

Article

Some Further Considerations: A Critique of Quaternary Prevention in Mental Health

César González-Blanch 

Hospital Marques de Valdecilla, IDIVAL, Spain

ARTICLE INFO

Received: December 8, 2024

Accepted: January 27, 2025

Keywords

Quaternary prevention
Overdiagnosis
Medicalization
Psychological treatments
Indication of no-treatment
Iatrogenesis

ABSTRACT

Quaternary prevention in mental health is emerging as a critical response to the risks of overdiagnosis and medicalization, aiming to avoid unnecessary interventions that may cause more harm than benefit. This article explores the concept of quaternary prevention, its application in mental health, and the challenges associated with its implementation, particularly in the context of psychological treatments. The paradox of the “no treatment” indication in mental health is highlighted, as the therapeutic resources it employs may be understood as a single-session psychological intervention, rather than a step within a stepped-care model. Finally, the article concludes by discussing the risk of a misinterpretation of quaternary prevention that could exacerbate the gap in access to psychological treatments, which are already notably underfunded in the public national health system.

Algunas Prevenciones más: una Crítica Sobre la Prevención Cuaternaria en Salud Mental

RESUMEN

La prevención cuaternaria en salud mental surge como una respuesta crítica frente a los riesgos del sobrediagnóstico y la medicalización, buscando evitar intervenciones innecesarias que puedan causar más daño que beneficio. Este trabajo explora el concepto de prevención cuaternaria, su aplicación en salud mental y los desafíos asociados con su implementación, particularmente en el contexto de los tratamientos psicológicos. Se hace notar la paradoja de la indicación de no tratamiento en salud mental, que por los recursos terapéuticos que emplea puede entenderse como una intervención psicológica de acto único, en vez de un paso dentro de un modelo de atención escalonada. Finalmente, se concluye sobre el riesgo de una interpretación errónea de la prevención cuaternaria, que puede agravar la brecha en el acceso a los tratamientos psicológicos, ya notablemente infradotados en el sistema nacional de salud público.

Palabras clave

Prevención cuaternaria
Sobrediagnóstico
Medicalización
Tratamientos psicológicos
Indicación de no-tratamiento
Iatrogenia

Prevention in mental health is paramount. It helps us to promote emotional well-being, reduce the impact of mental disorders, save resources, and eliminate the stigma associated with mental health problems (Le et al., 2021). Moreover, given the interrelationship of physical and mental health problems, mental health prevention potentially improves overall health and quality of life.

Among the measures aimed at preventing not only the onset of the illness (or the disorder or health problem, as psychologists might prefer to call it), but also at halting its progression and attenuating its consequences once established, three levels have been classically distinguished: primary, secondary, and tertiary prevention. These terms were first documented in the late 1940s by public health physicians Hugh Leavell and Eugene Clark (Leavell & Clark, 1965). The purpose of primary prevention is to prevent the health problem from occurring in healthy individuals (a paradigmatic example in mental health is the promotion of healthy lifestyles). Secondary prevention involves detecting the process of the illness (read: disorder or problem) at an early (preferably preclinical) stage in order to anticipate the development or aggravation of an illness and minimize long-term deterioration through appropriate measures (e.g., early intervention in incipient psychosis). On the other hand, measures aimed at eliminating or reducing disability or derived comorbidities are typical of tertiary prevention (as would be the case of social rehabilitation programs for people with severe and chronic mental disorders). These levels can be linked to the natural history and clinical course of illnesses, from exposure to the causative agents to their final consequences. Levels of prevention—hand in hand with the concept of diagnosis—broadened the spectrum of preventive activities in public health from communicable diseases to any health problem, including mental health problems, which are intangible in nature. However, this broadening has also brought with it significant risks, such as overdiagnosis, unnecessary medicalization, and the potential commodification of problems that, in many cases, could be considered within the range of normality.

Although the expansion of what is diagnosable is not exclusive to mental health, it is a worryingly fertile phenomenon in a field that deals with nosological entities that are heavily conditioned by context and without objective diagnostic tests. This subjectivity—exposed to sociocultural and commercial influences—in determining what constitutes a mental health problem has led to an alarming fattening of the psychological diagnostic manuals (Frances, 2013; Kendler, 2016). In response to the potentially excessive disease promotion (disease mongering) and its consequent medicalization and commodification, a new prevention is emerging: quaternary prevention.

Quaternary Prevention in Mental Health

The concept of quaternary prevention was proposed in the 1980s by the Belgian family physician Marc Jamoulle and in 1999 was recognized by the World Organization of Family Physicians (Suarez-Cuba, 2013). Quaternary prevention refers to measures and actions aimed at protecting people from excessive or unnecessary health interventions that could potentially cause more harm than benefit. Therefore, it is about avoiding inappropriate diagnoses and treatments under the fundamental Hippocratic principle of medical practice: *primum non nocere* (first, do no harm). The concept of quaternary prevention implies a reflexive perspective and

questioning the technical knowledge of medicine (extensible to clinical psychology in this case) applied in healthcare practice. In the context of the scientific and technological advances that transformed medical care in the 20th century, quaternary prevention builds on critiques of the medicalization of society by authors such as Foucault (1978), Illich (1976), Skrabanek (1990), Szasz (2013), and Zola (1972), among others.

The relevance of this concept in mental health is growing. According to a systematic review of articles published between 2000 and 2020, Spanish authors have been particularly prolific (Muniz, Ferrari, Duarte, Santos & Ferreira, 2022). While the majority of literature on quaternary prevention is narrative rather than empirical, its supporting arguments are grounded in evidence drawn from problematic health practices, such as overdiagnosis and overtreatment. These arguments also highlight the shortcomings of strategies aimed at detecting and eliminating the precursors of illness, as well as the importance of differentiating natural processes—falling within the spectrum of normal variation—from pathological cases requiring intervention.

In this regard, the screening of asymptomatic individuals, widely promoted as an indicator of progress in combating disease, has been questioned. Routine health check-ups for healthy adults may not clinically reduce morbidity or mortality rates for serious illnesses like cardiovascular disease or cancer but may instead increase new diagnoses and medical treatments, potentially causing more harm than benefit (Krogsbøll et al., 2012). These screenings may lead to unnecessary treatment of inactive cases that would not progress to disease, which involves not only costs in the form of individual suffering but also social costs in the form of increased prevalence of (presumed) diseases and increased health expenditure to treat them. Critics also highlight how risk factors are often mistakenly identified as etiological agents of disease under the assumption that their presence guarantees future disease development and that eliminating them prevents its onset (Gérvás & Pérez-Fernández, 2006). Another focus is the risks of vaccination campaigns to the general population, for example, the vaccination campaign during the 2009 swine flu pandemic may have been the cause of the increased incidence of narcolepsy in children and adolescents in countries that followed the campaign more rigorously (Wijnans et al., 2013). This does not go against the recognition of advances in the early intervention of cancer, heart disease, and other health problems in people with symptoms, or of some vaccination campaigns, but rather it questions the routine—and uncritical—invocation of primary prevention as an ideal strategy. Quaternary prevention is equally applicable to identified disease cases where excessive diagnostic and therapeutic procedures may evolve into a form of sophisticated clinical overzealousness.

In mental health, examples abound in support of quaternary prevention (Paris, 2015; Frances, 2013). This is the case of the overdiagnosis of mental disorders such as bipolar II disorder, in which it is no longer necessary to have a full-blown manic episode; of post-traumatic stress disorder and the extension of the concept of trauma to any stressful life event (such as the loss of a pet or moving house); the diagnostic epidemic of attention deficit hyperactivity disorder (ADHD), sometimes so difficult to distinguish from the evolutionarily expected behavioral problems in children, especially in the era of the "economy of distraction" (cf. Lipovetsky); or personality disorders of one kind or another. Another basis for

the critique is the increase in the over-prescription of psychotropic drugs exceeding any reasonable estimates of the prevalence of mental disorders, in many cases for off-label use (Devulapalli & Nasrallah, 2009). Similarly, the realization of the harm of treating normal reactions to everyday (i.e. bereavement) or extraordinary (i.e. catastrophes) life events as illnesses has served to highlight the risks of iatrogenic treatment of mental health problems (Ortiz-Lobo & Ibáñez-Rojo, 2011).

Social Determinants of Health

It is not unfamiliar to a psychologist's conception of health that an individual's behavior and specific health status are influenced by a broad range of factors extending beyond purely biological determinants. Medicine itself has understood, at least since the 19th century, the influence of living conditions on people's health. Throughout the 20th century, this understanding deepened as research developed and evidence accumulated on how non-health factors such as chronic stress, poverty, social exclusion, education, employment, and the physical environment influence health. In recent decades, the focus on the social determinants of health has gained significant momentum, supported by public health and socio-political organizations that recognize the importance of addressing these factors to improve the health of populations and reduce health inequalities (Álvarez-Castaño, 2009).

Aware of the influence of these non-medical factors, quaternary prevention can serve to protect vulnerable populations from healthcare interventions that inappropriately reinterpret structural socio-political problems as individual health issues. An indication of this risk is the existence of a social gradient, where certain health problems are more prevalent as income levels decrease. For example, schizophrenia is 12 times more prevalent in the lowest income level compared to the highest; personality disorders, 11 times more prevalent; and somatoform disorders, 7 times more prevalent (Subdirección General de Información Sanitaria, 2021). This is aligned with the need to address the structural causes that perpetuate these inequalities, promoting strategies that transcend the clinical setting to promote more equitable and effective care.

The Indication of no Treatment: Single-Act Psychotherapy

In all these cases suspected of being a consequence of (unfavorable) living conditions rather than of a supposed biological causal agent, the recommendation is not to treat them as if they were diseases. The so-called "indication of no treatment" is recognized as the maximum exponent of quaternary prevention in mental health (Ortiz-Lobo & Ibáñez-Rojo, 2011). However, there is no consensus on the criteria that determine what should be treated and what should not, which is a complex and multifaceted clinical decision that depends on clinical and care aspects, the patient's personal history, and the therapist-patient relationship. In other words, the indication of no treatment requires a previous evaluation and considerable clinical expertise in case management. Paradoxically, this approach is not devoid of (psycho)therapeutic elements.

Ortiz-Lobo and Murcia-García (2009) describe it as a "compressed psychotherapeutic process" (p.182) in five steps: empathic listening, initial construction of the discourse, narrative deconstruction of the discourse, resignification of the narrative so

that the patient is not seen as "sick" and in need of treatment but as a person who presents an adaptive and proportional emotional reaction to a problematic context, and, as the final phase of this process, an informed discharge. This process is estimated to have a minimum duration of 15 minutes and normally no more than 50 minutes—although we do not know the source of the calculation, it is not far from the times of an initial mental health consultation in specialized care. García-Moratalla (2012) calls "therapeutic minimalism" the elements involved in the indication of no treatment, which he describes in more detail as follows: reassuring framing; listening; the act of exploration itself, with its potential to increase and structure self-knowledge; empathy; support; validation of experiences, feelings, emotions and behaviors, explanation, which "must include messages of acknowledgements, reassurance, reflection, support, and attention (...) [and also] a confrontation, with non-punitive characteristics, which helps the subject to accept other realities" (p.49-50); and finally, as a central aspect of this "therapeutic minimalism", the resignification of the demand.

In reality, in this brief interaction between the patient and the health professional (whether a physician, psychiatrist, or clinical psychologist), both what are considered common (or nonspecific) factors of a psychological therapy for listening to and facilitating the patient's narrative (e.g., listening, psychoeducation, confrontation, interpretation, etc.) and other persuasive strategies for changing the initial narrative (e.g., cognitive restructuring, etc.) are being described. If the prescriptive connotation of the term "no treatment indication" was not sufficiently revealing of the paradox of the process, the detail of the elements involved clearly highlights the oxymoron when applied to mental health issues.

Strictly speaking, in psychological terms, the indication of non-treatment is better understood as a single-act intervention than as an act of non-intervention. In the case where the expectation was that of obtaining a drug (a psychotropic drug, in the mental health field), it can be understood that what has been prescribed is the denial of the drug, the no treatment. However, if the expectation was to obtain psychological help for a mental health problem—we are aware of the general preference of patients for psychological treatments over pharmacological ones—in reality, the patient is obtaining a form of ultra-brief psychological intervention presented as non-intervention.

The indication of no treatment can, in itself, become a high-resolution intervention that imposes a quick and superficial decision regarding the patient's discomfort. This rapid intervention has the inherent risk of reducing the complexity of psychological problems to a simplified response without adequately considering the particularities of each case. It prioritizes presumed social efficiency—labeled as social awareness—over quality care. Self-imposed limitations on the time that should be devoted to these cases run the risk of overlooking deeper or contextual needs of the patient, dismissing the opportunity to offer personalized care—not necessarily the most invasive and rapid. Thus, the indication of no treatment could become a form of neglect that disregards potential therapeutic solutions of greater intensity that could be beneficial in the long run for prevention. It is an indication that, while invoking lofty social causes, sometimes does not transcend the proverbial medical paternalism of "prescribing" social actions such as going to the library or joining a union (Gérvás-Camacho, Pérez-Fernández & Pastor-Valero, 2018) to functional adults who, in principle, are

not seeking guidance from a healthcare professional for such decisions.

Paradoxically, critical psychiatry, which questions the traditional practices and assumptions of conventional psychiatry (i.e., biologically oriented), when appealing to quaternary prevention, ends up agreeing with conventional psychiatry in not considering treatable those entities that can be better explained by environmental circumstances rather than by a supposed organic cause. In practice, neither front refrains from prioritizing—albeit disdainfully—the prescription of psychotropic medications over formal psychological treatments for minor or subclinical emotional disorders.

It seems more appropriate to include the indication of no treatment within a stepped-care model, which begins with attentive waiting and progresses, if the severity of the problem increases or is sustained over time, to more intense and complex interventions (Bower & Gilbody, 2005). Recently Kostic et al. (2024) proposed watchful waiting accompanied by a brief psychosocial intervention as a first-line treatment for non-suicidal patients with depressive symptoms, instead of initiating treatment with antidepressants or costly structured psychotherapies. This brief intervention strengthens healthy psychological resources, reduces stigma, and promotes actions through shared decision-making processes. This proposal aligns with the psychotherapeutic elements described in the indication of non-treatment but assumes that the process may require more than one session and acknowledges that some patients—regardless of initial symptom intensity or psychosocial triggers—may later require more intensive treatments (Kostic et al., 2024).

The Fallacious Prescriptive Analogy

This paper does not aim to delve into the differences and similarities between psychotherapy and psychopharmacotherapy in terms of indications, effects, duration, administration, quality of life, costs, user preferences, etc. It is sufficient to note here the risk of conceiving them interchangeable, ignoring the differential effects in terms of significance for professionals, patients, and society as a whole. Although both forms of treatment have cognitive, emotional, behavioral, and cerebral effects (Quidé, Witteveen, El-Hage, Veltman & Olff, 2012), prescribing medication and offering psychological treatment have quite different connotations for both the professional/therapist and the patient.

Differences in the meaning attributed to psychological versus pharmacological treatment influence the personal and social conceptualization of psychological distress. A pharmacological approach often frames psychological problems as biological illnesses, highlighting neurochemical or genetic imbalances as underlying causes. This framework, which may have its benefits in some cases, conceives distress as external and immutable, which can diminish the sense of control over the recovery process (Lebowitz & Appelbaum, 2019; Lebowitz, 2019) and even reduce clinicians' empathy for patients, seeing them as different from the rest of the population, deserving of social exclusion (Lebowitz & Ahn, 2014). Medication is understood from this perspective as a technical solution by a professional to correct a defect identified in the patient. In contrast, psychotherapy focuses on understanding problems as responses to life circumstances, such as conflicting interpersonal relationships, traumatic experiences, or dysfunctional thought patterns, promoting a narrative that highlights the patient's active

role in his or her own change, encouraging reflection processes and the resignification of past and present experiences (Gonçalves & Stiles, 2011). Integrating psychological distress into one's personal history, as sought in the case formulation, has the potential to reinforce the perception of personal growth and active transformation of oneself and one's environment (Johnstone & Dallos, 2017).

The psychological perspective in health care provides an integral approach that inherently considers social and personal contexts, promoting care tailored to individual needs. This is in alignment with the holistic conception of health promoted by the World Health Organization, which emphasizes physical, mental, and social well-being as interdependent components of health. Viewing psychotherapy and psychopharmacotherapy as comparable approaches for the purposes of quaternary prevention ignores not only the substantial differences in their significance but also the very nature of the indication of no treatment.

A few Further Precautions

In addition to the risks stemming from equating psychological and pharmacological treatments, and overlooking the fact that the indication of no treatment is itself a type of low-intensity psychotherapy, the implementation of quaternary prevention must be contemplated with other cautions to ensure its clinical effectiveness and ethical applicability.

First, one of the biggest challenges associated with quaternary prevention is the risk of undertreatment. Although the goal of this approach is to avoid unnecessary or harmful interventions, in some cases it could lead to the omission of necessary treatments. This risk is particularly relevant when timely diagnosis and treatment can make a significant difference in the course of a disorder. However, quaternary prevention could be misinterpreted as an invitation to reduce interventions based solely on diagnostic uncertainty (which is particularly high in mental health), potentially leading to a worsening of the clinical condition as well as personal and societal costs.

Clinical decisions, especially in the field of mental health, often depend on subjective factors that include the perspective of the professional, the cultural context, and the patient's expectations. For example, the diagnosis of ADHD has been the subject of debate due to discrepancies in diagnostic thresholds between countries, which may reflect the influence of sociocultural context rather than differences in actual prevalence (MacDonald et al., 2019; Chan, Shum & Sonuga-Barke, 2022). Precisely because of the absence of clear criteria, there is a risk that quaternary prevention will be applied inconsistently, exacerbating inequalities in access to mental health treatment within the public sector.

In a context of pressure from the limited economic resources of health systems, decisions to avoid interventions risk being driven more by economic considerations than clinical ones. This could lead to inequalities in access to treatment and the perception that quaternary prevention serves the interests of the system rather than those of the patient. This risk is especially notable in the case of mental health, where there is a tendency to stigmatize patients and underestimate the impact of these disorders.

Although quaternary prevention has some conceptual support, the empirical basis for its implementation is scarce. Most studies in this field are narrative or theoretical in nature, which makes it

difficult to create standardized evidence-based protocols. This poses a problem for its implementation in health systems that should prioritize interventions with measurable outcomes.

Quaternary prevention also poses significant ethical challenges. In some cases, practitioners may face conflicts with patient autonomy. This is particularly problematic in mental health, where perceptions of distress and expectations about treatment can vary widely between patients and practitioners, which as we know influences the therapeutic relationship and intervention outcomes (McHugh, Whitton, Peckham, Welge & Otto, 2013).

Finally, although the indication of no treatment seeks to reduce the treatments stemming from certain diagnoses in specific cases (stress reactions, bereavement, ADHD, social anxiety, bipolar disorders without truly manic episodes, etc.), it does not necessarily challenge the underlying logic of the system that produces such excesses. Its impact is primarily at the individual level, leaving intact not only the conceptual framework that underpins overdiagnosis and medicalization but also the economic, cultural, technological, professional, and regulatory factors that contribute to these phenomena.

Conclusions

Rooted in the Hippocratic principle *primum non nocere*, quaternary prevention emphasizes a highly relevant aspect of mental health practice by offering a critical response to the risks of overdiagnosis, medicalization, and unnecessary interventions. However, its implementation in mental health is exposed to multiple pragmatic and conceptual challenges.

A key tension lies in the paradox of the indication of no treatment, which, in practice, can be seen as a high resolution therapeutic intervention that simplifies the complexities of psychological distress and prioritizes efficiency over personalization of care. This approach conflicts with the clinical and research goals of psychological treatments in mental health, which emphasize tailored, evidence-based solutions (Harnas et al., 2024; Nye, Delgadillo & Barkham, 2023).

The most parsimonious underlying reason for the recurrent questioning of the role of psychological treatments in the health care setting by both sides is the erroneous conception of what they are, both by society in general and by the professionals themselves. Sometimes they are assimilated to pharmacological treatment; other times they are reduced to emotional support, with their technical, structured, and evidence-based dimension being underestimated, both for mild or subclinical cases and for more severe ones. This undermines the image of the clinical psychologist as a specialist capable not only of administering psychological treatments, but, above all, of determining, after appropriate assessment, which treatments should or should not be administered. It is precisely in this fundamental responsibility that their professional role resides.

Despite clinical guidelines recommending evidence-based psychological treatments as first-line interventions for mild or early-stage mental disorders (aligned with patient preferences), exclusively receiving psychological treatment in Spain remains extremely rare. Large-scale epidemiological studies report that most people who meet the criteria for a mental disorder do not receive any treatment, and in our context, when they do receive treatment, it is usually exclusively psychopharmacological (Codony et al.,

2007). Moreover, only about half of those with affective disorders who meet the criteria seek help within a year of the onset of the disorder (Codony et al., 2007). Notably, a lower educational level, triggering stressful events, a history of previous undiagnosed depressive episodes, and somatic comorbidity have been related to a longer delay in initiating treatment (Huerta-Ramirez et al., 2013).

It is indisputable that changes at the social and structural level aimed at addressing the social determinants that influence psychological well-being, such as poverty, chronic stress, and social exclusion, play a crucial role in the prevention of psychological problems (including mental disorders). However, recognizing the importance of these changes should not lead to the conclusion that access to psychological treatments is unnecessary or redundant, as they operate at a different level, even though the social and individual levels interact with each other. It is easy to understand that the recognition of the social determinants of physical health problems, such as obesity or cardiovascular disease, does not invalidate or limit the need for endocrinological or oncological treatments. The same can be said of psychological treatments for mental disorders influenced by socio-environmental factors.

Quaternary prevention in mental health nobly highlights the need to avoid the harm from unnecessary interventions—a critical goal in a field shaped by subjectivity. However, its principles and recommendations should be understood with caution, especially when it comes to psychological treatments in the public system, which are, in general, systematically underfunded and underutilized. An uncritical interpretation of quaternary prevention could aggravate the gap in access to psychological treatments and lead to the erroneous conclusion that they are not necessary or even to their rejection by the professional groups that ought to advocate for them. This, too, must be prevented.

Conflict of Interest

The author declares no direct conflicts of interest in relation to this work. However, the reflections presented were developed from their position as an Area Specialist in Clinical Psychology in a public hospital.

References

- Álvarez-Castaño, L. S. (2009). Los determinantes sociales de la salud: Más allá de los factores de riesgo [The social determinants of health: Beyond the risk factors]. *Revista Gerencia y Políticas de Salud*, 8(17), 69-79.
- Bower, P., & Gilbody, S. (2005). Stepped care in psychological therapies: Access, effectiveness and efficiency. *British Journal of Psychiatry*, 186(1), 11-17. <https://doi.org/10.1192/bjp.186.1.11>
- Chan, W. W. Y., Shum, K. K., & Sonuga-Barke, E. J. S. (2022). Attention-deficit/hyperactivity disorder (ADHD) in cultural context: Do parents in Hong Kong and the United Kingdom adopt different thresholds when rating symptoms, and if so why? *International Journal of Methods in Psychiatric Research*, 31(3), e1923. <https://doi.org/10.1002/mpr.1923>
- Codony, M., Alonso, J., Almansa, J., Vilagut, G., Domingo, A., Pinto-Meza, A., Fernández, A., Usall, J., Dolz, M., & Haro, J. M. (2007). Utilización de los servicios de salud mental en la población general española. Resultados del estudio ESEMeD-España [Utilization of mental health services in the Spanish general population. Results of the ESEMeD-Spain study]. *Actas Españolas de Psiquiatría*, 35(Supl. 2), 21-28.

- Devulapalli, K. K., & Nasrallah, H. A. (2009). An analysis of the high psychotropic off-label use in psychiatric disorders: The majority of psychiatric diagnoses have no approved drug. *Asian Journal of Psychiatry*, 2(1), 29-36. <https://doi.org/10.1016/j.ajp.2009.01.005>
- Foucault, M. (1978). *Historia de la locura en la época clásica [A History of Insanity in the Age of Reason]*. México: Fondo de Cultura Económica.
- Frances, A. (2013). *¿Somos todos enfermos mentales? Manifiesto contra los abusos de la psiquiatría [Are we all mentally ill? Manifesto against the abuses of psychiatry]*. Editorial Ariel.
- García-Moratalla, B. (2012). Indicación de no-tratamiento para personas sin diagnóstico de trastorno mental [Indication of non-treatment for people without a diagnosis of mental disorder]. *Norte de Salud Mental*, 10(43), 43-52.
- Gérvás-Camacho, J., Pérez-Fernández, M., & Pastor-Valero, M. A. (2018). La medicalización del vivir y del sufrir [The medicalization of living and suffering]. In I. Hernández-Aguado & B. Lumberreras Lacarra (Eds.), *Manual de epidemiología y salud pública: Para grados en ciencias de la salud [Handbook of Epidemiology and Public Health: For degrees in health sciences]* (pp. 265-267). Editorial Médica Panamericana.
- Gérvás, J., & Pérez-Fernández, M. (2006). Uso y abuso del poder médico para definir enfermedad y factor de riesgo, en relación con la prevención cuaternaria [Use and abuse of medical power to define disease and risk factor, in relation to quaternary prevention]. *Gaceta Sanitaria*, 20(Supl. 3), 66-71. <https://doi.org/10.1157/13101092>
- Gonçalves, M. M., & Stiles, W. B. (2011). Narrative and psychotherapy: Introduction to the special section. *Psychotherapy Research: Journal of the Society for Psychotherapy Research*, 21(1), 1-3. <https://doi.org/10.1080/10503307.2010.534510>
- Harnas, S. J., Knoop, H., Sprangers, M. A. G., & Braamse, A. M. J. (2024). Defining and operationalizing personalized psychological treatment: A systematic literature review. *Cognitive Behaviour Therapy*, 53(5), 467-489. <https://doi.org/10.1080/16506073.2024.2333345>
- Huerta-Ramírez, R., Bertsch, J., Cabello, M., Roca, M., Haro, J. M., & Ayuso-Mateos, J. L. (2013). Diagnosis delay in first episodes of major depression: A study of primary care patients in Spain. *Journal of Affective Disorders*, 150(3), 1247-1250. <https://doi.org/10.1016/j.jad.2013.06.009>
- Illich, I. (1976). *Némesis médica: La expropiación de la salud [Medical nemesis: The expropriation of health]* (Trad. J. Bayo). Barcelona: Barral Editores.
- Johnstone, L., & Dallos, R. (Eds.). (2017). *La formulación en la psicología y la psicoterapia: Dando sentido a los problemas de la gente [Formulation in psychology and psychotherapy: Making sense of people's problems]*. Desclée de Brouwer.
- Kendler, K. S. (2016). The phenomenology of major depression and the representativeness and nature of DSM criteria. *The American Journal of Psychiatry*, 173(8), 771-780. <https://doi.org/10.1176/appi.ajp.2016.15121509>
- Kostic, M., Milojevic, T., Buzejic, J., Spasić Stojakovic, M., Maslak, J., Ilic, M., Jakovljevic, A., Munjiza Jovanovic, A., Podgorac, A., Dabetic, M., Vezmar, M., & Lazarevic, M. (2024). Watchful waiting for depression using depathologization, advice and shared decision making. *Journal of Affective Disorders Reports*, 16, 100753. <https://doi.org/10.1016/j.jadr.2024.100753>
- Krogsbøll, L. T., Jørgensen, K. J., Larsen, C. G., & Gotzsche, P. C. (2012). General health checks in adults for reducing morbidity and mortality from disease: Cochrane systematic review and meta-analysis. *BMJ*, 345, e7191. <https://doi.org/10.1136/bmj.e7191>
- Le, L. K.-D., Esturas, A. C., Mihalopoulos, C., Chiotelis, O., Bucholz, J., Chatterton, M. L., et al. (2021). Cost-effectiveness evidence of mental health prevention and promotion interventions: A systematic review of economic evaluations. *PLOS Medicine*, 18(5), e1003606. <https://doi.org/10.1371/journal.pmed.1003606>
- Leavell, H., & Clark, E. (1965). *Preventive medicine for the doctor in his community: An epidemiological approach*. New York: McGraw-Hill.
- Lebowitz, M. S. (2019). The implications of genetic and other biological explanations for thinking about mental disorders. *The Hastings Center Report*, 49(Suppl. 1), S82-S87. <https://doi.org/10.1002/hast.1020>
- Lebowitz, M. S., & Ahn, W. K. (2014). Effects of biological explanations for mental disorders on clinicians' empathy. *Proceedings of the National Academy of Sciences of the United States of America*, 111(50), 17786-17790. <https://doi.org/10.1073/pnas.1414058111>
- Lebowitz, M. S., & Appelbaum, P. S. (2019). Biomedical explanations of psychopathology and their implications for attitudes and beliefs about mental disorders. *Annual Review of Clinical Psychology*, 15, 555-577. <https://doi.org/10.1146/annurev-clinpsy-050718-095416>
- MacDonald, B., Pennington, B. F., Willcutt, E. G., Dmitrieva, J., Samuelsson, S., Byrne, B., & Olson, R. K. (2019). Cross-country differences in parental reporting of symptoms of ADHD. *Journal of Cross-Cultural Psychology*, 50(6), 806-824. <https://doi.org/10.1177/0022022119852422>
- McHugh, R. K., Whitton, S. W., Peckham, A. D., Welge, J. A., & Otto, M. W. (2013). Patient preference for psychological vs pharmacologic treatment of psychiatric disorders: A meta-analytic review. *The Journal of Clinical Psychiatry*, 74(6), 595-602. <https://doi.org/10.4088/JCP.12r07757>
- Muniz, M. S. C., Ferrari, S. E. N., Duarte, I. N., Santos, L. L. dos, & Ferreira, J. B. B. (2022). Quaternary prevention and its implications for the clinical practice: A systematic review. *Medicina (Ribeirão Preto)*, 55(4), e-188477. <https://doi.org/10.11606/issn.2176-7262.rmrp.2022.188477>
- Nye, A., Delgadillo, J., & Barkham, M. (2023). Efficacy of personalized psychological interventions: A systematic review and meta-analysis. *Journal of Consulting and Clinical Psychology*, 91(7), 389-397. <https://doi.org/10.1037/ccp0000820>
- Ortiz-Lobo, A., & Ibáñez-Rojo, V. (2011). Iatrogenia y prevención cuaternaria en salud mental [Iatrogenic and quaternary prevention in mental health]. *Revista Española de Salud Pública*, 85(6), 513-523.
- Ortiz-Lobo, A., & Murcia-García, L. (2009). La indicación de no-tratamiento: Aspectos psicoterapéuticos [The indication of non-treatment: Psychotherapeutic aspects]. In A. Retolaza (Coord.), *Trastornos mentales comunes: Manual de orientación [Common Mental Disorders: Guidance Manual]* (pp. 179-194). Asociación Española de Neuropsiquiatría, AEN estudios/41.
- Paris, J. (2015). *Overdiagnosis in psychiatry: How modern psychiatry lost its way while creating a diagnosis for almost all of life's misfortunes*. Oxford University Press.
- Quidé, Y., Witteveen, A. B., El-Hage, W., Veltman, D. J., & Olff, M. (2012). Differences between effects of psychological versus pharmacological treatments on functional and morphological brain alterations in anxiety disorders and major depressive disorder: A systematic review. *Neuroscience and Biobehavioral Reviews*, 36(1), 626-644. <https://doi.org/10.1016/j.neubiorev.2011.09.004>
- Skrabaneck, P. (1990). Why is preventive medicine exempted from ethical constraints? *Journal of Medical Ethics*, 16(4), 187-190. <https://doi.org/10.1136/jme.16.4.187>
- Suarez-Cuba, M. A. (2013). Prevención cuaternaria en medicina familiar/general [Quaternary prevention in family/general medicine]. *Revista Médica La Paz*, 19(1), 67-72.
- Subdirección General de Información Sanitaria [General Subdirectorate of Health Information]. (2021). *Salud mental en datos: Prevalencia de los*

- problemas de salud y consumo de psicofármacos y fármacos relacionados a partir de registros clínicos de atención primaria [Mental health in data: Prevalence of health problems and consumption of psychotropic and related drugs from primary care clinical records]. BDCAP Series 2 [Internet publication]. Madrid: Ministerio de Sanidad [Madrid: Ministry of Health]. Retrieved September 7, 2024, from https://www.sanidad.gob.es/estadEstudios/estadisticas/estadisticas/estMinisterio/SIAP/Salud_mental_datos.pdf
- Szasz, T. S. (2013). *El mito de la enfermedad mental: Fundamentos de una teoría de la conducta personal* [The myth of mental illness: Foundations of a theory of personal behavior]. Buenos Aires: Amorrortu.
- Wijnans, L., Lecomte, C., Vries, C. de, Weibel, D., Sammon, C., Hviid, A., Svanström, H., Mølgaard-Nielsen, D., Heijbel, H., Dahlström, L. A., Hallgren, J., Sørensen, P., Jennum, P., Mosseveld, M., Schuemie, M., Maas, N. van der, Partinen, M., Romio, S., Trotta, F., Santuccio, C., ... Sturkenboom, M. C. (2013). The incidence of narcolepsy in Europe: Before, during, and after the influenza A(H1N1)pdm09 pandemic and vaccination campaigns. *Vaccine*, 31(8), 1246-1254. <https://doi.org/10.1016/j.vaccine.2012.12.015>
- Zola, I. K. (1972). Medicine as an institution of social control. *Sociological Review*, 20(4), 487-504. <https://doi.org/10.1111/j.1467-954X.1972.tb00220.x>