

# Disease is an Alteration of the Patient's Relationships Matrix: Implications for the Diagnosis in Family Practice

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## Abstract

*This paper investigates and reflects on the biopsychosocial concept of disease from the point of view of the general practitioner. What is the disease? The disease is a relational concept. The disease appears between the person and their relationships with the contexts; there are not isolated contexts. The disease depends on individual contexts and in turn produces consequences in contexts: social, cultural, economic, environmental and political in which it occurs. The disease (not only the mental) is impossible to be located and framed in the purely individual. The degradation of a living system (i.e., disease, aging, etc.) that occurs over time is primarily the result of a breakdown or reduction or dysfunction in the interconnections of its network of relations. Individual health is an expression of sick relationships or connections. Patient is the spokesperson of a sick relational structure (family conflict, social conflict, etc.). Therefore, to make the diagnosis in general medicine is to consider: which relationships are broken or distorted? In whom this situation occurs? At what time, with what sense, in what structure of the personality, what is the function of the symptomatology, in what context, and with what actors? And in this way, the units of analysis of the consultation in general medicine should be the relationships, connections, or "links" between actors. Health problems (bio-psycho-social) can be conceived as a result of the blockage in relational processes (structural, strategic, narrative and construction of the meaning of experience). The treatment is based on the re-learning of patient communication with itself and with others, of an adjustment of significant relationships.*

**Keywords:** *General Practice; Family Practice; Framework; Sanitary Attention; Diagnostic Techniques; Symptom Assessment; Biopsychosocial; Ecosystem*

## INTRODUCTION

From Einstein and relativity we know that the understanding of the world is not as a network of events, but as a network of relationships. And this also has implications in medicine. But, what is the implication for the doctor of this relational concept? What is the real purpose of medical work? Is it the body of the individual isolated? No. The real object of the doctor's work is the "social" body, which is formed by:

1. The living bodies of people in relation
2. The body in significant relation to others

Understanding the diseased body within the framework of its social referents changes:

- A) The focus of diagnostic and therapeutic procedures
- B) The attitude with which the doctor will face the relationship with the people in his care
- C) And, doctor's attitude regarding their insertion in the social process

Since life emerged on the planet 3.5 billion years ago, organisms have entered into a co-evolutionary, dialectic relationship with their environments in which each changes the other. Although modern humans evolved about 120,000 years ago, the qualities of ecological change created by population growth and technological achievements throughout the past

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several centuries, accelerating in the past fifty to one hundred years, are unique and deserve a closer look (1).

The world is composed of nested systems. Each individual human being can be considered as a unique system. However, humans do not exist in isolation. They are embedded or nested in other systems: The family / home system, The neighborhood system, The workplace system, The local system, The region system, The nation / state system, The system of supranational agreements (for example, the European Union), the global social system, and the system formed by all organic life ("Gaia" - "The Earth goddess" of the Greeks, from which the theory of the system takes its name global life). Ecosystems are connected. In an ecosystem, matter and energy are constantly being transferred from one location to another. An ecological perspective on health emphasises both individual and contextual systems and the interdependent relations between the two (2, 3).

The individual is a continuous whole made up of interdependent parts. Living matter always tends to group itself in closed, independent, harmonic systems; but these systems are never completely closed, nor is their independence ever absolute (4).

There are so many interactions in an ecosystem that can not be easily enumerated. Plants can interact with plants, e.g., two plants compete for sunlight, water, space, nutrients, minerals, etc. Plants can also interact with animals, e.g. a herbivore (animal that eats plants only) eating a plant. Animals can also interact with other animals, e.g. a sea anemone gives clownfish protection, and clownfish gives sea anemone food. Plants can interact with other organisms, e.g. a plant provides a fungus with sugar-rich compounds like glucose, which can be used as food, and fungus absorbs water and minerals from the soil for plant. Animals also interact with other organisms, e.g. humans getting sick from bacterial infection.

The health of the individual is not just a matter of factors in their own unique system.

The health of an individual is formed through interactions between that system itself and the other social and ecological systems in which it is "nested", "related". Related systems do not imply a one-way hierarchy. The actions of individuals affect the social

and environmental systems. Similarly, the actions of social communities extend beyond their internal structure and influence the systems in which these social communities are nested (5).

For example, in clinical medicine, asthma prevention usually focuses on avoiding exposures to well-established asthma triggers subject to individual control such as cigarette smoke or dust mites in the home. The healthcare sector, however, is often silent about more socially determined factors such as outdoor air pollution, engine or incinerator emission standards, housing quality, city planning and traffic flow, stress, or labor standards that influence occupational exposures to astmagens over which individual employees may have little control. Some kinds of cancer (e.g., prostate, brain, pancreatic, lymphoma, leukemia) are repeatedly positively associated with pesticide exposure in epidemiologic studies, although details of individual susceptibility and mechanistic understanding are limited. Despite overwhelming evidence of the importance of diet and nutrition for human health, many healthcare facilities ignore obvious opportunities for modelling disease prevention. The importance of social class and economic status as determinants of health is undeniable. Disparities in health outcomes across social class are not fully explained by individual risk factors such as diet, smoking, and exercise. Rather, lower social class is independently related to poorer health. Similarly, stress is independently causally related to a variety of adverse health outcomes. Yet, the ways in which these variables impact the pathophysiology of disease are often insufficiently understood to attract the intentional intervention of clinicians or healthcare facilities on a community or societal level (1).

There is therefore the metabolic concept of the interaction between man and nature and the creation of a social environment from a theoretical, scientific and ethical perspective (6). Ecological problems require a revolution in medical thinking. The basic ideas of the research methodology and the social application of traditional forms of medicine in society must be re-examined, replaced, elaborated or specified. In this stage, this article reflects on the concept of disease as an alteration of the patient's relations matrix and its implications for the diagnosis in general medicine

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### DISCUSSION

What Is Health? Some people think of health as the absence of disease. The World Health Organization says that "health is a state of complete physical, mental, and social well-being and not merely the absence of disease." The Institute of Medicine (1988) says that public health is "what we as a society do collectively to assure the conditions in which people can be healthy." An ecologist might define health differently: health is the capacity for self-renewal; health is to being connected, related with context. The word health comes from the same Indo-European root as heal, whole, and holy. To be healthy is to be whole. To heal is to make whole (1).

What is the disease? The disease is a relational concept. The disease appears between the person and their relationships with the contexts; there are not isolated contexts. The disease depends on individual contexts and in turn produces consequences in contexts: social, cultural, economic, environmental and political in which it occurs (7-9). In this sense, numerous examples are known: emotional distress increases the susceptibility to organic diseases: stress increases the susceptibility to viral infection; Stress due to lack of control at work or in events of daily life increases susceptibility to cardiovascular disease; emotional distress can lead to organic disease by affecting the immune response; etc.

It is not the human being that communicates; it is the social system that communicates. It is a system of meanings. Illness is a system of interpretation; and to understand the disease we have to see a system of relationships. The emotional response expressed by the patient has the effect of a linguistic transfer of social complexity to psychic complexity. We understand the clinical encounter understanding the activity of the social system rather than understanding the patient and the doctor. The clinical encounter represents two different and separate worlds, one from the doctor's perspective and the other from the patient's experience. The disease is expressed as a contrast -not as an own and unequivocal entity, but as a contrast between systems of relations-, as in painting a contour, a line, appears from the contrast between two colors instead of how a line really drawn. And this contrast expresses a "defect," "deficiency," "deficit," or "conflict." (10, 11).

The experience of the disease is different from the pathology classified by the doctor. It's like when we throw a stone into a calm pond; waves form on the surface of the water from the subjective experience of the person towards his family and friends, and depending on the intensity of the initial blow, they can also get to work, school, church... And if the impact was big enough, or perhaps the pond small enough, the waves can hit the edges and overcome them which could cause a dysfunction in the body politic produced by the multiple waves of the initial blow, which no longer maintain their original elements. That is called "disease" (12).

Sick people are the product of a sick culture. General practitioners (GP) / Family doctors should reject the simplistic distinction between illness and health, at least as far as apparent signs are concerned: Does disease mean having symptoms? The disease may very well consist of having no symptoms when they should be had. Does health mean being free of symptoms? Imagine a historical example: What Nazis were healthy at Auschwitz or Dachau? They were healthy those Nazis who felt anguished in their conscience or those who possessed their conscience fresh, clear and happy? Was it possible that a person could not feel deeply in such circumstances conflict, suffering, depression, anger, etc.? (13, 14).

The disease (not only the mental) is impossible to be located and framed in the purely individual. To do so with greater understanding, the disease must be located within the general group or relational scope. The group (family, community, etc.) as a unit or system that is who is sick. And the patient who consults does not always represent the most serious sick in that relational group, but is the spokesman and exponent of the "group disease." The functional anomalies in the group relationship (relational anomalies) are those that originate the disease (mental or organic). But the group (family, community) is like a coin with two faces. On the one hand, there is their ability to be pathogenic, and on the other, their capacity to cure the disease or to produce health. Even in very dysfunctional families they can have healthy resources.

There are three levels of phenomena involved in the interaction between the individual and the group (which are not different phenomena, but facets of the life process, and function as interconnected parts of a system with feedback):

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- 1) The internal organization of the personality
- 2) Interpersonal relationships
- 3) And the structure of the environment

Therefore, for the GP, it is not the stomach, the liver or any other organ the patient, but the totality of the individual. But in addition, that individual is in a context (physical, social...). Only through a conception of this nature is it possible to achieve not only a total and basic understanding of the patient and his illness, but also an effective, rapid and decisive resolution of his recovery: the disease is significant and, therefore, has to be have a meaning. The access to it and its clarification is the best way to achieve the resolution.

Doctors are reluctant to accept diseases without anatomopathological basis. The disease is initially defined by the patients (due to their experience, their symptoms), but these are not accepted as valid if there is no visible anatomical anomaly. The holistic view (the view that the subjectivity of individuals contributes to the form of the disease) is still in conflict with continuous ontological view of the disease (the disease exists as an ideal entity independently of the individual patients) of it (15, 16).

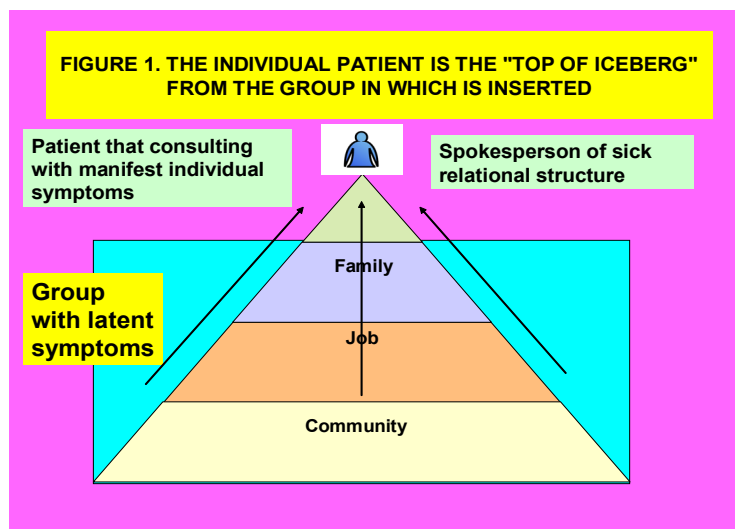
For the GP it is fundamental to be attentive to the relational context in which the person lives. In no way can this decisive variable be ignored in the constitution of the subject. Humans are not in a vacuum, we are in relation to others. The existence of the human being depends on its possibility of interaction with other human beings. Therefore, to make the diagnosis in

general medicine is to consider: which relationships are broken or distorted? In whom this situation occurs? At what time, with what sense, in what structure of the personality, what is the function of the symptomatology, in what context, and with what actors? (17).

The diagnosis in general medicine requires us to have a panoramic vision: to see the patient as emergent of the group (family, community, etc.). It means the meeting of two visions (18):

- 1) The verticality of the patient (his individuality understood as personal history)
- 2) And the horizontality of the family group (history, myths, relationships)

The GP must locate the symptom within its relational context. "Being" means "being related", and "being related" means building those relationships. The individual patient is the "top of iceberg" from the group in which is inserted (**FIGURE 1**). The transactions and correlations between the pathological parts of the individual as such, the family group in which he develops (within two inseparable parameters, one synchronic and another diachronic), and the environment or group in which the group takes root and coexists, are a "latent material", which may be more visible at the time of a holistic understanding of the specific pathology that, in principle, is presented only as a "manifest material", which is the reason for the consultation, and which seems to be an individual biologic problem (19-21).



**Fig 1.** The individual patient is the "top of iceberg" from the group in which is inserted

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The GP must take into account the concept of "Network or Matrix of Relations" (22): in the living systems there is a circular repetition of information, so that it is repeated again and again, or progresses step by step, originating a spiral of communication or ideas. To describe a living organism is not to specify each molecule in it, and catalogue or classify it piece by piece (by organs ...), but we have to know its "pattern" or significant set. For that it is necessary to know the "critical variables." To speak of "evolution" of a system, is analogous to talk about change of relationships (23).

What does the GP need to know about that "Network or Matrix of Relations" (family, community, actors, etc.) in terms of health? It is not about collecting and organizing the almost unlimited data that can be obtained from the "Matrix of Relations." An orientation for this is summarized in finding "the system that

defines the problem", which means the set of people affected by the problem, both in terms of problem maintenance (cause) and in its changes (treatment). A central notion is how the personal, cultural and social structures of the network of relationships in their context adapt to the demands of care of the sick person. For the GP, not looking towards the patient's "Network or Matrix of Relations", implies not being conscious of a basic law of Nature: the "American billiard ball" effect. Human behavior cannot be explained only in linear and individual terms. The context of the "Network or Matrix of Relations" (family, community, actors, etc.) is relevant to understand the behavior of its members in the same way that a pool table contains balls that affect others, through their contact with each other. Thus, some actors and contexts affect the health of their members and are affected by them (7, 24) (FIGURE 2).

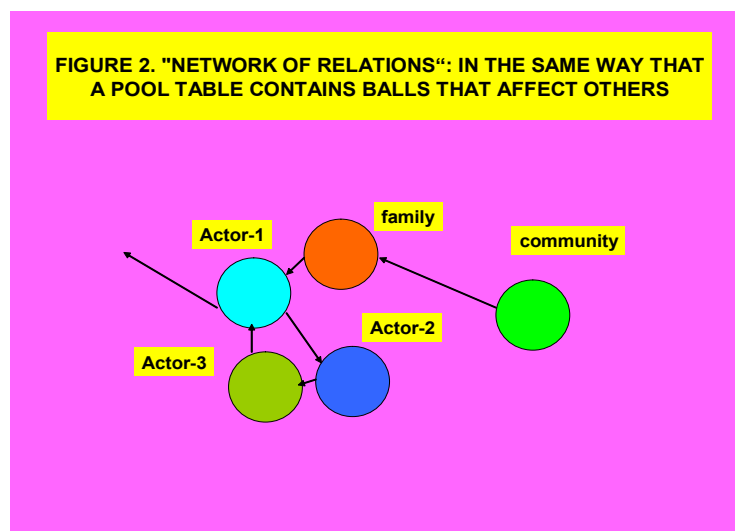


Fig 2. "Network of relations": in the same way that a pool table contains balls that affect others

In this way, the medical intervention that tries to solve or manage a health problem must be directed and depends essentially on a re-learning of the patient's communication with himself and with others; that is, an adjustment of the significant relationships in each of the stages of our life cycle and of the network or matrix of significant relationships (25). Remember that what is traditionally called, only with pedagogical character, individual, family and community attention, are entities or concepts that do not exist as such; they are elements of the same reality, and cannot be separated. That is, there is no individual attention, but it is always at the same time family and community (20).

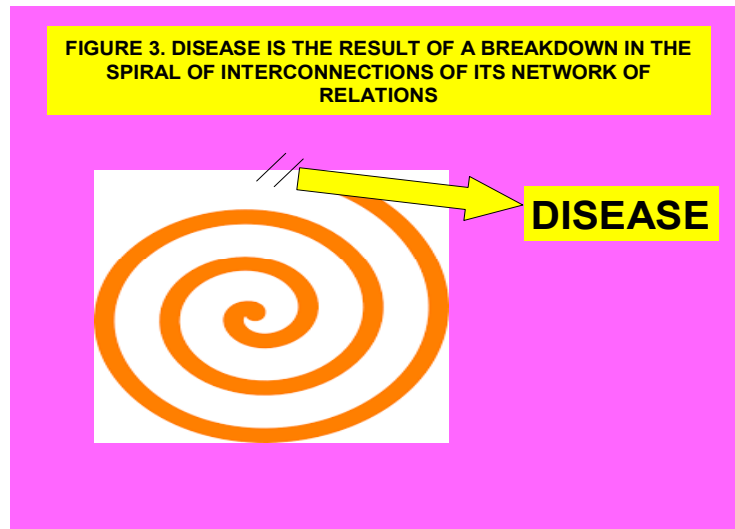
### CONCLUSION

Therefore, and in summary, the degradation of a living system (i.e., disease, aging, etc.) that occurs over time is primarily the result of a breakdown or reduction or dysfunction in the interconnections of its network of relations (FIGURE 3). Individual health is an expression of sick relationships or connections. The patient is the spokesperson of a sick relational structure (family conflict, social conflict, etc.). And in this way, the units of analysis of the consultation in general medicine should be the relationships, connections, or "links" between actors. Health problems (bio-psycho-social) can be conceived as

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a result of the blockage in relational processes (structural, strategic, narrative and construction of the meaning of experience). Health problems are not the exclusive domain of medicine,

although today they end up "in medicine". But its solution depends essentially on a re-learning of communication with oneself and with others, of an adjustment of significant relationships.



**Fig 3.** Disease is the result of a breakdown in the spiral of interconnections of its network of relations

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