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Pain, suffering and some ethical issues in neuroscience research

Abstract The distinction between suffering and pain express the two faces of a disease that influence a patient quality of life. Suffering is a composite phenomenon. It implies moral elements, such as the question that a human being can ask about the sense of life, the worries about himself and his own family; existential issues and ethical components. Suffering can rise not only when pain is not present, but also, sometimes, just when pain is won. We have to avoid to think of the patient's suffering always as a psychiatric pathology. This is a new and more adapted approach to suffering itself. Pain therapies should respect patient's personalities and requires a proportional use of the therapy itself. Quality of life, pharmacological pain treatment, informed consent, living

will: we have to consider all those issues deeply, starting from the perspective of the pain-suffering distinction.

Key words Pain • Suffering • Ethic • Bioethics • Neuroscience • Brain

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Introduction

The distinction between suffering and pain clearly expresses, even on a linguistic level, the two faces of a disease that influence a patient's quality of life. The development of neuroscience helps researchers better understand the pain components and find solutions; the issue of

suffering, on the contrary, needs an ethical and philosophical approach. The relationship between suffering and pain recalls, in fact, the relationship between mind and brain, a relationship that cannot be defined only on empirical science grounds.

Suffering is a composite phenomenon. It implies moral elements, such as the question that a human being can ask about the sense of life, the worries about oneself and one's

own family; existential issues, such as angst, uncertainty, and fear; and ethical components concerning the relationships between the patient and the environment and society. Suffering can arise not only when pain is present, but also, sometimes, just when pain is overcome. Physical pain, in fact, catalyses a patient's attention and worries. Free from pain, patients can have clearness of mind for thinking about their conditions, their expectations of life, and the evolution of the disease. If pain treatment is not accompanied by a treatment for suffering, the therapy cannot be defined as being adapted. The patient, restored to a better self-consciousness, has to be helped to live with his new condition. Clinical praxis, like any human act, has a moral value and responsibility: to cure pain in order to take care of the patient.

We have to avoid to think of a patient's suffering always as a psychiatric pathology. This is a new and more adapted approach to suffering itself. There is a difference between the normal and justified levels of emotive worry, concerning the existential and moral aspects of an illness, and its pathological degenerations. The moral and existential questions asked by the patient, even when they cause suffering, disclose the human being's and his historical condition's specificity. To think of the normal fear of death, of the apprehension regarding a degeneration in health as of psychic pathologies' signal, means to deny the human experience. This negation is possible only if we consider a human being without a thinking faculty, in a mechanistic way that recalls the image of hardware and software. The suffering human needs to look for a moral and existential answer, looking into the reasons for life, and trying to increase humanly significant relationships.

Pain therapies should respect patients' personality without obscuring consciousness unnecessary. In this way, caring for a patient does not require only clinical capacity but also comprehension and attention to the ethical and moral dimensions. Moreover, a physician's life experience often affects his comprehension of other's suffering. At the same time, caring for a person also implies a concern to involve the family and the civil society.

Physicians and researchers can improve their competencies only if they do not forget that to cure pain and disease also involves caring for an ill person whose human condition is always complex and analogous to the researcher's one. In the distinction between suffering and pain, which recalls the distinction between mind and brain, we need to recognize the central role of neuroscience. Pain is both a symptom and a disease, and the nervous system, with its sensorial links, is the organ that is principally involved.

Brain and research in neuroscience still require a careful approach: some urgent issues highlighted in the fol-

lowing paragraphs need further investigations as well as more accurate research.

Developments in the field of brain research are important for society. From both the cognitive and therapeutic viewpoints, brain research, helps improve the *quality of life* of neurological and psychiatric patients. The scientific results in this field have to be communicated to the widest public, but careful attention has to be paid to avoid creating unjustified expectations regarding therapies. Understanding the human brain and neurological framework must not become a tool for controlling and manipulating human behaviour, for producing social discriminations, or for violating the individual's *autonomy*, *human dignity* and the *right to privacy*.

In brain research, the developments in new technology and surgical techniques open new perspectives, but also pose many new, complex questions. Cerebral functioning has a certain influence upon the whole human organism, and it conditions both physical and cognitive human activities and the development of personality. Therefore, because of the peculiarity of the brain, it is urgent to consider which ethical limits should be posed regarding technological manipulations of the brain aimed at the integration or substitution of its functions. The ethical issues regarding a patient's dignity respect focus the attention on an important question: which are the boundaries existing, in the neurological diseases' cure, between the therapeutic fury and the correct use of new therapies?

The advancement of neuroscience allows a better understanding of the relationships between mind and brain and between body and brain, but it also implies complex issues in a border field between science, philosophy and ethics. The brain is in fact a peculiar organ. Its functionality affects the individual's personality, his social relationships and his behavior well-balanced development. Humans are different from animals not only because of the different level of awareness and knowledge, but also because they are able to be aware of themselves, and even to know the framework that allows them to have this cognitive activity. From this point of view, the development of neuroscience is just a confirmation of human's cognitive peculiarity.

The human-animal difference legitimises the use of animal models in scientific research, but it also requires some limits and conditions. Even though animals do not have rights on their own, they cannot be treated as mere biological material; we have to balance the demands of research with concerns for the animal, avoiding useless suffering and undue experiments. However, experiments with animals are necessary, both for developing scientific knowledge and for avoiding experimental actions on human beings.

Neurological and psychiatric diseases have heavy repercussions on human life and interpersonal relationships, and can even alter and obstruct the full manifestation of human personality. However, these diseases have always to be treated as pathologies. These diseases do not nullify the value of the patients (person) and they must not foster social discrimination. Proportionality of treatments, pain therapy and social integration are all factors that have to contribute to promoting a patient's quality of life. We need to create the ethical and cultural conditions to eliminate the stigma of all pathologies, especially those of neuropsychiatric diseases.

In the experimental and therapeutic field, we need to study how to obtain real informed consent from patients,

who, especially in this instance, are often not competent. Treatment of the so-called socially weak patients, such as children and elderly people, is a problematic issue. The increasing chronicity of some diseases makes the living will more relevant and complex even from an ethical point of view. The anticipate treatment directives (the so called living will) have to be an answer to the need of considering the patient's autonomy, also granting him proportional and adequate treatments. It is important, even in the field of neurosciences, to discover and emphasize the relational dimension deeply concerning the medical praxis.

Improvement of the relationship between the ethical issues of scientific research and the clinical ethics conciliates the requirements of therapy (*cure*) and of taking care (*care*).

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