling, reduced attendance in the group or compact special class in the general school, other services/ educational programs (specify which)

General school

Argumentati recomandarea facuta: Min ercenta micho micho enale on mineri in cadrul side for dare sunt UNY acepter note latilon Scolar 0.2 5 hestor sa at warea medin Co colevi no Data completării și ștampila Numele, prenumele și semnătura membrilor instituției Consiliului Profesoral

Argue the recommendation: There is no obstacle in following the courses within the general school with a normal schedule, the arguments brought in support of this recommendation are determined by: Fulfillment of all school responsibilities, the student's level of preparation is very good, excellent motivation, the need for socialization in a competitive environment, the reporting of personality manifestations towards colleagues, teachers determined by the establishment of his status as a student eager to learn. She enjoys the life experiences determined by the school environment.

The name, surname and signature of the members to the Teacher's Council

Prepared \*\*\*\*

#### Date of completion and stamp of the institution





### HYPERDIA

medical high tech Brasov - Calea Bucuresti 25-27, tel. 0268-330170, 330171, 332380; brasov@hiperdia.ro: www.hiperdia.ro SA HYPERDIA, BRASOV MAGNETIC RESONANCE Medical file: 89330 Date of the investigation: 12/06/2009

Examination: cervical-thoracic MRI

### Result:

Spina bifida C5, C6.
Postoperative fibrosis changes in the C5-C6 region with traction of the thecal sac and moderate traction of the posterior spinal cord.
No recurrence of cervical myelomeningocele.
Cervico-thoracic vertebral bodies with normal shape and structure.
Normal cervico-thoracic intervertebral discs.
Changes in CSF flow in the thoracic region.

Conclusions: Status after C5-C6 myelomeningocele surgery. Postoperative fibrosis changes. No relapse.

Performed by: Carstea M. Primary physician radiologist

Edited by: Mirela

### HYPERDIA

medical high tech

Brasov - Calea Bucuresti 25-27, tel. 0268-330170, 330171, 332380; Brasov -3-27, tel. 0268-330170, 330171, 332380: brasov@hiperdia.ro; www.hiperdia.ro

Brason Calas D			
Brasov - Calea Bucuresti 25-27, tel.0268-3301	70, 330171, 332380; brasoy@hiperdia.ro ; www.hiperdia.ro		
HIPERDIA SA, BRASOV			
REZONAL	NTA MAGNETICA		
Fiea medicala: 89330			
Data investigatiei : 12/06/2009			
Examinare: IRM craniu nativ			
Rezultat:	to in positio		
Ventriculul III si ventriculi latera normala.	li cu capacitate crescuta în pozitie		
A discont complui frontal si corni	alui ventriculului lateral stg. se		
avidantiaza a leziune nadulara de	aproximativ 1,2 cm, cu seminar identie ea		
cel al substantei gri in secventele	ponderata 12, 12 runin si in		
Fara alte anomalii de semnal in p	arenchimul cerebrai.		
Fosa posterioara, trunchiul cereb	a la nivelul sinusurilor maxilar stg.,		
Ingrosare importanta de inteoas.			
frontal stg. si sfenoidal.			
Concluzii:	Contraction of the International Contraction		
i i lagasfalia triventriculara.			
Moderata hidrocelane triventite Ectopie nodulara de substanta gr	i paraventriculara sig.		
nterpretat de: Carstea M.	Redactat de: Mirela		

### MAGNETIC RESONANCE

Medical file: 89330 Date of the investigation: 12/06/2009

Examination: native skull MRI

## Result:

Ventricle III and lateral ventricles with increased capacity in normal position.

Adjacent to the frontal horn and the body of the right lateral ventricle. a nodular lesion of approximately 1.2 cm is evident, with a signal identical to that of the gray matter in the T2-weighted, T2-FLAIR and T1-weighted sequences.

No other signal abnormalities in the cerebral parenchyma.

Posterior fossa, brain stem normal.

Significant thickening of the mucosa at the level of the left maxillary, left frontal sinuses. and sphenoidal.

Conclusions:

Moderate triventricular hydrocephalus.

Nodular ectopy of right paraventricular gray matter.

Performed by: Carstea M. Primary physician radiologist

Edited by: Mirela

Descrierea problemei / problemelor copilului / familiei: Prezentarea situatiilor / evenimentelor:

s-a născut cu probleme de sănătate grave, iar la vârsta de dou săptămâni a fost operată, urmând ședințe de recuperare timp de 4 ani de zile care nu au dat rezultatele așteptate. La vârsta de șapte ani a mai suportat o nouă intervenție chirugicala la piciorul drept întrucâ nu se putea deplasa în mod corespunzător iar de atunci starea de sănătate s-a îmbunătățit.

Description of the problem/problems of the child/family:

• Presentation of situations/events:

IR was born with health problems; at 2 weeks she was operated on, followed by recovery sessions for 4 years that did not give the results expected. At the age of seven, she underwent another surgical intervention on her right leg because she could not move properly and since then her state of health has improved.



Identification of needs:

As a result of his serious health problems, \*\*\*\* requires support, care and supervision from the family because due to paresis he sometimes loses his balance, has dizziness and needs to be accompanied to/from school.

Summary of the social worker's conclusions:

\*\*\*\*\* part of a legally constituted family, with positive income and is diagnosed with: OPERATED CERVICAL MYELOMENINGOCEL, SPASTIC HEMIPARESIS RIGHT PREDOMINANT. SECONDARY INTERNAL HYDROCEPHALY STATIONARY, according to medical certificate no. 1015/10.06.2010 issued by the Braşov Children's Clinical Hospital.

Recomandarile respons	abilului de caz prevenire :	and the set of the set of the
Propunem reînnoirea cert	ificatului de handicap a	
Responsabil de caz prevenire	Homeniuc Marina	Data :30.06.2010
Responsion	(* )	A CONTRACTOR

Recommendations of the prevention case manager:

We propose to renew the disability certificate of \*\*\*\*

Responsible	for	case	Н. М.	Date: 30.06.2010
prevention				

# ZARNESTI THEORETICAL HIGH SCHOOL

Entry/Exit no. 1391

Day 07, month 07, year 2010

# SHEET REGARDING THE EDUCATIONAL PATH

Name...... Age 12 years, Zarnesti Theoretical High School, Grade V A, Address: Strada Zorilor

Promoted: yes

/		LICEUL TEORETIC ZARNESTI INTRARE NR 1394 IESIRE NR 06 ANUL/2012
	FIȘA PRIVIND TRASEUL EI	DUCAȚIONAL
Nume Grădinna/Şc Adresa	oala hicent Teoret ic Zarnesti rada Zorelor	Grupa/Clasa . Q. V. A
Promovat :	da nu	

Eduction. The following must be specified: the name of the institution/institutions, the type or types of schooling, the results obtained: Grades I - IV attended in Zarnesti Theoretical High School, normal schooling, very good results.

Pregătire școlară. Se vor preciza : denumirea instituției/instituțiilor, tipul sau tipurile de scolarizare, rezultatele obtinute. Clarele i- in womate in cadu , Scolarizare normala

Past and present support activities (including extracurriculars).

They were not held

Activități (inclusiv extrașcolare) de sprijin anterioare și prezent Ne S-an derfammat

Assessments of behavior during previous and present school activities:

\*\*\*\* shows a behavior appropriate to the level, very mature, gets involved with the responsibility of a child who does not want to miss anything from the lessons.

Distributive attention, can focus on the proposed didactic task for a long period of time.

Learning motivation: Very good, determined by a mature understanding of educational goals.

Excellent learning receptivity, supported by the quick associations she makes at interdisciplinary and transdisciplinary level.

Participation and involvement (for different types of schooling). She gets deeply involved, sometimes has a competition with herself, frequently participates in school competitions, in the projects presented in class.

Aprecieri asupra comportamentului în timpul activițăților școlare anterioare și prezent manifesta un comportament potrinit mulului Lemme capiel ce nu vrea se pianda minue dem arele de invotare Atentia dustricant ma re peate facaliza pe rancina dichetica Atenția a perioadă în delingată Motivatia de învâțare Foarte brună determinată de a Entelepre matura a Scopendar educatiquale. Receptivitate de învățare ... începenta constituită de asecierile sociale Receptivitate de invatare d'acceptive d'anserter de l'arreide Le care le free le mirel enterdisciplinar si transdisciplinae Participare și implicare (pentru diferite tipuri de scolarizare) se emplică profund Dunt mine uneori de o competitire cu sine însuri, preprent Dunt mine la concursurile Geolore, în proiectele previorate în orele de cus