FROM THE THIRD GENEVA CONFERENCE ON PERSON-CENTERED MEDICINE: SPECIAL INITIATIVES FOR PERSON-CENTERED CARE

Person-Centered Medicine: Theory, Teaching and Research

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Abstract

Person-Centered Medicine (PCM) is a new interactionist, deterministic, extrinsic Paradigm of Medicine, born in 1999, based on the theory of the "determinate and the quality indeterminate relativity of biological reactions". Structuring a new health epistemological model developed from the medical science base of interactionist investigations, it is consistent with the Allostasis and Epigenetics epistemological changes in physiology and genetics and defines a new phenomenological hermeneutics of human nature: Kairology, defining the person's mystery and destiny. A complete epistemological definition of a "Person-Centered Health interactionist and non-deterministic health model" was presented by the author in 2005. Person-Centered Medicine in 1998 was officially presented as the leading epistemological structure of the Milan School of Medicine, a priority for medical education in postgraduate courses, starting from the previous foundation of Medical Counselling and its teaching method. Since 1998, the Person-Centered Clinical Method (PCCM), born as the PCM clinical application, was introduced and taught in all of the postgraduate courses and in the University Quality System and assisted the physician's formation. The Person-Centered Clinical Method changes the operation of Clinics, introducing a three dimensional, non-deterministic structured work on the person: "Diacrisis", which in the "Person diagnosis" and in the "Cross ratio" structured assessment of resilience and vulnerability, in the interlocutory physical examination, in the clinical objectives assessment and in a literary clinical synthesis and portrait, ensures that information about the subjective and objective person's and hypotheses about their relations are depicted together. The learning objective of PCM and PCCM are theoretical and practical and PCM teaching is characterized by a structured training in Università Ambrosiana, organized in International Master's and in "Licentia Docendi" courses.

In 2002, the first investigation of PCCM teaching effects on clinical practice by 20 trained physicians who assisted 16,000 persons was conducted. The results documented a substantial reduction in drug prescriptions, hospital admission requests, technical examinations and an increase in physicians' professional satisfaction.

Keywords

Effectiveness of person-centered medicine, epistemology, hermeneutics, humanism, medical education, person-centered medicine

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The clinical and epistemological roots of Person-Centered Medicine teaching

The Person-Centered Medicine Paradigm [1,2] finds its clinical and teaching roots in "Medical Counselling" [3] and its clinical and teaching method (founded by the author of this paper in 1991 at the Italian Center of Medical Psychology) has from 1995 been taught at the Ambrosiana University. Medical Counselling, born as a new discipline, enabled Physicians to acquire new clinical skills, beginning with studies on empathy and reducing dependency on Psychologists and overcoming simplistic notions of a clinical separation of body and mind. Its method was inspired by Phenomenology, the humanistic school of Psychology, Psychoanalysis and Counselling theories in Psychology in a medical setting, but the new approach emerged from a synthesis between kairological hermeneutics and the traditional tendency of Medicine to

find in clinics and in human nature an objective reality, based on empirical and experimental structures. Medicine typically searches for objective truth at ethical and epistemological levels and appears to be only complementary to the dominant and relativistic subjectivism of psychology in the clinic. Medical Counselling partially realized in clinical practice the Humanistic-Existential approach as a new paradigm in medical science, which was depicted in 1992 [4] in opposition to the imperialistic and reductionist approach focussed on the biological basis of Medicine, which reduced the realm of health to the level of biological variables [5], with inadequate attention given to evolving disciplines such as Psychoneuroimmunology [6] and Psycho physiology. Thus, a radical and structural epistemological change in Medical Science as had been postulated by George Liebmann Engel [7] appeared increasingly urgent involving much more than a simple enrichment of clinical method with optional "communication skills". The first Course in Medical Counselling, delivered in 1991, focussed on clinics with adolescents and was a great educational success using a structured educational teaching theory well accepted by generalists, pediatricians, adolescentologists and hospital physicians. Its objective was to help physicians acquire skills in empathy and in overcoming natural diagnosis anxiety in situations where emergency biological problems were absent and to help them learn to work on the person's resources to be able to assess his problems. Physicians learn to cope also with the person's ethical demands, in and out of the clinic, and not to try to escape from delegating these to, for example, psychologists or to neglect the Hippocratic Oath principles as they relate to the person. Interlocutory and relational and interpersonal skills are taught and during the third year, the "Kairos program" introduced a structured and very successful program, inspired by "Kairology" to develop affective, cognitive and creative resources. The counselling was called "Kairological", referring, as it does, and as described by Brera [8-10], to Kairology Theory. According to this theory, the phenomenology of human nature hides a mysterious question of truth, love and beauty, calling for a right choice among a world of possibilities, true or false, which constitute the human experience and a second mystery for their unpredictability. Human nature is naturally oriented to a noble destiny and to "pathos" to give objective answers to the fundamental questions of existence which involve considerations of "truth", "love" and "beauty" and to the choice between true or false possibilities in the realization of liberty and dignity and individuality. These mysterious and natural questions which belong to human dignity are pondered from adolescence [11] through a hypothetico-deductive reasoning (Piaget) [12], which allows the perception of "a call" to objective truth, a call to personal ethical responsibility and the quest for an objective meaning in each human act. Here, psychosexual development (Freud) [13] leads to the genital expression of love and to a call to search for objective harmony as part of the perception of reality and beauty. Health and disease belong to this reality and are part of the person's freedom and realization. In this light, disease can be interpreted like an ontological question finalized to reveal the presence of an objective life meaning in human relations and suffering, such that "pathos" can be interpreted not only like a limit, but also as an existential possibility for realization, a disclosure to perceive the person's own dignity and freedom in answering the fundamental questions of existence [14,15].

At the end of the three year course, the trained physician is able to cope and resolve difficult psychological questions and cases, without depending on psychologists and on psychotherapists. During these teaching experiences, physicians were encouraged to start to apply the learned counselling method not only to adolescents, but, like a general clinical method, to all patients. The results obtained were important and a source of great personal satisfaction [16]. Physicians used the "Kairological medical counselling" method also with acute and chronic diseases and to discover their patients as persons. Early on, there was a risk of confounding Medicine with "Health Psychology" and a strong theoretical and institutionalized structure was necessary to preclude this risk. In 1995, when Ambrosiana University was founded, the principal objective was to prepare medical students and physicians to adopt the "humanistic-existential" paradigm in a climate culturally hostile to such philosophy, by beginning a true battle on one side against the subjective reduction of humanity to psychological subjectivism far from any spiritual dimension of life and on the other side against the erroneous technical reduction of medicine to biomedical science with a need also to confront ethical relativism in medicine. In 1998, the Ambrosiana University Academic Year opening celebration, which had adopted Iosef Seifert and Karol Wojtyla's personalism within its philosophical foundations, was dedicated to the Person-Centered Medicine (PCM) new paradigm and the Rector's contribution was dedicated to an illustration of the importance of the Person-Centered Medicine new paradigm for changing Medicine and medical science [17, 18]. For the first time, then, an University openly adopted an extrinsic paradigm for the reorientation of medical education, in open opposition to a reductionist medical culture, the loss of objective ethical principles and subjectivism in clinical psychology.

At an epistemological level, it is contended that the PCM paradigm was generated by Psychoneuro-immunology, by Kairology, by the discovery of new physiological relation between brain-mind [19], and by new epistemological concepts in Psychology like: "Coping" [20] and "Resilience", which later meet Allostasis and Epigenetics. In 1996, the paper which inspired Brera to write a new epistemological theory for Medical Science: ("The Relativity of Biological Reactions to possibility and quality of coping" [21,22]) (RBR theory) was Launslander's and Shavit's exposition [23], whose

epistemological interpretation was evident: Selye's [24] and Claude Bernard deterministic mechanism, founded on a simple Stimulus-Reaction (S-R) model, had fallen. The epistemological evidence was that a variable introduced by the experimental project and belonging to a philosophical, existential and kairological domain expressed by the word: "Possibility", had determined two qualitatively different "Biological Reactions", relative to two different ways offered to cope with a stress. Natural possibilities offered to an animal mediate a dichotomized and "qualitatively" different answer. Biological and clinically mechanicistic determinism had indeed fallen. The History of Medicine had changed. From the Popperian perspective, this was enough to justify the necessity of changing clinical applications. The person, from a psychological and biological naturally pre-determined constant, could choose among possibilities and this information is transduced into biological signals, from the brain through neuromodulators and hormones determining biologically qualitative reactions, founding a qualitative relativity of biological reactions to existence in a way poorly characterized to date. Medicine and Medical Science are changed from a theoretical conception based on "quantity" classical inferential statistics to "quality" of the person. RBR theory is consistent with the epistemological revolution in physiology initiated by Sterling and Eyer introducing the concept of "Allostasis" – "Stability through Change" in opposition to the older concept of "Stability through Constancy" [25]. Allostasis means that biological parameters are indicators not of an adaptation to biological stimuli, but of the organism's work to change its physiological reaction in relation to environmental stimuli, predicted by higher nervous functions, through the amygdala, PVA area and pre-frontal cortex. This changes the traditional way to interpret biochemical parameters that now must be interpreted as results of a qualitative change of adaptation. Allostasis, like Psychoneuroimmunology, introduces an important "Trojan horse" for Person-Centered Medicine: the clinical concept of "Allostatic load" [26]. Consistent with RBR theory and Allostasis theory, a series of investigations has been published since the 1990s emphasizing the role of emotions and affect on health. This body of literature well demonstrates the importance of positive affect and emotions on health, predicting lower rates of diseases and slower disease progressions [27].

RBR theory introduced into medicine and medical science and in clinics, has generated new knowledge. Firstly, it illustrates the link between biological and existential variables which are only human resources and possibilities: the inferences of laboratory investigations *in vitro* or *in vivo* on animals cannot be simply transduced on persons. Secondly, it supports the concept of "biological reaction" demarcated by the concept of "biological constants". Thirdly, it demonstrates the qualitative and relative weight of coping possibilities on biological variables. Fourthly is indicates necessary importance to be given to human protective factors; for example, teleonomy or affectivity, or logical and psychosexual development are higher human resources. RBR theory identifies the human spiritual tendency to a personal reality and realization in Medicine. The qualitative relation between biological variables and coping, enunciated by RBR Theory, was further confirmed in 1997 by Liu and colleagues [28]. These authors corroborated RBR theory, with the demonstration of the qualitative relation of the endocrine brain construction relative to the mother's coping where lucorticoid, GABA and CRH receptor synthesis in brain is relative to the mother's licking and grooming behaviour. Moreover, genetically selected hypertensive rats nurtured by wild mothers, do not develop hypertension. So culture can be more powerful than nature. Recent epigenetic studies in animals related chromatin change to quality of maternal coping, confirming an epigenetic link of culture with biological nature [29,30]. Genome is programmed by epigenome and in this example by the environmental biologically transduced messages. This is now also clear at human level [31]. The genome myth is thus exposed. Humans have only 25,000 genes, 5000 more than a worm. Their biological functions are determined by proteins and by transcription factors, which function only if a sufficient level of energy (ATP) is available. To date, biological research based on epistemological error, continues to concentrate only on the results of genetic errors, not on their causes [32]. Epigenetics represents the third strongest epistemological change of medical science based on a dominant biological determinism. The cell brain is not the nucleus, but the cell membrane [33], which reads and interprets environmental signals via receptors synthesis and down-up regulations, determining the signal transduction which activates regulator proteins which determine gene expression. The neurone nucleus is changed by learning processes. Social, relational, affective and spiritual life and behaviour determine a hereditary variability and a quest for changes in biological parameters of the organization to cope with new stimuli through gene expression. RBR Theory, Allostasis and Epigenetics are interconnected and mutually reinforced. Social biology relates this phenomenon to evolution, through the hereditary transmission of hereditary changes [34].

On an epistemological level, we could affirm that Medicine and Medical Science from the birth of the PCM paradigm is founded on a "Person Centered Health Epistemological Model" [35]. This contention leads, epistemologically, to the necessity to introduce the concept of "quality" in clinics and research, rediscovering the importance of the qualitative clinical approach. The "protection" possibilities for health, "protective factors", constructing resilience, are "real" resources if addressed to life, or "risk" factors if addressed to death. A decrease in the number of protective factors predisposes to an absence of possibilities and gives rise to the occurrence of problems. On a three dimensional level, patients' problems are generated by the absence of resources which are qualitative possibilities for life and survival. This needs clinical work of a nature that can create possibilities as

new personal resources and not of a kind that reduces persons to their problems. Indeed, the description of patients as "Diabetic" or "Schizophrenic" in any other such way reduces persons to their pathology and is an indicator of a substantial reductionism. Often patients use their pathology like a mask, as it were, to hide themselves and physicians are often complicit in such actions. The concept of a work on "resources" in clinics, before taking in to consideration non-acute or non-emergency problems, has been and is a true epistemological revolution, because it allows persons to become aware of themselves: their identity in a particular and mysteriously important moment of their life. Body or mind and behavior, previously "unknown friends" become "others" and reveal themselves as part of the experience of concerns, pain, suffering and anguish. Human nature builds its biological structure thanks to possibilities and resources mysteriously received or built by the person, which have, through the symbolization processes, an epiphanic function of the self. Disease does not occur without symbols and symptoms. Interpersonal relations built through diseases open up possibilities to a hidden life, to the ability to reveal to others a private world, to change behavior and to understand life more deeply. The concept of health and disease has moved to a "Constructivist concept" from an "Adaptational one". In clinics, it corresponds perfectly to RBR Theory, Allostasis and to the revolution in Epigenetics. Human biology changes as the organism works to change its adaptational styles. Here, higher nervous system function, through cognitive and affective resources, sends biochemical messages which are interpreted by the cell membrane and which lead to the initiation of transcription. Health and disease contribute to a new existential reality continuously built by the person during his life and formed by his possibilities and choices which work by integrating three component variables: Subjective, Environmental, Biological. The person interprets and elaborates these, integrating information belonging to and deriving from these three domains. A new Person-Centered Health System characterized by interactionism and non-determinism is born. (Figure 1). The mechanistic nature of, and the scientifically reductionist determinism predicated by, the biomedical paradigm has been overcome. It cannot be right to base clinical decision making only on statistically significant investigations built only on one biological order of variables. Persons need an interactionist approach to medical science, based on Engel's systematic and mechanicistic bio psychosocial model, but consistent with a spiritual dimension of existence which reveals itself in a natural quest for meaning, a "teleonomia" toward a fulfilled existential reality. All human phenomenona and diseases have a spiritual dimension, because they always have a mysterious, unconscious and/or conscious meaning lived by the person.

At the clinical level, RBR theory has been supported by the results of important investigations where it appears that immunological function in persons with cancer is modulated by health education, stress management, enhancement of illness-related coping skills and by psychological support [36]. Paul Tournier [37] was the first clinical investigator to show that Christian faith – a religious and mystical answer to questions of existence, funded on the anthropic principle that human behavior and affects derive from God, is an important protective or healing factor. Health and disease appear to be not a result of an adaptation, the research of "constancy", but a constructive work, an hidden or manifest research for an existential change. Viktor Von Weizsacker, Viktor Frankl, Karl Iaspers, Alfred Adler and also Carl Gustav Yung, interpreted well this dimension of disease. No person wants to be a grain of sand on an infinite beach. This much is evident from studying adolescents [38]. At the biological level, how the need to be important for someone (love) and something (originality) is related to pathogenesis, is a mystery. Person-Centered Medicine finds in RBR theory, Allostasis and Epigenetics and at a clinical level Paul Tournier's "Medécine de la personne", the fundamental basis for a new constitution of clinics, research and medical education. This is not a humanistic option, but an imperative for the correct evolution of medical science and clinic work. Given the epistemological revolution of Medicine and Medical Science, a true change of paradigm, health appears like music played on a piano, a score is read (DNA), and piano keys are pushing (receptors at biological level) and emotions are generated (symbolic level). It is the person who plays the keys.

The Person-Centered Medicine Clinical Method. Clinics is a maieutics of the person

The last forty years has seen the reduction of persons to "clockwork oranges", with a progressive reduction of clinics to biomedicine and technology and the physician's role reduced almost to that of a technician. Hospitals appear more like technical facilities than houses where pain, concern and anguish become human suffering. We need to return the human encounter to medicine, where the person's human identity is considered before his symptoms and biological diagnosis. Family doctors and hospital specialists, with some rare exceptions, look first at the results of biochemical or technical assessments and fail to give importance to other factors. They consider the person in terms of a biological interpretation of clinical pictures and look to empirical indicators or to biological therapies as complete solutions. They do not help in changing quality of life. To be sure, the adoption of only a biomedical approach to clinical decision making is not only not human, but scientifically wrong. The Media typically portrays the image of an omnipotent physician who through biotechnocracy, enters into and controls the mystery of life and death in order to determine it, not a

humble ally of suffering people who uses modern technologies and much more, to create possibilities to heal persons. Physicians should be motivated to build truth and love as possibilities for the weaker person, to be his protagonist and to accompany him on the human and mysterious adventure that is life. In opposition to a biomedical reductionism, physicians should be prepared to discover "with" suffering people, a new existential reality which could change also the same physician's quality of life. An attitude to change from this existential perspective is the physician's first resource. The physician's mission involves a mysterious entrance into deep mysteries: life, health, disease and death. We can depict them, but not comprehend their meaning, with a scientific-empirical approach. Greater understanding can be revealed only by contact with persons-patiens, using a new clinical method, phenomenologically oriented. Causes must not be confounded with "meaning": the divine Aristotle's "ousia". In this sense, medicine is a metaphysical profession which finds its substance in the suffering person. The paradox is that medicine presents itself as the "suffering science", but this kind of "science" is impossible, because suffering is not an empirical concept, to diagnose with computerized tomography or biochemical tools. Medical culture, medical schools and physicians must recover their irreducible ethical and existential mission against a technical conception of life and death [39].

To date, actions against life, normalized in many countries, such as pregnancy interruption and euthanasia, equate the value of individual human life to a "pill" (RU486), indicating a sunset of an objective ethics and revealing, perhaps, the loss of an understanding of objective meaning by the health professions. Moreover on a traditional level, it is startling that many physicians have an ideological approach, without any concern about the well documented psychobiological consequences of these non-medical acts for persons. Pregnancy is not a pathology to heal. Medicine has become submitted to a relativistic sociology, the tool of a psychosocial adaptation of people. There is widespread clinical reductionism in medical practice (Table 1) and Person-Centered Medicine, with its epistemological force and its human identity, is the right paradigm for winning a battle against ignorance, ethical reductionism and false conjectures about medicine and medical science. To date, clinics are characterized by a distance between doctor and patient. There is a sunset of prevention, a genomic imperialism while its limitations are well known, the enhancement of drug prescription and technical examinations and a closure of health systems due to financial problems and rationalizations toward a financial and market domination. In opposition to these developments, the new PCM paradigm involves body-mind and spirit in the person's teleonomia toward a real person identity, characterized by freedom and dignity. The clinical method is a tool to allow this natural tendency, like "an enzyme", not only a tool to asses a clinical picture or a pharmacological therapy.

In 1998 in the Conference promoted by the Italian Society of Adolescentology and the Adolescentology Department of Ambrosiana University: "The physician and the adolescent person", the author of this paper presented the "Person Centered Clinical Method" which, starting from the previous Medical Counselling Method, was a structured step by step clinical method which integrated the traditional one, and aimed to realize in clinics new epistemological applications. During the same year, the "Person-Centered Medicine Manifesto [40] was formulated and presented at the inauguration of the Ambrosiana University Academic Year as the epistemological basis of all the basic sciences (interactionism) and all the clinical courses of the Ambrosiana University Milan Medical School. The Manifesto presented the Person-Centered Medicine Paradigm and founded medicine, medical science and medical education on new principles indicating these as necessary knowledge objects of Medicine. These eight principles are as follows:

TABLE 1

INTRINSIC EPISTEMOLOGICAL PRINCIPLES OF MEDICAL PRACTICE AT 1998 AND OF CONTINUING RELEVANCE TO DATE

- LOSS OF THE OBJECTIVE AND ETHICAL FUNDAMENTAL BASIS OF MEDICINE
- RADICAL CARTESIAN DUALISM
- BIOMEDICAL REDUCTIONISM
- DETERMINISTIC EMPIRICISM
- FRAGMENTATION OF INDIVIDUALS WITHIN BIOLOGICAL SYSTEMS
- S-R EPISTEMOLOGY

1. The person's teleonomy (the natural tendency to search for a meaning in life and for self-fulfillment) which urges in Medicine, a rehabilitation of the traditional Hippocratic and Christian medical ethics tradition.
2. The three-dimensional structure of the person, introducing the clinical and scientific consideration of the relations between biological, psychological and spiritual variables, seen as determinants for health or disease construction.
3. The necessity of considering health as a individual qualitative work based on the person's three-dimensional protective factors, an action addressed to neutralize or cancel risk factors. Health is not a mechanicistic result of an impersonal balance outside of the person's world.
4. The definition of Medicine as a mission addressed to (a) care, (b) cure and (c) to study the sick person and not the opposite "c-b-a", introducing a new existential concept of prevention such as, "providing possibilities" for individuals.
5. The individualisation of the individual, and with reference to the three dimensional resources of the person as the priority objective of the clinical method. Clinical

pictures are defined as the result of a person's cohesive body-mind-spirit teleonomic interaction.
6. The dangerous deficiencies that result when the person's three-dimensional conception is omitted in clinical and scientific work.
7. The necessity of medical education: (a) to teach ethical possibilities and (b), to teach the epistemological fundamentals of medical science, theories and studies as they relate to healthy and sick persons within their cultures and social contexts
8. The necessity to achieve methodological rigour in biomedical research and clinical work, introducing and simultaneously considering biological, psychological and spiritual variables.

The Person-Centered Medicine Clinical Method [41] develops the traditional one with the formulation of new clinical methodology embracing what Brera has termed "Diacrisis", a Greek word meaning "discernment" (Table 2). The "Diacrisis" time starts with the creation of an "Anthropic effect" at the beginning of the clinical relation-

TABLE 2

DIACRISIS

1. **GENERATION OF THE ANTHROPIC FIELD (ACH) (Generation of the Acceptance-Comprehension-Help affective field)**

2. **PERCEPTION AND ASSESSMENT OF EMPATHIC PHENOMENA**

3. **BUILDING A PERSONAL RELATIONSHIP**

4. **LISTENING TO THE PERSONAL PROBLEM INTERLOCUTORY BEGINNING**

5. **CLINICAL EPOKE**

6. **THE PERSON DIAGNOSIS: ASSESSING THE PERSON'S STRENGTHS, WEAKNESSES, RESOURCES AND PROBLEMS ON A THREE-DIMENSIONAL LEVEL**

ship corresponding to the physician's affective disposition to accept, comprehend and help the person in front of him. After this, the "diacrisis" clinical objective is the "Person's diagnosis" which comprehends the person's empathic assessment finalized to discover a non-verbally transmitted person identity "revealed" at that moment (empathic diagnosis). Here, gathering information about existential resources and possibilities (protective factors), clinical problems to date and from the past, exploring significant values, interests, spiritual life, relations and affects, coping styles, quality of life and habitudes, physiology, giving importance to the dynamics of resources and problems and identifying the patient's strengths and weaknesses are all of fundamental importance. The person's diagnosis is assessed by building a cross/ratio between the person's strengths and weaknesses, resources and problems to date and in history with a three dimensional approach depicting protective factors and risk factors and giving structure to the operational concept of resilience (protective factors action) and vulnerability (risk actor action). The person's diagnosis is re-assessed after physical examination and the time that is required to update the cross model, which shows the dynamic between resilience and vulnerability. The "SMRP Cross Model" offers many inputs to research and Diacrisis must clearly be adapted to the acute symptoms presented. In emergency situations, attention must be given firstly to biological survival problems, without omitting Diacrisis when the patient is conscious. In emergency psychiatry, Diacrisis can be applied if there is a relational possibility and the first aim is to create possibilities for it. The education of the psychiatrist in PCCM is very important. The question which allows PCCM application is "*Who is the person I'm in front of?"* and not "*What is the patient presenting with?*". This is the first principal learning objective and it asks for the physician to overcome diagnostic anxiety as part of clinical picture assessment. The concept of the "person" comes before that of "the patient". This distinction is postponed in emergency situations when the principal aim is an urgent assessment of a life threatening condition, but if the patient is conscious, the anthropic field production is necessary, because such an effect transmits positive emotions, which immediately modify allostatic processes and gene expression. The existence of a "subtle energy", transmitted through emotions, affects and healing intentions behind space-time dimensions and transmitted faster than light speed is exciting increasing interest, even though its basic principles and mechanisms of action are far from universally recognized or well worked out and remain largely conjectual. This kind of energy, anticipated by Max Plank in 1944 and described by Tibetan Monks, (they call it "compassion") and St Paul (Charity) is suggested as capable of modifying DNA electrical charges and cell replication. These first, courageous and original investigations opened new fields of knowledge [42]. These types of studies are consistent with investigations on the relationship between coping and epigenetics. The "placebo effect" documents well an evident relationship between affects (hope-trust) and biological variables, enabling a deeper understanding of the clinical phenomenology of, for example, Lourdes, where the existence of a true mystery between the person's subjective phenomenology (religious faith, suffering, death anguish, trust, hope) and disease, like a third intervening variable, between subjectivity and clinical picture, is empirically evident [43,44].

The major difference between the PCCM and the traditional method is that the PCCM already constitutes a therapy, because it at the same time acts at a spiritual, affective, emotional and biological level through the Resource-Problems analysis (Cross model), allowing the person to reveal himself to another person, becoming aware of his own life-constituting work, to which also his clinical problems belong and to begin a quest to discover and build his own new personal reality through an

existential change, probably related to pathogenesis, beginning with symptoms presentation, almost as products of his bodily or mental suffering. The higher purpose of PCCM is to consider a disease like an existential event that could open new possibilities for the person if physicians are able to do a "maieutical" operation. The "Haec cum ita sunt" Person-Centered Clinical Method is thus a maieutics of the person, from an individual human biopsychosocial nature, not an adaptation, which means the birth of a new human reality. A problem of every nature, is a call for life, where "life" is intended to be the fulfilment of the noble destiny of truth, love and beauty, discovered from adolescence. Clinics hide this transcendent meaning of life present in all persons. The concept of "Restitutio ad integrum", as the principal objective of clinical acts, is obsolete and wrong. The healing process is a constructive work to enter into with the patient, creating new possibilities such as spiritual, affective, relational and biological resources. This is the meaning of the "therapeutic alliance". The Person-Centered Medicine clinical epistemology is consistent with the new medical epistemology. The PCCM model poses new questions for clinicians:

1. How does the person relate with close people, the physician(s) and the caregivers (empathy, diagnosis and verbal communication), his symptoms-symbols and the environmental stimuli he receives. How do we understand the emotional and affective world of the patient, his work, interests, ideals, aspirations, the inner and outer conflicts? Estimations of limits and possibilities are information and necessary for the person's diagnostic process. The clinical objectives are assessment over time and therapy.
2. How does the person answer or not answer to the existential call to his noble human destiny (truth-love-beauty): the meaning he is giving to his own mystery and the mystery of life?
3. How does one interpret the person's spiritual, cognitive and affective symbolic world and perceived internal and environmental stimuli?
4. Which is the relationship between the clinical picture symptoms and symbols and environmental stimuli and the person's subjectivity, life philosophy and quality? (Medicine cannot be reduced to Psychology or Sociology).
5. What is the hypothetical meaning of his disease at that moment of his life?
6. How can the person's biological variables be related to subjectivity and how do they influence his behavior?

This operation generates hope, an important health protective factor.

After Diacrisis PCCM, the next steps are the physical examination, conducted in an interlocutory way and with attention to the patient's word, the general clinical assessment, defining eventual diagnostic further steps addressed to define the clinical picture, the three-dimensional clinical plan assessment, the clinical "portrait", which is a clinical synthesis of the precedent clinical steps starting from empathic phenomena depiction. Clinical follow up measures the extent to which clinical objectives are realised.

TABLE 3
THE PERSON-CENTERED CLINICAL METHOD

1. DIACRISIS: (GIVING BODY TO WORD)
Anthropic effect (generation of a feeling of acceptance, comprehension, help). Person Diagnosis "Who?": Empathic assessment, Clinical Epoké, Maieutics and analytical method (cross ratio) addressed to assess Resilience – Vulnerability in a three-dimensional cross structure (Mind-Body-Spirit) in a SP-R-M-P dynamics – (Cross model) – biographic anamnesis with the historical analysis of life positive and negative life stressors (Semantic-symbolic procedure-development of maieutical and analogical skills)

2. PHYSICAL EXAMINATION (EMPIRICAL "What?")(GIVING WORD TO BODY) (Semantic-empirical procedure with attention to symbolization)

3. CLINICAL SYNTHESIS: "WHO, WHAT, WHY?" MEANING: "What for?"
Evaluation of hypothetical relations about the person subjective resources and three dimensional problems or menaces evidenced by person diagnosis leading to an hypothesis about the interaction between protective (resilience)and risk factors (vulnerability). This step must teach the integration between maieutical-analogical-hypothetico-deductive skills)

4 ASSESSMENT OF CLINICAL OBJECTIVES (AN UNDERSTANDING DERIVED FROM PHYSICAL, BIOCHEMICAL AND TECHNICAL EXAMINATION)

5. CLINICAL PORTRAIT

6. PERSON-CENTERED THERAPEUTIC PROGRAMME
That comprehends Medical Counselling (after education in PCCM)

7. CLINICAL ASSESSEMENT OVER TIME

Educational Programs

In 1998, before the move to develop a Medicine degree, oriented to the PCM paradigm, the Milan School of Medicine dedicated its medical education plan to form physicians in postgraduate courses, teaching the Person-Centered Clinical Method [45] (Table 3) and Medical Counselling, taking into account that PCM introduction into clinical activity of one generalist or pediatrician was intended to give an important contribution to the health of 1500 and 800 people, respectively. This action fits very well with the WHO concept of "People Centered Care". To date, in the Milan School of Medicine, there are three curricula years dedicated to teaching Person-Centered Medicine and Medical Counselling, with a particular attention given to Adolescents, according to the PCM paradigm and PCCM Clinical Theory, forming a practical training in the Person-Centered Clinical Method.

Physicians, through a step-by-step teaching method, began to apply PCCM, gradually integrating it with and modifying the traditional clinical method. A two year international course has been recently founded. In 2003, the educational procedures were inserted into the University Quality System. Assessment method of PCM learning were applied from 1999. A three year program to form clinical teachers in Person-Centered Medicine, a Licentia Docendi Diploma, was instituted. Educational procedures received quality certification in 2003. For the first time in medicine, clinical teaching received a quality certificate. From 2003, international courses to educate clinicians in the Person-Centered Clinical Method were organised.

Learning is both is theoretical and practical. On a theoretical level, the general learning objective is to teach the new interactionist teleonomic understanding of human nature and medical epistemology, new operational concepts and the PCM and PCCM theoretical structure. (Table 4)

TABLE 4

PCM THEORETICAL LEARNING OBJECTIVES TAUGHT IN THE MILAN SCHOOL OF MEDICINE

a. Epistemology and new interactionist medical principles of medical science based on Psychoneuroendocrine-immunologypsychophysiology and the theoretical elaborations: Relativity of biological reactions (RBR Theory, Allostasis, Epigenetics and other modern theoretical contributions.
b. Teleonomic principles of human nature and health enunciated by Anthropoanalysis, and not reductionist Psychoanalysis, Logotherapy, American Humanistic Psychology and Phenomenology applied to clinics.
c. Kairology, which depicts a mysterious teleology in human life revealed to humans from adolescence. Here, questions of love, truth and beauty, the conceiving of existence as a mysterious revelation of the human being and consequently disease and suffering as a mysterious, dramatic and ontological subjective possibility for experiencing an objective meaning (love and truth) in own individual life all become of fundamental importance.
d. A New Health Paradigm and operational concepts in medical science like Resilience and Vulnerability, Protective Factors *versus* Risk Factors and their implications for diagnosis.
e. Person-Centered Medicine Manifesto, Person Centered Clinical Method Manifesto and Structure (PCCM)

On a practical level, the general learning objective is to teach the Person-Centered Clinical Method. (Table 5). The PCCM steps are taught in three phases corresponding to three years of learning procedures [46]. Physicians learn the "Diacrisis procedure", generating, perceiving and modulating the PCM positive "Anthropic field" made by the "Acceptance-Comprehension-Help" attitude and the "Empathic Assessment" applying the "Analogical Thinking". They learn to "put into commas" (Clinical Epokè) the empirical "diagnosis anxiety" (if there is not a biological emergency) and to learn the art and method of the "person diagnosis", to conduct a physical examination and how to interact with the person and to apply three-dimensional findings in the "Cross Model" form, studying resilience and vulnerability. They learn how to formulate a "Clinical Hypothesis", studying the interaction of environmental–subjective-biological variables and how to develop "Person-Centered Clinical Objectives" (using variables belonging to Mind-Body and Soul) and a "Clinical Synthesis", defined as a "Clinical Portrait". "Soul" is understood here as the quest for an existential meaning and religious faith is considered as a subjective existential resource (protective factor). Physicians learn to apply the PCM clinical sheet. Learning assessments are conducted each year: In the first year there is the *Theory and first PCCM phase*. In the second year there is the *second PCCM phase* and in the third year the *third PCCM phase*. That teaching method is concurrent with training and consists in role playing organised by a trained or in-training clinical teacher (in this case under the "Magister's" supervision). Case reports presentation and discussions on-line are employed as part of the assessment method. The final examination with a dissertation on a clinical case is preceded by the PCCM clinical skill assessment with a standardized procedure.

TABLE 5
THE PHYSICIAN'S NEWLY DEVELOPED SKILLS IN PERSON-CENTERED MEDICiNE

Development of analogical skills for inner perceiving and assessing the use of empathic phenomena and the embrace and development of the clinical relationship (cf: the mirror neurons development).

- The ability to identify, using the history, clinical events as the result of the interaction of environmental-relational-subjective-biological variables, modulated by the person and concurrent in constituting health quality and quality of life.
- The ability to perform the physical examination, giving full attention to the person's word
- The ability to understand the maieutics of resources, possibilities, the antagonists and problems dynamics in a clinical dialogue and the ability to build the individual, structured cross model of the interaction between protective/risk factors.
- The ability to constitute an individual person-centered diagnostic hypothesis procedure and clinical plan, integrating subjective - environmental - biological variables.
- The ability to describe the person diagnosis result, clinical hypothesis and objectives integrating a literary depiction with clinical style.
- The Ability to fulfill the Person-Centered Medicine Clinical Sheet

In 2002, the first investigation of the effects of PCCM learning in medical practice was conducted with striking

results [47, 48]. The aim of this study was to investigate the first application of the Person-Centered Clinical Method by a three year trained physicians sample. It was a descriptive pilot study. 20 Physicians (7 medical practitioners, 6 paediatricians, 3 hospital doctors, 4 private doctors) agreed to complete a questionnaire on "PCCM Quality in Medical Practice". Answer rates relating to the perception of a change in medical practice and the associations with the physician's role were studied with descriptive statistics and cross tabulations. Physicians stated that PCCM improves patient's understanding (95%) and patient's quality of life and health, (75%), avoids useless examinations and drug prescriptions, (70%) avoids unnecessary hospitalizations (55%), but requires more time to dedicate to patients (55%).

The effectiveness of the PCCM in avoiding useless examinations and drug prescription is significantly associated to medical role (P=0,02). Medical Practitioners (100%) and paediatricians (85%) declare that PCCM is effective in avoiding useless examinations, drug prescriptions and unnecessary hospitalizations.

TABLE 6

ITEMS	%
Permits a better understanding by patient of his problems	95
Improves the finalization of specialty referrals and technical examinations	30
Saves useless examinations and drug prescriptions.	70
Spares unnecessary hospitalizations	55
Reduces hospitalisation times	10
Improves professional realization	40
Is effective on patients' quality of life and health improvement	75
Reduces doctor -dependency	45
Creates new possibilities for research	30
Shortens improvement times	30
Necessitates more time to dedicate to the patient	55

TABLE 7

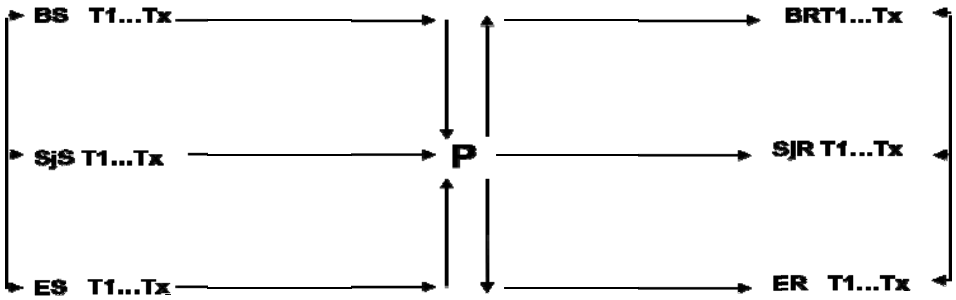
	Paediatrician trained	Differences in % with other Lombardia Region, Italy Paediatricians
N° of drug prescriptions	420	-77,33
Prescription/beneficiary	0,42	-76,21
Total Cost (euro)	6.208,97	-89,05
Cost per capita	6,28	-88,5
No. of items prescribed	590	-82,10%
No of items per capita	0,6	-80,45
Mean value of items	10,19	-99,99
Mean value of prescription	14,78	-51,67

There is general agreement about the necessity and importance of learning and recommending the PCCM. This investigation, where results were presented for the first time in 2003 [49], demonstrated that PCCM leads to true medical practice quality improvement (Table 6). Data assessments by the Lombardia Region analyzing drugs prescriptions confirmed the described reduction of drug prescriptions in an extraordinary way, giving strong support to the argument that the more widespread adoption of Person-Centered Medicine could lead not only to the improvements in the patient's wellbeing, but also to important financial savings in health systems (Table 7). A major obstacle to the progress of the PCM revolution, according to the Ambrosiana University program, is to form clinical teachers and tutors who are able to apply PCM and PCCM in clinics and to teach it in pre- and post-degree courses.

Conclusion

At the time of writing, and failing to take into account epistemological knowledge, medical schools, with the exception of the Milan School of Medicine, cling to an intrinsic bio-medical paradigm producing biotechnocrats, whose knowledge and formation does not include a "Real", "Vera" and "Véritable" interpretation of human nature. A disease means a change in existence and research for an objective answer to it should be based on a scientific interpretation entrusted to RBR Theory, Allostasis, Epigenetics, psychoneuroimmunology endocrinology and Kairological human nature hermeneutics. The problem is the general absence of teachers, all over the world, prepared to teach Person-Centered Medicine. The birth of the Person-Centered Medicine International Academy will help to address this need. New journals like the *International Journal of Person-Centered Medicine* and *the Person-Centered Medicine International Journal* (published on-line by the Universita Ambrosiana) and continuous and sustained efforts [50] will build a culture which assures progress. The person is an irreducible end and the object of all human actions. We must continue, with vigour, to communicate this new truth about Medicine and Medical Science.

Fig 1 The person-centered health Interactionist-indeterministic-constructivistic model



P = the Person
BS = Biological Stimuli;
BR = Biological Reactions (eg. gene expression)
SjS = Subjective Stimuli (eg: quality of coping, emotions, affects, behaviors, values).
SjR = Subjective Reactions
ES = Environmental Stimuli
Educational, environmental variables [non controlled by individuals] eg: quality of parental care - culture-religion- natural, environmental, social and political events
ER = Environmental Reactions
T1…Tx = time 1…time x x = the unpredictability constant
T…Tx = indicates the assessment of variables during the person's lifetime. The direction of the arrows indicates the action of variables on the person and the person's action on the variables.

The model has been corroborated by neurobiology, physiology, epigenetics and psychoneuroendocrineimmunology.
The epistemological model is "interactionist" because the objects to investigation are simultaneously variable in interaction belonging to biology, subjectivity and environment. The model is "indeterministic" because phenomenology of variables' perception, necessary for the hypothesis generation, belongs to existence and is unpredictable. It is "constructivistic" because the person directly acts on the interactions of variables and is reciprocally changed by them. In humans, health appears more a construct than a determinate adaptation to pre-existing variables.

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