

Perspective

Teaching the Prescriber's Role: The Psychology of Psychopharmacology

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Objective: *The author examines one aspect of the psychopharmacology curriculum: the psychology of psychopharmacology.*

Method: *Drawing from his experience teaching this subject to trainees at many different levels and from an emerging evidence base suggesting that psychosocial factors in the doctor-patient relationship may be crucial for medication effectiveness, the author explores the importance of this often overlooked aspect of pharmacotherapy. Several methods for teaching the integration of meaning and medication are examined.*

Results: *Generally, residents receiving thorough instruction in the psychology of psychopharmacology believe that they are not only better equipped to integrate psychotherapy and medications, but that this instruction enhances their skills as psychopharmacologists and psychotherapists*

Conclusion: *Teaching the psychodynamics of psychopharmacology addresses not only residents' needs to become more effective prescribers, but, in pan, it may also address predictable developmental crises in residency.*

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The last two decades marked incredible advances in the neurobiological sciences. Psychiatric residents must master an increasingly complex body of neurobiology and psychopharmacology, prompting greater focus on the teaching of these and related fields. With limited time and resources in residency, there is relatively less time for teaching psychological and psychodynamic principles and the skills of long-term psychotherapy (1). With an increasing medicalization of psychiatry, influential academicians have seriously proposed that psychotherapy training be eliminated from training programs altogether (2, 3). However, the Accreditation Council for Graduate Medical Education (ACGME) has simultaneously emphasized the need for psychiatry trainees to develop competencies in psychotherapy and in the combination of medications and psychotherapy. One reason for this is the general agreement among training directors (4) that understanding intrapsychic and interpersonal dynamics is crucial for the functioning of all psychiatrists, even those focusing solely on somatic treatments. Nevertheless, while considerable effort has been put into better understanding and teaching *what* to prescribe, our field may have neglected a focus on *how* to prescribe. In this article, the author discusses the importance of psychological and relational aspects of prescribing for the trainee, both in relation to the resident's development and efficacy as a biological psychiatrist.

The Psychology of Psychopharmacology

The shift in our field from the subjectivity of the psychodynamic psychiatrist to the more scientific model of the biological psychiatrist administering treatments in accordance with the available evidence base makes the prescribing process seem clearer and more straightforward. However, the vision of the prescriber as scientist may obscure the impact of the patient's subjectivity on the response to

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PSYCHOLOGY OF PSYCHOPHARMACOLOGY

medications (5). Patients may be seen only as biological objects who respond neurochemically to medications and not subjects who respond to the meanings that those medications may have. A "delusion of precision" (6) may emerge based on our understanding of the neurobiological underpinnings of psychopharmacology that leads the prescriber to experience medication effects to be precise, concrete, straightforward, and specific.

In fact, we know that medication response is not straightforward. An emerging evidence base shows how psychological factors play a significant role in the outcome of psychopharmacological treatments. The placebo effect may account for more than 75% of the efficacy of antidepressants (7, 8). Patients' interpersonal styles and attitudes about medications and their treaters can profoundly affect treatment compliance (9). Psychological variables, such as perception of alliance (10) and readiness for change (11), appear to be powerful determinants of medication response, even more powerful than treatment with active drug. Nocebo effects, the experience of side effects based on the explicit or implicit expectation of harm (12), may also complicate psychopharmacological treatments. Nocebo effects are more prominent in people from disadvantaged social positions (13), which is likely to include many of our patients.

Similar to the psychotherapeutic encounter, the psychopharmacological relationship is suffused in irrationality. A straightforward medical model training approach to psychopharmacology can contribute to an illusion of simplicity that leaves residents unprepared to make sense of the complex and irrational processes that occur in the acts of prescribing and taking medications (or not taking medications). There are serious consequences of this for both treaters and patients.

Developmental Struggles of Early Psychiatric Training

Psychiatric residency is a stressful experience. A "beginning psychiatry training syndrome" (14, 15) has been identified, marked by increased neurotic disturbances and transient psychosomatic symptoms. Psychiatric residents have an increased incidence of depression when compared to residents in other specialties (16). Explanations for this have included the frustration of narcissistic expectations that residents bring, especially to psychiatric training (17); disappointment at learning that, even with the neurobiological revolution, few patients will make a full recovery; disorientation around the shift from the consolation of an

authoritative, action-oriented medical model to a more passive psychotherapeutic model based on collaboration and maximizing the patient's authority; and stresses in integrating treatment these models which may be essentially in conflict (18). In addition, residents are grappling with the emotional strains inherent in intense relationships with deeply troubled and primitively organized patients. Symbiotic (19) and projective processes may be unleashed in these relationships, which fill treaters with powerful and dysphoric affects.

Why Teach the Psychology of Psychopharmacology?

To the extent that the early resident's distress derives from the frustration of unrealistic expectations, which the resident experiences as sign of personal failure, clarification of the task, role, and boundaries of prescriber and psychotherapist may address some of the resident's confusion and ameliorate his or her distress. However, some tension is inherent in the psychiatrist role, especially when trying to navigate between the poles of psychotherapist and psychopharmacologist. The psychotherapist and psychopharmacologist make different assumptions about the patient and have different aims and methods. The resident is generally quite aware of these tensions inherent in the identity formation of the psychiatrist. He or she is trying out the role of medical expert issuing "doctor's orders," while also trying to give the patient a nondirective space for safe self-exploration and learning. He or she feels the need to medicate the patient, while also fearing how this will have a negative impact on the therapeutic alliance, perhaps even leading to treatment termination. By learning about the deep and unresolved historical and theoretical tensions in our culture between mind and brain, residents may appreciate that their experiences of conflict in role are tensions commonly experienced by therapist-prescribers and not signs of personal inadequacy. The considered optimism of teachers in the face of unresolved tensions can model the capacity to tolerate and even make use of such conflict. Our patients are in conflict as well, and the capacity of the psychiatrist to manage and empathize with conflict may go a long way toward creating a space for the patient to work through his or her conflict.

Residents can learn how the patient's own conflict or dysfunctional attitudes are expressed in the pharmacotherapeutic relationship. Ambivalence, resistance, and transference to medications may result in misuse of medication, noncompliance, lack of effectiveness, or the re-

peated emergence of untoward side effects. Residents see how treatment failures are not necessarily the result of incorrect diagnosis or failure to prescribe correctly. Treatment resistance may also derive from the patient's own psychological issues. The appreciation of those issues may give the resident a way to address the treatment resistance at the level from which it emerges: the level of meaning. Exploring the psychodynamics of human relations, residents can learn that phenomena such as projective identification may occur in psychopharmacological relationships, just as in psychotherapeutic ones. Consider, for example, the situation of a survivor of early abuse. The patient does not declare his or her fear and resentment of the doctor's authority (and may not be aware of it). Instead, the patient refuses to feel controlled by his or her prescriptions (as he or she once felt controlled by an abuser). The patient then pleads with the doctor to help, but takes the medications at a whim: sometimes too little, sometimes too much, and sometimes way too much. Sometimes the patient lies to the doctor about how he or she is using medications because the doctor will not approve of it. No matter what is prescribed, the patient does not get better (having seldom used the medications in ways that might be helpful). Over time, the doctor begins to feel helpless, manipulated, and angry. In an attempt to reject feelings of helplessness and being controlled, the patient projects some of these same feelings onto the doctor. Understanding that phenomena such as projective identification are part of the pharmacotherapeutic relationship provides a context for understanding some of the resident's more distressing feelings that emerge from interactions with patients. Furthermore, trainees can learn the positive values of these uncomfortable feelings. To the extent that these projective feelings are communications of the same feelings with which the patient is struggling, residents can use them to better understand the patient, which may be used to deepen the pharmacotherapeutic alliance.

Better Prescribing Through Psychology

Perhaps the most important reason to teach the psychology of psychopharmacology is that awareness of emotional and interpersonal issues can enhance the effectiveness of the prescriber. In addition to a diagnostic assessment, residents can learn to incorporate a psychological assessment of the patient into the psychopharmacology, determining not simply *what* but *how* best to prescribe. Assessing character structure, attachment style, conflicts, dysfunctional beliefs, important developmental

issues, conscious and implicit attitudes about medications, typical interpersonal patterns, and the place of the sick role in the patient's life can allow the prescriber to anticipate and deal with problems and potential problems with medications. Such an assessment also alerts the patient that the doctor is interested in all aspects of the patient's life and not just the patient's symptoms. This alone may improve the alliance and also makes it more likely that the patient will bring concerns to the doctor's attention before these concerns emerge behaviorally as medication non-compliance or other problems. This may be especially important with patients who have failed previous medication trials.

If, for example, the resident was able to discern that the patient had a dismissive attachment style (people who quickly reject others, often in the face of even the slightest disappointment), he or she would know that the patient's predictable problems with treatment compliance might be avoided with particular effort at good communication (9), suggesting perhaps that the doctor might spend a little more time with the patient than usual. If the patient had a character organized at the borderline level, the prescriber might anticipate receiving skewed reports of the patient's response to medications (20), would clearly negotiate the treatment frame (21), and would expeditiously address violations of the treatment agreement (21, 22). If the patient was deeply conflicted about dependency, the prescriber might anticipate noncompliance as a result of fears of the medication and could address this with the patient (and the patient's therapist, if the treatment was split) prior to noncompliance becoming an issue. Similarly, if the patient had been harmed in early life by people who were supposed to be trusted helpers, the prescriber could acknowledge and begin to address likely issues around trust and fears of being harmed that could manifest as nocebo reactions (12) or other problems with medication use.

A focus on the psychology of prescribing would also alert the prescriber that prescribers are also prone to acting out unconscious issues through the patient's medication regimen. Trainees can be helped to recognize that one's conscious reasons for prescribing (or not prescribing) may not always be the real reason. Prescribing medications may serve a myriad of defensive functions that touch on universal human concerns, including establishing a sense of control, managing feelings of helplessness, controlling the patient's affect and transference expression, disidentifying with a patient and disrupting an emerging symbiotic relatedness, or subtly promoting the patient's dependency to avoid experiences of loss.

When countertransference plays a major role in prescribing, the outcome is seldom good. First of all, it is likely that the prescription will not address the patient's real problem. Second, patients are often unconsciously quite sensitive to the doctor's "countertransference prescribing." The patient then either acquiesces in a masochistic surrender, or the patient's resistance is sparked and power struggles ensue, or both. To be able to recognize one's own role in such tangles can let the doctor back out of such futile or destructive engagements and reestablish an alliance based on the shared goals of treating the patient's real problems.

Finally, instruction in working across disciplines and with other treaters can be extremely helpful. Most frequently, residents in the pharmacotherapist role are working with patients who are involved with other caregivers. This occurs both when the resident is a prescriber for an inpatient team and when the resident is the prescribing psychiatrist for a patient in outpatient therapy with another treater. Perhaps responding to the notion that prescribing is a straightforward and objective activity, training programs often neglect to provide comprehensive instruction in the dynamics of such triadic relationships.

Just as alliance is a critical factor in dyadic treatments, "triadic alliance" (23), a sharing of goals and treatment perspective between treaters and the patient, may also be a crucial factor in treatment outcome. It has been observed that, when prescribing residents feel that they unwillingly have to submit to the will of a treatment team in prescribing a particular medication, patients typically will not respond well to the medication (24). Other more subtle differences may effect the triadic therapeutic alliance. Differences in therapeutic philosophy as well as personal and interdisciplinary tensions (25) around such issues as competition and envy are ubiquitous. Patients, and particularly patients with splitting dynamics, may exploit such rifts in order to externalize a painful inner struggle, leading often to treatment impasses. Communication between treaters is essential but does not occur often enough (26). With instruction, residents can recognize the importance of communication, be better prepared to identify counterproductive triadic dynamics, and will have some concrete techniques for promoting better communication (27) and establishing a triadic treatment agreement.

Models of Teaching the Integration of Meaning and Medicine

There may be a number of ways that a training program can teach the psychology of psychopharmacology and the

complexities of the prescriber role. Perhaps the simplest would be to use existing supervisory staff. Too often, residency programs unintentionally convey the notion that psychology and medications are distinct and unrelated by providing one supervisor for therapy and another for medications. An integrative lesson may be given by using, whenever possible, supervisors who can provide integrated supervision in both pharmacotherapy and psychotherapy.

When dealing with treatment-resistant patients, it may be especially important to consider the psychodynamics of the psychopharmacology relationship (12). The methodology of Balint groups (28), originally developed to address treatment issues in a treatment-resistant or so-called "fat envelope" medical population, may be applicable here. In the traditional Balint group format, a psychoanalyst consults to a stable group of primary care practitioners who are struggling with difficult patients. The focus of the group is first to try to identify what exactly is transpiring between the doctor and the patient on a conscious and unconscious level. Second, the doctors are then given skills and techniques for making simple psychodynamic interventions to improve treatment outcomes.

When the model was developed, its application to psychiatrists was not considered since psychodynamic education was extensive in psychiatric training. Now that psychiatric education has been more extensively medicalized, many residents will not have the knowledge, skills, or attitudes necessary to make such psychodynamic links to the patient's medication use and will not thoroughly understand relational aspects of the pharmacotherapeutic relationship. In residency, the Balint group may take the form of a case-based seminar on the difficult patient in pharmacotherapy. Such a format would have the benefit of addressing the residents' most salient emotional concerns while providing skills for working with troubled and troubling patients. One limitation of this model is that there is a relative deficit of theory. For optimal teaching, such a model might best be paired with a course that provides an additional theoretical framework on the psychodynamics of psychopharmacology.

A didactic curriculum on the prescriber role and the integration of meaning and medication is another method to develop the resident's skills in effective prescribing. A well-defined curriculum has the advantage of explicitly covering relevant theory and teaching a prescribed set of knowledge, skills, and attitudes about the nonpharmacological aspects of prescribing. An example of a ready-made curriculum would be Beitman's curriculum (29) on integrating psychotherapy and psychopharmacology. This cur-

riculum provides numerous case examples rather than relying necessarily on the cases with which the resident is struggling.

A Curriculum for Teaching the Psychodynamics of Psychopharmacology

Here, the author briefly describes his experience teaching this 10-hour course to Advanced Fellows in Psychodynamic Psychiatry, to senior residents, and to beginning residents over a period of 5 academic years. The curriculum structure covers general issues in mind-body and psychodynamic-somatic integration, the patient's use of medications, countertransference issues, and triadic/systems issues relating to psychopharmacology and combines theory with discussion of dilemmas experienced by participants in the course. An example of a reading list is included (Appendix 1).

There were some interesting differences observed between beginning and more advanced students of psychiatry that may guide curriculum development. More senior residents and fellows were able predictably to engage the material in more sophisticated ways. However, beginning residents appeared most hungry for this instruction. It became apparent that this was, in large measure, due to the ways that the course addressed often unarticulated but distressing aspects of their learning to be psychiatrists and prescribers, a factor that became less salient as residents navigated their way into a psychiatric identity. There seemed to be a number of other reasons to locate this course into the earlier part of the residency. If the instruction is done too late in training, there is a risk that this 1) conveys that it is not an essential aspect of psychiatric practice, and 2) occurs after identity formation of the resident is complete so that residents who feel that they fall into a "somatic treatment" camp may remain resistant to integrating psychodynamics or relational understanding into their conceptualization of the patient

The introductory sessions (2 hours) introduce to the students the notion that nonpharmacological factors can profoundly affect medication response. Here, the class reviews some of the evidence base that shows the importance of psychosocial factors for pharmacotherapy. We begin to explore the ways that pharmacological and nonpharmacological factors may be synergistic or antagonistic and to understand why patients might resist our ministrations, whether consciously or unconsciously. The class is introduced or reintroduced to basic psychodynamic concepts of conflict, resistance, transference, and unconscious (pro-

cedural) mental process, with particular attention to how these concepts might relate to psychopharmacological practice. The class is reminded that the patient does not have the only unconscious role in the relationship, or, to paraphrase Elvin Semrad, "the psychiatric relationship is an encounter between a big mess and an even bigger mess" (personal communication by Leston Havens, M.D.). This opens the door to consider our role in irrational processes emerging in the pharmacotherapeutic relationship.

We then begin to consider the roles of psychopharmacologist and psychotherapist, elucidating the tasks, attitudes, and boundaries essential to each role. Trying to arrive at some clarity, we also begin to explore how confusions in role and responsibility may arise from the patient's dynamics, the prescriber, the nonmedical therapist (if different from the prescriber), and/or milieu dynamics.

Studying "history and theory of mind and brain" (1 hour) provides a framework for understanding where we are now, trying to integrate psychodynamics and psychopharmacological treatment. We think about the deep cultural tensions, including the debates about the primacy of mind or body, beginning with the Greeks, through the Age of Enlightenment, to today. We consider that the pendulum swings from the successes and abuses of nineteenth century psychiatry through the emergence of psychoanalysis and the polarization of psychiatry into biological and psychoanalytic schools. We then look at more modern efforts to integrate psychotherapeutic and pharmacotherapeutic approaches, including relevant research on the subject, and explore the ways that medication and therapy are and are not treatments in conflict. We begin to address the experience of residents as being in conflict in their roles.

The remaining lectures strive to be more experience-oriented, focusing on clinical material drawn from participants' experiences. The next topic is "the patient's use of medications" (2 hours). We consider the effects of medications on the patient's self-perception, the interference of medications with the adaptive value of their pathologies (e.g., secondary gain), and effects of medications on the patient's defenses (e.g., manic or psychotic defenses). We touch on the ways that medications affect transference and then focus extensively on transference to medications. We discuss how negative transferences can lead to poor outcomes, including noncompliance and side effect emergence, and work at developing residents' skills at detecting possible transference interferences. We also consider positive transferences, the use of medications as transitional objects, and problems associated with "medication hun-

PSYCHOLOGY OF PSYCHOPHARMACOLOGY

ger." We explore ways that patients can use medications in order to remain pathologized. For example, the patient who takes the fact of being on medication as an indication he or she cannot be held responsible for his or her actions. Perhaps most importantly, we consider when and how to address (and/or tolerate) the patient's irrational medication response and think about specific approaches to particular diagnoses, character structures, and transference configurations.

We then turn our attention to "countertransference issues in psychopharmacology" (2 hours). Here, the residents counter some of the objectifying pressures in the psychopharmacological relationship by recognizing the potential for the doctor to also be caught up in irrational processes. Using the participants' own experiences, we consider countertransferences that are promoted and/or learned in medical education. Some examples of this would include the experience of the passivity of the first patient (the cadaver), prominent metaphors in medicine (such as the war metaphor), notions of the physician's authority, and the first rule of medicine, *primum non nocere*. We explore common ways that doctors may use medications in irrational or defensive ways. For example, to avoid feeling powerless or helpless, to feel good and giving, to de-intensify an intense engagement with a patient, or to promote the patient's dependency in order to avoid experiences of loss. Importantly, we also reflect on the positive side of countertransference—as an emotional experience that tells the doctor something about the patient's inner world.

Finally, we explore "issues in split treatments" (1 hour). We consider arguments and evidence for and against split treatments and consider which patients would best be served by one treatment arrangement or the other. We emphasize the importance of the triadic alliance and treatment collaboration/integration. We discuss problems that may arise in split treatments such as splitting, competition, or genuine disagreements between treaters. Here, residents will often explore complicated milieu dynamics that residents encounter as prescribers on inpatient units. To close, we consider practical techniques to maximize the effectiveness of triadic engagements (e.g., issues of communication and delineation of clinical responsibility). If possible, we try to leave an additional hour to further discuss the resident's cases and to further deepen the learning.

Evaluation of the Curriculum

Residents were asked to evaluate the course described. This evaluation was carried out for the purposes of ordi-

nary performance improvement, and no recourse was made to an institutional review board. Nonetheless, some responses are relevant, as they provide insight into the residents' experience of the subject and to the place of such a course within the overall curriculum. Generally, residents gave the course high marks, believed that it taught them to be better psychopharmacologists, taught them to be better psychotherapists, and taught them to better integrate psychotherapy and psychopharmacology (addressing in part the ACGME competency requirement in this area). Interestingly, the lowest scores (though still better than average) were on the assessment of whether the course helped residents to integrate treatment better with other providers and whether the course lessened their sense of confusion about the practice of psychiatry. In this first case, scores suggest that more than 1 hour may be necessary to teach this part of the curriculum (all other subsections of the course received 2 hours of teaching). On the second question, as many residents felt more confused about the practice of psychiatry than those who felt less confused. However, there was no correlation between the degree of confusion and students overall evaluation of the course (Pearson Correlation - 0.297, nsec), suggesting that residents may have used the course to learn to appreciate and tolerate some confusing and conflictual aspects of psychiatry.

Conclusion

Teaching residents to be effective psychopharmacologists entails more than a simple evidence-based approach to proper choice of medications. Psychosocial aspects of pharmacotherapy appear to be as important as biological aspects in effecting positive treatment outcomes. Overreliance on technology and scientific advances in psychopharmacology, when they occur at the expense of the traditional focus of psychiatry on meaning and relationship factors, threatens to impoverish our discipline and deprive psychiatry of some of its most powerful tools. Without psychodynamic and relational understanding, psychiatrists at ill-equipped to work with psychological resistances to healthy use of medications and less able to recognize and contain irrational processes in pharmacotherapy. The; psychological issues may be particularly important with treatment-resistant patients, who increasingly make up the caseload of psychiatrists. It is important, therefore, that residency curricula continue to contain instruction about the relational aspects of psychopharmacology and the p etiology of taking and prescribing medications. In addition to improving effectiveness, a focus on the dynamics of p

chopharmacology may also address expectable developmental crises in early residency, providing some support

and guidance as residents form their identities as psychiatrists.

APPENDIX 1: Required and Supplemental Readings

Required readings

1. Havens LL: Some difficulties in giving schizophrenic and borderline patients medication, *Psychiatry*, 1968; 31: 44-50.
2. Mintz D: Meaning and medication in the care of treatment-resistant patients. *Am J Psychother* 2003; 56(3):322-337.
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Supplemental readings

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PSYCHOLOGY OF PSYCHOPHARMACOLOGY

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