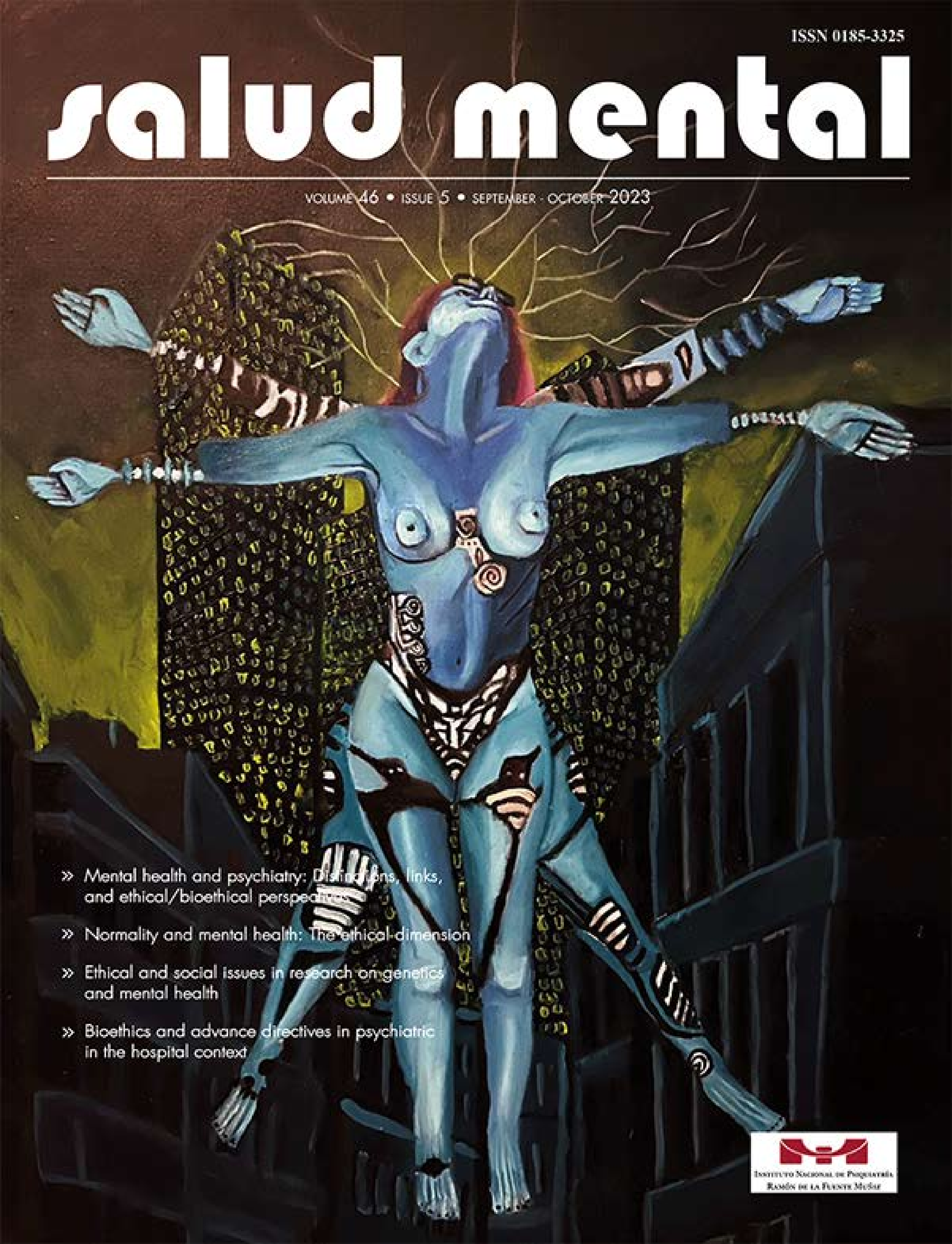
ISSN 0185-3325

salud mental

VOLUME 46 • ISSUE 5 • SEPTEMBER - OCTOBER 2023



- » Mental health and psychiatry: Distinctions, links, and ethical/bioethical perspectives
- » Normality and mental health: The ethical dimension
- » Ethical and social issues in research on genetics and mental health
- » Bioethics and advance directives in psychiatric in the hospital context

Instituto Nacional de Psiquiatría
Ramón de la Fuente Muñiz

ISSN 0185-3325

salud mental

Volume 46 Issue 5 September-October 2023

CONTENT

EDITORIAL

ORIGINAL ARTICLES

On the cover
La vitruvia contemporánea
*(*Oil on canvas, Julio *2023)*

Sofía Covili, Santiago de Chile (2002-)

INSTITUTO NACIONAL DE PSIQUIATRÍA
RAMÓN DE LA FUENTE MUÑIZ

Directorio

Salud Mental, Año 46, No. 5, Septiembre-Octubre 2023, es una publicación bimestral, editada por el Instituto Nacional de Psiquiatría Ramón de la Fuente Muñiz. Calzada México-Xochimilco No. 101, Col. San Lorenzo Huipulco, Alcaldía Tlalpan, C.P. 14370, Ciudad de México, Tel. 55 4160-5128. Página web: www.revistasaludmental.mx, correo electrónico: revistasaludmental@gmail.com. Editor responsable: Dr. Héctor Pérez-Rincón. Reservas de Derechos al Uso Exclusivo No. 04-1979-000000000-506-102 e ISSN: 0185-3325, otorgados por el Instituto Nacional del Derecho de Autor. Certificado de Licitud de Título y Contenido de la Comisión Calificadora de Publicaciones y Revistas Ilustradas de la Secretaria de Gobernación número 17472. Impresa y distribuida por BVS ediciones, Playa Regatas 501, Col. Militar Marte, Alcadía Iztacalco, C.P. 08830, Ciudad de México. Depósito en SEPOMEX, oficina expedidora M.D.M. Coyoacán, Higuera 27, La Concepción, Coyoacán, 04020 Ciudad de México, CDMX , este número se terminó de imprimir el 8 de septiembre de 2023 con un tiraje de 3,000 ejemplares.

Salud Mental

Since 1977, the SALUD MENTAL as the official publication of the National Institute of Psychiatry Ramón de la Fuente National Muñiz has sought to respond to the publishing needs of researchers working in the area of mental health, basing on four fundamental criteria: continuous education, updating, information and a multidisciplinary approach.

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SALUD MENTAL is indexed in Social Science Citation, Scopus, Academic Search Premier, Journal Citation Report, SciELO, PsycINFO, IMBIOMED, RedALyC, LILACS, BIREME, EBSCO, DIALNET, MIAR, Latindex, QUALIS, Mexican Journal Classification System of Science and Technology (CONACYT).

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EDITORIAL
Volume 46, Issue 5, September-October 2023
doi: 10.17711/SM.0185-3325.2023.027

Mental health as the moral dimension of health. Bioethics and dialogue in psychiatry and the behavioral sciences

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Citation:
Lolas Stepke, F., & Mondragón-Barrios, L. (2023). Mental health as the moral dimension of health. Bioethics and dialogue in psychiatry and the behavioral sciences. *Salud Mental*, *46*(5), 221-222.

DOI: 10.17711/SM.0185-3325.2023.027

Many classical works on "practical philosophy" or ethics could be read as treatises on psychology or psychiatry. They contain "patterns of psychological thought" based on conceptions about human nature that either describe or, most frequently, prescribe behavioral norms applicable to individuals and societies (Averill, 1976). Ethics is the linguistic justification of moral conduct.

No wonder French alienists in the nineteenth century spoke of "deviations" and proposed "moral treatments" for clinical pictures that today are part of nosologies based on empirical/statistical foundations (Foucault, 2003). Almost all philosophers have had something to say about proper behavior and ethics as part of their systems.

This observation suggests that mental health and morals (along with the linguistic justification of these, *ethics*) have always been intertwined (Alker, 1965). In medicine, although distinguishing between organic and mental (or psychological) ailments, it has always been recognized that human health is global well-being and not simply the absence of disease (WHO, 1994). The concepts of *disease*, *illness*, and *sickness* attest to the psycho- and socio-somatic substrate of human suffering (Lolas, 1995). However *mental health and bioethics* concepts were not current until the twentieth centuries.

As Bertolote (2008) points out, the expression "mental health" is polysemic and sometimes confusing. It is a pleonasm, an expression overcharged with meaning. It originally designed a dimension of well-being related to the previous expression "mental hygiene", retained in the French language as equivalent to mental health.

The expression mental hygiene was first used by William Sweetzer in 1843, emphasizing its importance in human life. J. B. Gray envisioned community-based mental hygiene operating through education, social culture, religion, and involvement in community life. In 1893, Isaac Ray, a founder of the American Psychiatric Association, defined mental hygiene as "the art of preserving the mind against all incidents and influences calculated to deteriorate its qualities, impair its energies, or derange its movements. The management of the bodily powers concerning exercise, rest, food, clothing, and climate, the laws of breeding, the government of the passions, the sympathy with current emotions and opinions, and the discipline of the intellect—all these come within the province of mental hygiene." (Rossi, 1962, p. 46).

Another important pioneer, Adolf Meyer, suggested that industrialization, urbanization, and civilization could be detrimental to human well-being and stressed that a preoccupation with mental states was essential for a productive life (Meyer, 1957). Civilization demanded adaptation and novel forms of regulation of social practices.

The establishment of the United Nations (UN) and World Health Organization (WHO) led to institutionalizing the notion of mental health; this created the impression that it was something akin to a discipline, difficult to define. Mental health is truly a *dimension* of general health. "There is no health without mental health" as the current expression underlines. The term mental, associated with health, refers to those aspects of human well-being and welfare not always observable in the body and includes feelings, sentiments, cognition, and the sense of fulfillment that permits anticipation of satisfactory existence (Galderisi et al., 2015).

From historical and conceptual points of view, the field of psychiatry has been the natural discourse for most analyses and recommendations. But it is not the only one. Psychiatry deals with pathological states and mental health refers also to the enjoyment of life and the prevention of illness.

In this collection of contributions, the relevance of the interface (or close association) between mental health and ethics is approached from different standpoints, ranging from the experiences associated with totalitarian regimes, the meaning or normality from biological and social perspectives, personal experiences like pain and distress, and recommendations on expansions and renovations of the field. It is clear from these texts that conceptualizations of mental health extend beyond the medical field. Its full appreciation demands the contribution of many disciplines.

The neologism *bioethics*, introduced during the twentieth century, adds to classical ethical reasoning the notion that interdisciplinary dialogue and procedural considerations must be considered when analyzing the interface between mental health and ethics (Lolas, 2001). The debate about the dilemmas posed by mental illness, organization of services, law, and regulations is discussed through accepted principles and implementation of value-laden assertions considering cultural diversity; the need to "translate" axiological perspectives from individual, institutional, political, and social contexts to adequate professional practices is essential (Lolas, 2002).

The papers comprising this special issue of the journal "*Salud Mental*" illustrate how different approaches to the interfaces between (bio)ethical thinking and mental health coalesce in discourses emphasizing the "moral determinants" of health and behavior. Careful conceptual analyses and applications are presented which stimulate discussion and further insights.

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ORIGINAL ARTICLE
Volume 46, Issue 5, September-October 2023
doi: 10.17711/SM.0185-3325.2023.028

From the breakdown of psychiatry during nazism and the Nuremberg Code, to the materialist neuropsychological model in contemporary science and society: A bioethical analysis

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Received: 16 March 2023
Accepted: 24 April 2023

Citation:
López-Muñoz, F., & Pérez-Fernández, F. (2023). From the breakdown of psychiatry during nazism and the Nuremberg Code, to the materialist neuropsychological model in contemporary science and society: A bioethical analysis. *Salud Mental*, *46*(5), 223-230.

DOI: 10.17711/SM.0185-3325.2023.028

ABSTRACT

The breakdown of German psychiatry with the coming to power of the National Socialist regime in 1933 resulted in a revival after the war of bioethical issues, the immediate effect of which was the enactment of the Nuremberg Code. In many ways, this breakdown was the result of the historical evolution of psychomedical knowledge and the mass dissemination of reductionist discourses and ideas that created a breeding ground for tragedy. The cyclical discourse of psychic materialism, which has been repeated for centuries in the history of science in different formulations, can, if not properly interpreted, lead to far-reaching appropriations and risks, to which due attention must be paid. The latest manifestation of this issue, the view of mental life as basically cerebral, neurological, biochemical, and determinist, a view that has not been managed or presented adequately to the public, could become the basis for perverse new perspectives and applications in the current context of research and academic activity.

Keywords: Degenerationism, materialism, nazism, nuremberg code, neuroscience.

RESUMEN

La llamada "quiebra" de la psiquiatría alemana en 1933, tras la llegada al poder del régimen nacionalsocialista, tuvo como resultado una reactivación de la cuestión bioética, cuyo efecto inmediato fue la promulgación del famoso Código de Nuremberg. En más de un sentido, tal ruptura fue el resultado del devenir histórico del conocimiento psicomédico, así como de la difusión masiva de discursos e ideas reduccionistas que terminaron por generar un caldo de cultivo propicio para la tragedia. El discurso cíclico del materialismo psíquico, que se reedita en la historia de la ciencia, en diferentes formatos y formulaciones, desde hace siglos, no bien interpretado, puede inducir apropiaciones y riesgos de largo alcance a los que se debe prestar la debida atención. Así, el último episodio de este asunto, la visión de la vida mental como vida básicamente cerebral, neurológica, bioquímica y determinista, no bien gestionado y presentado a la opinión pública, aunado a las condiciones actuales de la actividad investigadora y académica, podría convertirse en piedra angular de nuevas perspectivas y aplicaciones perversas de este asunto.

Palabras clave: Degeneracionism, materialismo, nazismo, código de nuremberg, neurociencia.

INTRODUCTION

The problems associated with explaining psychic life and the human condition in biological, physiological, and ultimately materialist terms have become a staple of bioethical research. Their earliest formulations date to the end of the nineteenth century, an era which underwent a paradigm shift in the understanding of psychiatric therapeutics. The decline in the moral treatment of mental patients, whose greatest exponents were Philippe Pinel (1745-1826) and his protégé Jean-Étienne Dominique Esquirol (1772-1840), slowly gave way to the anatomoclinical, neurohistological, and neuropathological approaches proposed by the emerging German school. There were exceptions to this rule, of course, such as occasional attempts to keep the treatment of mental patients within moral criteria using all sorts of devices, for example, the architectural designs of Thomas Story Kirkbride (1809-83) in the United States (Pérez-Fernández & López-Muñoz, 2019). These also fell within the framework of the sociopolitical culture of welfarism and charity, as was the case of the network of asylums run by the Hospitaller Order of St. John of God in Spain (Pérez-Fernández & Peñaranda-Ortega, 2017). However, the general trend in psychiatric practice was different, and gradually led to a more somatic reading, not only of mental pathology, but also of the human condition itself.

These rapid changes in approach, which took barely three decades to consolidate, were the result of disparate lines of research which found convergent paths, inspired by common themes. These included, for example, "degeneration theory," which, although it had been proposed some time before, became established through an extreme interpretation of Mendel's laws of inheritance, Galton's eugenicist contribution to psychometrics, the biomedical interpretation of criminality provided by Lombroso and the Italian positivist school of criminology, and a mixture of secondary, theoretically extreme perspectives such as phrenology, craniometry, and anthropometry. The latter were pseudo-scientific proposals, but they flourished in this propitious environment and soon gained a large following among eugenicists, most of whom were neurologists, neurohistologists, physiologists, physicians, psychiatrists, and psychologists. By the beginning of the twentieth century, the theory that the mental life of individuals could be explained in purely determinist and materialist terms was taken for granted in many contexts of biomedical, psychiatric, and psychological research. Of course, as this was the general scientific trend, it would ultimately become the basis for sociopolitical discourse (López-Muñoz & Pérez-Fernández, 2020a).

Along the same lines, starting with the physiological approaches proposed by Ivan P. Pavlov (1849-1936) and Vladimir Bechterev (1857-1927), and including the behaviorism of John B. Watson (1878-1958), the proposals that would become firmly rooted in the emerging field of psychology would soon come up against the medicalized approaches to psychiatry of Wilhelm Griesinger (1817-68), Richard von Krafft-Ebing (1840-1902), and Emil Kraepelin (1856-1926) (López-Muñoz, 2015a). The same applied to the more radically eugenic proposals which, beginning with the more theoretical approaches of Benedicte-Auguste Morel (1809-73) and Cesare Lombroso (1835-1909), would later culminate in the biotypologies of Ernst Kretschmer (1888-1964), Earnest Hooton (1887-1954), and William Herbert Sheldon (1898-1977). Consequently, trends in legislation and governance such as social Darwinism, which were accepted in many parts of the world with slightly different nuances, and which have never completely vanished from the collective imagination or from certain ideological discourses, were not something perverse that appeared out of nowhere, but ideologies that, although debatable, were reasonably constructed on popular interpretations at the frontlines of scientific research (Sandín, 2000).

In reality, much of this development was deeply rooted in a yearning for the past that was merely a kind of scientific and technical reformulation of age-old cultural traditions, such as humorism. The first attempts at a positive approach to understanding psychic life came in various forms, but there is no doubt that the most successful took morphological studies of individuals as a starting point in order to unravel the "mysteries" of their personalities. First Giovani Batista della Porta (d. 1615) and then Johann Caspar Lavater (1741-1801), authors of the most successful publications in the field of physiognomy, would lay the foundations of this path towards somatization of the psychic, which would later be consolidated with the celebrated phrenological works of Franz Joseph Gall (1758-1828) and his protégé Johann Caspar Spurzheim (1776-1832). Phrenology sought to deduce the basic personality traits of subjects by means of cranioscopy, a thorough examination of the cranial surface (López-Muñoz & Pérez-Fernández, 2017).

In this context of reductionist frameworks to explain the human condition, the explosion of evolutionary theory proposed by Charles Darwin (1809-82) came to revolutionize the field of biology and by extension related sciences. Although the theory of evolution was by no means a novelty in the Western intellectual arena, Darwin's great discovery was to propose a theory that, for the first time in history, gave an account of the process without apparent gaps, based on empirical data and on premises that were as reasonable in theory as they were powerful in practice. The fact that Darwinian theory proved to be so solid and difficult to discredit was what provoked the panic of the most conservative and traditionalist sectors and furious attacks which lasted for decades, the vast majority of which were spurious. And no wonder, because the theory of creationism, as a once-and-for-all divine act, was dealt a blow from which it would never recover (Darwin, 1984; Young, 1998). Religion, however, was not the most important issue here. The critical contribution of Darwinism turned out to be epistemological, as it consolidated the possibility of analyzing and understanding biological phenomena, at all levels, in materialist terms. It was Darwin's *The Expression of the Emotions in Man and Animals*, published in 1872, that opened up completely new expectations in this field, as it introduced evolutionary criteria to the mental sphere: it was not only biological mechanisms that had changed to adapt to the environment in a slow process of millions of years, but also behaviors and, predictably, souls. Indeed, only by understanding behavior as something that is in some ways also biologically inherited, and therefore capable of being shaped by the action of natural selection, does it make sense to question observable "behavioral differences" among human beings that go beyond metaphysical criteria of substance (Carpintero, 2003; Sáiz Roca, 2011; López-Muñoz & Pérez-Fernández, 2020b).

If we add to these progressive concerns of new industrial societies, spurred on by the conflict of the emerging "social question" raised by developing market economies, and by subsequent sociodemographic questions, it is not at all surprising that eugenic thought became highly charged (Pérez-Fernández, 2002). In this context, the phrenological misconception that the craniums of the mentally ill, criminals, alcoholics, or "degenerates" could have certain special features, an idea that was later consolidated in the widespread craniometric contributions on race by the Swedish anatomist Magnus Gustaf Retzius (1842-1919), took root with great vigor in nineteenth-century psychiatry and was even accepted by leading neurologists and pathologists, including the celebrated Paul-Pierre Broca (1824-80). This acceptance could be seen as the very basis of today's anatomopathological and neurophysiological tradition (López-Muñoz & Pérez-Fernández, 2020a). For example, the Scottish prison doctor James Bruce Thomson (1810-73), who actively defended the famous theory that criminality was a hereditary evil six years before Lombroso, published the results of his psychocriminological observations in 1870, based on a study of the cranial configuration of more than 5,000 prisoners (Thomson, 1870).

ETHICAL BREAKDOWN

Bioethical reflection in fields such as psychiatry and psychology was rare at this time, if not virtually non-existent in some places, and did not emerge until the middle of the twentieth century. Little had been done in this field beyond vague, well-intentioned formulations that were not free of paternalism, such as the code proposed in 1803 by British physician Thomas Percival (1740-1804), with the publication of his *Medical Ethics or A Code of Institutes and Precepts Adapted to the Professional Conduct of Physicians and Surgeons* (Olivares & Hernández-Mansilla, 2015). The explanation is clear: If psychiatry and its parallel spheres of activity, such as health policy, forensic practices, and prisons, were a medical specialty that had only recently been systematized and tended to draw on the codes drafted for other biomedical fields, psychology was an entirely new, emerging science, seeking professionalization, in which almost everything had yet to be done. Arguably, the development of both progressed so suddenly that most of the professionals concerned could do little more than keep up to date.

It should also be noted that the psychopharmacological era began only in the early decades of the twentieth century and was not consolidated until the 1950s (López-Muñoz, Álamo, & Domino, 2014). Moreover, clinical trials as an experimental method did not become a standardized procedure until 1946, thanks to the contribution of the epidemiologist and statistician Austin Bradford Hill (1897-1991). There were no general, standardized, nosological criteria for mental disorders until the appearance of the first edition of the *Diagnostic and Statistical Manual* (DSM), published by the American Psychiatric Association (APA) in 1952. The first edition of the *International Classification of Diseases* (ICD) was published by the World Health Organization (WHO) in 1900, and already included a characterization of mental disorders, but within the logic of the time, it considered only mental disorders with a concrete, manifest organic basis. Other attempts to classify mental illness in the United States between 1917 and 1934 predated the DSM, but like the ICD they were primarily based on the criterion of organicity and had a major problem of heterogeneity in classificatory criteria and nomenclature. In fact, it was the Second World War that finally established the need for homogenization, as the complex problems of soldiers affected by the war made it clear that a common classificatory language for mental disorders was essential (del Barrio, 2009). In this context of scientific uncertainty, the ethical criteria of professionals were for decades often linked more to their own personal convictions than to standardized and shared regulation. The criticisms that John B. Watson (1879-1958) and Rosalie Rayner (1898-1935) would receive for experiments that today would be deemed unacceptable, such as one carried out on the child Albert B. at the Phipps Clinic in Baltimore in 1920, are well known (Bayona-Pérez et al., 2022).

Therefore, it would not be fair to say that no medical, psychotherapeutic, or psychometric excesses were committed until the Nazi regime came to power. As it happens, the history of mental institutions, psychotherapies, and even public policy built around the nascent field of psychometrics is riddled with all sorts of extravagances induced by the mass, uncritical acceptance of "new" materialist, biological, positivist, degenerative, and eugenicist postulates (Kraepelin, 1999; Cruz Puerto, 2020). But the lessons from history of what happened to German psychiatry during the Nazi regime, insofar as it elevated what until then had been considered exceptional, often concealed behind a veneer of pseudo-humanitarianism, to the rank of normality, prompted the need to promote bioethical reflection in the context of mental health and its introduction into public policy. The fact that one of the most internationally renowned schools of psychiatry, the German school of the 1930s, had made a significant contribution to implementing Nazi policies of racial and sociopolitical segregation set off alarm bells, to the extent that 1933 has come to be regarded as the year of the "breakdown of German psychiatry" (López-Muñoz et al., 2006). It is worth delving into the details to understand the magnitude of the subsequent hecatomb. In 1911 Germany had 16 university psychiatric clinics, as well as 187 public and 225 private asylums. All these centers were equipped with the latest diagnostic and treatment facilities of the time, and contributed to creating a unique network of research in the field of mental health that was the most prestigious in the world (López-Muñoz, Álamo, & Shen, 2015).

The underlying problem, which facilitated the historical process that culminated in the psychomedical tragedy propagated by the Nazis, was an unfortunate concatenation of materialist, determinist, and preventive assumptions. These should at the very least have prompted reflection on the future of public health policy, its medium-term implications, and the uncritical sociopolitical promotion of certain scientific assumptions for the sake of implementing ideological criteria which, a priori, might have seemed reasonable to a large part of the general population. What is certain is that when Morel published his very popular *Traité des dégénérescences* in 1857, he conveyed the idea to the emerging psychiatric profession that mental illness was "incurable," while at the same time spreading the theory that alcohol and other intoxicants, together with heredity, played a devastating etiopathogenic role with a high social cost. As a result, what was important was no longer to intervene in incurable mental problems, but to prevent or anticipate events that were not only unresolvable, but also transmissible to offspring (Caponi, 2009). The "abnormal" was as untreatable as it was potentially dangerous. Morel's theory, supported by the biopositivist, economic, and demographic conditions of the time, spread very easily to other fields, such as sociology, psychology, criminology, and anthropology. From there, it spread to the framework of public policy based on the "numerical magic" of emerging statistical techniques, such as those suggested by André-Michel Guerry (1802-66) and Adolphe Quetelet (1796-1874). We should not overlook the fact that Lombroso postulated his famous theory of atavism as a psychosocial stigma of criminals as early as 1876, at a time when all these ideas were commonplace among the intelligentsia (Pérez-Fernández, 2004).

The immediate impact of these events was a political interpretation of psychiatry that was socialized to become an active part of health and sociocultural policy, giving impetus to eugenic criteria as a form of population control and a key preventive measure. Psychiatry, in its most organicist form, suddenly emerged from the isolation of mental institutions to become an agent of power, a fashionable, thriving force, capable of justifying all manner of sociopolitical measures. As a result, it became a particularly attractive future field of medicine for many professionals, also given the relentless advances in psychopharmacology (López-Muñoz & Álamo, 2009). What is certain is that the peculiar economic and political conditions in Germany between the wars, permanently scarred by the disastrous internal repercussions of the Treaty of Versailles and the nationalist reinterpretation of the events of 1914-18, would cause eugenics to take on particularly serious totalitarian overtones, which unsurprisingly also reached academic and research contexts terrified by the specter of "proletarianization" (Stevenson, 2013). As in other areas of German life, the insecurity that reached a once privileged environment caused great discontent and facilitated the pervasive infiltration of "reformist" National Socialist policies. Where many were shut out on ideological and economic grounds, others saw an excellent opportunity for career advancement (Gay, 1968).

This result is particularly surprising given that the pre-Nazi medical profession had shown itself to be one of the most bioethically aware in the world, especially after the Neisser scandal, in which prostitutes were used to test a syphilis vaccine without their consent (Vollman & Winau, 1996; Cuerda-Galindo, Sierra-Valentí, González-López, & López-Muñoz, 2014). The issue prompted the Prussian Reich government to pass a number of pioneering regulations on human experimentation in February 1900. These were ratified and expanded in 1931, shortly before the Nazi regime came to power, when the Reich Ministry of the Interior issued its Guidelines for New Therapy and Human Experimentation. These were extraordinarily strict regulations, the now-usual principles of beneficence, non-maleficence, patient autonomy, the legal need for informed consent, and a ban on experimentation on people who were dying or in precarious psychosocial or economic situations (López-Muñoz, 2015b). However, despite a prevailing wind, the process by which Nazism managed to undermine these advances was neither rapid or sequential. It required a meticulous strategy of cultural, legislative, and propagandistic inculcation to make it possible for a large part of the always critical and well-educated German intelligentsia to slowly digest changes which, moreover, referred openly to a steady degradation of ethics (Table 1).

There is a risk that the exploitation and proletarianization of academic and research life may be repeated with unforeseeable ethical consequences in the future, though by the path of dubious policies based on politically controlled criteria of "productivity" and "knowledge transfer." In this regard, it should be remembered that it was during the Second World War that the concept of "science policy" emerged. This concept has now been assimilated by most democratic governments and has led to very close relationships between science and the powers that be: not only governments, but also commercial and industrial powers (López-Muñoz, 2022).

> "The capitalization of universities and the de facto libertarian model for developing them, dictated from above by state bureaucracy, is something so grotesque that the great liberals—above all the liberal economists and political thinkers—never dreamed of it. It is academic capitalism without freedom, a kind of technocratic and bureaucratic tyranny imposed in the name of freedom and progress. At the same time it is a technocratic simulacrum of the free market, in which competitiveness is fabricated from criteria chosen tendentiously to ensure the benefit of certain favored institutions.… What does academic freedom mean for the bureaucracy, a political class that is symbiotically tied to it? Nothing more than an impediment to achieving a form of technological social control that requires lecturers and researchers to submit to standardized reports of their activities, reports that provide the basis for distributing and spending public funds. Academics who do not kowtow and believe they have no obligations to anyone are kept in ignorance and subjected to permanent pressure to make them understand who controls the situation and to pay their debt to the university, the program, or the department for the privileges or benefits they have received. Then they duly become vassals and pages and forget all the rhetoric of freedom and autonomy." (Bauman & Donskis, 2015, p. 173)

Today we are facing another set of ethical threats that make the future uncertain. On the one hand, we have the enormous proliferation of structures for disseminating science—publishing houses, journals, and scientific congresses—predatory structures whose sole objective is to benefit financially from the need for scientists to publish in order to promote themselves academically, stemming precisely from the scientific policies mentioned above. And on the other hand, there are certain interest groups of an economic or political nature whose interference in the funding of major research projects is becoming increasingly apparent (López-Muñoz, 2022). For example, lobby groups sponsored by large corporations from various sectors have recently been found to fund activities and statements by so-called scientists who reject the role of human actions in causing climate change, contrary to the vast majority of the scientific community.

NEUROIMAGING, MODULARITY, AND "CEREBROCENTRISM"

It is well known that the breakdown of German psychiatry and its consequences in the context of public health resulted in the unification of ethical and preventive criteria in

Table 1
Elements of Psychiatric and Psychopharmacological Abuse during the Nazi Regime

1. Mass introduction of eugenics discourse into psychiatric ethics.	1920s. With the systematic participation of renowned professionals such as Ernst Rüdin (1874-1952) and Alfred Hoche (1865-1943).
2. Legal provisions for racial segregation and "protection of the race."	Nazi rise to power (1933): • Gesetz zur Verhütung erbkranken Nachwuchses ("Sterilization Act"). • Gesetz gegen gefärhliche Gewohnheisverbrecher ("Dangerous Criminals Act").
3. Nuremberg Laws.	1934-35. Legislation aimed at "purifying the blood" of the German people. Direct involvement of the medical profession in its implementation.
4. Aktion T4 program.	September 1939. The euthanasia of "incurable patients," "inferior beings," "deformed children," and others was established. This set in motion the Aktion T4 program, the prelude to the Holocaust, led by physician-psychiatrist Karl Brandt (1904-1948). It was cancelled in August 1941 because of public protests and the invasion of the Soviet Union.
5. Experiments on patients designated for euthanasia programs.	Carried out at hospitals and universities. For example: • Two projects with patients suffering from "mental retardation" and epilepsy led by the psychiatrists Carl Schneider (1891-1946) and Hans Heinze (1895-1983). • Extraction of the brain from euthanized patients for subsequent pathological examination. Project led by Julius Hallervorden (1882-1965).
6. Experiments with psychotropic agents on healthy prisoners.	Concentration camps became an ideal location for all kinds of experiments, including psychopharmacological ones. Many of them were paid for by the pharmaceutical corporation I.G. Farben, which even had its own facilities at Auschwitz.
7. Use of psychotropic drugs as a homicidal tool.	During the Aktion T4 program and afterwards, as its public cancellation did not mean that it ended in hospitals; trials involving euthanasia continued, in many cases behind closed doors. These activities were common in concentration camps for experimental purposes and as part of the extermination policy.

Source: Compiled by the authors from López-Muñoz et al. (2008).

the form of the Nuremberg Code, issued in August 1947. The first international code of ethics governing research on human beings based on the Hippocratic precept of *primun non nocere* ("first, do no harm"), the Nuremberg Code never became a specific legal regulation, and was never officially adopted by any nation or body, but it has had a profound influence on the advancement of humanitarian and bioethical considerations, and has inspired other national and international legislation, regulations, and codes that have adopted many of its precepts, with particular emphasis on obtaining the voluntary consent of the research subject (López-Muñoz et al., 2007). However, the ethical aberrations that reached their peak in Nazi medical practice were to be repeated later, primarily but not exclusively under totalitarian regimes, such as in the former Soviet Union and the People's Republic of China. They took place mainly in relation to political and religious repression, but also in a purely ideological context, such as the scientific suspension of Mendelian genetics by the Soviet Communist Party in 1949 as "bourgeois and reactionary," and accompanied by the purging of its advocates. The risk of denaturalizing scientific and academic discourse in the context of political action is thus very real, particularly in the current climate, where the exaggerated reiteration of scientific "argument" and "pretext" in the digital immediacy of the present, and the subsequent temptation to stretch science to solidify potentially dangerous ideas, has never gone away and should keep the scientific community on its guard. The risk of breakdown is more alive than ever.

To return to the main theme of this article, the trend toward reductionist-materialist interpretations of psychic life, which are not bad as epistemological options per se and which function cyclically in the scientific context, carries an intrinsic risk of being used for dubious purposes if these interpretations are not preserved, expressed, and disseminated to the public with the necessary precautions. In this regard, research professionals must not forget that very often the reinterpretation of the meaning and scope of their work means that it is not always properly understood outside specialist settings. After all, if there is one clear conclusion to be drawn from the historical evolution of eugenic and degenerative approaches, it is that doing science, for better or worse, is not the same as talking about science or talking from a scientific perspective, and that the strategies used to shift the scientific debate to the public can have consequences that are as excessive as they are undesirable (Lorente, 2015). This phenomenon is magnified, if that is possible, by today's digital mass society, in which the widespread and popularized consumption of supposedly scientific content has become commonplace. It is often forgotten that scientists are people like any others, with all the shortcomings and virtues imaginable, and that beyond the margins of experimentation that may at some point involve human beings or animals, or the need to abide by certain generally accepted methodological guidelines, there is no Hippocratic Oath that obliges them to work ethically, for the benefit of humankind, or to worry about the repercussions of their theories and findings (Baggott, 2013). There is nothing even remotely similar for the scientific communicator beyond what they themselves might deem "ethical." Consequently, to assume that there is nothing but good intentions and honest interests behind every assertion advanced by basic science, or behind every dissemination of its findings, is nothing more than a naïve preconception with no basis in reality.

In today's world of the "neuro-something," which is basically just another successive iteration of reductionism, everything now seems to be explained by a "cerebrocentric" logic that replaces the old traditional soul-body or mind-body distinctions with brain-subject, brain-consciousness, or brain-identity distinctions (López-Muñoz & Pérez-Fernández, 2020b). Ultimately, it is often more a question of semantics, the type of discourse one is willing to take on in the context of contemporary science, than a question of substance. In other words, it has more to do with the kind of "scientific explanation" one is willing to accept than with the scope and effectiveness of science in and of itself (López-Muñoz & Pérez-Fernández, 2020a). For example, it has become customary to illustrate the explanation of psychic life in terms of the brain through the use of elaborate graphics with "colored brains" that offer a modular image of brain activity that magically corresponds to the progression of specific mental states. This type of illustration gives the general impression that it is possible to perfectly identify a psychic state with the activity of a specific material substrate, and that it would thus be enough to activate or deactivate that brain area to provoke all kinds of behavioral, personal, identity, and other changes in an individual. It is only one step from there to assuming that in the near future it will be possible to explain, predict, and control a person's entire psychic life—the dream of organicist alienism from the time of the man-machine proposed by Julien Offray de La Mettrie (1709-51) (López-Muñoz & Pérez-Fernández, 2022)—with all the ethical consequences that this entails. But what is certain is that this is a misleading perception of the problem, based on the way it is presented to the public, to which a certain skepticism must be applied (Shermer, 2012).

First, a neuroscientific experimental laboratory or a functional magnetic resonance imaging (fMRI) machine are not exactly the most appropriate places to study the functioning of the brain. It is not just that it is a profoundly unnatural and contrived place to record normal brain activity; it is that, as an organ under powerful evolutionary pressure and strong environmental selection, the brain is not equipped to function properly in such a context. Second, any form of measurement of brain activity is always indirect, as the machinery uses processes to establish its measurements that enhance the effect of certain neurochemical and bioelectrical activities to the detriment of others. Third, presenting images of "brain activity" in color magnifies the visual impact of that activity by providing a metaphor of a "Christmas tree," which does not reflect the real thing and gives the misleading idea that the organic functioning of the brain is modular. Fourth, images of colored brains do not portray the brain at a given moment in time, but are statistical compilations of hundreds or thousands of images of the same brain taken over a specific period of time and subjected to corrective criteria. In other words, they are statistical, not real-time images. And lastly, it is well known that different brain areas are activated for different reasons at different times, and contribute in different ways to the corrective courses of various brain activities, so it is often quite difficult to determine exactly what they are doing at any given time. All this means is that it is not possible, however materialist one may be, to determine that a state of mind has a specific brain locus (Mora, 2004). All of these forms of argument about the psychic life of people, uncritically transferred to other fields of research and dissemination, are nothing more than a banal and simplistic expression of scientific knowledge.

FINAL THOUGHTS: ON MATERIALISM AND MORALITY

At the end of the last century, Benjamin Libet (1916-2007) and his team published an experiment that theoretically called into question the existence of something like what we know as "free will" (Libet et al., 1983). The idea behind the experiment was that almost a third of a second before a subject "voluntarily decided" to lift a finger, an alert potential was registered in their brain activity. In other words, the person's brain would have already decided to lift the finger on its own before he or she was aware of the decision. The experiment, which was cleverly sold as the death knell of free will, caused rivers of ink to flow. Subsequent experiments, which further extended the temporal delays Libet initially found, convinced the proponents of materialist reductionism that conscious psychic life was indeed nothing more than an epiphenomenon and that, at last, at the culmination of the age-old dream, the organ had defeated the mind (Soon et al., 2008). More than a few people were convinced that, in effect, mental control and selection were, to all intents and purposes, a done deal. Consequently, there was a shift from biological determinism, based on eugenic criteria, which was the driving force behind Morel's work at the time, to neural determinism, based on the influence of genetic criteria.

There was no shortage of theoretical and methodological criticism of these experiments, starting with the fact that there was no way of arguing that this recorded non-conscious activity was really linked to will, a question that still remains unresolved (Romero Sánchez, 2016). But this did not prevent a veritable avalanche of researchers and intellectuals determined to attack free will by proposing ideas, even dangerous ones—such as the idea that legal systems are confused by judging the offender based on the criterion of free will, that a preventive criminal law approach was possible based on the idea that that criminals could not choose not to be criminals—and that the eugenicists and degenerativists were right (Schleim, 2009). The response from the legal world, which is used to dealing with this kind of argument, has tended to be philosophical: responsibility is an "ascriptive," not a "prescriptive" concept, that is, something that by definition is attributed to people as moral-ethical subjects, not something that can be demonstrated in a scientific experiment. Therefore, moral, law-abiding behavior is to be expected from individuals to the same extent that the vast majority of people generally choose to abide by the law. In other words: free will and responsibility are matters of principle and thus not proven, but presupposed. Moreover, it is metaphysically quite impossible to demonstrate that a pattern of neural excitation has been able to produce one action or another in the same way that conscious activity can and does redirect or interrupt a previously designed behavioral program at an organic level (Schleim, 2009).

The presence of these kinds of arguments in a scientific context, and their mass dissemination, should keep researchers and academics in a permanent state of alert at a time which is not particularly kind to all aspects of the profession—in particular if we bear in mind the worrying rise in ideological extremism, where certain theories, ideas, and experiments, if not properly assimilated and disseminated, could set in motion a repetition of past failures and tragedies.

Funding

None.

Conflict of interest

The authors declare they have no conflicts of interest.

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salud mental

ORIGINAL ARTICLE
Volume 46, Issue 5, September-October 2023
doi: 10.17711/SM.0185-3325.2023.029

Mental health and psychiatry: Distinctions, links, and ethical/bioethical perspectives

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Received: 3 April 2023
Accepted: 26 April 2023

Citation:
Perales, A., Alarcón, R. D., & Wagner-Grau, P. (2023). Mental health and psychiatry: Distinctions, links, and ethical/bioethical perspectives. *Salud Mental*, *46*(5), 231-240.

DOI: 10.17711/SM.0185-3325.2023.029

ABSTRACT

Introduction. Mental health and psychiatry have been terms of intense and complex use for almost a century, and they may have reached a critical level of ambiguous and imprecise synonymy that makes their definition and validation difficult. **Objective.** To examine these concepts in depth, establishing precise distinctions, ontological connections, and instrumental scope reinforced by well-defined ideas in ethics and bioethics. **Method.** Narrative review of pertinent literature, consultation with diverse scientific, medical, historical, philosophical, and literary sources, with appropriate analysis of ethical and bioethical practices. **Results.** A broad, comprehensive definition is elaborated of mental health as a field with sociocultural, political, and demographic implications, and of psychiatry as a medical specialty. In addition to making clear distinctions and describing the specific impact of both fields on diverse populations, various levels of conceptual linkages, sociopolitical action, and ethical content are highlighted, as well as in processes of administration, education, and research. **Discussion and conclusion.** There are factors that reinforce or weaken the scope of mental health and psychiatry, including their ethical and bioethical dimensions. Their effectiveness requires a reaffirmation of objectives and the reinforcement of individual and institutional initiatives, as well as the search for authentic connections and a social projection that is objective, comprehensive, and just.

Keywords: Health, mental health, ethics, bioethics, humanism.

RESUMEN

Introducción. Salud Mental y Psiquiatría han sido términos de uso intenso y complejo por casi una centuria y, en el momento actual pueden haber llegado a un nivel crítico de sinonimia ambigua e imprecisa que dificulta su delineación y vigencia. **Objetivo.** Estudiar en profundidad los conceptos mencionados, estableciendo distinciones precisas, vínculos ontológicos y alcances instrumentales reforzados por nociones éticas y bioéticas definidas. **Método.** Revisión narrativa de la literatura, consulta pertinente con fuentes de diversa índole médico-científica, histórica, filosófica y literaria y análisis de contenidos éticos y bioéticos pertinentes. **Resultados.** Se plantean concepciones amplias y comprensivas de Salud Mental como campo de implicaciones socioculturales, políticas y demográficas, y de Psiquiatría como especialidad médica. Aparte de claras distinciones y de su impacto específico en diversos sectores, se precisan varios niveles de vinculación conceptual, acción socio-política y contenido ético-bioético en ambos campos y en procesos de manejo administrativo, pedagógico y de investigación. **Discusión y Conclusión.** Existen factores que apuntalan o debilitan los alcances de Salud Mental y Psiquiatría, así como sus características ético-bioéticas. Su vigencia requiere una reafirmación de objetivos y un reforzamiento de voluntades individuales e institucionales, así como la búsqueda de vinculaciones auténticas y una proyección social objetiva, íntegra y justiciera.

Palabras clave: Salud, salud mental, ética, bioética, humanismo.

INTRODUCTION

Health is a fundamental right, and also a duty of every human being. No country can cover all of the health needs of its population, so individuals must assume duties and responsibilities to contribute to the promotion of their own self-care and self-protection and that of the members of their community. As a bio-psycho-socio-cultural and spiritual phenomenon, health is conditioned by society's historical and political evolvements (WHO, 2012; Perales, 2020).

The World Health Organization (WHO) defines mental health as "a state of well-being in which the individual is conscious of their own capabilities, can face the normal tensions of life, work in a productive and fruitful way, and contribute to their community" (OPS/OMS, 2004; Herman, Saxena, & Moodie, 2005). When mental health is compromised or impaired, a mental disorder may occur, and it enters the conceptual area of psychiatry. Mental health thus has two expressions: 1) positive mental health, in which the subject, without signs of alteration or abnormality, directs their personal potential into constructive behaviors and actions; and 2) negative mental health, where they show clear evidence of impairment or mental disorder, the essential focus of psychiatry. To consider mental health and psychiatry as synonyms is inappropriate, since conflating their study would make mental health a mere expression of the presence or absence of mental disorder, with a place in budgets for health care well below that of other, more dramatic medical pathologies with greater public demand. Mental health would then be a neglected component of comprehensive health care. It is therefore important to distinguish these concepts in order to adequately describe the broad field of mental health and the clinical nature of psychiatry, both directly linked to models of human behavior and ethics (Perales, 1993; Gracia, 2013).

METHOD

This study explores the conceptual and pragmatic territories of mental health and psychiatry with a review of pertinent literature, delineating specific degrees of distance (distinctions) and closeness (links) to allow clear definitions, specific approaches, and norms of management. Ethical and bioethical concepts from well-defined perspectives of reflection, objectivity, fairness, and precision are used to reinforce substantive points in both fields.

RESULTS

Coverage and scope of mental health

The distinction between positive and negative mental health is inexact; it locks the concept into the medical field and confuses it with psychiatry. Mental health has an essential link with the process of human development, with both individual and collective well-being, and in connection with harmonious social development. The confusion is even greater when labels such as "mental health problem" are used inappropriately to avoid terms such as "psychiatric illness," "problem," and "disorder" (PAHO, 1995). These terms may be even more damaging when they are used in official documents of international institutions, such as the Strategic Plan of Pan American Health 2014-2019 (PAHO, 2013), or the demand from WHO (2009) regarding "parity and integration in the care of mental and physical health." By emphasizing its concern for "the inadequate appropriation of expenditures for mental health" in the Americas, PAHO (2018) confirms that it is considering mental illness, that is, psychiatry, under the rubric of mental health. Kohn et al. (2018) demonstrate this conflation even more clearly in proposing that "the gap in the treatment of mental health in the region" must include an examination of "the prevalence of mental disorders, the use of mental health services, and the global disease burden."

Such confusion leads to a false reductionism that minimizes and even denies the importance of authentic mental health and its impact in multiple areas. In Peru, for instance, there are no specific research plans or effective intervention programs for problems such as underdevelopment and poverty, generalized corruption, and violence in all its forms (Perales, 1993). It could be argued that the corruption prevailing at every level constitutes a critical problem of mental health: the attorney general's office, after analyzing 4,225 cases of corruption involving 2,059 current and former authorities in regional and local agencies, reported that only 4.8% concluded in sentencing; this finding confirms the need for honest judges and prosecutors to guarantee objective investigation and fair sentences and reduce impunity (PPEDC, 2018). If the insufficient social scientific research on these problems is considered an expenditure rather than an investment to argue for the scarcity of resources, the result is not only the aggravation and perpetuation of the problem, but also its acceptance and normalization, creating a vicious circle that punishes the most disfavored populations and slows the comprehensive development of countries and communities.

What Is Mental Health?

In order to correct this conceptual confusion, more precise definitions of mental health have been offered, but they are still problematic. Definitions have been proposed based on the capacity to live and co-exist with oneself and others (Herman, 2001), adaptation to diverse social determinants of health and mental health (Rodríguez-Yunta, 2016), and the fostering of supportive communities free of racism and other social inequities (Primm et al., 2010). Severe climate change has also been postulated as a factor, as the erosion of physical surroundings damages social surroundings and affects community well-being (Berry et al., 2010; Satcher & Druss, 2010). Kjellstrom and Mercado (2008) warn that many negative social conditions are due to the failure of governments in cities and metropolitan areas, which generates the growth of informal settlements and marginal communities, creating unhealthy living and working environments for millions of people (Burris et al., 2007).

In Mexico, the National Commission Against Addictions (Gobierno de México, 2022) notes that mental health "is more than the mere absence of mental disorders. It refers to the possibility of increasing the competence of individuals and communities, and allowing them to reach their own objectives. Mental health is a matter of general interest and not only for those affected by a mental disorder." The WHO (OMS, 2009) laments the little interest shown in fostering mental health and the great risk that the situation may not change unless the conceptual confusion is overcome.

Concretely speaking, mental health cannot be examined or understood without a previous and clear definition of health; in fact, mental health constitutes the conceptual nucleus of the mental and social dimensions in the classic definition of health as "a state of complete physical, mental and social well-being, and not only the absence of afflictions or diseases" (WHO, 1948). Physical and mental health are closely linked with human development and productivity at individual and collective levels, seen from multisectoral and multidisciplinary perspectives. Both depend on levels of education and moral development, and as the concept of physical health involves medicine, mental health involves psychiatry.

This integration translates into physical, mental, social, and spiritual well-being, generating environmental, cultural, and economic well-being as well. An individual's mental health generates their own full human maturity as well as that of their family and, stimulated by their own moral responsibility, also contributes to the progress of their community. Yet mental health problems are not necessarily psychiatric problems susceptible to specific clinical treatments; rather, they constitute situations in a complex causal network whose management requires interdisciplinary approaches. We will examine three such situations (Perales, 2016) that are now acutely present in Peru.

1. *Underdevelopment and poverty.* These problems do not depend only on economic factors; their major variable may correspond to a deficit-created attitude of the individual in the face of reality, an inefficient repertoire of approaches to face them, and a "loss of freedoms" (Sen, 2000). The country has taken two approaches to the analysis and management of this situation. The first, violent and based on cruel, bloody methods, was represented by profoundly ideologized terrorist groups, for which the only way to overcome the problem was the extermination of a corrupt governing class. The second, rather silently, advocated a non-violent road, intense labor, and actions of solidarity. Its protagonists personified values and principles that showed moral fortitude and solid mental health: many inhabitants of the "inner country" (Andean communities) migrated to urban areas to escape the terrorist threat, and built "human settlements," initially under very poor conditions. Stimulated, however, by their desire for a better future, they were able not only to develop what today are strong communities, but also to contribute to the country's economic progress (de Soto, Ghersi, & Ghibellini, 1986).
2. *Generalized corruption*. A human behavior that is not necessarily an expression of individual psychopathology, corruption is a type of social pathology in groups that take illegal advantage of economic, political, and other benefits. Corruption can be organized and grow around authorities and personnel of public and private institutions and be enhanced by cultural anti-values. Mass media report on corrupt activities, but they are covered with a mantle of impunity cultivated and supported by public institutions and even judicial authorities in the face of impotent confusion, incredulity, and even acceptance by the community.
3. *Violence.* In addition to so-called narco-terrorist organizations and criminal groups linked to illegal businesses, two forms of violence are observed in Peru. One is delinquency-based, increasingly bold and protected by powerful, organized groups; another is of a social nature, and includes familial and street violence, with a gradual increase in feminicide. Some authors include violent automobile accidents on this list.

In short, the moral obligation of every state and government is to provide their citizens with the social environment and the means necessary for their development, so that their health, including mental health, can reach the maximum level allowed by their genetic potential. Interdependence, cooperation, and trust between the government and the population are essential components of this process (Perales, 2020).

The field of psychiatry

As a medical specialty, psychiatry fundamentally addresses mental disorders or illnesses, clinical entities recognized by diagnostic manuals, testing instruments, and professional, technical, and institutional pronouncements. In fact, the definitions of mental disorder in two universally accepted sources (DSM-5 TR, published by the American Psychiatric Association [APA], 2022; and CIE- 11, published by the WHO, 2022) include the abnormal behaviors characterized by identifiable symptoms and accompanied by distress and interference with habitual social, family, occupational, and intellectual activities, as well as "the ambiguity indispensable to incorporation of permanent advances in knowledge" (López-Ibor Aliño, 2002). In short, psychiatry is oriented, on the basis of scientific evidence, toward diagnosis, treatment, prevention, and research relative to abnormal behavior (Delgado, 1955). It is carried out by specialists, it adheres to the medical model, and it includes valid methodologies and codes of practice.

The clinical and heuristic activities of psychiatry also include etiopathogenic perspectives and diverse areas of study. This process configures the real or potential existence of subspecialties such as biological, social, cultural, forensic, pediatric, and geriatric psychiatry, among many others. All of these must be the object of duly conceived and applied ethical norms, supervised by well-trained personnel and competent agencies (Okasha, Arboleda-Flórez, & Sartorius, 2000).

Links between psychiatry and mental health

In spite of their differences, psychiatry and mental health must not be looked upon as antagonistic, subordinate, or autonomous fields, a perspective that would deny the integrity (and integration) of human beings and their experiences, a scenario initially conceived in lucid philosophical elaborations (Shorter, 1997; Kendler, 2014). In the Spanish language, this integration is eloquently described by Santiago Ramón y Cajal (1999); (2006), with the ontological and ethical quality of a universal and superior mind, and a "scientific morale" never far from the ideals or values of medicine, which condemns without reservation "the cruelties and insidiousness of an ancestral barbarism …[and]… of a coarse and anarchic individualism."

The link between psychiatry and mental health is thus complementary, since the absence or exclusion of one or the other would leave an irreplaceable emptiness. At the same time, the management of every mental disorder or "problem" involves recurring to preventive and promotional measures that entail the clear perception of perturbations and anomalies ("symptoms") as well as realities of harmony or equilibrium substantiated by the notion of comprehensive mental and physical health (Martínez-Pintor & Martínez Gamo, 2022). This exploration of clarity and complementarity profiles four components that provide the epistemological background that shares and nourishes this connection.

1. *Humanism.* Every medical-psychiatric act entails the unique relationship of two individuals supposedly oriented toward the same objective, even if sometimes from diametrically opposed positions: the patient, under the overwhelming pressure of anomalous and damaging experiences, and the professional, in possession of objectivity and valid resources of clinical management (Mariátegui, 1987). Each protagonist carries powerful ethical and humanistic baggage: the patient, due to their expectations of help, support, and hope, and the physician, given their training and learning obtained through study and practice (López-Ibor, 1954). Surrounded by different human environments and coming perhaps from different sociodemographic and geographic backgrounds, patient and doctor generate not only a deliberative dialogue, but also a full and intense relationship of equals united by the common human and ethical objective of healing, improving, or fighting a common adversary with courage, resilience, and mutual loyalty. This dialectical encounter requires adaptability and comprehension, sincerity and trust, qualities that, from the psychiatrist's perspective, demand a crowning ethical seal, clearly linked to the perspective and the action of "the most human medical specialties" (Laín-Entralgo, 1984). In the pragmatic phases of their work, the physician-psychiatrist must firmly adopt an ethical compass, and behave simultaneously as scientist, ethicist, and humanist. A bioethical humanism is sensible, alert, and consistently present in the classroom, the doctor's office, the emergency room, or the laboratory (Kleinman, 1988). A humanistic bioethics in medicine is solid, strong, categorically established and rooted in the essence of the profession (Alarcón, 2021a).
2. *Eco-bio-genetic ethical determinism.* To the extent that medicine as a scientific field not only promotes impressive advances toward the cure of diseases, but regrettably may also produce them, there is other evidence of the link between mental health and psychiatry. For instance, Gracia (2004, p. 69) points out that to the classic placebo effect of many pharmacological agents, the fact that "every agent is toxic" (i.e., it produces collateral effects) must be added. Its "indiscriminate and abusive consumption…fostered by the own inner structure of consumer society, produces an enormous amount of disease and even death." Additional challenges that bypass the search for utopian objectives but also induce discomfort and frustration (Gracia, 2004) include: a) iatrogenic diseases; b) the biogenetic component that, in its extreme anti-Darwinian positions, generates distinctions in the consideration, accessibility, and management of vulnerable segments of the population; c) the deterioration of the environment and ecological crisis (Wallace-Wells, 2019); d) the scarcity of basic resources; and e) health, understood not only as a socially and economically productive life, but also as a fundamental state of well-being.
3. *Behavior and Sociocultural Factors.* Beyond purely medical territories, these mechanisms may push society to assume generally negative group behaviors, with an obviously unfavorable impact on the mental health of their protagonists and those around them. Paradoxically, the pathogenic impact of behaviors such as

corruption and violence on collective mental health is often forgotten: it ranges from a bland indifference to a sterile fury or a paralyzing demoralization, through resigned acceptance or flagrant denial. The ethical perspective is then weakened and ineffective, and may result in attitudes and behaviors damaging to the emotional and physical health of the population (Kellar-Guenther, 2016).

The location and repository of traditions and beliefs, language and habits, and unique and non-transferable identities (Alarcón, 2013), culture also includes historical roots, human empowerment, dimensions of duty and processes of possibilities, and adjustment and agreement that may occasionally produce ambivalent results (Gracia, 1998). This foundation gives ethics and humanism distinctive characteristics of content and practice, contributing also to enriching comparisons and their subsequent universalization. It is only through an open, receptive, and flexible culture that the ecumenism of fundamental ethical principles and of genuinely human conceptions of compassion, solidarity, and identity have been achieved in some countries or regions of the world (Lolas & Rodríguez, 2020). Such culture is an effective antidote to dogmatic prescriptions, sectarian rules, and obsolete slogans.

The ontological and epistemological growth of psychiatry as a medical specialty has led to the definition of areas of study, reflection, and research with themes sufficiently broad to allow for semi-autonomous approaches (Leighton, 1981). Two of them, inappropriately called "subspecialties," address individual and collective emotional suffering: cultural psychiatry and social psychiatry. Cultural psychiatry is defined as a discipline oriented to the description, evaluation, and management of psychiatric conditions insofar as they reflect the formative influence of cultural factors and variables (Alarcón et al., 1999; GAP, 2002). These variables include lifestyles, positions, and principles in individuals, families, communities, countries, regions, and continents. The exploration, recognition, and effective use of these characteristics, formalized, for instance, in the DSM-5 Cultural Formulation Interview (CFI; Lewis-Fernández et al., 2016), facilitate the psychiatrist-patient relationship on a solid foundation of competence, trust, respect, and ethics. The use of cultural elements and factors in psychotherapeutic relationships is considered an essential factor for favorable outcomes (Alarcón et al., 2020).

Social psychiatry includes collective and group-oriented projections, transferring cultural precepts and foundations to the life, functions, and attitudes of populations conceived as unities or organizations that are global in scope (Di Nicola, 2023). It encompasses well-defined multidisciplinary work and the conception, materialization, and promotion of community services, and, in its educational and scientific dimensions, epidemiological research and so-called preventive psychiatry, both substantive tasks of public health.

An essential element of social psychiatry are the so-called social determinants of health and mental health (Compton & Shim, 2015; Silva, Loureiro, & Cardoso, 2016; Alarcón, 2021b; Thompson & Tasman, 2022). These play a powerful role in the presence or absence of health, generate varied levels of symptomatic severity, and exercise a definitive causal process by triggering or perpetuating different kinds of psychopathologies (Kirkwood, 2020), including poverty and its sequelae of scarcity and need; violence and its impact of impotence and abandonment; lack of educational opportunities and its effects of disinformation and ignorance; corruption and its biased perception of power and manipulation; and sociopolitical instability, with its consequences of stress, uncertainty, negligence, and cynicism.

The close association between poverty and mental illness is an important consideration. Poverty is the cause, scenario, and consequence of a variety of social problems, such as homelessness, unemployment, deficient environmental and working conditions, and financial inequities (Laughland, 2020). Obviously, it is also related to lower educational levels, chaotic urbanization, and substantially reduced quality of life. Poverty generates emotional fragility and vulnerability in the face of a variety of stressors, including delinquency, violence, hostility, discrimination, segregation, negligence, and stigmatization, that increase the prevalence of physical and mental disorders and highlight the lack of access to health services.

The enormous number of physical and mental health problems caused by these social determinants, particularly in low and middle income countries (LMICs), such as those in Latin America (Alarcón, 2013; 2021b; Mari, 2021), also include inequities in areas such as sexual identity, ethnicity, and social class that accentuate the psychosocial disadvantages of those affected. Other features are apathy, lack of action, and even government or private measures that are directly harmful to large sectors of the population (Mitchell, 2009; Ekuma & Akobo, 2015).

4. *Science.* An ethical and bioethical emphasis must underly all areas of basic science and clinical research related to mental health and psychiatry. Their methodologies must include ethical consideration of such issues as confidentiality, selection of study participants, ethical approval and informed consent, reasons for acceptance or exclusion, and placebo and secondary effects (Gracia, 2004, pp. 303-334), plus established norms for examinations and laboratory tests. These considerations are most

frequently related to genetic, biophysiological, and psychopharmacological research (Romeo Casabona, 1997), with special consideration of age groups and the specific objectives of each study.

Research in social and cultural psychiatry raises unique ethical issues. In the context of cultural relativism, the interpretation of findings must cover both their cultural significance and their eventual neurobiological correlates (Adams & Quartiroli, 2010). Finally, research in psychotherapy is a relatively new and complex field, due to the enormous variety of theoretical foci or "schools," which requires a greater attachment to established methodological and interpretative norms (President's Council on Bioethics, 2003). Serious research has also demonstrated that complex and intuitive factors such as hope play an important role in the outcome of psychotherapeutic interventions (Frank, 1973; Alarcón & Frank, 2012). The participation of the patient, and of relatives, friends, and close acquaintances, is also a crucial component of every study.

Ethical and bioethical perspectives

Bioethics is the ethics of life. The term life or vita comes from the Latin word vis, which means force, power, or energy (Gribbin, 2003). Ethics, in turn, is identified with ethos, which alludes to the good, to what has been achieved, and to progress, growth, improvement, the search for and the finding of excellence. Cosmic and non-cosmic global bioethics, the latter identified with ecology and implying a harmonic balance, a dynamic that favors progress and well-being (Gamow, 2007), are emerging fields.

The vital root is expressed and culminates, finally, in the human being, the person (Comte, 1985). Personalistic bioethics considers the person as an actor, central figure, or author of an ethical worldview. It focuses on the person, a subject endowed with reason and moral experience, with the ability to fully distinguish between good and bad, virtue and evil, a characteristic that defines its organization and ecological balance (Teilhard de Chardin, 1959; 1963).

Mental health is the progressively structured modeling of the person from earliest childhood. Thus, it is influenced by family, school, community, and other social environments. In this context, moral and spiritual training are essential. The U.S. philosopher and pedagogue John Dewey (1915); (1925), insisted on these principles, and created a wholly pragmatic pedagogy, still essential in modern education and in the formation of people with healthy and productive minds. Philosophy, for Dewey, is basically a moral engineering which makes life more useful, beautiful, and creative. In this context, he compares different pedagogical approaches, describing "cultured" and "uncultured" educational processes, continuous and harmonious versus disrupted "training for life," and education "in and for values." He postulates that axiological training is the secret to a healthy, productive, creative, and above all ethically balanced life.

Mental health is one of the highest expressions of personalistic bioethics, as it makes us face true homeostasis, a bioethical ecology. The recovery of altered, lost, or threatened homeostasis is thus a fundamentally topic in bioethics. Human ecology also implies another profound issue: the necessary relationship between the life of the human being and moral law, indispensable to a dignified, valuable, and efficient internal and external environment (Kragh, 2007). The bioethics of caring for mentally ill patients is also based on these considerations, since care represents the therapeutic effort deployed to return balance, order, and harmonious ecology to the mind, that is to say, to recover lost virtue and the displaced or diminished good.

The ambiguities of this present-in-transition are the future challenges we face today. Ethics and bioethics must look at this future in the context of changes that are already being perceived in essential aspects of the medical profession and its practice, as well as in the populations, communities, and societies they serves. Medical and psychiatric practice will be increasingly based on the composition and activities of multidisciplinary teams, conducted by a democratic and equalitarian medical leadership (Weisstub & Arboleda-Florez, 2000). The system of compensation for medical actions will require changes, not only with respect to the economic reimbursement for each profession on the team, but also in terms of insurance coverage, access for the neediest, and sanctions for rule-breakers. Together with technical competence, the ethical dimensions of these processes, going far beyond administrative dispositions of public and mental health, are undeniable (Lolas, 2001; 2010a).

In the strictly clinical field, these changes affect both patients and the society of which they are part. No longer characterized merely by passivity, dependence, suffering, or frustrations of different kinds, patients are gradually becoming activists in defense of inalienable rights (Lolas 2010b; de la Fuente Muñiz, 2021). It is in the face of this "patient emancipation" process (Montori, 2020) that ethics must confer balance and discretion on the organizations involved. It will not be able to deny, for instance, the appropriate participation of patients and members of organizations in critical phases of the clinical process, but there must simultaneously be clear guidelines about the nature and limits of such participation. In turn, the impact of phenomena as diverse as internal and external migrations or advances in technology constitute, today and in the future, a process of globalization that also entails major ethical changes (Adis Castro, 1991; Alarcón, 2016).

Mental health demands a normal brain and the social modeling of its functions (Álvaro-González, 2015). It is a human process that advances in parallel with moral development. It responds to the formative modeling of society, beginning with the newborn who, after a long process of informal learning in the family and formal learning in school, along with learning the social ethos—the management of customs, habits and values—will become an authentic human being: a person. During this process, children register information in their neocortex, incorporating culture in its broadest individual expression: the forging of personality (Ortiz, 1997; 2019).

Spirituality is another strand in the development of mental health, based on its adaptive connection with the processes of coping with stress (Koenig, 2009). The microsociety of the family milieu and the educational system are the most prominent modulators of the basic behavior of the future citizen. In short, mental health is a product of the interplay of many variables, with education, the process of cultural transfer, one of the most significant. When those who occupy levels of political decision making understand the enormous value that mental health research and education have for national development, they will have recaptured its true meaning as investment and potential of comprehensive human development (Perales, 2013).

DISCUSSION AND CONCLUSION

This article reflects a renewed debate not just on the means but on the purposes of medicine, mental health, and psychiatry. In his profound analysis, Gracia (2004) criticizes "the predominant rationalism in our Western world," a feature he qualifies as "purely strategic," as it does not question the moral characteristics of its objectives, but searches only for efficient means of achieving them. According to Kant (1997), this approach becomes the characteristic sign of moral life and thus becomes absolutist. Weber (1967) advocates for a "responsible" attitude that does not deny emotions or values, or even the need for a good "instrumental rationality." It therefore becomes indispensable "to ponder means, purposes and values…as…objectives of a true ethics of responsibility."

Humanism cannot resolve its differences with positions devoted to demonstrating the purely neurobiological basis of every human action, motor or emotional, cognitive or affective (Le Mappian, 1970), or with dogmatic philosophies that render superficial eminently practical accomplishments of a constructive, applied humanism (Vovelle, 1985). The principles of goodness ("to do good"), appropriateness, and justice must always occupy a central position in medical acts, including research, given their genuinely human nature.

One of the most important topics in these processes of reform and renovation are the definitions of health and disease. These must be continually updated with new concepts such as well-being and quality of life (Edwards, 1982; Griffin, 1986), as they relate to important sociocultural realities such as employability, productivity, comfortability, and even happiness. It also remains clear that there are numerous conditions and behaviors that should not be considered symptoms or mental illness and that are thus the appropriate focus of non-clinical disciplines.

Diverse international organizations, including the World Health Organization, the World Psychiatric Association, and other national professional and academic entities, have issued pronouncements and declarations about the ethical conduct and responsibilities of specialists, with clear guidelines for specific situations and universally applicable paradigms, based on promoting good and reducing evil (Sartorius, 2000). Standardized ideals of professional behavior create norms of respect, autonomy, beneficence, equity, and avoidance or minimization of damage in individuals and societies. Consensus based on evidence, experience, and periodic reexamination of norms at local and global levels is also a moral obligation of individuals and professional organizations.

There are also positive and negative factors that strengthen or weaken the essence of ethics and its role in mental health and psychiatry. The positive factors include altruism, compassion, honesty, honor, equality, judgment, justice, optimism, order, wisdom, and truth (CIPD, 2020), and the negative factors include abuse, chaos, cynicism, cruelty, envy, indifference, manipulation, materialism, reductionism, and treating people as objects. Power also has negative moral dimensions, including maleficence, maliciousness, malignity, and evil. The latter, when structural and thus supra-individual, possesses a sociocultural and historical character (Gracia, 2004; 2013) that has been present in the three major "social revolutions"—the agricultural, industrial, and consumer revolutions—leading to important ethical contingencies. To complicate matters even more, there are factors that could be called neutral, yet are as complex and decisive as the others. These include subjectivism, relativism, curiosity, and skepticism (Cherniss & Adler, 2000; Goleman, 2005).

Bioethics, Gracia (2004, p. 89) points out, must assist health professionals in reflecting on the essential purposes of their work: "The greatest task of the future is to leave the purely professional sphere and move to the social space, in order to interact Socratically and debate these types of questions. It is good to get away from the excessively professional and sanitized conceptions of bioethics, and practice instead a general reflection on the problems of life and death, the body's carrying on: a comprehensive focus."

The humanization of medical assistance may be complicated by theoretical and practical approaches that are exclusivist, absolutist, or rationalistic. The rescue of what is emotional in this process has been laborious, due to confrontations with followers of old positivist prejudices that never updated the approaches (which were lucid in their historical moment) of Comte and Bernard. Knowledge, abilities, and attitudes do not have to lack an emotional and ethical substrate that complements the historical, cultural, and scientific components of authentic humanism.

The theoretical and practical vicissitudes resulting from inevitable changes in medicine, mental health, and psychiatry must, however, avoid the "feeling of imposition, the usurpation of the role that only the most veracious person can legitimately interpret." The value of words as vehicles of change implies "a radical ascesis, a fight to overcome indolence" (Gómez Pin, 2012).

It is also pertinent to examine the ethics of technology in projects of mass digital education that can generate a depersonalization of the didactic process (Williamson, 2016). Brockman (1995) argues about the emergence, since the closing decades of the twentieth century, of a "third culture" beyond the traditional dichotomy of science versus the humanities. This third culture is the result of a convergence of humanists that must think like scientists and vice versa, testing the logical coherence, explanatory power, and agreement of their ideas with facts and empirical findings. Scientists, says the author, "are not reducing the humanities to biological and physical principles, but believe that art, literature, history, politics—a total panoply of humanistic concerns—need to take the sciences into account." "Intellectually eclectic" humanists are thus needed to postulate a "realistic biology of the mind."

However, authors like Lanier (2010) question the reticence of the "cybernetic totalists" to educate themselves in the tradition of "scientific skepticism," and they voice concern in the face of a possible process of "self-intoxication" that could lead them "to essentially build their ideas within the software that commands and manipulates our society and our lives. If that occurs…[this ideology]…will pass from being a novelty to constitute itself as a force that could cause suffering to millions of people." It must be reiterated here that mental health, unlike psychiatry, orients itself to the integral development of the human person and society in general, through valuable processes of cultural, scientific, technological, and axiological education (Perales, 2023).

In conclusion, a reaffirmation of objectives and a reinforcement of individual and institutional willpower (Clark, 2015) are required in the search for a non-prejudicial connection between mental health and psychiatry. It is indispensable to differentiate the two concepts, distinguish their constitutive values, and identify principles and duties that by becoming behaviors, define the specific objectives of bioethics (Lolas, 2001; Perales, 2023). In other words, the ethical debate and the humanistic discourse on the essence of mental health and psychiatry must be reopened (Alarcón, 2021a), as well as the view of human beings, healthy or ill, as connected with their environment and world, in harmonious exchange and with precise vital objectives. It is necessary to reaffirm and reformulate the technical, clinical, practical, and instrumental truths of our task, together with the social and economic realities that demand change: to combat poverty, abolish the victimization and isolation of disadvantaged populations, ensure just and comprehensive access to services, condemn and expel corruption and violence as normative elements, and face every type of problem or event with valid information, solid knowledge, clarity of mind, integrity, and genuine sense of justice, in order to build a more dignified, more ethical, and thus a freer society.

Funding

None.

Conflict of interest

The authors declare that they have no conflicts of interest.

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salud mental

ORIGINAL ARTICLE
Volume 46, Issue 5, September-October 2023
doi: 10.17711/SM.0185-3325.2023.030

Normality and mental health: The ethical dimension

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Received: 16 March 2023
Accepted: 26 April 2023

Citation:
Lolas Stepke, F. (2023). Normality and mental health: The ethical dimension. *Salud Mental*, *46*(5), 241-245.

DOI: 10.17711/SM.0185-3325.2023.030

ABSTRACT

This article applies the concept of normality, in both its descriptive and normative connotations, to the field of mental health, emphasizing its ethical undertones in different cultural and situational contexts. Ethics is defined as the linguistic justification of morals, and bioethics is characterized by arguments based on dialogical, discursive, and deliberative processes. Bioethical decision-making influences human relationships and has implications for diagnosis, prognosis, interventions, and evaluation of therapeutic results and outcomes. Normality in mental health should be reformulated on bioethical principles to avoid being a source of stigma and discrimination, at a time when human diversity and cultural change impose a redefinition of conceptual boundaries and depathologization of different forms of behavior and experience.

Keywords: Normality, mental health, ethics, bioethics, discrimination, stigma.

RESUMEN

Se aplica el concepto de normalidad en sus connotaciones descriptiva y normativa al campo de la salud mental, destacando su tonalidad ética en diferentes contextos culturales y situacionales. Se define la ética como la justificación lingüística de la moral y se caracteriza a la bioética como fuente de argumentos basados en procesos dialógicos, discursivos y deliberativos. La toma de decisiones en clave bioética influencia las relaciones humanas y posee implicaciones para el diagnóstico, el pronóstico, las intervenciones y la evaluación de resultados y consecuencias. La normalidad en salud mental debiera ser reformulada sobre la base de principios bioéticos a fin de impedir ser fuente de estigma y discriminación en una época en que la diversidad y el cambio cultural imponen una redefinición de límites conceptuales y la despatologización de diferentes formas de conducta y vivencia.

Palabras clave: Normalidad, salud mental, ética, bioética, discriminación, estigma.

DIFFERENCES BETWEEN INDIVIDUALS

Human behavior is characterized by its variability. Differences between individuals can be relatively permanent and are conceptualized as personality traits. The personality construct refers to the permanence of propensities and behaviors. It has the value of a predictive description. There is also situational variability, which is alluded to in the concept of state. A person can feel anguish, fear, or joy, have certain desires, and act unexpectedly. Such states, by definition transitory, are not used to characterize people but rather to evaluate situations or capacities.

When traits or states cause impairment, disability, or handicap, altering social relationships or causing suffering, the result can be called a disorder. Disorders can be brief and transitory or prolonged and permanent, configuring psycho-pathological patterns. Persistent affectations are usually classified as personality disorders and transitory ones as symptoms of possible "diseases" that psychiatric nosology distinguishes based on their intensity, frequency, or degree of disturbance of habitual life.

Not all psychopathology requires specialized interventions. Depending on the culture and circumstance, manifestations that in one context may seem minor or that can be remedied over time or through social support, in others may be cause for concern and a cry for professional help. A typical case is mourning the loss of a significant or loved person, which begins to be considered pathological when its duration or intensity exceeds the tacit frameworks established by a person's environment.

CONCEPTS OF NORMALITY

The concept of normality became culturally ubiquitous in health in the mid-twentieth century. Previously it denoted a statistical notion, meaning a distribution according to certain quantitative parameters. Strictly speaking, it equated to a high probability of an event or a high frequency of a characteristic.

The concept of normality has at least two connotations (Rost, Favaretto, & De Clercq, 2022). It is a descriptive notion, which indicates a state of affairs or belonging to a group or habitual situation. It has also normative connotations, indicating what "should be" appropriate, correct, and desirable according to accepted standards, either quantitative or qualitative. In physiological research, for example, what the aggregation of process studies indicates as habitual for the human species becomes the norm. Thus, for example, a temperature higher than 37°C is both a description and an indication of being outside the norm, in which case one speaks of "fever" (Lolas, 2001).

In medicine, the notion of normality has different uses open to criticism (Catita, Águas, & Morgado, 2020). The first derives from statistics. A value or state found in most measurement events or situations specified by theory is normal. Most laboratory tests give results depending on the conditions and methods of measurement. The accumulation of measurements under standardized conditions allows for the definition of a range of variation considered normal. This is the case of glycemia, body temperature, blood electrolytes, hormonal assessments, heart or respiratory rate, and a wide variety of parameters. Thus normality turns into normativity (Lolas., 2001).

The second connotation of normality is associated with a set of desirable or ideal attributes. The body accepted in a culture without objection, or the manifestation of culturally desirable attributes is normal. There is also a dynamic or temporal consideration. Certain bodily processes that run without alterations are normal, with their appropriate and accepted rhythms and in the expected places in the body. For the classical medical mentality, what makes a process abnormal is heterochrony, going out of the expected rhythm, or heterotopia, occurring in unusual places.

Normality is usually associated with adaptation to changing environments and with the biological and social advantage of existing without major modifications when conditions change. Cannon's classical notion of homeostasis conceives of adaptability as part of biological normality, and Claude Bernard suggested that the constancy of the internal environment is a condition for a free existence. Normality is adaptability, resistance, and resilience.

It is customary to consider normality as a component of the complex concept of health, understood not only as the absence of suffering, but as fullness and enjoyment of capacities. To the consecrated definition of the WHO, a prospective factor of permanence and expectation must be added, which takes on importance when talking about mental health.

"Mental health" is a pleonastic construction, that is, a phrase or combination of words with excessive and redundant valence. There can be no health without mental health in any animal species, especially human. What is insinuated with the over-meaning added to the idea of health by the adjective *mental* is both the self-perception of a satisfactory and pleasant interiority and the ideas, projects, and perspectives that people harbor according to their knowledge and beliefs. The mental is the conscious or the unconscious that is accessible to the word, the relation of behavior to meaning, or behavior according to the social norm. When any of these aspects of the mental show abnormality, the result is called a mental disorder. Technically, it is unlikely or impossible that ideation or behavior does not have some form of correlation with processes in the central nervous system. However, debating dualism versus monism, determination, or physiological modulation is not the objective of this text (Armstrong, 2005).

ETHICS AND MENTAL HEALTH

The concept of normality, which in physiological or physical medicine is assimilated, albeit with reservations, to average magnitudes of measurable parameters, is confusing in the field of mental health (Jäger, 2018). Many variants of behavior, self-perceptions of subjective interiority, and sensibility are unequivocally incommunicable. The psychiatrist or psychologist has sources of information such as the word (which roughly reflects interiority), manifest behavior (motor behavior), and physiological signals (chemical or electrical). This psychophysiological triad (Lolas, 1988b) is expanded with the consideration of personal history as biography (self or other), the material products of personal activity (writings, drawings, objects), and family history as suggesting abnormal predispositions or diathesis.

If morality can be considered the social behavior "accepted" by a society, ethics is the verbal justification of what is correct and what it should be. It is not a question of verifying only what is, or what nature can be. Ethics justifies what should be according to the ideals of a culture. It is a philosophical discipline that uses language to support prescriptions and prohibitions. It requires a source of authority that imperatively allows justification: a religious belief, a philosophical conviction, the mandate of reason, the knowledge of nature, or any source recognized as an authority worthy of compliance and respect. The variant known as bioethics highlights the relational role of this "justificatory language game," by proposing that norms should come not from the monological derivation of a system of thought, but from the dialogical and participatory appropriation of conventions. In bioethics, dialogical or "multilogical" deliberation predominates, basing its acceptability on consensual procedures rather than on the imposition of doctrines. Its decisive cultural contribution has been the installation of social institutions known as committees that combine different visions and interests to make decisions. There may be tensions between the ethics of convictions and the ethics of responsibility (which considers the consequences of actions). The bioethical discourse accepts the plurality of rights and duties and combines perspectives and interests.

It is not surprising that ethical prescriptions and prohibitions can be read in a psychological key and that many disorders today considered psychiatric (in medical psychiatry) have been attributed to "moral idiocy," "perversion," or "demonic possession." The abnormality is thus confused with moral deviation and the disturbance is interpreted in an ethical key. Remnants of such a position persist in the notions of deviation and degeneration, less useful today since they have been associated with etiological considerations that are no longer valid. The "causes" of so-called mental disorders oscillate between physiological and anatomical determinations, oppressive or limiting social contexts, and genetic predispositions.

DIMENSIONS OF BIOETHICS IN PROFESSIONAL PRACTICE

When we address here the interface between ethics and mental health, we do so from a special, limited perspective. It is about elaborating on the form of ethics that can best serve to help people who suffer from disorders, and the appropriate behavior of those who can and should help people who need and require help. The appropriate practices in a given context are defined by multiple interests: social, economic, cultural, and institutional. Thus, from a bioethical point of view, it is a matter of specifying the ethical dimension that justifies individual or collective interventions to alleviate disorders of ideation, emotion, or behavior (Lolas, 1988a).

The need for bioethical discourse begins with the adequate training of professionals, who must know how to support their actions on a technical level, and also how to justify them ethically. The perception of one's value architecture is possible with introspection and experience, which can be exercised in teaching. It is part of the didactic analysis used in psychoanalytic training, but its principles should be considered in any educational process.

In a professional relationship, there are a multiplicity of planes. The people who meet—therapist-patient, doctor-patient—are just examples. However, each person entering into the dialogue does so with a personal and cultural background, in addition to the presence of many relevant people, who, although physically absent, never cease to influence the relationship. There are "significant others" in the lives of the interlocutors, authority figures, and the pervasive influence of law and custom. The relationship also includes what in psychoanalysis is known as transference, sometimes with vicariant identifications (the therapist replaces the father or mother, and the patient can awaken associations with people from the therapist's biographical memory, for example).

In the dialogic situation, these various layers of meanings can be identified. It is not always easy. The medicalization of psychiatry reduces the interview to the search for a diagnosis, a label that is reached inductively, depending on the thoroughness of the examiner, the identification of relevant signs and symptoms, and their division into significant groups (syndromes, clinical pictures, disease entities). The idea of a patient in society is that of a "labeled person" or "cataloged individual." The power of professionals consists in giving names to what worries or torments people. It is not always possible; many complaints and the feeling of limitation or impairment sometimes do not fit with the categories in which "diseases" are coded. Feeling sick is not the same as having a disease or being considered sick (illness, disease, sickness). This discursive dissociation forces us to consider different points of view in the construction of a common concept (illness negotiation) based on the "offer" of signs or symptoms that the expert can group into meaningful categories and that can be labeled with a view to intervention. The psychiatric diagnosis is not only a description; it is also a prognosis and an indication to intervene. However, there are also the perceptions of people who tend not to communicate where there is no trust in professionals or if communication implies unwanted stigmatization (Lolas, 2014).

Diagnosis, therefore, has an axiological dimension (Lolas, 2009). Designations, and words, have effects on people's lives and often initiate a "patient career," since with this labeling an identity element is added that can cause stigmatization and discrimination. People labeled as "carriers" of a condition assume an identity that modifies their lives, induces concern or anguish, and determines behaviors (Lolas, 1997). It also has legal and social consequences, since it can generate actions to repair damage or limitations on interpersonal treatment. It is understandable to use diagnostic terms that avoid these consequences, distorting statistics and leading to negative consequences (although sometimes the diagnostic label is used to advantage). The psychological or psychiatric diagnosis requires consideration of its consequences and is ethically relevant.

The relationship between professionals and applicants for help is marked by prohibitions and limits that are part of the ethical context of professional practice. In medicine, most of the codes of behavior highlight the obligation to keep secret what is exchanged in meetings and to practice the trade following the ancestral precept of "do no harm," which also finds expression in prescriptions and interventions. Especially in the case of vulnerable people or those in need of esteem and support, the relationship must be carefully elaborated in order not to generate harmful dependencies or affective transfers that alter the necessary "equanimity" that must prevail. Empathy and willingness to help, as William Osler indicated, should not prevent the necessary distance that avoids the clouding of clinical judgment and distinguishes professional intervention from friendly comfort. People do not go to professionals just to be sympathized with. They also want expert knowledge, experience, and accuracy.

There is a frequently highlighted tension here. The alleged dehumanization of medical practice and the reduction of people to numbers or cases, the basis of some criticisms of the medical model propagated by some sociological currents, is usually based on the convenience of not affecting judgment based on feelings, the self-protection of professionals against the pain that is contagious and damaging, or administrative reasons that simplify communication in health institutions. The balance between understanding, empathy, warmth, truthfulness, honesty, and technical competence is an achievement of correct professional training.

Therapeutic interventions are of many types. They begin with the word, and what Michael Balint has called the "medical drug": the mere presence of someone who knows and has authority is a component of the healing or curative action. Like any drug, it must be dosed and administered at times and in ways appropriate to each subject. These are semiotic and discursive technologies, part of the "hidden curriculum" of professional studies because they are not always explicitly taught. Collecting data for a medical history is not the same as reconstructing a biography. The ethics of the verbal or pre-verbal intervention must be considered when defining the abnormality in conjunction with those who want help. The ultimate foundation of the anthropological orientation of medicine, observed Viktor von Weizsäcker, is the recognition of the Other as a person and the reformulation of the interpersonal relationship as "communicative praxis." In psychiatry, "encratic" technologies (related to the management of professional power) have historically played an important role, as noted by Foucault, who observes how the prescriptions of the French alienists of the eighteenth and nineteenth centuries explicitly highlighted manifest "psychiatric power" in the appearance, the institutional design, and the hierarchies of "caretakers" that the "moral treatment" then in place demanded (Foucault, 2007). It was a sign of abnormality not to abide by such relationship designs. It is necessary to examine the historical changes in the ethics of professional practice leading to more egalitarian forms of treatment and the abandonment of old notions about the incapacity and incompetence of the "mentally ill."

Instrumental interventions, from the technification of the diagnostic process to pharmacological, surgical, and telematic treatments, are part of the ethics inherent in the labeling of abnormality that precedes any non-verbal action in the technical process of "therapy" (which means help). The complexity derives from the fact that it is never a simple exchange or relationship between two people. The significant others are present in the lives of therapists and patients, the prejudices rooted in culture, the institutional context in which the interaction takes place, and the omnipresent influence of economic factors. The latter involves external actors, such as industry and social security systems. Factors and interests that affect the "quality" of care, such as the prescription of novel drugs or sophisticated techniques not available to all communities or individuals, play a role. Not recognizing or ignoring these factors does not nullify their influence on decisions, and requires, apart from the usual regulations in professional behavior codes, an acknowledgment of the conflicts of interests or loyalties that their existence inevitably generates.

Finally, there is an ethical dimension (that is, morally expressible and in need of justification) in the analysis of costs and benefits generated by professional work. It is different to talk about "effects" as different from "results." Even perceptible curative interventions must be judged in the context of the "satisfaction" that their final result generates in consultants and professionals. In the field of mental health, with its diffuse and incommunicable results, this evaluation must incorporate not only the convictions of the participants, but also the individual and collective effects of the interventions. Evidence-based psychiatry cannot be separated from value-based psychiatry. This second formulation, however, is ambiguous. It refers both to respect for the values of patients and therapists and to the social and economic cost of decisions. Not infrequently the normality achieved for one group of people is unattainable for others, and professionals are faced with working in the contexts imposed by the resources and the possibilities of the populations to be cured and healed.

The normality predicated on the experiences and behaviors of people requiring help for disorders not exhibiting a physically measurable substrate requires considering the validity of this conceptual category. As medicine becomes a search for normality through curative procedures, it condemns many individuals to exclusion and discrimination. It dichotomizes a complex reality. The ethical challenge is to distinguish abnormality from acceptable or condemnable varieties of human beings. Historical evolution indicates that many diagnostic labels of the past have been "depathologized" and have become acceptable variants of the human condition (think, for example, of homosexuality, which went through the stages of "egosyntonic" and "egodystonic" before becoming a socially and medically acceptable variant of personal life). It is not about reducing psychiatry to a mere social control device or denying the existence of pathological conditions, but about reformulating what is normal and abnormal on a plane that is independent of what is pathological. Canguilhem (1966) implicitly suggested the need to deconstruct normality as normativity and not simply to oppose the terms normality and disease, especially if the former is identified with "the average" or "the usual". What is pathic, what makes one suffer, is not necessarily pathological, worthy of diagnostic labeling.

BIOETHICAL CONTEXTS FOR A REDEFINITION OF NORMALITY

The redesign of a broad concept of normality requires considering the diversity of human existence and demands a reformulation, at the level of what is loosely called "mental health," the changing boundaries of the pathological. It is a challenge for a psychiatric and psychological metatheory to rescue the original use of the idea of normal, which in its statistical meaning is equivalent to "probable" or "frequent" (Rost, 2021). When adopted in the medicalizing (or pathologizing) language game, it poses ethical dilemmas. As a language game that reflects vital worlds, bioethics as a deliberative and dialogical exercise reconsiders differences, deficiencies, and impairments as challenges. It invites us to explore the "testimonial injustice" that makes social and physiological norms inflexible in pursuit of a desired objectivity never reached by professional work in mental health. It places importance on recognizing and celebrating the perfections of imperfection, as well as understanding the power of mental resilience. To reach normality is to embrace abnormality and accept the variability, inconsistencies, and discrepancies that are naturally part of all human life. As a concept it demonstrates the importance of lifting oneself up to build a brighter and more hopeful tomorrow, and encourages individuals to make conscious and proactive efforts towards revitalizing their well-being.

The bioethical enterprise is in essence the discursive reformulation of relational contexts through the deliberative process embraced jointly by those who help and those who seek help (Lolas, 2002). In this endeavor, bioethics goes beyond the simple application of principles and calls for pro-active thinking and a thorough examination of normality and normativity.

Funding

None.

Conflicts of interests

The author declared they have no conflicts of interest.

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ORIGINAL ARTICLE
salud mental
Volume 46, Issue 5, September-October 2023
doi: 10.17711/SM.0185-3325.2023.031

Anthropological algology and bioethics

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Received: 29 March 2023
Accepted: 20 April 2023

Citation:
Martinez Pintor, F. (2023). Anthropological algology and bioethics. *Salud Mental*, *46*(5), 247-250.

DOI: 10.17711/SM.0185-3325.2023.031

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, Laín 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 Laín 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 antiquity 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.

Funding

None.

Conflict of interests

The author declared they have no conflicts of interest.

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salud mental

ORIGINAL ARTICLE
Volume 46, Issue 5, September-October 2023
doi: 10.17711/SM.0185-3325.2023.032

Ethical and social issues in research on genetics and mental health

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Received: 16 March 2023
Accepted: 20 April 2023

Citation:
Rodríguez-Yunta, E. (2023). Ethical and social issues in research on genetics and mental health. *Salud Mental*, *46*(5), 251-259.

DOI: 10.17711/SM.0185-3325.2023.032

ABSTRACT

Objective. To reflect on ethical and social issues related to research on the genetics of mental health. **Method.** A narrative review was undertaken of 87 articles found in three databases: Medline, Scopus, and Scielo. Keywords were defined broadly to capture as many relevant publications as possible. Data were summarized by topic. **Results.** The following topics were identified regarding the application of genetic and genomic tools to mental health disorders: problems with diagnosis, proper informed consent procedures, protecting confidential data, providing participants with research results, risk-benefit balance, equity and access, commercialization of genotyping, and prenatal testing. **Discussion and Conclusion.** Although a promising field, there is still much research needed on genetic approaches to mental health to achieve clinical relevance and predictive value, and more so in developing countries where there is little available data. Cost-benefit studies thus do not recommend genetic diagnoses in underdeveloped settings. Instead, local approaches should be enhanced. One limitation of research on the genetics of mental health is that it seeks biological causes for mental illnesses. However, the etiology of most mental health disorders is multifactorial, limiting the predictive value of genetic tests. Still, understanding the genetic origins of the biological pathways that lead to mental illness is important to diagnosis and therapy. Other problems discussed are enhancement of the informed consent process and counseling, protection of the right to know and not to know, and how the geneticization of disease is related to stigma.

Keywords: Mental health, psychiatry, genetics, ethical and social issues.

RESUMEN

Objetivo. Este artículo reflexiona sobre temas éticos y sociales de investigación genética en salud mental. **Método.** Se realizó revisión narrativa mediante búsqueda en bases de datos: Medline, Scopus and Scielo (se revisaron 87 artículos). Las palabras claves se definieron con amplitud para mayor número de publicaciones relevantes. Los datos fueron resumidos de acuerdo con el tema. **Resultados.** Se identificaron los siguientes temas en la aplicación de herramientas genéticas y genómicas en trastornos de salud mental: problemas de diagnóstico, procedimientos de consentimiento informado apropiados, protección de confidencialidad, información a participantes de resultados, balance de riesgos y beneficios, equidad y acceso, comercialización de genotipos y pruebas prenatales. **Discusión y conclusión.** A pesar de promesas, todavía debe realizarse mucha investigación genética en salud mental para lograr relevancia clínica y valor predictivo, con mayor deficiencia en países en desarrollo. Los estudios de costo-beneficio no recomiendan realizar diagnóstico genético para enfermedades mentales cuando existen pocos datos. Se necesita mejorar soluciones locales para abordar la salud mental. Una limitación es que la genética busca causas biológicas, pero la etiología de muchos trastornos mentales es multifactorial, disminuyendo el valor predictivo de pruebas genéticas. Sin embargo, encontrar el origen genético de caminos biológicos que conducen a enfermedad mental es muy importante para diagnóstico y terapia. Otros problemas consisten en encontrar métodos para mejorar el proceso de consentimiento informado y asesoría genética, la discusión si se debe preservar el derecho a saber o el derecho a no saber y el cómo la genetización de la enfermedad mental se relaciona con estigma.

Palabras clave: Salud Mental, psiquiatría, genética, temas éticos y sociales.

INTRODUCTION

Mental health is a major public health concern. According to the World Health Organization, an estimated one out of eight people in the world has a mental illness; research is needed to identify new treatments and improve existing ones, as well as to reduce stigma and increase access to quality mental health care (World Health Organization, 2019).

Mental illnesses are difficult to study because it is not possible to perform invasive investigations of the brain. When physiological differences can be measured, it is often impossible to distinguish between causes and effects. Genetic research may offer hope in understanding the causes of mental illnesses by finding the specific genes involved and the pathological processes that lead to their development (Geschwind & Flint, 2015). Once the genetic basis is known, individuals can be diagnosed and treatment interventions performed earlier, rather than waiting for symptoms to appear, by which time they are often acute.

Molecular genetic variants have been found to be associated with mental illnesses including bipolar disorder, autism spectrum disorders, attention deficit hyperactivity disorder, anxiety disorders, major depression, and schizophrenia (Bray & O'Donovan, 2018; Akingbuwa et al., 2022). Genome-wide association studies have also identified genes associated with schizophrenia (Gejman, Sanders, & Kendler, 2011). However, there are various challenges reflected in the heterogeneity and polygenicity of these illnesses and the difficulty in connecting multiple levels of molecular, cellular, and circuit functions to complex human behavior that is also influenced by psychosocial factors (Geschwind & Flint, 2015). The etiology of most mental health disorders is multifactorial (Insel & Collins, 2003), caused by the involvement of multiple genes, environmental influences, and epigenetic factors (patterns of DNA methylation and histone modification). Environmental factors, such as poverty, adverse childhood experiences, lack of employment, lack of social relationships, and stress, increase susceptibility to mental disorders (Hughes et al., 2016; Venkatapuram, 2010; Knifton & Inglis, 2020; Nelson et al., 2020). In Latin America, low socioeconomic status and lack of schooling are related to symptoms of depression, suicide attempts, and mood and anxiety disorders (Peñaranda, 2013).

The multifactorial nature of mental illness limits the predictive value of genetic tests. In addition, most existing data are from people with European genetic origins: there is little data about other populations. Genetic studies try to understand the biological and heritable components of mental illness using twin and familial analyses, linkage analyses, and variant association scans. The field also focuses on the development of clinical applications such as pharmacogenetic and diagnostic tests, as well as susceptibility genotyping. Many mental health disorders (including schizophrenic, bipolar, depression, anxiety, obsessive compulsive, and eating disorders) are not entirely genetically determined, so genetic testing cannot establish, confirm, or refine a diagnosis, but it is recommended for childhood neurodevelopmental disorders such as autism and intellectual disability (Finucane, Ledbetter, & Vorstman, 2021).

Genetic research on mental health raises various social and ethical issues that will be presented here.

METHOD

A narrative review was undertaken with searches in three databases: Medline, Scopus, and Scielo. Only peer-reviewed journal articles in English and Spanish were included. Keywords were defined broadly to capture as many relevant publications as possible: ethical issues, social issues, genetics research on mental health, and psychiatric genetics research. Data were summarized according to the issue. No statistical analysis was performed.

RESULTS

1. Problems with diagnosis

Diagnosis of mental illness, like that of any other medical condition, constitutes the foundation for intervention or treatment, identifying the individuals in need of that intervention or treatment. The problem is that there are no underlying physical changes, so there are no laboratory tests to confirm or rule out a diagnosis. Genetic tests may find genetic causes of subtypes of mental disorders, but many disorders have multifactorial causes, such as multiple genes, epigenetic factors, and the environment. Many major mental illnesses, including schizophrenia, bipolar disorder, obsessive compulsive disorder, major depression, anxiety disorders, autism, and attention deficit hyperactivity are polygenic; they are explained by combinations of interacting factors such as rare and common single nucleotide polymorphisms, copy number variations, and large chromosomal rearrangements (Demkow & Wolańczyk, 2017). Genome-wide association studies have identified common biological pathways to disease (Network and Pathway Analysis Subgroup of Psychiatric Genomics Consortium, 2015). The use of next-generation sequencing such as whole exome and genome sequencing, multiplexed single-nucleotide polymorphisms, microarray-based comparative genomic hybridization, and RNA sequencing, has identified thousands of sequence variants related to mental health, but it is not possible to link these findings with the complex traits of individual illnesses, which precludes pre-symptomatic testing (Frebourg, 2014). There are also only a few clinically useful gene-response associations that can be used to guide the choice of psychotropic medication (Kose & Cetin, 2018). However, genetic tests may help in understanding the biochemical processes involved in the development of mental illness, which could be useful for developing specific drug treatments.

Mental illnesses are currently classified by symptoms and observed clinical phenotypes (Cuthbert & Insel, 2013), as outlined in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5).

2. Informed consent procedures

Proper informed consent requires disclosure to participants of relevant information, including risks, benefits, and alternatives, their right to make decisions, and the voluntary nature of their participation. There are differences of opinion about mental health patients' ability to provide informed consent, but it should be acknowledged that having a mental health disorder does not automatically mean a reduction in the ability to consent, and this ability may change over time (Knoppers et al., 2002; Palmer et al., 2013). Since informed consent is a process, greater emphasis must be given on sufficient dialogue and patience with mental health patients, with repetition of the information to be sure they understand it.

Genetic research has identified mutations and variant associations related to mental health disorders. These findings are complemented by the availability of clinical genetic testing for diagnosis, detection of carrier status, and the ability to predict the development of disease. However, the low predictive ability of genotyping for most mental health disorders may affect proper informed consent, since many patients have problems understanding test results of a probabilistic nature. The complex inheritance of mental disorders, which is influenced by cognitive, affective, and cultural factors (Zipkin et al., 2014), provides less pertinent information about risks than single-gene Mendelian disorders. It is thus recommended that genetic counseling be provided by well-trained professionals. Genetic counseling promotes informed choices by helping patients to interpret the chance of disease occurrence or recurrence, and by helping them to understand inheritance, testing, prevention, and adaptation to risks with respect to the condition being tested (Abacan et al., 2019). When children are involved, the information must be carefully transmitted by professionals using good judgment to balance the best interests of the child with parental preferences (Arribas-Ayllon, Sarangi, & Clarke, 2009). It is recommended that informed assent be obtained from children aged 12-18, so that they are involved in the decision. However, those with neuro-developmental disorders may have impaired cognitive functioning that makes them less able to provide assent (Mezinska et al., 2021). Most ethics codes state that refusal to participate should be respected, but if a child does not agree to participate, the validity of their reasons should be explored (Hiriscau et al., 2016). Unless there are possibilities for treatment, there is no obligation for children to undergo predictive testing, including for diseases that develop in adulthood. Many mental disorders lack preventive measures or effective therapies, considerations that argue against the imposition of genetic testing.

There are special ethical issues regarding informed consent for genetic testing related to mental illness (Hoop, 2008): genetic information may predict a person's future health, knowing genotypes related to mental health may have psychosocial consequences, and the information may affect relatives or population groups. The results of genetic testing can exacerbate stereotypes and potentially stigmatize members of a particular population or racial or ethnic group. Consenting to have samples taken for genetic research also raises concerns about biobanks or storage repositories that might make future use of samples. Research on genetic variation and its association with mental disorders requires large samples of biospecimens linked to clinical and phenotypic information, which complicates the informed consent procedures at the moment samples are taken.

An important aspect of informed consent for patients with mental illness is their ability to make decisions. There is often a need to assess this ability by evaluating their understanding of information, their appreciation of its relevance to their personal situation, their ability to reason about the information, and their ability to express a clear and consistent choice (Dunn et al., 2006). For some mental illnesses, some authors have argued for taking the reasonableness of choices into account (Marson et al., 1995). A greater risk calls for a greater level of understanding (Dunn & Misra, 2009). Effort must be made to have research subjects participate in moments when they are clearheaded.

Good instruments for the measurement of decisional capacity with empirical support are the MacArthur Competence Assessment Tools for Clinical Research and Treatment and the Competency to Consent to Treatment Inventory, which have been validated for patients with dementia (Dunn & Misra, 2009). Many patients with mental illness can make decisions, and there is no association between decision-making capacity and specific diagnoses, but impairments in cognitive abilities may affect decisional capacity (Dunn & Misra, 2009). One limitation of current instruments is that there is no predetermined cutoff above which sufficient capacity can be said to exist. Capacity is considered a continuum or sliding scale; an element of subjectivity is accepted in capacity assessment, depending on the risk-benefit ratio of the decision to be made (Dunn & Misra, 2009).

When there is no decisional capacity, substituted judgment may be ethically acceptable (Shore et al., 1993); in this case, the research subject's consent can be provided by proxy (Karlawish et al., 2002). The use of substituted judgment in research on mental illness raises ethical questions, since decisions about whether to accept potential risks and unknown benefits are made without knowing the subject's preferences, and use of the process depends on policies and review by research ethics committees (Dunn & Misra, 2009).

3. Protection of confidential data

Professional confidentiality is an obligation in psychiatric practice: information provided by the patient must not be revealed to others unless there is consent. The rights to privacy and confidentiality as a type of disability right, including for mental illness, has been advocated by the United Nations (1991, 2006), the World Health Organization (2005), and the Council of Europe (1950). Due to the sensitive nature of genetic information about predisposition to mental health disorders, patients have the right to prevent stigmatization or discrimination by keeping this information confidential. However, most countries allow disclosure of information without consent if required by law (for example, by court order) or for the protection of others and/or the patient (for example, when there is a risk of suicide or homicide). In many cases the potential for suicide or homicide may be unclear, which makes decisions about breaking confidentiality difficult (Kelly, 2017). Although genetic testing for suicide may have significant benefits, there are concerns about stigma, access to insurance and employment, and increased anxiety and depression (Kious et al., 2021).

Confidential information on mental health may also affect family members. However, susceptibility genetic testing for most mental health disorders provides little information about risks to relatives. Genetic information may also be relevant to groups other than families. Some people from racial and ethnic minority groups have said they do not want to participate in genetic research on mental illness because of the danger of stigmatization and because such studies are culturally objectionable (Harmon, 2010). Population-based studies must therefore balance benefits with risks of stigmatization and discrimination (Knoppers & Chadwick, 2005). Private data must be safeguarded with provisions regarding data flow and security vulnerabilities.

With respect to biospecimens and related private information, identifiable information should be protected with measures such as data encryption, coding, establishing limited or varying levels of access to data by those associated with the collection, use of nondisclosure agreements, or use of an honest broker system (McGuire & Beskow, 2010).

4. Providing participants with research results

Ethical guidelines, such as those of the Council for International Organizations of Medical Sciences (CIOMS), require providing participants with research results. Although these results can benefit participants in mental health research, there are possible legal, social, and psychological risks to consider. In general, researchers are more willing to share the results of genomic research, including unsolicited and secondary findings—when these are reliable and clinically relevant—than other types of results that are less reliable and lack clinical relevance (Vears et al., 2021). Given that much genetic testing related to mental illness has little clinical relevance, the tendency is not to share results unless requested; if no treatment or preventative measures are available the information may be a burden. Such tests may provide only the information that there is little genetic predisposition to developing a specific mental illness. Many researchers are in favor of sharing results when there are medical interventions available or when the findings are clinically relevant, but not when there are genetic variants of uncertain significance, such as with schizophrenia (Kostick et al., 2020). The reasons in favor of sharing results are related to the duty to warn, improving participants' quality of life, and facilitating opportunities for early intervention. The reasons against sharing them are related to the mixing of research with clinical care, the potential for burdening patients with unexpected information, and burdening researchers who lack appropriate resources to support sharing results (Kostick et al., 2020).

In research using big data from heterogeneous sources (e.g., genetic studies, online data, social media profiles, electronic health records, mobile health applications, medical blogs, web networks, and screening tests), it is unclear when to share data with clinicians, when it is ethically or legally required to alert people about potential harm, or when to share individual research results (Ienca et al., 2018). The interpretation of research findings may be difficult, given the polygenic nature of mental illnesses and the role of environmental factors, and the cost of sharing individual results may be high when it is necessary to take large samples to detect genomic effects that contribute only minimally to overall risk (Sullivan et al., 2018).

5. Risk-benefit balance

The ethical principles of beneficence and non-maleficence dictate that the personal and social benefits of genetic research on mental health must be maximized and the risks minimized. In order to devise proper ethical safeguards, it is necessary to gather data on the risks and benefits of such research and its clinical application.

The benefits of genetic testing may include its use in devising medical and preventive measures to reduce the impact of illness and biological side effects, as well as providing relief from uncertainty, satisfaction of curiosity, alleviation of guilt, a basis for greater family support, and the ability to make better life plans (Wade, 2019). Among the risks are psychological distress arising from fear of the consequences of mental illness and the possibility of stigmatization and discrimination. A positive result on a genetic test may lead to psychological distress, including anxiety, embarrassment, depression, disrupted relationships, hopelessness, and uncertainty in the face of unclear results (Wade, 2019).

The prediction of neurological disorders such as Huntington's disease, for example, has been found to be associated with a risk of depression and suicide (Meiser & Dunn, 2000). However, there are no consistent findings of psychological distress; it depends on many factors, such as the condition being tested for, the reason for testing, the social context, and the psychology of the individual being tested (Parens & Appelbaum, 2019). It has been found that learning about positive test results for the APOE4gene, associated with a predisposition to Alzheimer's disease, does not lead to elevated anxiety and depression levels, but does lead to behavioral changes concerning insurance and preventive measures; it also produces some psychological stress and lesser performance in memory testing (Bemelmans et al., 2016). Pregnant women receiving prenatal genetic testing of uncertain significance for genetic variants for mental illness show anxiety both during pregnancy and after giving birth, and they perceive their children as vulnerable, even when they do not show signs of the condition being tested for (Werner-Lin, Mccoyd, & Bernhardt, 2019). There are no systematic reviews that report quantitative evidence of statistically significant, severe, and sustained negative psychosocial consequences following genetic testing for mental health disorders, but some recipients of genetic risk information may experience a significant impact (Wade, 2019). Since mental illness affects emotions, cognition, and behavior, patients may be more susceptible to psychosocial effects than somatic diseases (Hoop, 2008). The illness itself, depending on the particular disorder, may produce anxiety, hallucinations, or mood swings affecting the quality of life.

The Nuffield Council (1998) has recommended that research must also consider social circumstances, and that children should not be tested for carrier status or for mental conditions that develop in adulthood, since this information would profoundly affect them and those around them. Testing children also denies them the possibility of making their own choice in adulthood, and there are additional problems for adopted children.

Stigma is defined as a social process characterized by labeling, stereotyping, and separation or isolation influenced by prejudices, leading to the rejection practices of status loss and discrimination, all occurring in the context of power (Link & Phelan, 2001). Connecting race or ancestry to mental health genetic information may be stigmatizing (de Vries, Landouré, & Wonkam, 2020). Stigma is produced mainly as a result of social misunderstandings about the behavior of people with mental illness, which places them at a disadvantage and affects their social inclusion. People with mental illness may also turn against themselves, accept these social prejudices, and lose their confidence, and the idea that genes cause the illness may exacerbate self-stigmatizing negative attitudes such as blame, prognostic pessimism, and shame (Rüsch, Angermeyer, & Corrigan, 2005).

Social discrimination against people with mental disorders has been documented in employment and health insurance. Mentally ill people have difficulty in finding jobs because employers discriminate against them in hiring, and there are cases of mentally ill people being refused insurance coverage or having to pay higher premiums (Sharac et al., 2010). In education, elementary and junior high school children with mental illness often suffer bullying, isolation, and social rejection (Humphrey & Hebron, 2015; Schulte-Körne, 2016; Husky et al., 2020). Laws may protect people with mental illness, but some may not seek redress because of the associated stigma (Cummings, Lucas, & Druss, 2013).

6. Equity and access issues

The principle of justice applied to health care seeks to achieve equity and reduce discrimination. Justice requires consideration of the potential social harms that may occur with participation of individuals and groups in clinical and research activities. The World Health Organization (2021) has defined equity in health as the absence of unfair, avoidable, and remediable differences in health among groups of people, whether these groups are defined socially, economically, demographically, geographically, or by other dimensions of inequality. In many health care systems around the world, access to mental health care is hampered by avoidable inequitable distribution of resources owing to injustices that drive the social determinants of health. There is often discrimination in access to diagnosis and treatment, or mental illness is not considered a priority in systems of health care. Stigmatization often creates barriers to access and quality care. People with mental illness have reported stigmatization by health care providers in the form of being devalued, dismissed, or dehumanized, excluded from decisions, being the object of subtle coercive treatment, being made to wait excessively for help, being given insufficient information, and being sent to prison or institutions without treatment (Clarke, Dusome, & Hughes, 2007; Barney et al., 2009; Knaak, Mantler, & Szeto, 2017; Hamilton et al., 2016; Thornicroft, Rose, & Mehta, 2010; Nyblade et al., 2019; Bhugra, Tribe, & Poulter, 2022). The emphasis on pharmaceutical interventions and required genetic testing have increased the cost of mental health care. The situation has been especially difficult for developing countries with fewer resources, including a sufficient number of psychiatrists. In addition, most data come from developed countries, and it is difficult for less developed countries to be included in genetic research. Different cultural, historical, and geographical contexts must therefore be considered to develop trust and engage underrepresented populations in genomic research (Atutornu et al., 2022).

7. Commercialization of genotyping

Concerns have been raised about the growth of commercial genetic testing marketed directly to consumers without a doctor's order. This service is not regulated in most jurisdictions since it is considered a "laboratory developed test." Since the results of genetic testing for mental diseases are not easy to understand, this practice may harm consumers. The tests results may be misleading, deceptive in marketing (such as promising a diagnosis or cure, sometimes with celebrity endorsements), or with little practical use (Kutz, 2010). Furthermore, the tests may provide results only for a subset of variants and miss the disease causing gene, they often provide no genetic counseling, and genetic privacy may be compromised. Companies often convince consumers to sequence their genomes and grant the company access to their complete genetic data, yet they provide only partial results that are not always accurate (Rodrigues, 2020). These companies are then in possession of resources of interest to researchers. The transfer of data and samples across international borders also raises questions related to data security, privacy, and governance of biobank procedures (Mezinska et al., 2021). This situation calls for regulation of direct-to-consumer genetic testing.

8. Prenatal testing

Some scholars have questioned whether prenatal genetic testing for susceptibility to mental disorders is morally justified, since discrimination and stereotyping may lead to eugenic practices. The ease of embryo elimination hinders the social goal of promoting equality for individuals with disadvantages (Chipman, 2006). Francis Galton (1901) was the first to propose a program of eugenic birth control to reduce undesirable genetic traits. His ideas were pursued by the eugenics movement of the early 1900s, which in many countries targeted psychiatric patients and others considered "genetically inferior" for forced sterilization and death, including in the United States, Germany, and Scandinavia, and especially under the Nazi program of "racial hygiene" (Broberg & Roll-Hansen, 2005). Today, eugenic decisions are made by individuals rather than the state, but there are social pressures favoring the eugenic mentality.

DISCUSSION AND CONCLUSION

The difficulties in mental health care of assigning a symptom to a specific diagnostic category are further complicated by factors such as the ability of patients to consistently verbalize their experience and the perceptive capacity of health professionals who must contend with the problem of subjectivity (Demkow & Wolańczyk, 2017). The difficulty of diagnosis has the additional risk of errors or conscious abuse in the application of diagnostic categories, which may result in patients' loss of freedom, overtreatment with drugs, labeling with a mental health disorder, or facing social or legal disadvantages. Diagnosis is also limited by social context, since people with mental health problems are generally identified when they transgress the culturally dependent social norms of verbal limits and acceptable behavior. There are social factors that complicate the problem, such as pressure from relatives to hospitalize a problematic family member, the political use of the mental health system against dissidents, and abuse in criminal proceedings that use diagnoses to argue for increased or reduced responsibility or punishment (Hartvigsson, 2023). One of the reasons it is important to find biological or genetic pathways that are involved in mental illness is to have a more objective system of diagnosis.

With respect to informed consent, decision making may be enhanced with educational interventions (Moser et al., 2006; Jeste et al., 2009; Palmer et al., 2008) such as repetition of information in different modalities (e.g., multimedia, presentation software, group discussions, interactive questions). To facilitate the engagement of research participants, community-based participatory research, which focuses on community needs, may help by informing researchers about questions to address the needs of those communities and avoid harm (Smikowski et al., 2009). Informed consent procedures must incorporate better communication to promote trust and respect the autonomy of research participants.

Some authors have argued that there is a right "not to know" for genetic testing for mental illness, since knowing may not add to quality of life but reduce it: people may lose hope and self-esteem and others may treat them as already ill, conditioning their personal choices and affecting their autonomy (Andorno, 2004). However, this view has been criticized as negatively affecting the interests of patients and family members in making their own testing and lifestyle decisions. Following this reasoning, individuals should not keep the results of genetic tests private, but should share the information with family members, following a family-based rather than individual model to manage informed consent and confidentiality in genetic testing (Parker & Lucassen, 2004). The potential benefits of genetic and diagnostic information and the fact that there are marked differences in preferences and interests among individuals suggest that there should be no right "not to know" in mental illness (Bortolotti & Widdows, 2011).

There is a need to improve genetic counseling. The benefits of genetic counseling do not depend entirely on the use of genetic testing: there are other considerations. Counselors should operate under a holistic and interactive view, discussing both genetic and environmental factors that contribute to the condition examined, addressing not only emergent feelings of guilt or fear, but also the emotional consequences of the exchange of information (Austin, 2020). The counseling strategy is enhanced when it is based on psychotherapeutically oriented information exchange, including family history, patient perspectives on the causes of mental illness, discussion of the role of genes and the environment, personal vulnerability factors, protective factors, the effectiveness of medication, self-management strategies to reduce the impact of mental illness, and considerations of sleep behavior, nutrition, exercise, and social and spiritual support (Austin, 2020). Mental health genetic counseling can help patients accept their illness at a deeper level and integrate it more fully into their sense of self in a way that helps them to feel empowered (Semaka & Austin, 2019).

The discovery of genes associated with mental illness has given rise to a tendency to define it as largely or entirely due to genetics. This perspective, which has been termed "geneticization" or genetic essentialism (Arribas-Ayllon, 2016), underestimates the array of social circumstances that affect mental health, and it may prompt stigmatization and discrimination by employers or health insurance companies. Clinicians also tend to favor pharmaceutical drug treatment rather than psychotherapy for disorders attributed to biogenetic causes, and patients may be blamed if they are not proactive in preventing the onset of the disorder (Lebowitz & Ahn, 2014). Iatrogenic effects of psychiatric drugs may cause harm (Evans, 1980; van Draanen et al., 2022), and there is a dependence on the pharmaceutical industry that neglects social and preventive measures (Ortiz-Hernández, López-Moreno, & Borges, 2007). Psychosocial therapeutic interventions have been shown to complement treatment in schizophrenia, improving social functioning and helping with adherence to medication (LeVine, 2012; Westermann et al., 2015). The issue has a cultural component that must be considered. For example, in some African cultures, mental illness is understood as caused by external factors such as the influence of ancestors or bewitchment, instead of the dominant individualistic view of the human body, with an emphasis on its intrinsic genetic and biological traits in Northern-Western cultures (Kamaara, Kong, & Campbell, 2020).

The lack of certainty associated with susceptibility genotyping due to the multifactorial nature of mental disorders must be considered alongside the risks of stigmatization or discrimination. But educating the public about genetics and genomics may help to avoid prejudice. For some, the genetic character of mental disorders has the potential to reduce stigma, since it assigns no responsibility to social factors; for others it may increase stigma, since it will mean that people with mental illness are "defective" and may be viewed negatively by others. It has been suggested that the genetic influence on mental illness may decrease punitive attitudes absolving people of responsibility, but it has also been found that it increases social distance from family members because of stigma (Phelan, 2002). Other studies show that geneticization of mental illness exacerbates social distance and discrimination for schizophrenia because of public perception of the immutability, dangerousness, and unpredictability of this disorder (Bennett, Thirlaway, & Murray, 2008; Lee at al., 2014), but not for affective disorders like depression or bipolar disorder. The belief in childhood adversity provokes lower acceptance of persons with depression (Schomerus, Matschinger, & Angermeyer, 2014). Clinicians may show less empathy, understanding, and patience when treating mental disorders as biogenetic (Lebowitz & Ahn, 2014).

Achieving greater objectivity in diagnosis is one reason why it is important to find genetic origins and biological pathways that are involved in mental illness, but despite promising advances, there is still much genetic research to be done to achieve clinical relevance and predictive value. In developing countries there is little data available, and so cost-benefit studies do not recommend genetic diagnosis in these settings. Local approaches need to be enhanced to deal with mental health care. The scarcity of resources demands that policymakers set ethical priorities that strengthen community resources and find local solutions to meet mental health needs (Saxena et al., 2007; deVries et al., 2020).

Funding

This study has not received any specific funding.

Conflicts of Interest

The author declares no conflict of interest.

Declaration

This work has not been previously published and it is not under review in any other journal in any language. It has been approved by the responsible authorities of the Interdisciplinary Center for Studies on Bioethics of the University of Chile.

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salud mental

ORIGINAL ARTICLE
Volume 46, Issue 5, September-October 2023
doi: 10.17711/SM.0185-3325.2023.033

Bioethics and advance directives in psychiatric in the hospital context

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Received: 28 February 2023
Accepted: 20 April 2023

Citation:
Mondragón-Barrios, L., & Lolas Stepke, F. (2023). Bioethics and advance directives in psychiatric in the hospital context. *Salud Mental*, *46*(5), 261-267.

DOI: 10.17711/SM.0185-3325.2023.033

ABSTRACT

Introduction. Mental health services have been a focus of human rights advocates and recent legal reforms in some Latin American countries, which have called for a change from the paradigm of hospitalization to one of accompanying and supporting the person with mental health issues, which make it possible to apply the Advance Directives in Psychiatry (PADs). This change will require time, as well as economic, material, and human resources, and transformations in attitudes, culture, and society, but the implementation of PADs cannot be postponed: they must be used to protect the autonomy of the persons affected, within a bioethical framework. **Objective.** Identify possible bioethical conditions in the prevailing conventional hospital context in Latin America that allow for an implementation of PADs. **Method.** A participant-observer study was carried out in two psychiatric hospital services from June to September 2022. **Results.** A thematic analysis found three themes: 1) clinical care, 2) patient predisposition, and 3) medical-legal questions. This study considered part of theme 2, including the following sub-themes: a) patient self-perception, b) biography/narrative versus diagnostic classification, and c) negotiation. **Discussion and conclusion.** Prominent among the sub-themes discussed are recognition of the values of autonomy and its elements in all of the expressions of the person with mental illness, as well as actions of the physician or health care team in synergy with supported decision-making, a distinctive feature of the anticipatory process of the PAD.

Keywords: Bioethics, advance directives, psychiatry, hospitalization, mental health, autonomy.

RESUMEN

Introducción. La atención de la salud mental se ha visto emplazada por los Derechos Humanos y las recientes reformas legales en algunos países latinos, que instan a cambiar el paradigma asistencial de la hospitalización al del acompañamiento y apoyo en la toma de decisiones de la persona en condición mental, que posibilitan la aplicación de las Directrices Anticipadas en Psiquiatría (DAP). Este cambio implica tiempo, recursos económicos, materiales y humanos, transformaciones actitudinales, culturales y sociales. No obstante, la implementación de las DAP no puede postergarse, deben aplicarse basadas en el respeto a las personas en un marco bioético. **Objetivo.** Identificar las condiciones bioéticas posibles en el contexto hospitalario convencional, imperante en los países de América Latina, que permitan la implementación de las DAP. **Método.** Se llevó a cabo una observación participante en dos servicios de hospitalización psiquiátrica, entre junio y septiembre de 2022. **Resultados.** A través de un análisis temático se obtuvieron tres temas: 1) atención clínica, 2) predisposición de los pacientes y 3) asuntos médicos-legales. Este estudio consideró sólo una parte del tema 2 con sus subtemas: a) Autopercepción de los pacientes, b) biografía/narrativa versus clasificación y c) negociación. **Discusión y conclusión.** En los subtemas discutidos se resalta el reconocimiento a los valores de la autonomía y sus elementos presentes en todas las manifestaciones de la persona con enfermedad mental, se reconoce también el actuar del médico o equipo de salud en sinergia con la toma de decisiones apoyada, que distingue el proceso anticipatorio de las DAP.

Palabras clave: Bioética, directrices anticipadas, psiquiatría, hospitalización, salud mental, autonomía.

INTRODUCTION

The psychiatric advance directive (PAD) is a process by which people with mental disorders determine in advance aspects of their care after they may lack the ability to do so, in order their wishes regarding care and treatment be understood and respected. The PAD is an instrument in the field of mental health that protects patient rights and the legitimacy of their decisions (Mondragón & Guarneros, 2020).

PADs have been introduced within the framework of recognizing fundamental rights under the Convention on the Rights of Persons with Disabilities, approved by the United Nations on December 13, 2006 (United Nations, 2006; Scholten, Weller, Kim, & Vollmann, 2021), as well as in mental health reform legislation in Latin American countries such as Chile (Law 21.331, "On the Recognition and Protection of the Rights of Persons in Mental Health Care") (Ministerio de Salud, 2021) and Mexico ("General Law on Mental Health and Addictions") (Secretaría de Salud, 2022; Marshall & Gómez, 2022). These laws conceptualize PADs as part of the rights of persons to mechanisms of support in decision-making, anticipating their future state of health.

The recent legislation of PADs in coordination with the U.N. Convention is intended to adapt mental health care to the social model of mental diversity; it constitutes a change from a paternalist posture to one of accompaniment in decision-making (Stavert, 2021; Marshall & Gómez, 2022). Self-determination, effective equality of rights, and the participation of persons with potential disorders is made explicit in the provision of care, therapeutic interventions, hospitalization, and other measures.

PADs allow people to specify therapeutic preferences, such as alternatives to hospitalization, restrictions, and confinement (Appelbaum, 2004; Srebnik, Appelbaum, & Russo, 2004; Srebnik & Kim, 2006). Even though, as Marshall and Gómez (2022) note, hospitalization should not be seen as involuntary if it is authorized in advance, PADs provide for it to be considered an "exceptional" measure in persons who experience an episode of acute instability (Amering, Stastny, & Hopper, 2005). The intent of the Convention and related legislation is to eliminate coercive interventions in order to guarantee the rights, the preferences, and the wishes of persons with psychosocial disability or mental illness (Szmukler, 2019; Noguero & Peregalli, 2021; Stavert, 2021; Scholten et al., 2021; Marshall & Gómez, 2022).

Noguero and Peregalli (2021) describe how admissions to closed hospitals with restrictive conditions involve the loss of freedoms, the traumatic experience of confinement, and the possibility of cruel or degrading treatment, with adverse effects on personal dignity. Latin American health systems generally lack alternatives to conventional hospitalization, such as home confinement or open-door acute psychiatric units, that are available in other countries (Cuevas-Esteban et al., 2022). If these alternatives are not developed in the region, the hospital context will continue to be one of paternalism and guardianship in a rehabilitative model, although also a resource, sometimes, compatible with bioethical principles and practices, such as informed consent (Valenti, Giacco, Katasakou, & Priebe, 2014; Martí, 2015).

The form of mental health care put forward by the Convention and the recent legislation in Latin American countries calls for a series of changes: increased budgets, specific resources, and development of alternatives in favor of a social model that would make possible the full implementation of PADs. However, their implementation should not be delayed while these changes are awaited. It should, moreover, be considered within the framework of bioethics. From this perspective PADs are part of an autonomist model that has been developed and accepted in recent years in health care contexts. This model considers the person affected by disorders as an active party, together with the health care team, in the making of decisions about procedures and treatment, including the making of decisions in advance.

Scholten, Gieselmann, Gather, and Vollmann (2019) describe the different aspects of autonomy: 1) instrumental, with which persons can decide which treatment options promote their well-being; 2) inherent, which shape their lives according to their own conception of good; and 3) "service users' positive claim on health professionals to be enabled to make autonomous choices. This grounds a duty on the part of health professionals not only to disclose the information about the consequences of the various treatment options in an understandable way but also to enhance service users' decision-making abilities by means of supported decision making" (p. 4). It recognizes people's right to choose a lifestyle they consider valuable, free, and autonomous, with adequate support to allow for full and effective participation in the construction of their health (Casado & Vilà, 2014).

Changing the paradigm of mental health care in Latin America from one of hospitalization to one of accompaniment and support in personal decision-making is essential, even if it requires time and multiple transformations (United Nations, 2006; Noguero & Peregalli, 2021; Stavert, 2021; Cuevas-Esteban et al., 2022). The implementation of PADs cannot be postponed, and it must take place based on a respect for persons in a framework of bioethics.

The objective of this study was to empirically identify the possible bioethical conditions in the prevailing conventional hospital context in Latin America that would permit the implementation of PADs.

METHOD

Design of the study

This was a qualitative study with simple participant observation (Monje, 2011, p. 153; Mondragón, Romero & Borges, 2008; Larraín, 2008; Castillo, 2018; Bárcenas & Preza, 2019; Granados, 2020, p. 5), carried out with a convenience sample in hospital services in the two major mental health institutions in Chile, from June to September 2022.

Sample

The sample was recruited from three specialized psychiatric units for men and women aged 14 and older. The units were located in hospital services at two different institutions, one public and one private, in the north of Santiago de Chile.

Measurements

Field diary. A field diary was used for observation to record the daily progress of events, experiences, happenings, concrete situations, impressions, statements, and other data. This type of instrument records systematic and detailed observations and information collected in situ (Larraín, 2008, p. 2), accumulating, categorizing, and synthesizing data for interpretation and analysis (Monje, 2011, p. 154; Castillo, 2018, p. 4; Granados, 2020).

Procedure

Participant observation began once approval was received from the Research Ethics Committee. The principal investigator attended the supervisory meetings for the cases of patients admitted to each of the three specialized psychiatric units in the participating institutions, and recorded, facts, objects, events, interactions, ideas, fragments of conversations, perceptions, opinions, and discussions of the treating health care team. The information was recorded in a detailed and systematic manner in a field diary for later evaluation, interpretation, analysis, and description (Monje, 2011; Larraín, 2008; Castillo, 2018; Bárcenas & Preza, 2019).

Statistical analysis

The data analysis compiled the information from the field diary into a single text file with 177 entries. A thematic analysis was performed (Howitt, 2010) to identify broad themes that characterized the content. Although this is a type of analysis used in qualitative research, it is less demanding than other techniques, since it is not closely associated with a particular theory, and is appropriate as a descriptive tool.

A descriptive coding of the data was carried out, with each word, phrase, or statement that referred to a theme assigned a code. During this process, some codes that were unsuitable were subdivided or corrected, and some with overlapping meanings were combined. The process produced 531 codes for the 177 entries. The codes that appeared most frequently (more than four times) were combined, producing 438 distinct codes.

The next step in the analysis was the identification of themes. Constructs connecting with a substantial number of codes were examined, and grouped in terms of similarities and common characteristics, which allowed for an evaluation of whether themes reflected relationships or differences between codes. The themes constructed captured the general meaning of the descriptive coding. Throughout the process of construction of themes, the relevance of each was reviewed with respect to the data as a whole and also among new themes with the entries from the field diary. The grouping of the codes and the development of themes were carried out based on the idea propounded by various authors that themes are not found in the codes themselves, but in the deliberation regarding a particular issue or its emphasis as a process of construction carried out by researchers in relation to a significant narrative (Braun & Clarke, 2006; Michel, Tachtler, Slovak, & Fitzpatrick, 2020).

The final step in the thematic analysis was a literature search regarding PADs and related texts, in order to support interpretation of the codes and themes. To complete the analysis, the entries in the field diary were reviewed once again, this time in light of the themes that had been developed. The importance of each theme was based on its relevance to the purpose of the study.

Ethical considerations

The research protocol was approved the Research Ethics Committee of the Santiago de Chile Metropolitan North Health Service. The study guaranteed the privacy and confidentiality of data. Observations omitted any identifying data regarding participants, patients, or third parties. Before observation began, participants were informed about the research project, the commitments and responsibilities involved in the study, its fully voluntary nature, freedom of participation, and other ethical considerations.

RESULTS

Participant observation is a deliberate and systematic process aimed at capturing the reality of a phenomenon under study (Monje, 2011, p. 153; Mondragón et al., 2008; Larraín, 2008; Castillo, 2018; Bárcenas & Preza, 2019; Granados, 2020, p. 5). The results of the thematic analysis of the observation showed three themes associated with the dynamics of psychiatric hospitalization: 1) clinical care, 2) predisposition of the patients, and 3) legal-medical issues. This study considered only the part of theme 2 that was linked to possible bioethical conditions in the hospital context that could facilitate the implementation of PADs.

Theme 2, the predisposition of patients, was defined in the following way in the observation records: "The self-perception of patients as an indicator of seeking help and voluntary hospitalization, as well an exploration of the patient's life history as a narrative, without a priori classification, in order to understand and explain their illness, with the purpose of negotiating the best treatment recommended by the health care team while respecting the decisions of the person with a mental condition and considering their family." This theme has three sub-themes: a) patient self-perception, b) biography/narrative versus diagnostic classification, and c) negotiation. The results for each were as follows:

Patient self-perception. Patient self-perception is an indicator of seeking help and voluntary hospitalization, when there is an ongoing sensation of decompensation, aggression, and impulsivity.

Admission of a patient. This patient mentions that he is being voluntarily admitted, that he is admitting himself because he is decompensated, which for him means that he started being very aggressive with his family, mainly with his mother, [and] also because he feels it. [Entry 18]

Another patient seeks pharmacological help, and the doctors think that is a good symptom, and congratulate him, while the patient doesn't understand why they are congratulating him. [Entry 114]

Biography/Narrative Versus Diagnostic Classification. The biographical details of the patient are given preference over any classification in terms of diagnosis or treatment. In addition to the clinical chart, the health care team focuses on exploring the patient's history, compiling a narrative of the case and symptoms, in order to arrive at a more general diagnosis of the complexity and context of the illness and provide more personalized treatment.

Admission of a patient. After the interview, the team begins to discuss the case; they mention aspects of the [patient's] biography, focusing on the part about the patient's social life. They say that the boy didn't have attention from his parents, although the father provided a lot of information about his life. [Entry 68]

They [the psychiatrists] tell him [the resident or intern] to explore the patient's history in order to know more and find out the causes of his use. [Item 160]

Negotiation. Addresses the need to arrive at an agreement with the patient and sometimes their family about the clinical recommendations of the health care team, such as continuing hospitalization, the best treatment, or at least the most appropriate treatment for the patient. This is a process that is carried out by means of the clinical case description (technical) and the interview (biographical listening), with non-classificatory narrative elements that allow for diagnosis and treatment. The objective of the meeting is to analyze and improve the patient's quality of life and respect their decisions.

There is a negotiation about the follow-up treatment before they discharge the patient, since this person says that this (the hospitalization) is a social experiment and is insisting that they discharge him, but he is very aggressive. [Item 56]

The professionals are divided over presentation of a case because the patient uses drugs, and presents other complaints such as chronic pain and factors related to antisocial acts, so he cannot be treated with a stimulant. Other professionals say that his treatment must be a stimulant. The disagreement is whether he should be discharged or not with stimulant medication. The question is what purpose it serves to keep him hospitalized longer, what benefit it would bring to him, and they answer and agree that it is necessary to learn more about the patient's life in order to offer him appropriate treatment with management of the controlled medication, that it not be abused. In the end they arrive at a negotiation to address more information with his family and see how much the patient can commit to change his use, so he will remain under observation for a while longer before he is discharged. [Item 75]

The treatment for the patient to be discharged and his willingness to follow up his care is important. One patient wants to leave the hospital to continue with his studies, but the team know that for now his social environment would make it impossible to manage his marijuana use, so they agree to negotiate with the patient and his treating physician, where they will highlight or emphasize as central the decisions the patient should make, so that there is an insight. If the patient decides to pursue his studies, they will ask him to go to follow-up treatment or another alternative that the psychiatrists are thinking of recommending. [Item 163]

DISCUSSION AND CONCLUSION

The first finding of this study concerned the patients' self-perception regarding feelings of decompensation, aggression, and impulsivity that lead them to seek help through hospitalization. This can be recognized as an autonomous act on their part, insofar as their consciousness of themselves and their decision-making ability, apart from the cognitive elements, includes their preferences and wishes, which allow them to recognize their symptoms and express an intention, such as asking for help or requesting voluntary hospitalization (Mondragón, Monroy, Ito & Medina-Mora, 2010; Szmukler, 2019).

Self-perception is not always a characteristic of people with mental disorders. Some people ignore or are not conscious of experiencing the first symptoms of an acute episode and thus do not seek help or present themselves as patients. This could call into question the instrumental or inherent value of their autonomy, not only in the sense of self-consciousness, but above all as a patient's ability to make decisions or declare their preferences. According to Hiu, Su, Ong, and Poremski (2020), this is one of the reasons PADs have not enjoyed widespread adoption (Scholten et al., 2019; Szmukler, 2019; Gloeckler, Ferrario, & Biller-Andorno, 2022).

This finding could thus be linked to the "combined supported decision-making model" of Scholten et al. (2019, p. 2), who note that the support of decisions in this model involves "substitute decision making in cases where a person's functional decision-making capacities remain below the threshold of competence despite the provision of support," as well as the evaluation of functional capacities of health choices. This model makes the objectives of the PAD compatible with accompaniment in decision-making for people with mental illness, as in the self-binding directives also known as Ulysses contracts (Potthoff et al., 2022).

Patients' self-perception of the symptoms preceding an acute episode and their request for voluntary hospitalization also appears to be related to safety or risk reduction. This finding is consistent with the results of Valenti et al. (2014), in their study of the values most important to patients who had been involuntarily hospitalized in England. They report that patients consider hospitalization as a form of risk reduction arising from their symptoms and illness, and that they justify their stay in the hospital as being in a safe place. Potthoff et al. (2022) also found that people perceive involuntary intervention, anticipated in a directive, not as a form of coercion, but as help and treatment. The interpretation of voluntary hospitalization as providing a clinical environment for the benefits of treatment in terms of risk reduction (Valenti et al., 2014) allows for a consensus between the physician and the patient at the moment of making a specific decision. Involuntary hospitalization is a very different situation, which the results of the current study do not examine.

Autonomy that emphasizes patients' preferences and desires, with respect to caring for themselves or perceptive self-care, is an essential bioethical principle in the implementation of PADs (Szmukler, 2019). The way in which to make this principle concrete is a still unresolved question requiring further investigation. Patients' search for help and voluntary hospitalization are acts that require physicians' support and accompaniment, that recall the duty to respect a person's decisions and act for their benefit, reducing the risks and increasing the benefits of treatment such as confinement and the patient's safety. Doing so allows the person labeled as a patient to play an active part in decision-making, together with the health care team, as implied by the respect for autonomy and the beneficial intent specified in PADs.

Another finding of this study was that of putting elements of the patient's history or biography ahead of any diagnostic classification in treatment. The approach through case narrative, symptoms, and diagnosis provides a concrete interpretation to the complexity and context of the illness and results in a more personalized treatment. This type of psychiatric approach allows for an implementation of PADs from a bioethical perspective that is more hermeneutic and more centered on the person, according to the development of their abilities for full participation (Casado & Vilà, 2014).

The importance of knowing the history or biography of people with mental illness as part of their care is consistent with the results of Hiu et al. (2020), who studied opinions and interests in the application of directives between persons diagnosed with psychotic disorders and care providers in Singapore. They found that patients had a greater interest in discussing non-clinical preferences, such as financial or dietetic concerns, or notification of their employers in order to obtain sick leave, and suggest that these preferences could improve their personal autonomy. They recommend that care providers recognize such information that can be added to PADs, that they value the document for more than its clinical content. PADs reflect the values and opinions that support people's lives, and for this reason non-clinical preferences should also be included (Hiu et al., 2020).

The second finding of this study, regarding biography or narrative versus diagnostic classification, supports the psychiatric and bioethical perspective that can provide utility, value, and meaning to PADs. Knowing a patient's history could also provide appropriate support or accompaniment for clinical and non-clinical decision-making that patients consider valuable, and important to their full participation in PADs. Plans for anticipated care should thus be reoriented to people's daily lives (Nicaise, Lorant, & Dubois, 2013; Casado & Vilà, 2014; Hiu et al., 2020; Stavert, 2021).

The third result of this study regards negotiation. At times it is necessary to come to an agreement with a patient and their family about the clinical recommendations of the health care team, such as whether to continue hospitalization or how to determine appropriate treatment, in order to consider and improve the patient's quality of life and respect their decisions about their health. According to Noguero & Peregalli (2021), hospital admissions can affect people's trust in health care personnel, with negative effects on the therapeutic process. However, hospital admissions and the care received can also be the focus of negotiation. Our results show that an agreement is made between people with mental illness and health care professionals about the most appropriate treatment. Negotiation is focused more on follow-up treatment and care plans that are consistent with people's daily lives (Nicaise et al., 2013).

This type of negotiation is not separate from that required for implementation of PADs. Nicaise et al. (2013) conducted a systematic review that considered PADs as multi-step interventions, including the drafting of the document, its finalization, and access. They found that 1) the drafting and content of the PAD are negotiated among the patient, physicians, and third parties; 2) PADs are created to strengthen the autonomy of people with mental illness or psychosocial disability, but the approval by physicians is critical to their effectiveness; and 3) support for PADs is greater if physicians and the health care team participate in the production of the document, especially in cases involving refusals of treatment. Scholten et al. (2019) found that 66% to 77% of the users of community mental health services in the U.S. would want a PAD if they were provided support, a figure comparable to those reported for New Zealand, the U.K., and India.

The negotiation carried out in the hospital context could be a model for deliberation, based on bioethics, in implementing PADs. It recognizes the ability of persons with mental illness to choose in advance their treatment, therapeutic measures, and circumstances associated with interests, preferences, and values in daily life for the moment in which they can no longer do so. It also involves a respect on the part of the physician and health care team that motivates shared decision-making (Nicaise et al., 2013; Szmukler, 2019). The results obtained here show that this context includes the bioethical considerations that could allow for the implementation of PADs. Each of the issues discussed here highlights the need for recognition of the values of autonomy and the issues in all the circumstances surrounding the person with mental illness, but the actions of the physician and the health care team are also recognized as a synergy in decision-making, in the form of support or as part of the combined supported decision making model (Scholten et al., 2019), considerations that characterize an anticipatory process. These issues are consistent with those found in the literature on PADs, noting that although PADs have been designed to increase the patient's autonomy, they turn out to be most effective in maintaining the therapeutic alliance (Nicaise et al., 2013; Scholten et al., 2019; Szmukler, 2019; Noguero & Peregalli, 2021; Gloeckler et al., 2022).

For the implementation of PADs in Latin America, it will be necessary not only to reconsider autonomy from a synergetic perspective, but also to address the challenges faced by some of the countries in the region, not only in the domain of clinics or health systems, but also in adaptation to viable and culturally congruent practices, such as mental health education and the identification and reduction of economic and structural barriers (Amering et al., 2005; Scholten et al., 2019; Szmukler, 2019; Gloeckler et al., 2022; Potthoff et al., 2022).

Bioethics can play a fundamental role in the implementation of PADs, but further research will be needed. The findings of this study include some limitations, but they also demonstrate practices in the hospital context that allow for an approach to bioethical conditions that may be necessary for the implementation of PADs.

Funding

This study was supported by a Postdoctoral Foreign Study Grant from the Mexican National Council of Science and Technology (Consejo Nacional de Ciencia y Tecnología, CONACYT) for the project "Bioethical Bases for the Implementation of Psychiatric Advance Directives in Mental Health Care."

Conflicts of interest

The authors declare they have no conflicts of interest.

Acknowledgements

This work was possible thanks to the health care professionals on multidisciplinary teams who shared the experience of their clinical practice, and also their patients. We also offer special thanks to the authorities of the institutions that collaborated in this project.

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salud mental

ORIGINAL ARTICLE
Volume 46, Issue 5, September-October 2023
doi: 10.17711/SM.0185-3325.2023.034

Chilean neurorights legislation and its relevance for mental health: Criticisms and outlook

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Received: 16 March 2023
Accepted: 24 April 2023

Citation:
Cornejo-Plaza, I. (2023). Chilean neurorights legislation and its relevance for mental health: Criticisms and outlook. *Salud Mental*, *46*(5), 269-274.

DOI: 10.17711/SM.0185-3325.2023.034

ABSTRACT

Background. Recently, the academic world has established a series of reconfigurations of emerging human rights, in order to safeguard the mental integrity of people exposed to neurotechnologies. The recommendations of different stakeholders and a literature review support regulation of these technologies. There are different proposals for regulation, some in soft law and others in objective law. The type of regulation chosen can have repercussions on clinical practice, research, and public policy. The constitutional enactment of neurorights in Chile has been criticized in the academic fields of neuroethics and law as having potential negative effects on mental health research. **Objective.** To analyze in light of the available literature whether the construction of neurorights could create ethical conflicts in the field of mental health, or if it could offer protection against the disruptive use of various neurotechnologies. **Method.** This analysis included a narrative review of studies included in the PsycInfo, Springer, JSTOR, Medline, Scopus, PubMed, CINALH, and Web of Science databases, without restrictions on language or year of publication. **Results.** The enactment of neurorights as hard law is found not to be detrimental to the field of mental health. **Discussion and conclusion.** This article argues that the regulation of neurorights does not threaten the framework of an ecosystem that uses neurotechnologies. On the contrary, such regulation offers protections to people within the complex system of neurotechnologies.

Keywords: Neurorights, neuroethics, neurotechnologies, regulations, mental health.

RESUMEN

Antecedentes. Recientemente, el mundo académico ha establecido una serie de reconfiguraciones de derechos humanos emergentes, con el fin de salvaguardar la indemnidad mental de las personas expuestas a las neurotecnologías. Las recomendaciones de las diferentes partes interesadas y de una revisión bibliográfica son la regulación de estas. Existen diferentes ejemplos de regulación, algunos de derecho blando y otros de derecho objetivo. El tipo de regulación puede tener repercusiones en la práctica clínica, la investigación y las políticas públicas de una comunidad. La consagración constitucional chilena de los neuroderechos ha sido criticada desde el mundo académico de la neuroética y también desde el derecho argumentándose que podría ser negativa para la investigación en salud mental. **Objetivo.** Analizar a la luz de la literatura disponible si la constitucionalización de los neuroderechos es éticamente conflictiva en el campo de la salud mental o más bien la protege frente del uso disruptivo de diversas neurotecnologías. **Método.** Revisión narrativa de estudios incluidos en las siguientes bases de datos (PsycInfo, Springer, JSTOR, Medline, Scopus, PubMed, CINALH y Web of Science) sin restricciones de idioma o año de publicación. **Resultados.** No se considera que la consagración de los neuroderechos como hard law sea perjudicial en el ámbito de la salud mental. **Discusión y conclusión.** Se discute si los neuroderechos son una regulación amenazante en el marco de un ecosistema que utiliza neurotecnologías. Se concluye que, a pesar de las críticas, no lo es, sino que favorece la protección de las personas del uso inapropiado de neurotecnologías.

Palabras clave: Neuroderechos, neuroética, neurotecnologías, regulaciones, salud mental.

INTRODUCTION

Neurorights are a recent and evolving legal construct. They are emerging human rights, reconfigured in response to the impact of neurotechnology, especially its disruptive use on people (Ienca, 2021; Cornejo Plaza, 2021a). The concept has its origin in two foundational texts in ethics, neuroscience, and law, one by Marcello Ienca and Roberto Andorno (2017) and the other by the research group led by Rafael Yuste et al. (2017).

Although there is a consensus favoring the regulation of neurotechnologies (OECD, 2019; Goering, 2021), there is controversy over the choice of legal methods to carry out that regulation and the possible effects of these methods. One possibility is to regulate the use of neurotechnologies through "soft law," which favors the flexibility of regulations in the face of the vertiginous advance and obsolescence of technology (Marchant, 2011). Another solution is "hard law," which has been adopted by Chile. It is important to note that the concept of neurorights has been controversial among scholars. This article thus seeks to respond to a series of observations from the world of neuroethics and law, which warn that the Chilean regulation should not be replicated in other countries because it could have a negative impact on research and mental health.

In what follows we will analyze the concept of neurorights and address the main criticisms of the Chilean approach. Our conclusion is that given the disruptive use of neurotechnologies, the Chilean regulation has a positive effect; it does not hinder but rather protects the field of mental health.

METHOD

This study consisted of a narrative review of the main critiques of the concept of neurorights in the PsycInfo, Springer, JSTOR, Medline, Scopus, PubMed, CINALH, and Web of Science databases, with no restrictions on language or year of publication. An analysis is presented of the major criticisms, followed by a review of biomedical legislation and Chilean mental health law, in light of those criticisms.

What are neurorights?

Neurorights are a reconfiguration of rights that are especially affected by neurotechnology, artificial intelligence, and the metaverse (Genser, Herrmann, & Yuste, 2022). In 2017, two publications introduced the topic to academic discussion. In "Four Ethical Priorities for Neurotechnologies and AI," Yuste et al. (2017) propose a new set of human rights in response to the advance of neurotechnology: the rights to mental privacy, identity and personal autonomy, free will and self-determination, and protection from bias in algorithms or automated decision-making processes. In "Towards New Human Rights in the Age of Neuroscience and Neurotechnology," Ienca and Andorno (2017) address four neurorights: cognitive freedom, mental privacy, mental integrity, and psychological continuity.

Both papers agree on the importance of regulatory consensus on neurorights. One such right would be the right to enhancement neurotechnology, which would allow people to radically extend their resilience and capacities. "The pressure to adopt enhancing neurotechnologies, such as those that allow people to radically expand their endurance or sensory or mental capacities, is likely to change societal norms, raise issues of equitable access, and generate new forms of discrimination" (Yuste et al., 2017, p. 163). However, only Yuste et al. (2021) goes so far as to define this neuroright, in addition to the neuroright to decision-making free of algorithmic biases (Cornejo Plaza, 2021a). These are two of the most controversial neurorights (Muñoz, 2019; Borbón & Borbón, 2021).

Major criticisms of neurorights

Chile recently passed Law No. 21.383, modifying the final clause of Article 19, Number 1 of the Constitution, regarding the protection of mental integrity in relation to the advance of neurotechnologies. In addition, a regulation of neurotechnologies bill, which deals with the protection of neurorights, is currently under consideration; it would regulate research and development of neurotechnologies.[1]

The introduction of this legislation was met with criticism from Chilean academics (Zuñiga-Fajuri et al., 2021; Ruiz et al., 2021; López-Silva & Madrid, 2021) and civil society. One line of criticism argued that these rights are already protected by the Constitution and international treaties to which Chile is a signatory. The Constitution already guarantees the rights to privacy, non-discrimination, and equality before the law. However, neurorights are a legal advance because they are a form of regulation that protects human dignity.

A second criticism claims that the threats that neurorights are intended to neutralize are a legal fiction: they do not exist or are very distant. On this point, the legal literature defines legal fictions and allows them, as long as they contain gnoseological assumptions based on certain methodologically founded certainties (Campbell, 1983). At present, brain reading is only an experimental hypothesis confined to laboratories, not yet a mass reality. We may even be witnessing the beginnings of a mutation in ontology (Rose, 2016), for example in treating cognitive freedom as the reformulation of the right to freedom in its multiple dimensions (Ligthart, 2020). Behind it is the rationale that al-

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[1] See https://www.camara.cl/legislacion/ProyectosDeLey/tramitacion.aspx?prmID=14385&prmBOLETIN=13828-19

gorithms are able to manipulate our preferences for marketing purposes, which affects our privacy (Nissenbaum, 1998; Véliz, 2021), our cognitive freedom (Sententia, 2004), and our mental integrity (Lavazza, 2018). The need for regulation is thus not based on a potential danger, but on a disruption of what we expect artificial intelligence to do (Zuboff, 2015). Thus, cognitive freedom as a reformulation of other types of constitutionally guaranteed freedoms (freedom of conscience, freedom of inquiry, freedom of expression, freedom of religion) implies a presupposition of freedom of cognition that the conceptualization of neurorights protects, expands, and consolidates. In addition, the Santiago Court of Appeals has agreed to consider an action for protection based on the constitutional neurorights reform against the neurotechnology company Emotiv for appropriating the neural data of users. This action was declared admissible by the Supreme Court (Rol 49852-2022, Court of Appeals of Santiago), and makes it possible to strike down the claim that neurorights are a fictitious legal construction.

A third type of criticism notes that there are more pressing legislative priorities to be resolved, for example, the passage of a data protection law. Indeed, Bulletin 11092-07, addressing "personal data protection," was introduced to the Congress in 2017 as a modernization of Law No. 19.628.[2] It is true that there is a need to modernize data protection to international standards, such as the European GDPR, but the neurorights bill, although broadly converging with this regulation, is more specific to neurodata, that is, data collected by neurotechnological devices, especially with regard to the ethical use of the brain-computer interface (Vlek et al., 2012; Fouad et al., 2015; Goering et al., 2021; Naufel & Klein, 2020).

Following the enactment of the neurorights reform, there was another series of criticisms from the international academic community (Bublitz, 2022; Rommelfanger, Pustilnik, & Salles, 2022; Fins, 2022; Rainey, 2023). Cristof Bublitz, a specialist in criminal law at the University of Hamburg, who has been writing about neurolaw for more than a decade (Bublitz, 2022), speaks of an "interdisciplinary misunderstanding," asserting that "it should not be the scientists who are drafting the norms on neurorights" (Bublitz, 2022, p. 7), but jurists specialized in constitutional law. In Chile, he notes, these scientists are neurobiologists, a clear allusion to the influence of Rafael Yuste in the deliberations on the neurorights bill. It should be noted, however, that records of the deliberations show that constitutionalist law scholars and jurists from other branches of law were involved in the discussion, as well as experts from other disciplines, including philosophers, ethicists, and neurobiologists. The academics who supported the Chilean project left the academy and became activists who advised legislators in the drafting of the laws. In my particular case, I was invited because of my dissenting position, so it is not true that a biased group of academics were uncritically discussing the implications of neurorights.

The Chilean discussion of the neurorights reform came at a time of particular democratic vulnerability, since the prospect of a new constitution was being voted on. The reform was passed in an entirely democratic process that demonstrated that it was possible to have a dialogue while respecting the bases of democracy (Celag, 2022). A commission of 24 experts is now in search of a more consensual and less idiosyncratic constitutional text, and digital rights such as neurorights will again be discussed.

Rommelfanger, Pustilnik, and Salles (2022) allude to a conceptual ambiguity, although they recognize the trend towards regulation of neurotechnologies and in this context the concept of neurorights could be correct, as long as there is clarity. They also argue that the legislation has had a negative impact on mental health research in Chile, arguing that Chilean legislation aimed at protecting the vulnerable has had a negative impact on medical care and research (Ruiz et al., 2021; López-Silva & Madrid, 2021).

There are also the criticisms of the president of the American Neuroethics Society, Joseph Fins:

> *First, [neurorights] would be obliged to balance both positive and negative rights in the furtherance of human capabilities. Second, it would need to be future oriented and informed about the science it sought to regulate and not fall prey to science fiction fantasies that remain ungrounded in reality. Third, it would need to be specific and avoid generalizations that would lead to conceptual confusion and litigation that could forestall scientific progress. Finally, it would need to harmonize novel neurorights with long-established norms in international disability and human rights law. A failure to meet these criteria will destine any novel neurorights regime to the periphery. At this juncture Chile's nascent constitutional venture into neurorights fails to satisfy these criteria. While there yet may be a role for a more capacious and bivalent articulation of neurorights that accounts for capabilities and precedent, the current Chilean neurorights reforms are vague and premature. As such they should undergo additional scholarly scrutiny and should not be adopted by other jurisdictions. (Fins, 2022, p. 8).*

Fins's conclusion is that Chile's incipient neurorights reform does not meet these criteria, which will condemn any novel neurorights regime to irrelevance.

RESULTS

The criticism that the neurorights law could have a negative impact on mental health research with those who cannot give consent on their own, as is the case of patients with alterations of consciousness or advanced Alzheimer's disease, has been discussed for more than a decade in Chile in light of a problematic article of Law No. 20.584, known as

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[2] See https://www.camara.cl/legislacion/ProyectosDeLey/tramitacion.aspx?prmID=11661&prmBoletin=11144-07

the "Law on the Rights and Duties of Patients," enacted in 2012. Article 28 of that law provides that "No mentally or intellectually disabled person who is unable to express his or her wishes may participate in scientific research." This provision rules out all biomedical research on people with alterations of consciousness or mental disabilities such as Alzheimer's disease, or those in a vegetative state (Valenzuela et al., 2015). The problem was partly remedied by the recent enactment of Law No. 21.331, "On the Recognition and Protection of the Rights of Persons in Mental Health Care" (Ministerio de Salud, 2021), although the new law still does not allow for research on persons without the capacity to consent. According to one analysis, "The law adds to the standards of the Helsinki Code, and safeguards are incorporated into informed consent, such as the prohibition of research on persons who might regain their capacity to consent to treatment, the duty to demonstrate minimal potential benefits and risks, and the possibility of advance consent, through advance directives for persons with neurodegenerative diseases" [Foros para el análisis de las implicancias de la ley 21.331, 2021; Universidad de Chile (2021)].

Another recent criticism (Rainey, 2023) argues that the neurorights could hinder attention to the regulation of neurological data more than it promotes human rights. The argument has contributed to a needed discussion in various fields about why we should protect mental integrity from the disruptive use of neurotechnologies, not only from the perspective of neuroethics, but also from a legal point of view. It is clear that the authors of the foundational texts of neurorights (Ienca, 2021) speak of reconfigurations of human rights, moving away from the novel refoundation proposal of neurorights, so that Hohfeld's magnifying glass could also be said to contribute to clarify the conceptual discussion, but at the same time further complicates the discussion with a new concept of neuroprivileges. It could be that we are facing a language game, a pendulum that swings between positions until it reaches the consensus necessary for an advance in the dialogue.

In the UK, the Regulatory Horizons Council has recently prepared a document that adopts a medical model similar to that of Chile, which would regulate neurotechnologies not only for therapeutic use, but also for commercial use, describing such regulation as "a proportionate regulatory framework that encourages the safe commercialization of medical neurotechnologies and addresses under-regulation concerns of non-medical neurotechnologies, and a governance framework to address the forward-looking ethical challenges neurotechnologies may pose in the future" (Regulatory Horizons Council, 2022). What is important about the Chilean regulation is that it emphasizes regulation of the recreational uses of neurotechnologies referred to as neuroenhancement (Maslen et al., 2015; Wexler, 2015; Cornejo Plaza, 2021b) and the ethical and regulatory issues raised by direct-to-consumer marketing of enhancement products (Goering, 2021).

Ethical Implications for Mental Health

The real challenge for mental health research lies in the reformulation of Article 28 of Law No. 20.584 and not in the enactment of neurorights at the constitutional level. Biomedical research in mental health is governed by health legislation. The law on neurorights does not interfere in this area, but to some extent remedies the disruptive uses of neurotechnologies that are not therapeutic but commercial. In this sense, the prohibition in the neurorights law of the use of neurodata without the user's consent is a legislative advance.

Law No. 21.331 introduced changes to the Sanitary Code with an impact on mental health. It amended Article 25 of Law No. 20.584, enacted in 2012, as follows:

4. Article 28 is replaced by the following:

> *Article 28.- Biomedical research may not be carried out on adults who are not physically or mentally capable of expressing their consent or for whom it is not possible to know their preference, unless the physical or mental condition that prevents granting informed consent or expressing their preference is a necessary characteristic of the investigated group. In these cases, a person whose health condition is treatable may not be involved in research without consent, so that they can regain their capacity to consent. In these circumstances, in addition to giving full compliance with the norms contained in Law No. 20.120, on scientific research on the human being and its genome, and prohibiting human cloning, and in the Sanitary Code, as appropriate. The research protocol must contain the specific reasons for including individuals with a disease that does not allow them to express their consent or manifest their show that the research involves a potential direct benefit for the person and implies minimal risks for them. A favorable report from an accredited scientific ethics committee and the authorization of the Regional Secretary of Health must be obtained in advance. In these cases, the members of the committee that evaluates the project may not be linked directly or indirectly with the center or institution in which the research will be carried out, or with the principal investigator or the sponsor of the project. The consent or expression of preference must be obtained as soon as possible from the person who has recovered their physical or mental capacity to grant said consent or express their preference. Persons with neurodegenerative or psychiatric diseases may give their informed consent in advance to be test subjects in future research, when they are no longer in a position to consent or express their preference* (Law No. 21.331 - Ministerio de Salud, 2021).

Biomedical research on minors is governed by the provisions of Law No. 20.120, which provide that their refusal to participate or continue in a study should be respected.

DISCUSSION AND CONCLUSION

The enactment of neurorights as hard law is not detrimental to the field of mental health. A lack of regulation in non-medical use could lead to problems related to safety (e.g., in relation to brain function modulation), privacy, misleading information, accessibility, and confidentiality. All brain modulation devices, both invasive and non-invasive, should be regulated as medical devices, regardless of the purpose for which they are marketed, as proposed by the European Commission. The recommendation of specialists is to regulate the inappropriate use of neurotechnologies, but the manner adopted must ensure the fundamental rights of individuals, regulatory integration, and technological innovation, and biomedical research should be carried out under the biomedical legislation. The legislation that is altered is that of consumer law: damage caused by a neurotechnological device for non-therapeutic use is no longer a matter of common law, but comes under a regulation of neurorights that protects mental integrity and cognitive freedom. The definition of neurorights is a task of jurisprudence. The legislation defines certain elements in a developing area of law, providing it with legitimacy and effectiveness.

Some authors have described the regulation of neurorights as a threat to an ecosystem that uses neurotechnologies. However, we conclude that despite these criticisms, from an ethical point of view it is not. Rather, it provides protection to people within the complex system of neurotechnologies.

The concept of neurorights can catalyze the normal evolution of the law in relation to the disruptive use of neurotechnologies and artificial intelligence, which has been accelerated by the COVID-19 pandemic. It has been adopted in Chile through democratic mechanisms, not behind the back of the people. In the deliberations on the proposed legislation, all parties were heard who wished to contribute their views; the proceedings were public and interdisciplinary, and included constitutional and civil legal scholars, experts in human rights, bioethicists, neurobiologists, and others.

Neurorights are a contribution of reflection and courage in the face of a future full of questions, challenges, and opportunities for improving our personal and social well-being. Discussions on neurorights must continue at all levels: political, academic and societal. There are continuing issues regarding the conceptual definitions of different neurorights and the new taxonomies arising from new technologies, and the task of addressing them is one for legal scholars and other academics (Herrera-Ferrá et al., 2022; Muñoz & Marinaro, 2022). This regulation provides a robust response relying on the biomedical model in the face of unregulated neuroenhancers without appropriate consumer legislation. Because it derives from the biomedical model, the regulation of neurotechnologies is no more restrictive than other regulations in Chile, which did have a negative impact on mental health research on vulnerable groups. This regulation does not affect research on mental health, but sets high standards for the commercial use of neurotechnologies.

Funding

None.

Conflict of interest

The author declare they have no conflicts of interest.

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   - **Título corto.** Debe contener un máximo de seis palabras.
   - **Nombre completo del autor y de los coautores.** El orden en el que se proporcione esta información será el que aparecerá en su posible publicación y en las bases de datos. Los autores deberán separarse por una coma; luego, en superíndice, sin espacio intermedio, deberá colocarse un número arábigo que indique la institución de adscripción. De acuerdo con la numeración del superíndice de cada autor/coautor, se señalará la adscripción completa de la institución a la que pertenece, especificando el área en la que labora dentro de ésta.
   - **Adscripción de los autores.** Se debe indicar con números arábigos y en superíndice. Las adscripciones se colocan inmediatamente después de los nombres de los autores (no como notas en pie de página). Es necesario que la adscripción especifique: departamento, área, institución, ciudad y país de cada autor. No es necesario indicar la dirección postal. Las instituciones deben escribirse en su idioma original, sin traducción. Si los autores añaden siglas, éstas deben pertenecer al nombre oficial. No se deben escribir cargos ni grados de los autores (doctor, residente, investigador, etc.).

   Ejemplo:

   Juan José García-Urbina,[1] Héctor Valentín Esquivias Zavala[2]

   [1] Dirección de Investigaciones Epidemiológicas y Psicosociales, Instituto Nacional de Psiquiatría Ramón de la Fuente Muñiz, Ciudad de México, México.
   [2] Departamento de Publicaciones, Instituto Nacional de Psiquiatría Ramón de la Fuente Muñiz, Ciudad de México, México.

- Al final de la primera página debe colocarse el texto “Enviar correspondencia a…”, señalando al coautor corresponsal con su respectiva dirección postal completa y correo electrónico. Éste será el único autor al que Salud Mental se dirigirá durante el proceso.

  Ejemplo:

  Correspondencia:
  Juan José García-Urbina
  Dirección de Investigaciones Epidemiológicas y Psicosociales, Instituto Nacional de Psiquiatría Ramón de la Fuente Muñiz.
  Calz. México-Xochimilco 101, San Lorenzo Huipulco, Tlalpan, 14370, México, DF.
  Tel: 55 4152-3624
  E-mail: jurb@imp.edu.mx

5. La segunda página debe contener los resúmenes del trabajo presentado en inglés y español. Cada resumen debe presentarse con un máximo de 250 palabras.

- Los resúmenes de los Artículos originales, Originales cortos y Revisiones sistemáticas deben estar conformados por: Introducción, Objetivo, Método, Resultados y Discusión y conclusión.
- El resumen de las Revisiones narrativas debe contener las siguientes secciones: Antecedentes, Objetivo, Método (bases de datos consultadas), Resultados y Discusión y conclusión.
- **Palabras clave.** Al final de cada resumen se incluirá un mínimo de cuatro y un máximo de seis palabras clave, separadas por comas y en minúsculas. Las palabras clave deben ser las mismas en inglés y en español. Éstas suelen emplearse para la indexación de los artículos, por lo cual tres de ellas deben encontrarse en el MeSH (Medical Subject Headings), que puede consultarse en: *http://www.nlm.nih.gov/mesh/MBrowser.html*.

6. A partir de la tercera página comienza el cuerpo del manuscrito, el cual debera conservar la misma estructura señalada en el resumen.

- **Introducción (o Antecedentes en el caso de las Revisiones narrativas).** Aquí se mencionarán los antecedentes en los que se sostiene la investigación, de modo que el lector comprenda la problemática tratada. El último párrafo de este apartado debe incluir de forma clara los objetivos del trabajo y, si se cree necesario, las hipótesis.
- **Método.** Debe presentarse suficientemente detallado para que el estudio pueda reproducirse. Por este motivo, es preciso que cuente con las siguientes secciones:
  - Diseño del estudio
  - Sujetos/descripción de la muestra
  - Sedes
  - Mediciones
  - Procedimientos
  - Análisis estadísticos
  - Consideraciones éticas
- **Resultados.** Se presentarán en una secuencia lógica dentro del texto. Pueden apoyarse con tablas, gráficas y figuras.
- **Discusión y conclusión.** En esta sección se destacarán los aspectos nuevos e importantes del estudio y las conclusiones que derivan del mismo, así como las posibles implicaciones de sus hallazgos y sus limitaciones.

7. Después del apartado de Discusión y conclusión, es preciso agregar las declaraciones de los autores en el siguiente orden:

- **Financiamiento.** En este apartado se debe declarar si el estudio o la preparación del manuscrito recibió algún tipo de financiamiento, indicando el nombre de la entidad que proporcionó los fondos.

  Ejemplo:

  Este estudio fue financiado en parte por el CONSEJO NACIONAL DE CIENCIA Y TECNOLOGÍA. (No. XXXXXXX).

  Si no se recibió ningún apoyo financiero, los autores deben declararlo también.

  Ejemplo:

  Ninguno.
- **Conflicto de intereses.** En esta sección, los autores deberán declarar si tienen conflictos de intereses relacionados con su actividad científica. Tener un conflicto de interés no supone necesariamente un impedimento para la publicación del manuscrito. Si no existe conflicto de interés se debe insertar la siguiente frase: “Los autores declaran no tener algún conflicto de intereses”.
- **Agradecimientos.** Cuando se considere necesario, se mencionarán después de las declaraciones anteriores los agradecimientos a las personas, centros o entidades que hayan colaborado o apoyado en la investigación.

8. Referencias. Las referencias se colocan después de las declaraciones del autor (Financiamiento, Conflicto de intereses y Agradecimientos), y deben seguir exclusivamente las normas de publicación de la American Psychological Association (APA), sexta edición.

9. Tablas y figuras. Salud Mental establece un máximo de cinco elementos gráficos en total, excepto en el caso de las comunicaciones cortas, las cuales solamente pueden incluir dos. El estándar solicitado para la elaboración de tablas y figuras es el de la American Psychological Association (APA), sexta edición. Éstas se colocarán en el mismo documento del manuscrito después de las referencias:

- Las tablas deben contener título y, en la parte inferior, una nota con el desglose de siglas.
- Las figuras deben enviarse en un formato de alta resolución (mínimo 300 dpi).
- Los títulos de las tablas y los pies de las figuras deben ser claros, breves y llevar siempre el número correspondiente que los identifique. Dentro del texto, el autor debe indicar entre paréntesis y con mayúsculas en qué parte del texto sugiere insertar los elementos gráficos.

  Ejemplo:

  Se cambiaron las definiciones de algunos patrones conductuales (Tabla 3) de manera que fueran más comprensibles en el idioma español y se redefinieron las categorías que agrupan dichos patrones con base en la literatura especializada. (INSERTAR AQUÍ TABLA 3)

ARCHIVOS COMPLEMENTARIOS

Los siguientes documentos se adjuntan en el paso 4 del envío. Asegúrese de dar clic en “CARGAR” después de seleccionar cada archivo. De no hacerlo, los archivos no se adjuntarán al guardar y continuar con los demás pasos.

1. **Carta de autorización de uso de obra.** Todo artículo debe acompañarse de la Carta de autorización de uso de obra firmada por todos los autores y enviarse en formato PDF. El formato de la Carta de autorización de uso de obra está disponible en el siguiente enlace: *http://revistasaludmental.mx/Carta_autorizacion_uso_obra_final.pdf.*
2. **Carta de presentación.** El autor debe exponer las fortalezas de su aportación científica, resaltando el alcance, la originalidad y la importancia de su contribución al campo de la salud mental. En la carta se pueden sugerir tres revisores nacionales o internacionales calificados en el campo de conocimiento del manuscrito sometido, asegurándose de que éstos no tengan ningún conflicto de intereses con los resultados presentados. Ésta debe cargarse en formato PDF.
3. ***Checklist* de estándares metodológicos.** Es importante enviar el *checklist* debidamente contestado según las guías para cada tipo de estudio (veáse apartado de *CONSIDERACIONES METODOLÓGICAS*) y en formato PDF.

CONSIDERACIONES METODOLÓGICAS

Salud Mental adopta el sistema convencional de cinco por ciento como valor para la significancia estadística y no toma en cuenta las tendencias para valores mayores. Con el propósito de proporcionar mayor claridad a los lectores y revisores, es necesario que, de acuerdo con el tipo de estudio, los manuscritos se apeguen a los siguientes estándares:

- Los ensayos clínicos aleatorizados deben adecuarse a las guías CONSORT (*http://www.consort-statement.org*).
- Los estudios con diseños no experimentales, a las guías TREND (*http://www.trend-statement.org*).
- Los estudios transversales, de cohorte y de casos y controles, a la guía STROBE (*http://www.strobe-statement.org*).
- Los estudios cualitativos, a la guía COREQ (*https://academic.oup.com/intqhc/article/19/6/349/1791966/Consolidated-criteria-for-reporting-qualitative*).
- Los artículos de revisión, a las guías PRISMA (*http://www.prisma-statement.org/PRISMAStatement/PRISMAStatement.aspx*) y/o MOOSE (*http://www.ncbi.nlm.nih.gov/pubmed/10789670*).

ÉNFASIS Y PUNTUACIÓN

1. Es importante que los manuscritos eviten en general las notas a pie de página, aunque se pueden considerar si son claramente necesarias.
2. No deben utilizarse letras negritas en el texto.
3. Las cursivas deben utilizarse para:
    - Destacar palabras extranjeras.
    - Enfatizar expresiones populares.
    - Mencionar títulos de libros, documentos ya publicados y publicaciones periódicas.
4. Las cursivas pueden emplearse para:
    - Resaltar términos significativos o importantes cuando se mencionan por primera vez.
    - Destacar una palabra u oración dentro de una cita.
5. Las comillas dobles deben usarse solamente para:
    - Citar párrafos de otros autores dentro del texto.
    - Referir textualmente fragmentos del discurso de los sujetos de estudio.
6. En la medida de lo posible, se recomienda evitar el uso de cualquier otro tipo de énfasis como cursivas, negritas, subrayados o letras mayúsculas.
7. Evite el uso de paréntesis doble, es decir, un paréntesis dentro de otro. En su lugar utilice corchetes.
8. Pueden emplearse guiones largos para indicar oraciones parentéticas.
9. Deben utilizarse de forma correcta todos los signos de puntuación. Por ejemplo, si emplea signos de interrogación en un texto en español, debe colocar el de apertura y cierre correspondientes, de igual manera se debe proceder con las comillas.

FÓRMULAS MATEMÁTICAS Y ESTADÍSTICAS

Para presentar los resultados se deben considerar las siguientes indicaciones:

1. Escribir con letra las cifras de cero a nueve y con números las cifras de 10 o más.
2. Utilizar números cuando se trate de fechas, muestras, etc.
3. Incluir en los datos estadísticos los intervalos de confianza.
4. Escribir en cursivas los símbolos estadísticos (por ejemplo, *M, SD)*.
5. Expresar la probabilidad exacta con dos o tres decimales (por ejemplo, p = .04; p = .002) sin el cero adelante del punto decimal. En caso de ser menor a .001 se deberá indicar con un < .001.
6. Dejar un espacio antes y después de cada signo (a + b = c en lugar de a+b=c).
7. Emplear puntos en lugar de comas para indicar decimales.

VERIFIQUE LO SIGUIENTE ANTES DE SOMETER SU MANUSCRITO

Antes de enviar su manuscrito, cerciórese de adjuntar la documentación solicitada. Anexamos la siguiente tabla que describe el contenido y el formato en el que es necesario presentar dichos documentos.

Documento	Contenido	Formato
1. Manuscrito	1. Primera página (página de título) 2. Segunda página (resúmenes) 3. Tercera página (cuerpo del artículo) con la siguiente estructura: - Introducción/Antecedentes - Objetivo - Método - Resultados - Discusión y conclusión - Declaraciones de los autores (Financiamiento, Conflictos de intereses y Agradecimientos) - Referencias - Tablas, figuras e ilustraciones.	Word. Se adjunta en el segundo paso del envío en la página web (“CARGAR EL ENVÍO”).
2. Carta de presentación	Breve presentación de las fortalezas, originalidad y aportaciones del artículo. En este espacio se pueden sugerir tres revisores para la evaluación del manuscrito.	PDF. Se adjunta en el paso 4 del envío (“CARGAR LOS ARCHIVOS COMPLEMENTARIOS”).
3. Carta de autorización de uso de obra	Este documento debe presentarse firmado por el autor responsable (a quien se dirigirá la correspondencia); además, debe contener los nombres y correos electrónicos de todos los coautores.	PDF. El formato está disponible en: *http://revistasaludmental.mx/Carta_autorizacion_uso_obra_final.pdf.* (“CARGAR LOS ARCHIVOS COMPLEMENTARIOS”).
4. *Checklist* de estándares metodológicos	Debe estar debidamente contestada según el tipo de estudio.	PDF. Se adjunta en el paso 4 del envío (“CARGAR LOS ARCHIVOS COMPLEMENTARIOS”).

UNA VEZ ENVIADO SU MANUSCRITO

El envío y la recepción del manuscrito, así como la resolución del proceso de evaluación, podrá consultarlos en el “ÁREA PERSONAL”.

Salud Mental recibe una gran cantidad de manuscritos, cuya calidad es determinada por el Comité de Evaluación Interno (CEI), encargado de comprobar que estos trabajos cumplan con los estándares de calidad establecidos: calidad metodológica, relevancia e innovación. Además, cada manuscrito es evaluado por pares externos que, en ocasiones, son miembros del Comité Editorial de la revista o expertos en el tema de la publicación y, en los casos en los que el autor haya sugerido dictaminadores, pueden ser elegidos de entre éstos.

Las posibles calificaciones que se pueden asignar a los manuscritos evaluados son: aceptado, publicable con modificaciones, reevaluable y no publicable. En función de los procesos de la Coordinación Editorial, Salud Mental estima un período de evaluación de tres a cuatro meses para el dictamen inicial del manuscrito y de uno a dos meses para la evaluación de segundas versiones, lo cual varía según el tipo de correcciones solicitadas.

GUIDELINE FOR AUTHORS

Salud Mental publishes original articles on psychiatry, psychology, neurosciences and other related fields according to the following formats:

1. **Editorials**
   Written at the invitation of the Director-Editor of the journal. They must express authoritative opinions on specific topics of interest for the scientific community and the mental health field. They must also stimulate debate and promote new research lines. *Maximum extension: 1000 words*.
2. **Original articles (peer-reviewed section)**
   They present unpublished research results. They can be developed according to the following methodologies:
   - **Quantitative:** Comprehends primary and secondary results of transversal studies, clinical trials, cases and controls, cohorts, and quasi-experimental studies. *Maximum extension: 3500 words*.
   - **Qualitative:** They include reports of focus groups, in-depth interviews, semantic networks, and content analysis. *Maximum extension: 5000 words*.
3. **Brief original articles (peer-reviewed section)**
   They validate measuring instruments and preliminary results of original research. *Maximum extension: 2000 words*.
4. **Review articles (peer-reviewed section)**
   - **Narrative reviews.** They comprise narrative reviews based on national and international bibliography in accordance with the corresponding standards. *Maximum extension: 5000 words.*
   - **Systematic reviews.** They must adhere to standard methodologies (e.g. Cochrane), preferably, they should include a meta-analysis. *Maximum extension: 4000 words*.

- **Case reports**
  They include reports of atypical cases in clinical practice as well as the diagnosis approach and innovative procedures. *Maximum length 2000 words*.

N.B. the word count of each section does not consider title, abstracts and keywords, or sections on funding, conflict of interests and acknowledgments; neither does it consider words included in tables, figures and references.

LANGUAGES

Salud Mental publishes manuscripts in Spanish and English. However, the publication of articles in English is preferred for the benefit of the international scientific community.

ETHICAL ASPECTS IN PUBLISHING

For Salud Mental it is important to observe the ethical policies of scientific publishing, Because of this, it is essential for the editors that every research involving animal and/or human subjects adheres to national and international regulations of basic, clinical, and social research. All clinical research articles must adhere to the ICJME international regulations.

SUBMISSION DECLARATION

By submitting an manuscript, the author states that:

1. The work has not been previously published (except as a summary or as a part of a lecture or a degree thesis).
2. It is not currently under review in any other journal in any language.
3. The work has been authorized by all co-authors and responsible authorities of the place where it was carried out.

AUTHORSHIP

Only those individuals who actively participated in the process of research and drafting of the manuscript should be considered as authors. Owing to this, Salud Mental accepts five coauthors maximum (in addition to the main author). In the case of projects involving multiple research groups and requiring the inclusion of more than five coauthors, the main author must justify their inclusion in the Cover letter.

SUBMIT YOUR PUBLICATION

Manuscripts must be exclusively submitted through the website available at: *http://revistasaludmental.mx* Prior to the submission of a manuscript, the sender needs to be registered as an author. Before making a submission, make sure to click on UPLOAD every time a file is added. In step 1 you must fill the checklist to declare you fulfill the policies established by the journal. In step 2, the Microsoft Word manuscript is attached. It must not include notes or track changes and must comply with each requirement listed in Guidelines for Authors. The main data will be requested in step 3. In step 4, Copyright Assessment and Cover letter must be attached in PDF.

EDITORIAL GUIDELINES

It is of the utmost importance for authors to consider the following before sending their manuscript:

1. Manuscripts must be clear and concise, avoiding spelling, grammar, and syntax mistakes.
2. The text must be written in Microsoft Word format, Times New Roman 12, with double spacing and 2.5 centimeters margins, in letter size paper.
3. Pages must be numbered in a consecutive order, beginning by the title page, with numbers placed in the upper right corner.
4. The title page should contain the following ordered sections:
   - **Title of the study in Spanish and English.** The title must be descriptive and indicate the study's main results.
   - **Short title.** Six words at most.
   - **Full name(s) of the author and coauthors.** The order in which this information is provided will be preserved in the manuscript's possible publication and registration in databases. Authors' full names must be separated by a comma. Then, following this punctuation mark, an Arabic numeral in superscript, with no intermediate space, will indicate the affiliation institution. Following each author's superscript number, their full affiliation must be stated, specifying their particular area of work therein.
   - **Author's affiliation.** This is indicated in Arabic numerals as superscripts. Affiliations are placed immediately below authors' names, not as footnotes. It is necessary that the ascription specifies: department, area, institution, city and country for each author, without indicating a postal address. The institutions must be written in their official language. The authors' degrees or positions (PHD, doctor, resident, researcher, etc.) must not be included.

     For example:

     Juan José García-Urbina,[1] Héctor Valentín Esquivias Zavala[2]

     [1] Dirección de Investigaciones Epidemiológicas y Psicosociales, Instituto Nacional de Psiquiatría Ramón de la Fuente Muñiz, Ciudad de México, México.
     [2] Departamento de Publicaciones, Instituto Nacional de Psiquiatría Ramón de la Fuente Muñiz, Ciudad de México, México.
   - At the bottom of the first page, the legend "**Correspondence:**…" must be placed, mentioning the corresponding author and including affiliation with postal address, telephone number and email. This will be the only author addressed by Salud Mental during the entire process.

For example:

Correspondence:
Juan José García-Urbina
Dirección de Investigaciones Epidemiológicas y Psicosociales, Instituto Nacional de Psiquiatría Ramón de la Fuente Muñiz.
Calz. México-Xochimilco 101, San Lorenzo Huipulco, Tlalpan, 14370, Ciudad de México, México.
Phone: 55 4152-3624
E-mail: jurb@imp.edu.mx

5. The second page must present the abstract of the work in Spanish and English. Each abstract must be 250 words maximum.
   - The abstracts of Original articles, Brief original articles, and Systematic reviews must comprise: Introduction, Objective, Method, Results, and Discussion and conclusion.
   - In the cases of Narrative reviews, the order of the abstract must be: Background, Objective, Method (databases consulted), Results, and Discussion and conclusion.
   - **Keywords.** At the end of each abstract, four key words minimum and six maximum must be included, separated by commas and in lowercase. Keywords must be the same in Spanish and English. As these are used in the articles' indexation, at least three of them must be based on MeSH (Medical Subject Headings), consulting *http://www.nlm.nih.gov/mesh/MBrowser.html*.
6. The manuscript proper begins in page three, following this structure:
   - **Introduction (**or **Background** in the case only of Narrative reviews**)**. The research's background is disclosed here for the reader to understand the problem being dealt with. The final paragraph of this section must clearly state the objectives of the work, and if deemed necessary the hypotheses.
   - **Method.** It must be sufficiently detailed so that the study can be reproduced. It must include the following sections:
     - Design of the study
     - Subjects / description of the sample
     - Places
     - Measurements
     - Procedures
     - Statistical analysis
     - Ethical considerations
   - **Results.** They are presented following a logical sequence in the text and making use of tables, graphs, and figures.
   - **Discussion and conclusion.** This section highlights new and important aspects of the study, conclusions drawn from it, possible implications of the findings, and its limitations if any.
7. After the Discussion and conclusion, the authors' declarations are listed in the following order:
   - **Funding.** In this section, it must be declared if the study or the manuscript preparation received any funding, indicating the name of the financing entity.

     For example:

     This study was partially funded by CONSEJO NACIONAL DE CIENCIA Y TECNOLOGÍA (No. XXXXXXX).

     If no financial support was received, the authors must state it was well.

     For example:

     None.
   - **Conflict of interest.** Authors must declare here if they have any conflict of interest regarding their scientific activity. Having a conflict of interest does not necessarily pose an impediment to publish the manuscript. If there is no conflict of interest, the following must be written: "The authors declare they have no conflicts of interest."
   - **Acknowledgments.** When deemed necessary, after the declarations, acknowledgements for people, centers, or entities that collaborated or supported the research must be mentioned.
8. **References** are placed after the authors' declarations (Funding, Conflicts of interest, and Acknowledgements), following exclusively the Publication Manual of the American Psychological Association (APA), sixth edition.
9. **Tables and figures.** Salud Mental establishes a limit of five graphic elements maximum, excepting the case of short communications, which may only include two. The standard required for tables and figures is also APA's, sixth edition. Tables and figures must be included in the same file of the manuscript after References:
   - Tables must bear a title on top and a note below with legends for the initials.
   - Figures must be sent in high resolution (at least 300 dpi).
   - The titles and footnotes of the tables and figures must be clear and brief and bear always an identifying number. In the text, the author must indicate in parentheses and in capital letters wherein the text the graphic elements should be placed.

     For example:

     The definition of some behavioral patterns was changed (Table 3) so that they were more comprehensible in Spanish and the categories that group such patterns were redefined based on specialized literature.
     (INSERT TABLE 3 HERE)

COMPLEMENTARY FILES

The following documents are attached in Step 4 in Submission. Make sure to click "UPLOAD" after selecting each file; if this is not done, the files will not be attached when saving and continuing to the next steps.

1. **Copyright assignment.** Each manuscript should include this letter signed of all the authors and must be sent in PDF. The official format of this letter is available at: *http://revistasaludmental.com/Copyright_assessment.pdf*
2. **Cover letter.** The main author must expose the strengths of manuscript scientific output, underscoring the scope, originality, and importance of its contributions to the field of mental health. In the letter, three national or international reviewers qualified in the submitted manuscript's field of knowledge may be suggested, making sure they do not have any conflict of interest with the results presented. This letter must also be uploaded in PDF format.
3. **Checklist of methodological standards.** It is important to send the checklist duly completed following the guides for each sort of study (see Methodological Considerations) in PDF format.

METHODOLOGICAL CONSIDERATIONS

Salud Mental adheres to the conventional system of 5-percent value for statistical significance and does not consider tendencies for higher values. For readers and reviewers to have a better clarity, it is necessary that, depending on the sort of study, manuscripts adhere to the following standards:

- Randomized clinical trials must follow the CONSORT Statement.
- Studies with nonrandomized designs must follow the TREND Statement.
- Transversal, cohort and cases, and control studies must follow the STROBE Statement.
- Qualitative studies must follow the COREQ.
- Review articles must follow the PRISMA Statement and/or the MOOSE Guidelines.

EMPHASIS AND PUNCTUATION

1. Although it is important for authors to avoid using footnotes in manuscripts as much as possible, they can be used if it is clearly necessary.
2. Bold letters should never be used in the main text.
3. Italics must be used for:
   - Distinguishing foreign words.
   - Emphasizing popular expressions.
   - Book titles, published documents, and periodical publications.
4. Italics may be used for:
   - Calling the attention to significant or important terms when they are mentioned for the first time.
   - Highlighting a word or phrase in a quotation.
5. Inverted commas must be used only for:
   - Quoting other authors' paragraphs in the text.
   - Textually quoting fragments of discourse of the subjects under study.
6. As much as possible, it is recommended to avoid using any other sort of emphasis such as italics, bold, underlining, or capital letters.
7. Avoid using double parentheses, that is, a parenthesis inside another. Use brackets instead.
8. Dashes may be used to indicate subordinate or other explanatory sentences.
9. Every punctuation mark must be correctly used. For example, in the case of questions, a question mark must close the question. Likewise, opening and closing inverted commas must be used.

MATHEMATICAL AND STATISTICAL FORMULAE

To present the results the following must be considered:

1. Write numerals from zero to nine in words and from 10 onwards in figures.
2. Use numbers in the case of dates, samples, and so on.
3. Include confidence intervals in statistical data.
4. Write statistical symbols in italics *(M, SD)*.
5. Use the exact probability with two or three decimals (e.g., $p = .04$; $p = .002$) with no zero before the decimal point. If it is lower than 001, indicate it as < .001.
6. Leave a space before and after each sign (a + b = c, instead of a+b=c).
7. Use points instead of commas to indicate decimals.

VERIFY THE FOLLOWING BEFORE SUBMITTING YOUR MANUSCRIPT

Before submitting your manuscript, make sure to upload the documents requested. We present a table describing the content and format in which such documents must be presented.

Document	Content	Format
1. Manuscript	1. First page (title page) 2. Second page (abstracts) 3. Third page (text of the article) with the following structure: ● Introduction/Background ● Objective ● Method ● Results ● Discussion and conclusion ● Authors' declarations (funding, conflict of interests, and acknowledgements) ● References ●Tables, figures, and illustrations.	Microsoft Word. It is attached in Step 2 in Submission at the website.
2. Cover letter	Brief presentation of the strengths, originality, and contributions of the article. Up to three reviewers may be may suggested to assess the manuscript.	PDF. It is attached in Step 4 in Submission ("UPLOAD COMPLEMENTARY FILES").
3. Copyright assignment	Signed by all the authors.	PDF. You can download the form in *http://revistasaludmental.com/Copyright_assessment.pdf* It must be attached in Step 4 in Submission ("UPLOAD COMPLEMENTARY FILES").
4. Checklist of methodological standards	Duly completed according to the sort of study.	PDF. It is attached in Step 4 in Submission ("UPLOAD COMPLEMENTARY FILES").

ONCE YOUR MANUSCRIPT HAS BEEN SUBMITTED

The submission and reception of the manuscript as well as the outcome of its review process may be consulted at "User Home."

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