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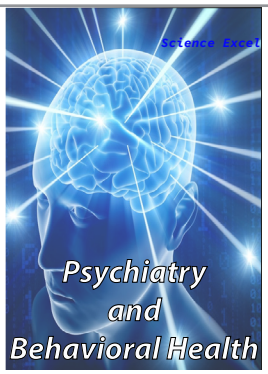

Ideology, Scientism and Mental Health

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Abstract

Background: *There is an intrinsic conflict between science and ideology, with the expected rational subordination of the latter.* ***Objective:*** *The present article will present a brief bibliographical exploration in neuroscientific and cognitive terms on the importance of the set of norms and positions of ideas or ideology held by the affected individuals in the field of mental health. It will particularly explore psychobiological and communicative influences, as well as the practical attitude or subjective perspectives of those involved in health interactions.* ***Method:*** *It is a narrative and theoretical review study, based on the pertinent electronic and manual search in different national and international qualified bibliographical indexes. The number of references included is n= 78.* ***Results and discussion:*** *Modern neuropsychiatry and clinical psychology tend towards personalisation or precision applied to individual mental health. Neuroscience fused with multiple approaches will be the next identity frontier for both. In any case, the best accompaniment, subsumed or added to the specialised psychological or psychiatric intervention, is essential for therapeutic adherence and effectiveness.* ***Conclusion:*** *Findings for the psychobiological basis of most mental, behavioural and neurodevelopmental disorders is beginning to collide with traditional exclusivist psychologistic preconceptions, as we are immersed into a new era of scientism in search of the best experimental knowledge.* ***Limitations:*** *High heterogeneity of scientific quality, approaches and contents of contributions make it difficult to pondering the obtained results.* ***Value:*** *This article elucidates general basic questions on the considered matter.*

Background

In the practice of health sciences, there is sometimes a preference for rhetoric over scientific rigour, which might be expected with an appropriate scientistic attitude that prioritises reasoning with the precision and objectivity inherent in the methodology of science. Scientism is not understood here in its excessive and extreme reductionist sense of logical positivism or, on the contrary, by its pejorative pseudo-scientific usage, but as the term that best emphasises what is applicable to achieve true experimental knowledge. It is therefore a socio-epistemological philosophical position or stance in the applied, natural and social sciences [1,2].

In any case, if science is understood as an activity related to reason or general knowledge, it cannot be free of beliefs [3], since ideology, which also affects science, encompasses a normative set of knowledge, beliefs, opinions and attitudes [4]. There is an intrinsic conflict between science and ideology, to the detriment of the latter. In the ideological realm, public figures tend increasingly to promote their own interests in the supposed name of science [5], whereas authentic scientific process is based on constant critique and refinement.

In health care, there is a widespread habit of over-diagnosing too soon too mild dysfunctions and of providing unnecessary clinical care [6,7]. Social demand for health care is continuously growing, as is the supply of ad hoc services, while the general population's attitude is more consumerist. It is also true that in the past the psychiatric discipline in particular was regarded by some as a mere ideology of mental health and illness. Since Sigmund Freud, it has evolved from a purely medical activity to a psychological and social one, and has become part of a certain popular ideology [8].

Neuroscientific, psychological and socio-cultural approaches in psychopathology can be brought together in explanatory frameworks that affect care practice. There is little doubt that neuroscience or neural science is likely to be the next frontier for ideology. The ideology of mental health and pathology not only serves to understand all kinds of enigmas, but also tries to explain how to solve them. Certain authors, who are no exception, even believe

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today that mental disorders are essentially a consequence of life circumstances [9], which is apragmatic, imaginative and ignorant of much relevant, high-quality scientific evidence.

The scientistic perspective, as opposed to popular cognitivist versions, considers mental disorders as essential categories, while the alternative sceptical stance considers them to be mere social constructs, which is why the latter has proposed self-considered integrative models [10]. In any case, new theoretical and empirical strategies addressing the causality of mental health disorders based on the findings of cognitive neuroscience are needed, as well as on possible agreements between the integrationist and isolationist perspectives, contributions from the more philosophical aspects of psychiatry and clinical psychology, and other more types of agreements [11].

Ideological thinking can be conceptualised as a style that is rigid in its adherence to some doctrine and resistant to updating qualified evidence-based knowledge. Some people may be especially susceptible to that cognitive style, which is a matter to be explored with psychology concerned with ideology [12]. Now, predictably, emerging quality research has begun to address the neural underpinnings of the biological and psychological differences that promote political ideology, attitudes and actions [13]. But relatively little is known about the relationships between ideological attitudes and psychobiological traits, as well as how cognitive perceptual and processing dispositions shape ideological perspectives [14].

In the present contribution, a brief bibliographical exploration will be made in cognitive terms of the importance for the field of mental health of the ideas or ideology displayed by stakeholders, of the psychobiological and communicative influences, as well as of the practical attitude or subjective perspective on health, all scrutinised with scientific methodology. The aim is not to present the bibliographical findings in a grouped presentation in order to discuss them in detail, but to provide a comprehensive, up-to-date perspective on a complex, interdisciplinary issue.

Materials and methods

Secondary, narrative and theoretical review study on the objectives specified in the previous paragraph. Using the Pubmed search engine in the MEDLINE bibliographic database, the main keywords used as descriptors up until September 2023 were: *scientist; scientism, attitude to health* and *ideology*. The following indexes with the same descriptors have also been tracked: American Psychological Association – PSYCINFO JOURNAL; Sistema de Información Científica REDALYC; Google Scholar and ÍnDICEs CSIC, of the Spanish Ministry for Science, Innovation and Universities. Furthermore, certain books deemed outstanding were included.

A manual screening of the results was then carried out and other contributions not included in the findings were added. These were considered relevant at the author's based on their title, authorship (evaluated when possible through the corresponding research record of the ORCID identifier) or, if applicable, by the importance of the journal (evaluated by its impact factor). Heterogeneity in the contributions found has been the norm in approaches, quality and contents, most of them having high dimensionality and low statistical power. Quite a number of contributions were only from the opinion of non-preeminent authors, repeated in various repositories, too dated or from unimportant publications. After prioritising the most relevant and recent ones, the final result of selected references is n= 78.

Results and discussion

Ideologisation of clinical psychology and psychiatry

In the search for the best quality of life for convalescents and patients, more or less biologistic, psychologistic, social and cultural professional perspectives, on the one hand, and values, attitudes, beliefs and ideologies, on the other, inevitably influence the practice of medicine and psychology [15-17]. The practical consequence in specialised mental health care, including both public and community care, is that appropriate medical interventions may differ greatly.

By way of example, and in a fully psychologistic context, it is fashionable to refer to what some call, perhaps pretentiously, "third-generation psychotherapies". As a theoretical approach, they emphasise applying the appropriate contextual paradigm to explain human behaviour. They also consider themselves to be "third wave" behavioural therapies, especially including the so-called Acceptance and Commitment; Dialectical-Behavioural; Metacognitive; Behavioural Activation; and Functional-Analytic therapies [18], among others.

The same applies to community psychology in its relation to empowerment, understood as the connection between the sense of personal competence, desire and willingness to act in the public domain [19]. The new meta-psychology, apart from its Freudian conception, integrates philosophical, methodological, epistemological and ontological reflections. Once the treatments in psychiatry and clinical psychology have been modified, the patient acceptability can be improved and the implementation of optimal evidence-based therapeutic options can be maximized [20]. Mappings of adaptation studies to multiple issues and types of intervention have already been undertaken in this respect [21].

We are also witnessing what is sometimes called the "new era" of so-called community meta-psychiatry in care [22]. This is understood as a theoretical discipline that integrates the methodology of clinical research with the philosophy of science, in particular analytical philosophy of mind or simply philosophy of mind [23,24]. This has been the case since what was probably the seminal paper on the philosophical analysis of psychopathology [25]. The philosophy of science in its modern version is based on empirical methods and scientific findings. It can be said that, in a complementary way, philosophy, unlike the sciences, studies what makes something real, whereas the sciences are concerned with what things really are.

The aetiology of almost all mental disorders appears complex, multifactorial and encompassing different explanatory levels, ranging from genetic-epigenetic and neurobiological to psychological and social [11]. However, the biopsychosocial model proposed by George Engel in 1977 does not currently have scientific explanatory power, so that emphasising it has become, for some, a fickle, misguided discourse [26,27]. Philosophy, of course, can be a convenient ally of mental health. So philosophers, medical psychiatrists and clinical psychologists should be able jointly to generate conceptual or theoretical models that lead to enlightening pluralism, but without departing from the scientific method.

Political ideologies interact with individual cognition. Environmental and socio-cultural influences are so common and normal that militant attitudes and ideologisation of the reality of health even among many practitioners specialised in psychiatry or clinical psychology -and, naturally, among those who are not true specialists- should not surprise us [28]. Willpower, beliefs

and desires, integrated into the ideological realm, together with neurobiology, explain most of the behaviour of patients and health care professionals [29]. In short, ideology, both general and applied to the field of mental health, is a tool of social influence that transforms reality, convinces and almost always wins [30].

Synergy of psychological and psychiatric treatments

In general, for many mental, behavioural and neurodevelopmental disorders, combined treatment with psychotropic drugs and psychotherapy (provided by the same or another psychiatrist, or by a clinical psychologist) seems to be more effective than exclusive treatment [31,32]. Many patients have a low perception of their need for treatment, which contrasts with the over-utilisation of health services by others. In particular, the considerable demand in primary health care for psychological-only interventions to address depressive symptoms is now classic [33] and is often underestimated by those involved and those accompanying them.

The same is true for many other mental disorders. Specifically for clinically significant depression, lack of confidence in a psychobiological aetiological explanation influences inadequate patient assessment [34]. This is mainly despite the preponderant, but increasingly challenged monoaminergic hypothesis, the novel hypothesis of the influence of chronic stress on the brain [35] as well as evidence that antidepressants sometimes enhance aberrant resting-state functional connectivity in patients with depressive disorders [36]. In this regard, ventral attentional network–subcortical network connectivity may be an antidepressant target associated with changes in depressive state and a predictor of response to treatment with serotonin reuptake inhibitors [37].

Supportive interventions, whether professionalised or not, for people with clinical depression are usually timely, but distinct from what should be a properly therapeutic intervention. The latter will often be primarily psychobiological, i.e. with effective, safe medication, as well as the empathetic inherent and implicit verbal and visual interaction between patient and prescriber physician [38]. With regard to medication, note that the randomised clinical trial is the cornerstone of research aimed at obtaining regulatory approval for pharmacological agents. In general, all competent mental health specialists support the synergy of treatments, but with a different emphasis on the psychobiological, which will usually be psychopharmacological, and the psychological [39].

Even for political affinities, biological and neurological roots have been suggested that can help to understand them [13]. In scientific psychopathology, as opposed to the imaginative and utopian approaches that are supposedly more humanistic, the current generalised approach focusses on anatomophysiological brain anomalies, necessary to understand them [29,40,41]. Idealistic theoretical approaches are to be considered literally as purposeful instrumental, which is antithetical to scientific thinking. Political ideology, on the other hand, adds a framework of attitudes, values and beliefs to understand the social world that affects the patient.

There are anthropological assumptions that form a key part of any psychological hypothesis and that connect psychology to broader cultural values, norms, ideals and meanings [42]. The personality of each individual, including that of appropriately trained mental health practitioners (psychiatrists and clinical psychologists), interacts with environmental influences to develop ideology (understood as a priori judgements) regarding the professional care to be provided [43]. What could be called "value-based practice" in the field of mental health requires the above-mentioned specialists and their patients to make personal decisions, but without the former renouncing the unavoidable technical decisions based on the best updated scientific knowledge [44].

Psychobiology, communication and mental health

Severe mental disorders are among the most enigmatic from the perspective of scientific knowledge. The fusion of genetic, functional genomics, neurobiological, pathophysiological, psychological and evolutionary approaches is on the threshold of transforming the specialisations of psychiatry and clinical psychology, although more multidisciplinary research effort is required.

Modern evolutionary psychiatry, by addressing the above aspects together with phenomenological and interpersonal aspects, provides a useful and timely basis for all kinds of scientifically supported treatments of mental, behavioural and neurodevelopmental disorders [45-49]. Evolutionary theory, in turn, provides the best-founded explanatory framework for clarifying why personality and related trait disorders, impulse control disorders, and disruptive, dyssocial behaviour disorders exist, among many other disorders, dysfunctions or pathologies [50].

This ties in well with what is sometimes called "cultural psychiatry" or ethnopsychiatry [51-53] which emphasises the culturally relative nature of what is considered healthy and unhealthy, and is concerned with genetic differences in human groups that determine or influence the response to psychotropic agents [54]. Idem per idem happens with cultural or culture psychology, with which we go back to the historical-cultural school led by Vygotski [55]. Cultural differences modify the expression of psychophysical distress and undermine the validity and reliability of diagnoses and treatments in different socio-environmental contexts and the concrete communicative situation.

In particular, pharmacophobia and scepticism seem to play a consistent role in the non-adherence of many patients [56]. In any case, the communicative behaviour of the health practitioner will be relevant to the outcome of the treatment [57]. Better doctor-patient relationships are associated with better adherence to prescribed medication in the case of psychiatrists [58], albeit considering that multiple issues and circumstances may be involved in such a linkage that will require, where appropriate, combined interventions [59].

It should be borne in mind that in the progression from the former more autocratic to the current more shared care approach, dysfunctional communications and exchanges can be avoided by paying attention to the affective, behavioural and cognitive signals of those involved. In particular, and as an example of what is particularly interesting in the auditory domain, voluntary attention is a crucial component in sound source segregation, which will allow the most useful or relevant audible issues to be distinguished and kept in focus [60]. Cortical tracking of speech appears to be related to listener prediction [61].

Psychological factors are primary in health and illness. Supporting, listening with intention (active listening) and kindness, understanding, reasoning and accompanying are very useful and convenient for any person affected by physical,

psychophysical or specifically mental, behavioural and neurodevelopmental disorders. In the field of mental health, as in many others, the physician's selective active listening when acting as the receiver may be impartial, objective and professional where appropriate, or clearly biased by the listener's intentionality and ideology.

With continuing neurobiological advances, ideological worldviews must increasingly be seen as understandable in terms of neural, cognitive principles. A neurocognitive model of ideological thinking has even been proposed, postulating the existence of bidirectional processes between the brain and the ideational environment [62]. In common applied terms, ideologically driven communication can entrench and exacerbate political polarisation, which in turn can be amplified by the dynamics of social networks and groups [63].

On a more individual level, between contemplating an idea and making it a reality, one has to take into consideration the emotions and desires that will inevitably converge, either regularly or occasionally, and whether they are self-recognised or not [64]. With regard to indirect interaction of ideology and science, the role of communication is fundamental, and can be decisive even if the person concerned has a defective ideational-cognitive background [65]. In today's global reality we are witnessing a biological revolution that has already begun, which along with the unstoppable development of the digital-communication revolution may transform the classic dualistic concepts of mental health and mental disorder.

General healthcare patient interaction

The activities of support, listening and accompaniment referred to in the previous section are not the same, equivalent to or interchangeable with any treatment, which should only be provided by trained health practitioners. In contrast, they are complementary actions in which family members, relatives or specifically so-called general health psychologists in Spain, or doctors in primary care and other specialisations other than psychiatry can engage. Naturally, those who are official technical specialists in mental health can and should also do so, logically each in their own way and within their own competencies [66].

Eye contact between people is a major source of communication and social signals. Using novel functional near-infrared spectroscopy to assess the brain systems underlying doctor-patient interactions, it has been estimated that prefrontal systems may be central to cultivating mental health [67]. This supports the "interactive brain" hypothesis, according to which there are far-reaching neural mechanisms involved in interactive processes associated with social, in this case spoken, signals [68]. This hypothesis proposes that interpersonal relationships evoke neural mechanisms that are not activated during non-interactive behaviour [69]. Related to reciprocal interaction, the psychotherapist's attachment style can influence the therapeutic alliance and intervention outcome [70,71].

The success of so-called "learning moments", seen as more or less complex events or circumstances that can lead people to more positive behavioural change, relies on the ability of the doctor or psychologist to identify and explore the relevance of the patient's concerns, linking them to behaviours that were unhealthy [72,73]. In terms of wider society, learning and service projects exist such as the "Cambiando miradas, aumentando oportunidades" ("Changing Views, Increasing Opportunities") project at the University of Burgos (Spain, EU), which promote understanding, comprehension, empathy and learning from people with mental health problems.

In Spain, state-qualified mental health specialists are only psychiatrists, clinical psychologists and mental health nurses. These three specialisations are integrated into the National Health System and their qualifications are valid throughout Spain. However, the latter two are not yet correlated in the rest of the EU, only the first two correspond to physicians who can provide psychotherapy (understood as psychological or conversational treatments) and only psychiatrists can prescribe medication [74].

Some sources propose a distinct, unofficial, model of competency-based neuropsychological training called "Europsy" for the whole of Europe [75,76]. In the vast realm of ideologies, any person, group or private or even public institution can consider itself an expert or specialist in mental health and have supposedly sufficient qualifications to accredit and train in this field. State degrees in psychiatry and clinical psychology do not guarantee optimal training, but they discourage upstart and less adequate training.

Professionalism in health care in general is a vaguely defined concept, but one that is increasingly being promoted. Paradoxically, psychological pseudo-therapies, often practised by pseudo-psychotherapists, pseudo-researchers and parapsychologists, are as frequent, as they generally go unpunished for their intrusive activity. A dramatic, relatively recent example is so-called Scientology, which grew out of a programme of ideas called "dianetics" that was expected to replace psychiatry [77].

Inherent functions of the specialities of psychiatry and clinical psychology are to help resolve or better cope with mental, behavioural and neurodevelopmental disorders, which will affect the comprehensive well-being of those affected. In the field of psychopathology, the most positive approaches of both specialisations are to increase awareness and use individual strengths to deal with manifested cognitive or emotional disabilities [78]. The same applies in Spain to general health psychology although, as mentioned above, this professional activity is not the same as having an official specialisation and even less so in the peculiar yet complex field of mental health.

Conclusions

Little is known about the relationship between science, psychology, biology and ideology, so this contribution has provided a brief, illuminating theoretical narrative review, without claiming to be exhaustive. The article has particularly addressed health care ideologisation, the relationship between psychobiology, communication and mental health and, lastly, general health care interaction with patients and the frequent intrusiveness associated with it.

Modern psychiatry, which in fact is neuropsychiatry, like modern clinical psychology, are health specialisations that are meant to be somewhat personalised or individualised to each patient. They have faced and still face inevitable social, political, cultural and other ideologies that seek to influence them. Neuroscience fused with multiple approaches will be the next identity frontier. A neurocognitive model for ideological thinking has even been proposed.

Findings on the psychobiological basis of most mental, behavioural and neurodevelopmental disorders are already beginning to clash with traditional preconceptions, many of

them psychologistic. We are in a new scientistic era that seeks the best experimental knowledge. Greater professionalism and training in health care in general and mental health care in particular are needed – though this is not always the case in everyday reality, encouraging intrusiveness.

Accompanying a patient through their journey with illnesses or disorders is not the same as treating them, for which optimal training is required. The issue is not only professional but also ethical. With today's more shared approach to care, appropriate accompaniment, in addition to therapeutic intervention, may be essential for the patient's corresponding adherence to treatment. The communicative style based on the dispositions, traits and attitudes of specialist practitioners as well as other health care staff will also be important for therapeutic effectiveness.

Ethical considerations

There are no ethical conflicts.

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