

## From Listening to Prescribing: Pharmacological Reductionism, Temporality, And the Loss of Complexity in Contemporary Psychiatry

Giovanna Azevedo Rodrigues\*<sup>1</sup>; Luiz Costa<sup>2</sup>; Samuel da Silva Ribeiro<sup>3</sup>; Marcelo Ferreira Caixeta<sup>4</sup>

<sup>1</sup>Hospital ASMIGO, Goiânia, Goiás, Brazil · ORCID: [0009-0003-9020-9368](https://orcid.org/0009-0003-9020-9368) ·

<sup>2</sup>Hospital ASMIGO, Goiânia, Goiás, Brazil · ORCID: [0009-0006-4580-9788](https://orcid.org/0009-0006-4580-9788)

<sup>3</sup>Hospital ASMIGO, Goiânia, Goiás, Brazil · ORCID: [0009-0008-1817-7839](https://orcid.org/0009-0008-1817-7839) ·

<sup>4</sup>Hospital ASMIGO; Federal University of Goiás (UFG), Goiânia, Goiás, Brazil · ORCID: [0000-0003-2357-6558](https://orcid.org/0000-0003-2357-6558)

### ABSTRACT

Pharmacotherapy has transformed prognosis and broadened the possibilities of care across different mental disorders. This recognition, however, does not eliminate the problem of **pharmacological reductionism**, understood in this article as the conversion of medication from a therapeutic resource into the organizing principle of diagnosis, of the explanation of suffering, and of psychiatric practice itself. This critical review of restricted scope examines the literature published between 2021 and 2026 on the mechanisms that favor this reduction, its clinical and epistemological consequences, and the alternatives proposed to reintegrate the biological, psychopathological, relational, social, and existential dimensions. The analysis is organized around eight problems: the symptom–diagnosis–drug circuit; the reification of diagnostic categories; the gap between acute response and long-term recovery; polypharmacy and prescribing cascades; economic and organizational incentives; the limits of a merely protocol-driven deprescribing; shared decision-making; and biopsychosocial and recovery-oriented models of care. The general psychiatric syndrome hypothesis is discussed as a possible challenge to nosographic fragmentation, but also as a construct that demands caution so that it does not become a new reified entity.

The synthesis showed that pharmacocentrism does not stem from a single cause. It emerges from the combination of diagnostic reification, the predominance of short-term outcomes, the invisibility of harms and preferences, cumulative polypharmacy, commercial influence, and services with few psychosocial alternatives. At the same time, studies of efficacy and effectiveness confirm relevant pharmacological benefits, which precludes an anti-psychopharmacological conclusion. The data support a distinction between **rational use of medicines** and **pharmacocentric organization of care**. Overcoming the latter depends on a causal and revisable clinical formulation, shared decision-making, longitudinal follow-up, family involvement when appropriate, and effective access to non-pharmacological interventions. We argue that criticizing pharmacocentrism does not mean denying psychopharmacology, but rather restoring medication to a proportionate position within a broad, longitudinal clinical formulation that is sensitive to the person's experience.

**KEYWORDS:** psychiatry; psychopharmacology; biomedical reductionism; medicalization; polypharmacy; deprescribing; biopsychosocial model; recovery.

### ARTICLE DETAILS

**Published On:**  
**22 October 2026**

**Available on:**  
**<https://ijmscrs.com>**

### INTRODUCTION

Psychotropic drugs can reduce symptoms, prevent relapse, and produce clinically relevant benefits. In acute conditions,

they may be decisive in protecting life, restoring sleep, reducing agitation or psychosis, and creating conditions for other interventions. The problem begins when this usefulness

## From Listening to Prescribing: Pharmacological Reductionism, Temporality, And the Loss of Complexity in Contemporary Psychiatry

is turned into a total theory of illness and care. In that transition, pharmacotherapy no longer responds to a clinical formulation and instead comes to determine which questions will be asked, which phenomena will be recognized, and which results will be considered meaningful.

In this article, **pharmacocentrism** designates a form of practical reductionism. It is not merely the belief that mental disorders have biological components. That claim is compatible with a complex clinical practice. Reductionism appears when one level of explanation is taken as sufficient and comes to subordinate the others. Life history, psychopathological structure, family relationships, material conditions, habits, values, and subjective experience become peripheral variables, while the categorical diagnosis and the choice of drug occupy the center of the clinical encounter.

The simplest form of this process is the **symptom-label-medication** circuit. A set of complaints is rapidly converted into a diagnostic category; the category is treated as a causal entity; and the entity is linked to a pharmacological intervention. The circuit offers legibility and speed, but it can produce a false sense of precision. Similar symptoms may arise from distinct trajectories, mechanisms, exposures, and conflicts. In addition, adverse effects, withdrawal phenomena, substance use, medical illnesses, and biographical changes may mimic or aggravate psychiatric presentations.

The critique developed here does not propose replacing biologism with a symmetrical psychologism. Brain processes, genetic vulnerabilities, and bodily changes remain relevant. Nor is it assumed that psychotherapy, family, or the reorganization of one's life are sufficient in every case. The argument is integrative: none of these domains should, in isolation, be turned into a complete explanation. The properly psychiatric task consists in articulating distinct levels and deciding, for a concrete person and over time, which combination of interventions is proportionate, acceptable, and clinically justifiable.

The guiding question of this review is: **how does the literature published between 2021 and 2026 describe the mechanisms by which contemporary psychiatry is reduced to a pharmacocentric practice, which clinical and epistemological consequences does it attribute to this process, and which models of care does it propose to reintegrate the biological, psychopathological, relational, social, and existential dimensions?**

Recent literature provides grounds for formulating this distinction without resorting to an abstract opposition between "biological" and "psychosocial." Bolton proposes revitalizing the biopsychosocial model through causal relations between levels, understood as processes of regulation and dysregulation, instead of using it as an undifferentiated list of factors [3](#). Stein et al. situate this proposal within an ontological, explanatory, and values pluralism: mental disorders involve facts and evaluations, and

different models may identify distinct "difference makers" for research and for treatment [4](#). Maximino adds that plasticity, culture, and power relations take part in the constitution of suffering, not merely in its later expression [5](#).

These formulations help to delimit the target of the critique. Pharmacocentrism is not synonymous with biological research, frequent prescribing, or prolonged use of medication. It occurs when an available intervention comes to function as the preferred explanation of the phenomenon and as an implicit measure of clinical relevance. In this arrangement, aspects that do not correspond directly to a pharmacological target may be recorded, but they remain without consequence for the treatment plan. The critique is therefore directed at the **asymmetry between levels of explanation and of intervention**, not at the existence of a biological level.

Rose and Rose show that proposals presented as alternatives to mainstream psychiatry must also be critically evaluated, since community participation or listening to service users does not, by itself, guarantee theoretical, empirical, or power-relations change [6](#). Similarly, Gault, Jurek, and Fournier argue that the problem of medicalization calls for balance: avoiding overmedicalization without producing undermedicalization or withdrawing necessary support [7](#). These counterpoints prevent the article from trading one reductionism for another.

The problem also has a material dimension. Cosgrove, Patterson, and Bursztajn argue that commercial incentives may favor the presentation of psychotropic drugs as "magic bullets," overstate benefits, and reduce the visibility of harms and of the sociopolitical determinants of suffering [8](#). On a broader scale, Dun-Campbell et al. show that commercial products and practices — such as alcohol, tobacco, gambling, digital platforms, and pollution — are associated with mental health outcomes, although broader corporate actions remain under-investigated [9](#). Thus, reducing suffering to an individual dysfunction treatable with drugs may also obscure social and commercial exposures that cannot be modified in the consulting room by a prescription.

Drawing on this literature, the article examines pharmacocentrism on four interdependent planes. The **diagnostic** plane converts descriptive categories into presumed causes. The **therapeutic** plane privileges pharmacological intervention even when the evidence is limited or when other modalities are first-line. The **temporal** plane extrapolates responses observed over weeks into expectations of lasting recovery. The **organizational** plane offers appointments and indicators compatible with prescribing, but not necessarily with formulation, therapeutic bond, and longitudinal care.

### METHODS

A **critical review of restricted scope** was designed, rather than a systematic review. This choice stems from the

## From Listening to Prescribing: Pharmacological Reductionism, Temporality, And the Loss of Complexity in Contemporary Psychiatry

heterogeneity of the object. Pharmacological reductionism does not correspond to a single intervention or outcome. It appears in studies on medicalization, psychiatric epistemology, conflicts of interest, prescribing quality, polypharmacy, medication withdrawal, shared decision-making, recovery, and service organization. An exclusively quantitative synthesis would erase important differences between these fields.

The exploratory search covers literature published between January 1, 2021, and September 22, 2026. PubMed, Crossref, journal websites, and publicly accessible academic indexers were considered. The searches combined terms related to psychiatry, psychopharmacology, biomedical reductionism, pharmacocentrism, medicalization, psychotropic polypharmacy, prescribing cascade, deprescribing, shared decision-making, recovery-oriented care, biopsychosocial formulation, lived experience, and general psychopathology factor.

Peer-reviewed articles in Portuguese, English, or Spanish were defined as eligible if they examined at least one of the following domains: biomedical reductionism; pharmacocentrism; medicalization; diagnostic expansion or reification; commercial influence; organizational incentives; temporal limits of psychopharmacological evidence; polypharmacy; prescribing cascades; gradual withdrawal; shared decision-making; biopsychosocial care; recovery; lived experience; or explanatory pluralism. Excluded were texts without verifiable metadata, duplicates, protocols without results when a completed study was available, publications prior to 2021, and exclusively pharmacodynamic studies with no contribution to the question. The final set was limited to **25 articles**.

The synthesis was thematic. For each study, design, population or object, main contribution, limitations, and relationship with the analytical categories were recorded. Reviews, observational studies, clinical trials, and conceptual articles were not treated as if they produced the same type of evidence. The interpretation actively sought discordant results and evidence of pharmacological benefit. The aim is to assess the conditions under which practice becomes reductionist, not to demonstrate in advance that all pharmacotherapy is so.

The search was carried out in two stages. In the first, a broad thematic search retrieved 44 candidates potentially related to the eight analytical domains. In the second, records were deduplicated and assessed for relevance, thematic diversity, type of evidence, and verifiability. Twenty-five articles were retained; all had their DOI and title match confirmed by Crossref lookup. The selection included one article from 2021, five from 2023, ten from 2024, four from 2025, and five from 2026.

The sample was intentionally heterogeneous. It brought together conceptual and narrative reviews, an umbrella review, systematic reviews and meta-analyses, observational

studies, an analysis derived from a randomized trial, a Delphi consensus, and qualitative studies. This composition makes it possible to relate institutional mechanisms, epistemological arguments, and clinical results, but it precludes attributing the same inferential weight to all studies. Quantitative results were used to characterize frequency, association, or effect only within the designs that produced them.

Data extraction recorded authors, year, journal, publication type, population or object, contribution to the question, and main limitation. For empirical studies, sample size, follow-up duration, and effect estimates were retrieved when available. For reviews and consensus statements, scope, number of studies or participants, certainty-assessment method, and nature of the recommendations were recorded. The synthesis was organized by thematic convergence, with a deliberate search for results that confirmed pharmacological usefulness or limited critical conclusions.

This review does not claim to be exhaustive. Neither duplicate screening of all records by independent reviewers nor formal risk-of-bias assessment of each article with specific instruments was performed. The expression "critical review of restricted scope" should therefore be retained. The matrix of 25 studies offers a verifiable argumentative basis but does not replace a registered systematic review. This limitation is particularly important for the topics of commercial influence, lived experience, and service organization, in which the selected literature is methodologically diverse.

## RESULTS

### Characterization of the selected literature

The 25 articles were distributed across five evidence clusters. The first brought together biopsychosocial models, explanatory pluralism, medicalization and counterpoints to medicalization [3](#) [4](#) [5](#) [6](#) [7](#). The second addressed industry influence and commercial determinants [8](#) [9](#). The third examined polypharmacy, potentially inappropriate prescribing, and adverse effects [10](#) [11](#) [12](#) [13](#) [14](#). The fourth concentrated studies on deprescribing, withdrawal, and shared decision-making [15](#) [16](#) [17](#) [18](#) [19](#). The fifth gathered efficacy, effectiveness, long-term outcomes, limits of pharmacological indications, and care preferences [20](#) [21](#) [22](#) [23](#) [24](#) [25](#). The two articles on the general psychiatric syndrome were kept as a separate nosographic axis [1](#) [2](#).

The synthesis found no support for the claim that psychotropic drugs are globally ineffective. On the contrary, there is evidence of benefit in well-defined indications [20](#) [22](#) [23](#). The recurring pattern was a different one: observed effectiveness, tolerability, personal goals, and long-term results are not always represented by short-term mean efficacy. The literature also showed that both prescribing and withdrawal become inappropriate when applied without context, participation, and monitoring.

## From Listening to Prescribing: Pharmacological Reductionism, Temporality, And the Loss of Complexity in Contemporary Psychiatry

### From pharmacotherapy to pharmacocentrism

The distinction between pharmacotherapy and pharmacocentrism is indispensable. The former names a set of interventions whose appropriateness can be discussed in terms of indication, dose, duration, preference, benefit, harm, and alternatives. The latter describes an epistemological and care hierarchy in which medication becomes the presumed answer and the other components of clinical practice must justify their presence.

This hierarchy can operate without any explicit theoretical statement. It appears when the appointment is structured almost exclusively as a review of symptoms and adjustment of doses; when the diagnosis is inferred retrospectively from the response to a medication; when therapeutic failure is explained solely as pharmacological insufficiency; or when problems of adherence, substance use, violence, precarious living conditions, isolation, and family conflict are recognized but remain outside the treatment plan. Reductionism, therefore, does not lie in the act of prescribing. It lies in the replacement of formulation by prescription.

A broad clinical formulation performs a function different from classification. Classification organizes similarities between cases and can improve communication, research, and access to treatment. Formulation seeks to understand how vulnerabilities, events, maintaining mechanisms, resources, and meanings combine in that particular person. When a diagnostic category is treated as a sufficient explanation, an unwarranted passage from the descriptive to the causal takes place. The consequence is the impression that naming the disorder is equivalent to understanding the illness.

A non-reductionist psychiatry must also avoid idealizing complexity. Stating that a case is multidimensional does not dispense with decisions. In situations of risk, action is necessary even under uncertainty. The difference lies in acknowledging the provisional character of hypotheses, monitoring consequences, and revising the formulation as the trajectory becomes clearer. Epistemic humility is not permanent indecision; it is the capacity to keep a decision open to correction.

This distinction has recent theoretical grounding. The biopsychosocial model proposed by Bolton replaces the enumeration of factors with causal relations between levels 3; the pluralism of Stein et al. rejects the assumption that the most basic level of description is always the most clinically sufficient 4; and the biocultural synthesis of Maximino shows that context and biology co-constitute each other through plasticity, rather than context serving as an external backdrop 5. From this perspective, a pharmacological intervention may be central without being totalizing; what defines its position is the causal hypothesis of the case, not a fixed hierarchy among treatments.

### The symptom–diagnosis–drug circuit

The symptom–diagnosis–drug circuit becomes especially persuasive when each step seems to confirm the previous one.

A patient reports insomnia, agitation, or sadness; receives a category; partially improves after a medication; and the improvement is interpreted as validation of the diagnosis. This inference ignores the fact that many psychotropic drugs have transdiagnostic effects. Sedation, reduction of anxiety, or behavioral stabilization can occur in different conditions and do not, by themselves, demonstrate a specific etiology.

The same circularity may operate in the face of failure. Persistent suffering is classified as resistance; resistance justifies combination or dose escalation; the effects of the combination generate new complaints; and these complaints are incorporated into the clinical picture as comorbidities. Although this sequence does not describe every treatment, it makes explicit how a practice can produce **interpretive cascades** even before it produces prescribing cascades.

Categorical reduction also affects what counts as an outcome. Symptom scales are necessary and useful, but they do not fully represent the patient's life. A reduction in scores may coexist with sedation, loss of initiative, sexual dysfunction, weight gain, perceived cognitive decline, or withdrawal from social roles. Conversely, functional recovery and the rebuilding of life projects may occur without complete symptomatic remission. A proportionate assessment must make explicit which outcome matters, to whom, and over what time horizon.

The selected literature indicates that diagnostic reification does not result from the mere use of categories, but from the loss of awareness of their function. Stein et al. note that the thresholds between normality and disorder are partially indeterminate and that psychiatry lacks biomarkers capable of deciding most cases 4. This does not make diagnosis arbitrary, but it requires acknowledging that suffering, disability, values, and context take part in the decision.

The debate on neurodiversity illustrates the double risk. Gauld, Jurek, and Fournier warn that an indiscriminate critique of medicalization may deny support to people who need it, while an indiscriminate expansion of categories may convert differences and difficulties into pathology 7. The alternative is a proportionate assessment, sensitive to disability, preferences, and the concrete effects of the diagnosis. The same principle applies to medication: not every prescription confirms a pathological essence, and not every refusal to prescribe represents more humane care.

Studies of lived experience show what the fast circuit tends to lose. In interviews with 20 people in remission after a first episode of psychosis, van der Heijden-Hobus et al. identified needs for reassurance, information, understanding, support from significant others, and practical guidance to rebuild their lives; the need to be heard and informed was frequently considered insufficiently met 24. In the review by Hawke, Sheikhan, and Rodak, 20 reviews covering 376 articles showed broad convergence on the facilitators and benefits of involving people with lived experience in research, but found limited information on family involvement 25. These results

## From Listening to Prescribing: Pharmacological Reductionism, Temporality, And the Loss of Complexity in Contemporary Psychiatry

support the view that listening is not an ornamental gesture: it can change questions, outcomes, and decisions.

### **The general psychiatric syndrome: integration without new reification**

The **general psychiatric syndrome** hypothesis offers a relevant counterpoint to pharmacological reductionism because it questions the simplified correspondence between a categorical diagnosis, a specific biological alteration, and a medication supposedly targeted at that entity. Rodrigues, Castanheira Júnior, and Caixeta propose that high comorbidity, the migration of symptoms across the lifespan, shared genetic architecture, and the transdiagnostic efficacy of certain psychotropic drugs would indicate that different diagnoses may constitute variable manifestations of a common disturbance [1](#). From this perspective, the fact that the same drug is used across distinct categories does not prove the existence of independent diseases; it exposes the limits of the circuit that rigidly links a symptom, a diagnosis, and a medication.

The proposal has two potentially useful consequences for the argument of this review. First, it shifts attention from supposedly autonomous entities to patterns of vulnerability, comorbidity, and longitudinal transformation. Second, it makes it possible to understand the transversality of pharmacological and psychotherapeutic interventions without presenting each application as the discovery of a specific treatment for an isolated disease. This shift may favor broader formulations and reduce the fragmentation of care. However, transdiagnostic integration should not be confused with the discovery of a unitary etiology. Costa et al. conclude that the existence of a general dimension of psychopathology is well supported at the phenotypic level, as it summarizes symptomatic variance and is related to impairment; the causal interpretation of this dimension, however, remains uncertain [2](#). Different psychometric models can produce similar general factors, while molecular results favor multiple correlated genetic dimensions. Neuroimaging associations are modest and do not yet offer demonstrated diagnostic or prognostic utility. Likewise, the performance of transdiagnostic psychological interventions does not establish that a single causal mechanism exists.

This tension must be preserved. The general psychiatric syndrome may help to overcome diagnostic fragmentation and pharmacocentrism, provided that it is not reified as a new "single disease" awaiting a universal pharmacology. Its current value seems greater as a guide for observing continuities, trajectories, and overlaps than as an established etiological entity. The responsible clinical consequence is to broaden the formulation, not to replace it with a new totalizing label.

Rodrigues, Castanheira Júnior, and Caixeta present general psychiatric disease or syndrome as a framework capable of explaining comorbidity, symptom migration, genetic sharing, and the cross-cutting use of interventions [1](#). The proposal

seeks to preserve categorical diagnoses for pragmatic purposes but reinscribes them within a broader vulnerability. Its interest for this review lies in showing that pharmacological transversality may weaken, rather than confirm, the idea of rigid correspondences between a category and a drug.

The publication itself acknowledges, however, that the model is a conceptual synthesis derived from clinical observation and theoretical integration, not a prospective finding. The proposed neural integration mechanism remains controversial, not every comorbidity indicates a shared mechanism, and validated clinical instruments are still lacking [1](#). These limitations are decisive because a transdiagnostic construct only overcomes reductionism if it remains open to competing explanations and to falsification tests.

This conclusion directly connects the two articles to the argument of this manuscript. The first broadens nosography and favors continuity between clinical conditions [1](#). The second sets an epistemic limit to this broadening [2](#). Taken together, they offer an alternative to fragmentation without authorizing an undifferentiated pharmacology for a supposed single disease.

### **The temporality of the "silver bullet"**

The "silver bullet" imaginary brings together three expectations: an isolable cause, a specific intervention, and a rapid response. In psychiatry, each of these may hold true in circumscribed situations, but their combination is less frequent than the everyday language of innovation suggests. Severe and recurrent mental disorders develop over years, interact with the environment, and alter relationships, habits, and opportunities. An intervention may produce an acute effect without modifying the processes that sustain relapse or disability.

The temporal distinction changes the interpretation of efficacy. Short-term studies answer whether an intervention alters certain outcomes over weeks. They do not automatically answer whether it favors functioning, quality of life, or recovery over years. Maintenance trials extend the horizon but may select participants who tolerated and responded to the initial treatment. Observational studies are closer to practice but face confounding by indication and differences between patients. No single design solves the problem; the conclusion requires convergence and attention to limitations.

Pharmacocentrism thrives when the horizon of the appointment, the study, and the service is aligned with the most immediate effect. Rapid relief is important, but it can dominate decisions if future costs are barely visible or attributed to other specialties. Metabolism, sexuality, cognition, dependence, withdrawal, and social participation must be included in the same clinical accounting that records symptom reduction.

## From Listening to Prescribing: Pharmacological Reductionism, Temporality, And the Loss of Complexity in Contemporary Psychiatry

The comparison between trials and real-world practice provides a quantitative example of the temporal and population difference. Efthimiou et al. combined data from 90,469 people in Swedish and Finnish registries with 10,091 participants from 30 clinical trials on relapse prevention in schizophrenia [20](#). The trials estimated a larger effect against placebo than that observed between use and non-use in real-world practice; the ratio between estimates was 2.58. Comparisons between drugs were more concordant, and long-acting injectable antipsychotics showed slightly better relative performance in the registries. The study does not invalidate the trials, but it shows that participant selection and context modify the magnitude applicable to routine care.

The analysis by Moncrieff et al. adds an interpretive difficulty. Among 253 participants in an antipsychotic reduction trial, 82 relapsed; at 24 months, the authors found no evidence of a difference in change in social functioning, quality of life, or symptoms between those who relapsed and those who did not [21](#). The result does not demonstrate that relapses are harmless. It is a secondary analysis with limited power for some outcomes. It does, however, question the automatic inference that every relapse produces lasting biological deterioration and reinforces the need to measure social and personal effects directly.

Pharmacological counterpoints are equally important. Gitlin and Bauer summarize evidence that lithium is effective in acute mania and in the maintenance treatment of bipolar disorder, can act as an antidepressant adjunct, and has a consistent, though not uniform, evidence base for reducing suicidal behavior [22](#). At the same time, it requires renal, thyroid, and parathyroid monitoring, and its cognitive and somatic effects influence acceptability. Good psychopharmacology thus appears as the longitudinal management of benefits and risks, not as the isolated choice of a molecule.

In eating disorders, Ali and Couturier report that first-line recommendations remain centered on psychotherapy, since pharmacological evidence is limited and varies across anorexia nervosa, bulimia nervosa, binge-eating disorder, and avoidant/restrictive food intake disorder [23](#). This case shows that recognizing limits is not the same as excluding medications: some are useful in specific situations, but the structure of care should not be derived solely from their availability.

### Polypharmacy, prescribing cascades, and iatrogenesis

Polypharmacy is not, by definition, irrational. Combinations may be justified by true comorbidities, partial response, distinct phases of illness, or the need to cover simultaneous risks. The problem is accumulation without an explicit hypothesis, without review of duration, and without a clear assignment of the function of each medication. In this situation, it becomes difficult to distinguish illness, adverse effect, interaction, and withdrawal phenomenon.

A prescribing cascade occurs when an effect produced by one medication is interpreted as a new condition and treated with another drug. In psychiatry, the cascade may also be diagnostic. Agitation, emotional blunting, sleep disturbance, sexual dysfunction, weight gain, or cognitive difficulties may be recorded as new psychopathological components before their temporal relationship with treatment is examined. The reverse possibility also calls for caution: attributing all symptoms to the medication may conceal the actual course of the disorder. The decisive tool is longitudinal reconstruction. Iatrogenesis should not be used as a moral accusation. Complex prescriptions often emerge from understandable decisions made at different times by different professionals. Fragmentation of care, lack of records, the pressure of crises, and difficulty accessing psychosocial interventions favor accumulation. Reducing polypharmacy therefore requires more than instructing the prescriber. It requires continuity, clinical time, coordination, and real alternatives.

Observational studies show that the accumulation of psychotropic drugs occurs across different populations and services. Chiang et al. identified 126,972 young Medicaid enrollees using psychotropic medications and defined polypharmacy as three or more classes for at least 90 days [10](#). Among those exposed, three-class combinations predominated, frequently including medications for attention-deficit/hyperactivity disorder, antipsychotics, and antidepressants. The mean annual duration increased from 227.8 days in 2015 to 235.7 in 2020. Claims data do not reveal indication, intake, or benefit, but they demonstrate that exposure is neither merely brief nor exceptional.

In 47,071 psychiatric hospitalizations, Wolff et al. found a mean of 6.1 different medications over the course of the stay, of which 2.7 were psychotropics; 51% of cases received more than one psychotropic simultaneously [12](#). Polypharmacy was associated with a higher risk of drug-drug interactions and of potentially inappropriate prescriptions in older adults. The design does not allow each event to be attributed to the number of drugs, because severity and comorbidity also increase therapeutic complexity. Even so, it supports active review of interactions and indications.

Borderline personality disorder offers a case in which pharmacological practice exceeds the specificity of the evidence. White et al. analyzed records of people medicated shortly after diagnosis and followed up for 12 months [11](#). Among 1,461 participants with complete data, antidepressants were present in 80.4% at baseline, and switching between antidepressants was the most frequent trajectory. The study reported high polypharmacy, but its sample was already selected by prescription, and the operational definition could classify switch overlap as combination. The absence of data on psychotherapy, indication, and adherence precludes conclusions about individual inappropriateness, although the treatment burden

## From Listening to Prescribing: Pharmacological Reductionism, Temporality, And the Loss of Complexity in Contemporary Psychiatry

contrasts with the absence of any drug specifically approved for the disorder.

In multimorbid older adults, Schneider et al. observed an increase in atypical antipsychotic use from 4.4% at admission to 5.9% at discharge among approximately two thousand participants [13](#). At admission, 62.5% of prescriptions were classified as potentially inappropriate. Among 47 new users, about one third had no clear indication, and only 58.3% of new prescriptions without an adequate indication had been discontinued at one year. The authors acknowledge that incomplete documentation may overestimate inappropriateness, and they did not assess substitution with other psychotropics, precisely the type of cascade that future research should track.

The review by Pillinger et al. shows why personalization cannot be reduced to choosing the "most effective" drug [14](#). The work pooled 68 meta-analyses of adverse effects and built databases for 32 antipsychotics across 14 domains and 37 antidepressants across nine. Avoiding one harm may increase another, as when a lower risk of weight gain is associated with a higher risk of akathisia. The proposed tool weighs patient concerns through multicriteria analysis. Its clinical impact has yet to be tested, but the principle is relevant: the adverse effect that matters cannot be defined without the person who will experience it.

### Political economy and the organization of care

The institutional preference for pharmacological responses does not depend solely on physicians' individual convictions. Medications are easier to standardize, record, and fund than prolonged relational interventions. A prescription can be produced in a brief appointment; a shared formulation requires time, longitudinal information, and coordination. Services under volume pressure tend to reward measurable and immediate actions.

Commercial influence constitutes another domain, but it must be analyzed with precision. Sponsorship, authorship, continuing education, guideline development, and dissemination of results may introduce bias. Even so, it cannot be inferred that all favorable evidence is invalid because it has ties to industry. Proper scrutiny distinguishes designs, transparency, replication, effect size, choice of comparators, and publication selectivity.

Unequal access also complicates the critique. In many settings, medication is the only available intervention. Condemning prescription without offering psychotherapy, family support, social protection, or community care may increase dropout and suffering. The problem of pharmacocentrism is therefore inseparable from the underfunding of alternatives and from the organization of systems capable of sustaining longitudinal care.

Cosgrove, Patterson, and Bursztajn describe mechanisms by which funding, marketing, research agendas, and professional interests may favor the biomedical model of depression [8](#). The article is a critical perspective, not a

quantitative review capable of estimating the overall size of the bias. Its contribution lies in identifying verifiable points — selection of questions, dissemination of results, underreporting of harms, and presentation of interventions as scalable solutions — that can be investigated empirically.

The umbrella review by Dun-Campbell et al. broadens the focus to commercial determinants of mental health [9](#). Sixty-five reviews were included, with evidence of associations between different commercial products and depression, anxiety, suicide, or self-harm. The authors found a more solid basis for tobacco, alcohol, and pollution and less developed evidence for ultra-processed foods, gambling, social media, and climate. Interpretation should remain cautious because much of the literature is observational and heterogeneous.

A particularly useful limitation for this manuscript is that the umbrella review did not include the pharmaceutical industry among the sectors examined and found little research on broader corporate actions [9](#). Therefore, the selected literature better supports the claim that commercial determinants are omitted by individualizing explanations than a comprehensive causal estimate of pharmaceutical influence on psychiatric prescribing. This distinction avoids turning a plausible critique into an undemonstrated quantitative fact.

Service organization connects these findings to practice. If brief appointments, fragmentation, and lack of alternatives make prescribing the most available action, the physician's individual behavior is only part of the mechanism. Rose and Rose argue that an alternative psychiatry must revise theory as well as power relations and the concrete conditions of life [6](#). Without time, coordination, and access, recommending a biopsychosocial formulation may remain a moral demand addressed to the clinician, with no institutional change.

### Deprescribing is not enough

Deprescribing can correct unnecessary treatments, reduce harm, and give patients greater participation. However, if it is treated as an inverse and equally automatic procedure, it may reproduce the very logic it aims to overcome. A withdrawal algorithm that ignores history, duration of use, dose, previous experiences, preferences, and available support continues to reduce a trajectory to a technical operation.

Withdrawal of psychotropic drugs requires distinguishing relapse, rebound, and withdrawal symptoms. This differentiation is not always immediately possible. Gradual reductions, monitoring, communication, and the possibility of revising the plan are clinical components, not adherence details. Shared decision-making does not mean transferring all responsibility to the patient; it means building an informed choice within a relationship that acknowledges asymmetries of knowledge and risk.

A non-reductionist deprescribing practice asks why the medication was started, what function it came to perform, and what needs to be in place before reducing it. Sleep, housing, substance use, support network, crisis management, and access to psychotherapy may determine the feasibility of the

## From Listening to Prescribing: Pharmacological Reductionism, Temporality, And the Loss of Complexity in Contemporary Psychiatry

plan. Withdrawing without rebuilding care turns harm reduction into abandonment of care.

Alrawiai defines deprescribing as an individualized process guided by goals, functioning, expected benefit, values, and preferences [15](#). The author shows that explicit criteria and tools do not cover every situation, especially in multimorbidity, and that trust and communication influence acceptance. Although the focus is on primary care for older adults and not exclusively on psychotropic drugs, the work offers a direct critique of mechanical withdrawal.

The systematic review by Zeraatkar et al. evaluated 49 trials, reported in 58 publications, involving more than 39,000 users of benzodiazepines and related hypnotics [16](#). Patient education, medication review, and an educational intervention delivered by pharmacists may increase discontinuation, but certainty was low for most comparisons. There was little evidence on physical functioning, mental health, and insomnia symptoms, and follow-up beyond one year was rare. The result is central to this review: increasing the proportion of people who stop a drug does not, by itself, demonstrate an improvement in their lives.

The American Society of Clinical Psychopharmacology consensus brought together 45 experts and reached agreement on 44 of 50 statements [17](#). There was unanimity on periodic review of the purpose and benefit–risk ratio of each component of the regimen. The consensus also emphasized assessment of adherence before withdrawal, consideration of the psychological repercussions, close monitoring, and active patient participation. Like any consensus, it expresses professional convergence and does not replace implementation trials.

The network meta-analysis by Zaccoletti et al. included 76 trials and 17,379 participants with depression or anxiety in remission [18](#). Compared with abrupt discontinuation, continuation at standard dose with psychological support reduced relapse; slow tapering with support also showed better results and was similar to continuation in some comparisons. The evidence on anxiety was more limited, and the population was predominantly White. The finding supports gradual and structured withdrawal but does not authorize a universal scheme for all classes and trajectories.

Vinkers et al. examine antidepressants, antipsychotics, benzodiazepines, mood stabilizers, opioids, and stimulants and find important gaps regarding who can discontinue, when, and how [19](#). Taken together, these studies indicate that responsible deprescribing is not the opposite of rational prescribing. Both require a hypothesis, temporality, negotiation, and the possibility of correction.

### Reintegrating psychiatry

Reintegrating psychiatry does not mean restoring a specific historical school. It means recovering the capacity to formulate. The biopsychosocial model can be merely a list of factors if it does not explain how they relate to one another. A useful formulation describes vulnerabilities, precipitants,

maintaining mechanisms, resources, and goals. It also clarifies the role of each intervention and the conditions for reassessing it.

Recovery-oriented care broadens the criteria of success. It asks not only which symptoms have decreased, but what life the person is able to build, which roles they wish to resume, and which treatment effects they consider acceptable. Lived experience does not replace population-level evidence; it informs how that evidence applies to a given person. Likewise, shared decision-making does not eliminate technical responsibility; it improves the legitimacy and precision of choices.

Psychotherapy, psychoeducation, family interventions, rehabilitation, community care, and social protection are neither universal accessories nor interchangeable alternatives. Each responds to different mechanisms and needs. Their integration with pharmacotherapy requires sequencing, prioritization, and evaluation. At some points, biological stabilization is a precondition for psychosocial work. At others, persisting with pharmacological adjustments may postpone the main intervention.

The results allow us to specify what reintegration means. First, the treatment plan should contain a causal and revisable formulation, not merely a list of factors [3](#). Second, facts and values must be distinguished and articulated: a mean difference on a scale does not, by itself, define whether a given effect is acceptable to a person [4](#). Third, material and commercial exposures should be treated as causal components and targets for prevention, not as background [5](#) [9](#).

Fourth, the therapeutic relationship should produce information and agency. In the first-episode psychosis study, participants asked for understanding, reassurance, support from significant others, and practical help to rebuild their lives [24](#). In the review on research involvement, people with lived experience contributed to relevance and quality, although problems of representation and reporting persisted [25](#). These findings do not demonstrate that involvement always improves clinical outcomes, but they show that experiential knowledge identifies needs and success criteria that traditional designs may lack.

Fifth, personalization should include adverse effects and preferences, and not merely biomarkers or algorithmic choice [14](#). Sixth, the family should be involved when there is consent, clinical relevance, and capacity for support; the scarcity of specific evidence on family involvement noted by Hawke et al. indicates a gap, not license to assume that every family is protective [25](#).

Finally, integration must remain proportionate. In eating disorders, psychotherapy holds a first-line position and pharmacology has circumscribed roles [23](#). In schizophrenia, antipsychotics reduce relapse, and some formulations show substantial effectiveness in registries [20](#). In bipolar disorder, lithium has known efficacy and risks [22](#). A non-reductionist

## From Listening to Prescribing: Pharmacological Reductionism, Temporality, And the Loss of Complexity in Contemporary Psychiatry

psychiatry does not homogenize these scenarios. It asks which modality should lead care in each phase and which other conditions must be in place for the benefit to be sustainable.

At the clinical level, this corresponds to six operations. The first is to record the function of each medication and the expected outcome. The second is to reconstruct, over time, symptoms, exposures, dose changes, and life events. The third is to discuss benefits and adverse effects in understandable language. The fourth is to periodically review necessity, redundancy, and duration. The fifth is to ensure support and monitoring during any withdrawal. The sixth is to incorporate psychological, family, social, and occupational interventions as components with their own goals, not as generic add-ons.

### DISCUSSION

The central hypothesis of this review is that pharmacological reductionism is less a property of a medication than a way of organizing knowledge and care. It appears when prescription precedes formulation, when symptomatic response is mistaken for diagnostic confirmation, when the short term dominates assessment, and when social or relational conditions are recognized without altering the treatment plan. The selected literature allows the initial question to be reformulated. There is no single movement that "reduces psychiatry to pharmacology." There is a set of mutually reinforcing mechanisms. Categories may be converted into causes; short-term effects may be extrapolated; harms may be distributed across specialties; combinations may accumulate without reassessment; and services may offer medication without offering time, psychotherapy, or community care. Commercial influence operates within this arrangement, but its magnitude must be demonstrated rather than presumed [8](#) [9](#).

This hypothesis must be tested against the selected literature. Some mechanisms, such as polypharmacy and conflicts of interest, lend themselves to empirical measurement. Others, such as diagnostic reification or loss of complexity, depend on conceptual and qualitative analysis. Mixing these levels would produce the very simplification the article criticizes.

The main alternative to pharmacocentrism is not to abandon pharmacology, but to subordinate it to a longitudinal clinical practice. This means asking what is being treated, over what horizon, with what evidence, at what cost, and according to which goals. It also means recognizing that clinical time, continuity, and access to non-pharmacological interventions are material conditions of good prescribing.

Temporality emerges as a unifying element. Trials answer essential questions, but their extrapolation depends on population and horizon [20](#). Relapse, functioning, and quality of life are not interchangeable outcomes [21](#). In withdrawal, successful cessation during a study may not persist, and several trials fail to measure outcomes valued by patients [16](#).

Therefore, both starting and withdrawing a psychotropic drug require a follow-up plan that makes explicit what will count as benefit, harm, relapse, or withdrawal.

At the institutional level, such clinical operations depend on conditions that go beyond individual competence. Brief appointments, staff turnover, fragmented medical records, and the unavailability of psychotherapy favor pharmacological responses even among clinicians who recognize complexity. The research agenda should therefore evaluate service, funding, and coordination models, in addition to comparing molecules.

This review has limitations. The search was broad but neither systematic nor exhaustive. The selection of 25 articles privileged thematic diversity, which reduced the number of studies in each subtopic. A relevant part of the sample is conceptual or observational and does not support causal inference. The 2026 articles are very recent, and their results have had little time for replication and debate. English-language literature and high-income countries predominate. Brazilian studies on the organization of appointments, polypharmacy trajectories, shared decision-making, and withdrawal in public and private services are lacking.

There is also an asymmetry in the evidence. Polypharmacy and deprescribing have quantitative data, but pharmacocentrism, reification, and loss of complexity are constructs that are harder to operationalize. Future research may examine appointment length, medical record content, availability of interventions, agreement between patient and prescriber goals, functional changes, and the distribution of funding. Pragmatic trials should extend follow-up, include people with multimorbidity, and measure functioning, quality of life, social participation, and treatment burden.

### CONCLUSION

Pharmacotherapy is a constitutive part of contemporary psychiatry and can produce indispensable benefits. It becomes reductionist when it takes the place of investigation, formulation, and the therapeutic relationship. The symptom–diagnosis–drug circuit offers speed, but it can obscure trajectories, adverse effects, contexts, and long-term goals.

Overcoming this problem requires more than adding psychotherapy or creating deprescribing protocols. It requires reorganizing clinical decision-making around explicit hypotheses, temporality, patient participation, and ongoing review. Psychiatry remains biological, psychological, and social not because it distributes its attention equally among three domains, but because it must understand how they become inseparable in concrete life.

The 25 articles analyzed converge on one point: psychiatric decisions improve when pharmacology is integrated with multilevel explanations and goals. They do not converge toward a rejection of medications. Evidence of the effectiveness of antipsychotics, of the usefulness of lithium, and of specific pharmacological indications precludes that

# From Listening to Prescribing: Pharmacological Reductionism, Temporality, And the Loss of Complexity in Contemporary Psychiatry

reading [20](#) [22](#) [23](#). The critique is directed at the transformation of this partial evidence into a total architecture of care.

A non-pharmacocentric practice may prescribe a great deal in an acute phase and little in another; the criterion is not quantity in isolation, but the explicit relationship between indication, goal, duration, preference, and review. Likewise, it may maintain prolonged treatment when the preventive benefit is relevant, or plan slow withdrawal with support when risks and goals change [17](#) [18](#) [19](#).

The main implication is that listening and prescribing should not occupy opposite poles. Listening produces data on temporality, context, values, and effects; these data make prescribing more precise. Psychopharmacology, when subordinated to a revisable formulation and to longitudinal care, ceases to represent the reduction of psychiatry and returns to its legitimate function: an important, sometimes indispensable tool, but one insufficient to explain or treat, on its own, the totality of human suffering.

## REFERENCES

- I. Rodrigues GA, Castanheira Júnior FM, Caixeta MF. Doença psiquiátrica geral: um marco nosográfico unificador para a psiquiatria com aplicações em psicopatologia, farmacologia, psicoterapia e cognição [General psychiatric disease: a unifying nosographic framework for psychiatry with applications in psychopathology, pharmacology, psychotherapy, and cognition]. *Debates em Psiquiatria*. 2026;16:1-25. Portuguese. doi: [10.25118/2763-9037.2026.v16.1633](#).
- II. Costa L, Castanheira Júnior FM, Rodrigues GA, Caixeta M. The General Psychiatric Syndrome as a Transdiagnostic Hypothesis: A Critical Appraisal of Evidence, Interpretation and Clinical Reach. *International Neuropsychiatric Disease Journal*. 2026;23(5):67-88. doi: [10.9734/indj/2026/v23i5581](#).
- III. Bolton D. A revitalized biopsychosocial model: core theory, research paradigms, and clinical implications. *Psychological Medicine*. 2023;53(16):7504-7511. doi: [10.1017/S0033291723002660](#).
- IV. Stein DJ, Nielsen K, Hartford A, Gagné-Julien AM, Glackin S, Friston K, Maj M, Zachar P, Aftab A. Philosophy of psychiatry: theoretical advances and clinical implications. *World Psychiatry*. 2024;23(2):215-232. doi: [10.1002/wps.21194](#).
- V. Maximino C. Biocultural Aspects of Mental Distress: Expanding the Biomedical Model Towards an Integrative Biopsychosocial Understanding of Disorder. *Integrative Psychological and Behavioral Science*. 2024;59(1):5. doi: [10.1007/s12124-024-09869-1](#).
- VI. Rose D, Rose N. Is 'another' psychiatry possible?. *Psychological Medicine*. 2023;53(1):46-54. doi: [10.1017/S003329172200383X](#).
- VII. Gauld C, Jurek L, Fournier P. Diversity, epistemic injustice and medicalization. *Cortex*. 2024;176:234-236. doi: [10.1016/j.cortex.2024.03.003](#).
- VIII. Cosgrove L, Patterson EH, Bursztajn HJ. Industry influence on mental health research: depression as a case example. *Frontiers in Medicine*. 2023;10:1320304. doi: [10.3389/fmed.2023.1320304](#).
- IX. Dun-Campbell K, Hartwell G, Maani N, Tompson A, van Schalkwyk MCI, Petticrew M. Commercial determinants of mental ill health: An umbrella review. *PLOS Global Public Health*. 2024;4(8):e0003605. doi: [10.1371/journal.pgph.0003605](#).
- X. Chiang YY, Amill-Rosario A, Tran P, dosReis S. Psychotropic Polypharmacy Combinations and Duration of Polypharmacy Among Medicaid-Enrolled Youths. *Psychiatric Services*. 2025;76(2):196-199. doi: [10.1176/appi.ps.20240113](#).
- XI. White C, St Rose S, Dwyer JB, Palmer EOC, Yeow J, Griffiths K, Chee B, Oyesanya M, Patel R. Treatment trajectories of patients with borderline personality disorder prescribed pharmacotherapy: real-world insights from a retrospective observational study. *BMC Psychiatry*. 2026;26(1):351. doi: [10.1186/s12888-026-07974-6](#).
- XII. Wolff J, Hefner G, Normann C, Kaier K, Binder H, Hiemke C, Toto S, Domschke K, Marschollek M, Klimke A. Polypharmacy and the risk of drug-drug interactions and potentially inappropriate medications in hospital psychiatry. *Pharmacoepidemiology and Drug Safety*. 2021;30(9):1258-1268. doi: [10.1002/pds.5310](#).
- XIII. Schneider C, O'Mahony D, Byrne S, Dalleur O, Spinewine A, Huibers CJA, Knol W, Rodondi N, Aubert CE. Prescribing and deprescribing of atypical antipsychotics in older multimorbid patients. *BMC Geriatrics*. 2025;25(1):962. doi: [10.1186/s12877-025-06579-0](#).
- XIV. Pillinger T, Howes OD, Correll CU, Leucht S, Huhn M, Schneider-Thoma J, Gaughran F, Jauhar S, McGuire PK, Taylor DM, Young AH, McCutcheon RA. Antidepressant and antipsychotic side-effects and personalised prescribing: a systematic review and digital tool development. *The Lancet Psychiatry*. 2023;10(11):860-876. doi: [10.1016/S2215-0366\(23\)00262-6](#).
- XV. Alrawiai S. Deprescribing, shared decision-making, and older people: perspectives in primary care.

- Journal of Pharmaceutical Policy and Practice*. 2023;16(1):153. doi: [10.1186/s40545-023-00671-9](https://doi.org/10.1186/s40545-023-00671-9).
- XVI. Zeraatkar D, Nagraj SK, Ling M, Jassal T, Kirsh S, Lima JP, Pitre T, Couban R, Hussain M, Seterelv S, Van de Velde S, Gustavsson K, Wichniak A, Aubert CE, Christiaens A, Spinewine A, Agoritsas T. Comparative effectiveness of interventions to facilitate deprescription of benzodiazepines and other sedative hypnotics: systematic review and meta-analysis. *BMJ*. 2025;389:e081336. doi: [10.1136/bmj-2024-081336](https://doi.org/10.1136/bmj-2024-081336).
- XVII. Goldberg JF, McIntyre RS, Swartz HA, Freeman MP, Mago R, Citrome L, Rosenblat JD, Thase ME, Tohen M, Vieta E, Malhi GS, Sajatovic M, Shelton RC, Macaluso M, Berk M, Perlis RH, Ostacher MJ, Khan A, Iosifescu DV, Sanacora G, Rubio JM, Kane JM, Goodman DW, Nierenberg AA, Correll CU, Kupka R, Kasper S, Furukawa TA, Davis L, Aaronson ST, Gitlin MJ, Jha MK, Cohen LJ, Papakostas GI, Mitchell PB, Gorwood P, Gupta S, Frye MA, Young AH, Zohar J, Steingard S, Zarate CA, Clayton AH, American Society of Clinical Psychopharmacology Task Force on the Deprescribing of Psychotropic Medications. Recommendations for the Deprescribing of Psychotropic Medications: A Consensus Statement From the American Society of Clinical Psychopharmacology Task Force. *JAMA Network Open*. 2026;9(2):e260043. doi: [10.1001/jamanetworkopen.2026.0043](https://doi.org/10.1001/jamanetworkopen.2026.0043).
- XVIII. Zaccoletti D, Mosconi C, Gastaldon C, Benedetti L, Gottardi C, Papola D, Ponzi O, Purgato M, Naudet F, Cristea IA, Barbui C, Ostuzzi G. Comparison of antidepressant deprescribing strategies in individuals with clinically remitted depression: a systematic review and network meta-analysis. *The Lancet Psychiatry*. 2026;13(1):24-36. doi: [10.1016/S2215-0366\(25\)00330-X](https://doi.org/10.1016/S2215-0366(25)00330-X).
- XIX. Vinkers CH, Kupka RW, Penninx BW, Ruhé HG, van Gaalen JM, van Haaren PCF, Schellekens AFA, Jauhar S, Ramos-Quiroga JA, Vieta E, Tiihonen J, Veldman SE, Veling W, Vis R, de Wit LE, Luykx JJ. Discontinuation of psychotropic medication: a synthesis of evidence across medication classes. *Molecular Psychiatry*. 2024;29(8):2575-2586. doi: [10.1038/s41380-024-02445-4](https://doi.org/10.1038/s41380-024-02445-4).
- XX. Efthimiou O, Taipale H, Radua J, Schneider-Thoma J, Pinzón-Espinosa J, Ortuño M, Vinkers CH, Mittendorfer-Rutz E, Cardoner N, Tanskanen A, Fusar-Poli P, Cipriani A, Vieta E, Leucht S, Tiihonen J, Luykx JJ. Efficacy and effectiveness of antipsychotics in schizophrenia: network meta-analyses combining evidence from randomised controlled trials and real-world data. *The Lancet Psychiatry*. 2024;11(2):102-111. doi: [10.1016/S2215-0366\(23\)00366-8](https://doi.org/10.1016/S2215-0366(23)00366-8).
- XXI. Moncrieff J, Pillai E, Marston L, Lewis G, Barnes TRE, Johnson S, Priebe S. The association between relapse and the outcome of schizophrenia and recurrent psychotic disorders. *The British Journal of Psychiatry*. 2025;227(4):673-679. doi: [10.1192/bjp.2024.304](https://doi.org/10.1192/bjp.2024.304).
- XXII. Gitlin M, Bauer M. Lithium: current state of the art and future directions. *International Journal of Bipolar Disorders*. 2024;12(1):40. doi: [10.1186/s40345-024-00362-7](https://doi.org/10.1186/s40345-024-00362-7).
- XXIII. Ali Z, Couturier J. Psychopharmacology Review for Eating Disorders Among Children, Adolescents, and Adults. *Focus*. 2024;22(3):307-311. doi: [10.1176/appi.focus.20230043](https://doi.org/10.1176/appi.focus.20230043).
- XXIV. van der Heijden-Hobus IMW, Rosema BS, Vorstman JAS, Kas MJH, Franke SK, Boonstra N, Sommer IEC. Personal preferences for treatment and care during and after a First Episode Psychosis: A qualitative study. *Early Intervention in Psychiatry*. 2024;18(6):415-424. doi: [10.1111/eip.13477](https://doi.org/10.1111/eip.13477).
- XXV. Hawke LD, Sheikhan NY, Rodak T. Lived experience and family engagement in psychiatry research: A scoping review of reviews. *Health Expectations*. 2024;27(3):e14057. doi: [10.1111/hex.14057](https://doi.org/10.1111/hex.14057).