

# Anthropological algology and bioethics

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## ABSTRACT

The importance of biopsychosocial factors in the genesis and maintenance of disease is increasingly being recognized. Most illnesses should be studied from a multifactorial perspective to facilitate understanding and treating them. Many psychopathological processes involve factors such as loneliness, hopelessness, and lack of social cohesion. As early as the nineteenth century, J.M. Charcot defined those illnesses in which no organic lesion was visible as functional disorders. Today, the anthropological view of illness known as the Heidelberg School provides us with a more global and comprehensible assessment of illness. The anthropological approach is complemented by a bioethical one, a bioethics of daily life which, as a practical science, studies and evaluates the living conditions of individuals, seeking practical solutions and contributing its reflections with deliberation and care. In this paper, we aim to highlight the most important factors that have an impact on illness by providing an anthropological view of illness and bringing bioethics closer to everyday life.

**Keywords:** Anthropology, pain management, bioethics, biopsychosocial interventions in health.

## RESUMEN

La importancia de los factores Biopsicosociales, en la génesis y mantenimiento de la enfermedad, cada día tiene mayor relevancia. La mayoría de las enfermedades deben ser estudiadas bajo un prisma multifactorial, para facilitar su comprensión y posterior tratamiento. En la génesis y en el mantenimiento de muchos procesos psicopatológicos, aparecen factores tan importantes como la soledad, la desesperanza, la falta de cohesión social, etc. Ya en el siglo XIX J.M. Charcot definió aquellas enfermedades en las que no se veía ninguna lesión orgánica, como trastornos funcionales. Hoy en día, la visión antropológica de la enfermedad, según la Escuela de Heidelberg, nos aporta una valoración más global de la enfermedad y más comprensible. La antropología, se ve complementada con la bioética, una bioética de la vida cotidiana, que, como ciencia práctica, estudia y valora las condiciones de vida de los individuos buscando soluciones prácticas y aportando sus reflexiones con deliberación y prudencia. En este trabajo pretendemos poner de manifiesto los factores más importantes que influyen en la enfermedad, aportando una visión antropológica de la enfermedad y acercando la bioética a la vida cotidiana.

**Palabras clave:** Antropología, algología, bioética, intervenciones biopsicosociales en salud.

The World Health Organization has defined biopsychosocial factors as “those environmental, social and cultural influences that affect people’s health and behavior” (OIT/CIE/OMS/ISP, 2002). This definition from 2015 confirmed the growing concern among the general population about the importance of these factors in people’s daily lives for both physical and mental health. There is no doubt that, throughout history, these factors have changed. The oft-repeated statement that life has never been better, more comfortable, that most people have a better quality of life clashes with the reality that there have never been so many psychiatric patients—adults, young people, and teenagers—as well as so many stress-related illnesses. It is also true that the concept of disorder introduced in the DSM-5 has influenced the medicalization of society, and that we may even end up, as the Argentinian psychiatrist Diana Campolongo et al. (2015) says, “considering boredom a disorder.” We must also consider that the new hybrid society (Lolas, 2022) of technologies and the human species favors the presence of certain somatic and mental pathologies, whose occurrence or increased frequency is linked to the use of new devices, for example, tendonitis of the index finger and rhizarthrosis, as well as back pain due to use of computers that are usually placed where they fit and not where they should be.

The morphotype of the human species has not changed for more than 300,000 years. Simpson (1944) defined “adaptive contingencies” as those changes that have been pivotal in human evolution and that have resulted, for example, in the frontalization of the eyes, the grasping hand, and standing erect. The internet, which precludes necessary intellectual activity and thus decreases neuroplasticity, could be acting as an evolutionary contingency of the brain as well as a promoter of psychopathologies. Perhaps new technologies are an evolutionary contingency that will have an impact on the somatic evolution of the human species.

Haanes et al. (2020), at the University of North Norway, has identified symptoms associated with environmental factors such as electromagnetism and other elements of the work environment. In Barcelona, we have been able to detect lipodystrophies on the front of people’s legs secondary to certain types of radiation at the desks of staff working in certain newly constructed buildings. Occupational risk factors have always existed, but they may be changing and increasing due to the presence of certain technologies.

In the 1950s, Lain Entralgo (1969) spoke of loneliness and hopelessness as causes of illnesses, which he grouped into what he called the hopelessness (*dyselpides*) syndrome. A few years later, Engel (1977), after working for twenty years in Rochester, reproduced what Lain had described, observing that 80% of his patients showed different clinical somatic patterns, which were all related to the suffering caused by loneliness or hopelessness.

Travel, migration, and the globalization of the twenty-first century produce a lack of social cohesion in many

people. Feelings of loneliness, boredom, hopelessness, and suffering in general trigger what Lipowski (1984) called “medically unexplained symptoms,” which are characterized by more or less florid symptoms without any organic lesion. Illnesses as common as irritable bowel syndrome, headache, dizziness, fatigue, fibromyalgia, and non-specific back pain belong to this group of medically unexplained illnesses that are secondary to stress.

Galileo said that the great book of nature is written in mathematical language. With this approach, biology and medicine have always tried to “mathematize” themselves in order to discover the causes and evolution of illnesses and their most suitable treatments. The 1980s saw the emergence of evidence-based medicine (Sackett, Haynes, & Tugwell, 1994), with the goal of fitting the biological data obtained from individual patients to mathematical and statistical laws. The American Statistical Association (Amrhein, Greenland, & McShane, 2019) and about 800 epidemiologists worldwide (Greenland et al., 2016) argue that these formulations of statistically significant data or p-values obtained from different mathematical models imbue studies with a false scientific tint, and that the results cannot be considered mathematically correct. In fact, no work has been published that proves the effectiveness of these statistical methods, as compared to works that do not follow predetermined statistical laws. Biopsychosocial factors and the difficulty of “mathematizing” them surely play a major role in this poor mathematization of medicine.

Zubiri (1934) noted that, since the discovery of quantum physics, there has been a paradigm shift not only in physics, but also in philosophy and science in general. Before 1900, nature was subordinated to theory, but since the emergence of quantum physics in that year, theory must be subordinated to medicine. Ascertaining the existence of biopsychosocial factors in the etiopathogenesis of disease forces us to reconsider not only person-based medicine, but also people’s ways of coping with disease. A good example of this paradigm shift is Lolas’s concept of “anthropological *algología*” (2020),” which calls for such fundamental factors as physiology, biography, values, and hermeneutics to be taken into account in the study of chronic pain syndrome.

Ethics is the part of philosophy that reflects on moral phenomena. Its aim is to establish concepts, formulate values, offer models, systematize theories, justify norms, and develop methods of application for problem-solving procedures. Ethics is based on the Kantian categorical imperative, which requires being able to want the same maxim for everyone that I want for myself.

Van Rensselaer Potter used the term “bioethics” within a global project, relating it to human value systems. In other words, it is about associating human life with ethics in terms of morals, customs, habits, and values. Ethics is not about principles or rules. In fact, according to Sánchez González (2021), philosophical ethics began to exist in classical an-

tiquity as an analysis of the virtues that lead to eudaemonia, i.e., anthropology and ontology.

The Royal Spanish Academy defines bioethics as: “A scientific discipline that studies the ethical aspects of medicine and biology, as well as man's relationships with other living beings.” It paraphrases Lolas (2002) —“ethics is the realm of practical reason”— and adds that it is “the study of value judgments that determine people’s behavior in relation to life and the techniques that affect it.” Taking both parts of this definition into account, we can say that bioethics envisages the study of social facts, their values, and their biological impact.

We can approach bioethics from three points of view: first, as a social process; second, as a procedure, thereby accepting different perspectives on what is proper, good, and fair; and third, as a process of publishing studies that can be debated but that aim to be universally valid.

In the same vein, we can speak of civic ethics (Sánchez González, 2021) as a secular ethics shared by the majority of citizens and linked to public opinion in the form of common concepts and attitudes, assumed values, and shared ideals: an ethics by and for citizens, considering them as autonomous individuals with rights and duties, which aims to minimize conflict by promoting collaboration in harmonious social life. It is a global ethics of the biosphere, which always takes the cultural and social context into account in its assessments.

Based on this premise of civic ethics and from a practical point of view, we can distinguish two types of bioethics. The first, large-scale bioethics, concerns the macroscopic study of society; it examines social issues and relations between different countries and their possible international impact, as well as worldwide legislation. The second encompasses the microscopic ethics of everyday life; it studies the specific conditions of individuals, where the “comprehensive interview” (Kaufmann, 2021) with an analysis of individual privacy plays a major role.

This paper addresses only the latter view, which is closer to the individual and could be called “biopsychosocial health procedures” in bioethics. Each of these procedures, according to Adela Cortina (1986), would consist, in a synthesized manner, of the following sequence:

1. Analysis of reality after a good diagnosis of the situation.
2. Making the right decisions at the right time.
3. Monitoring the decisions made so that they are tantamount to responsibilities.

Thus, some of the biopsychosocial health procedures would include:

- Measures to achieve lifelong learning for all, what Heidelberg calls “health literacy” (Sturm et al., 2021), and educating people in terms of values, as proposed by García Baró (2012).

- Healthcare for all, especially the elderly, while ensuring the highest quality of life for all individuals, taking care of both their possible physical deficiencies and the emotional impact that may occur. The obsolescence syndrome described by Lolas and Martínez Pintor should be taken into account.
- Measures to be applied to people’s working environments, which examine their occupational risks, rights, and obligations, as well as working hours that allow them to have social and family lives.
- Measures regarding people’s living conditions, including the presence of noise at night, humidity, and nearby magnetic fields, as well as the proximity of large department stores with machinery running around the clock.
- Analysis of the environment in general.
- Analysis of the type of food consumption in each region, ensuring that it is in proper condition, with investigation of such issues as prepared foods and pesticides, and with advice on nutritious foods.
- Measures to control the pharmaceutical industry in all its forms, both local pharmacies and large pharmaceutical laboratories.
- Measures to control regulated therapies. We should not forget that one of the four Georgetown principles is *primum non nocere* (“First, do no harm”), avoiding intrusions and charlatanism.
- Measures to foster social cohesion, including the social integration of displaced people, as well as their rights and obligations, by taking into account the laws of each country.
- Measures regarding immigration, favoring the right to health care for displaced people and respect for their culture, religion, and values. The vast field of migration studies.

This bioethics of proximity, of everyday life, is directly related to the medical anthropology of the Heidelberg School, based on a foundation of dialogue, deliberation, respect for different values, and prudence, and which forms the basis of biopsychosocial health procedures.

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