

Is the Evidence Strong Enough to Warrant Long-Term Antipsychotic Use in Compulsory Outpatient Treatment?

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Debate surrounding assisted outpatient treatment has mostly focused on issues of due process, cost-effectiveness, and efficacy as measured by readmission and incarceration rates. Less attention has been paid to whether long-term use of antipsychotic treatment is supported by sufficient evidence to warrant its compulsory use in assisted outpatient treatment programs. The authors examine the rationale and evidence for long-term use of antipsychotics, noting the pervasive belief

within the psychiatric community that psychotic illness, especially schizophrenia, requires lifelong medication. They argue that although antipsychotics are clearly indicated for patients in the acute phase of psychotic illness, the evidence for long-term use is less convincing and may not justify compulsory long-term use.

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Assisted outpatient treatment (AOT), also called involuntary outpatient commitment, is a treatment modality that has been gaining popularity as public attention paid to high-profile crimes committed by persons with mental illness has increased and inpatient resources available to persons with mental illness have decreased (1). In AOT, an individual meeting specified criteria for mental illness is compelled by court order to comply with outpatient psychiatric treatment as a condition of remaining in the community. The two most well-known versions of AOT are Kendra's Law in New York and Laura's Law in California, both named for women who were murdered by assailants with mental illness (2). In California, Laura's Law mandates that patients under AOT be detained, against their will, for evaluation (72-hour psychiatric hold) if they fail to comply with the court-ordered outpatient treatment plan (3).

AOT exists in many forms, making comparisons less valid and generalizations difficult. In most states, involuntary outpatient commitment laws are applied differently in each county. Furthermore, individual judges often allow the mental health treatment team to define the scope of treatment and what is deemed to be nonadherence. AOT typically includes mandatory mental health visits for monitoring of symptoms and case management, with recommendations and assistance for shelter and rehabilitation programs. AOT occasionally includes mandatory counseling. Although AOT laws do not allow forcible restraint and medication injection (4), they permit involuntary detention if patients deviate from their treatment plan, and the treatment plan will likely include antipsychotic medication. This last measure is the focus of our paper. We are not familiar with any data on rates of long-term

prescription of antipsychotics in AOT that would allow an assessment of the extent of their use. However recent reports of overprescription of antipsychotics among foster children in California (5) and nursing home residents nationwide (6) raise our concern about aggressive prescriber habits for vulnerable individuals with little say in their treatment.

There has been considerable debate about AOT, often regarding issues of due process (7); cost-effectiveness (4); and efficacy as measured by readmission and incarceration rates, rather than by control of psychotic symptoms (8). A recent Cochrane review found limited benefit of these programs compared with voluntary programs (4). However, current consensus seems to be in favor of AOT (9), and 45 states have enacted some form. As one recent review put it, "The research is good enough to lead one to expect a near-universal embrace of AOT within the mental health field" (2). As support for AOT grows and compulsory outpatient treatment is implemented nationwide, we would expect that the evidence for a key treatment modality—long-term use of antipsychotics—to be clear and unequivocal.

Rationale for Long-Term Antipsychotic Use

Both within the psychiatric community and among the general public, there is a pervasive sense that psychotic illness, especially schizophrenia, requires lifelong medication. The idea of psychotic patients who are "off their meds" and prone to violence against society is likely what has driven the popularity of AOT in the public consciousness. The psychiatric literature often appears to confirm the importance of long-term antipsychotic medication. The American Psychiatric

Association “strongly recommends” continued antipsychotic medications in the stable phase of schizophrenia (10). Medication nonadherence is reported to be the primary cause of schizophrenia relapse, with a fourfold increase in relapse compared with other factors (11). These recommendations and reports have led to the widely accepted notion that maintenance treatment with antipsychotic medications is necessary to minimize the chance of relapse. Some even argue that a placebo arm in schizophrenia relapse research may be unethical (12). Indeed, these reports appear to confirm the necessity of sustained, even lifelong antipsychotic medication treatment, despite the well-known cognitive, metabolic, and extrapyramidal effects (13) and the less-known neurotoxic effects (14,15) of these medications. However, a more in-depth review of the published data is worth considering in the light of the use of these medications in court-mandated treatment.

Evidence for Long-Term Antipsychotic Use

The vast majority of studies of long-term use of antipsychotics cover a period of six to 12 months, and, until recently, little data existed on antipsychotic maintenance use beyond one year. Most studies of the effectiveness of AOT also span this range of up to 12 months (4). A recent Cochrane review on antipsychotic maintenance treatment highlighted this lack of truly long-term data, reporting a clear benefit to maintenance antipsychotic treatment up to 12 months (16). However, when discussing the evidence for longer use, the authors of that review lamented that “nothing is known about the effects of antipsychotic drugs compared to placebo after three years.” One can sympathize with the practical difficulties of carrying out a controlled study of patients with schizophrenia and antipsychotic use over several years. This void of data has begun to be filled in recent years, with unexpected results.

Wunderink and colleagues (17) followed more than 100 participants for seven years after they were treated for a first episode of a psychotic disorder; half remained on antipsychotics continuously, and the rest followed a dose reduction–discontinuation approach when they were not acutely psychotic. This represents the first randomized controlled study of antipsychotic use over such a long period. Although those in the dose reduction–discontinuation group were more likely to have an initial relapse within the first year, the proportion of this group experiencing functional recovery after seven years (as measured by social relationships, self-care, employment, and so forth) was twice as high as in the group on continuous medications (40% compared with 18%). Both groups were found to have roughly equal rates of relapse when followed up to seven years.

Wunderink and colleagues’ data seem counterintuitive to the widely accepted belief in psychiatry that continuous antipsychotic maintenance is required to minimize relapse. However, other, less-controlled studies have suggested this pattern of an increase in relapse rates during the first year after antipsychotic discontinuation, followed by a relative evening out of relapse rates over the next few years (18,19).

Reasons for this trend are unclear. They may include diminishing medication efficacy or receptor resistance over time, leading to the phenomenon of prolonged antipsychotic use actually increasing the risk of relapse after medication discontinuation. Another reason may be related to abrupt discontinuation—the usual case when patients go “off their meds”—as opposed to a directed and smooth medication taper over time (20). A lowered dopamine D₂ occupancy requirement in the maintenance phase versus the acute phase of treatment may also account for this pattern (21). These studies and similar recent reports prompted National Institute of Mental Health Director Thomas Insel, M.D., (22) to comment, “For some people, remaining on medication long-term might impede a full return to wellness. . . . For others, discontinuing medication can be disastrous.”

A Reasonable Objection to Long-Term Antipsychotic Use

In defending AOT, Torrey and Stanley (23), who helped coin the term “assisted outpatient treatment,” point to the public health need to mandate compulsory treatment for a tuberculosis patient who poses a direct threat to the public if that patient denies the diagnosis and refuses treatment under the paranoid belief that the medications are poisoned. Few could argue with this logic. However, we would point out that the efficacy of antimycobacterial treatments for tuberculosis is well documented by clear and convincing evidence. In addition, both the pathophysiology of tuberculosis infection and the mechanism of antimycobacterial treatment are well established (24). This cannot be said for schizophrenia or for antipsychotic medication.

The current psychiatric tenet of long-term or lifetime use of antipsychotic medications to prevent psychotic relapse is based almost solely on studies lasting no more than one year. Although there can be little doubt that antipsychotic medications are effective in the acute phase of psychotic illness and among patients who are recently stabilized, recent data seem to cast at least a reasonable doubt on the efficacy of long-term (more than one to two years) use of antipsychotics. Far more work needs to be done to clarify this doubt, and it may well turn out that the recent data do not hold up. However, if a clinician is considering compulsory long-term use of these side effect–laden medications against a patient’s will, with the threat of involuntary psychiatric hold if the patient is noncompliant, then it is our opinion that the evidence for the long-term use of these medications should be far stronger than that provided in the current literature.

As clinicians who treat severe mental illness on a daily basis, we encourage continued academic and public discourse on how to best assist patients with severe mental illness. AOT offers mental health clinicians immense power to affect the lives and outcomes of people with severe mental illness. However with this power comes an immense responsibility to engage in the most ethical and evidence-based treatment, especially considering that noncompliance may have legal ramifications for patients. We argue that the involuntary use of

long-term antipsychotic treatment for relapse prevention for an asymptomatic patient with severe mental illness is rarely justifiable.

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REFERENCES

1. Bishe T, Jaffe DJ: Police shootings: mental health industry part of problem. San Diego Union-Tribune. Dec 5, 2015. Available at www.sandiegouniontribune.com/news/2015/dec/05/mental-health-illness
2. Stettin B: An advocate's observations on research concerning assisted outpatient treatment. *Current Psychiatry Reports* 16:435, 2014
3. A Guide to Laura's Law: California's Law for Assisted Outpatient Treatment, 3rd ed. Arlington, Va, Treatment Advocacy Center, 2009. Available at mentalillnesspolicy.org/states/california/lauraslawguidetac2009.pdf
4. Kisely SR, Campbell LA, Preston NJ: Compulsory community and involuntary outpatient treatment for people with severe mental disorders. *Cochrane Database of Systematic Reviews* 12:CD004408, 2014
5. Second Generation Antipsychotic Drug Use Among Medicaid-Enrolled Children. OEI-07-12-00320. Washington, DC, US Department of Health and Human Services, Office of Inspector General, 2015. Available at oig.hhs.gov/oei/reports/oei-07-12-00320.asp
6. Briesacher BA, Tjia J, Field T, et al: Antipsychotic use among nursing home residents. *JAMA* 309:440-442, 2013
7. Player CT: Outpatient commitment and procedural due process. *International Journal of Law and Psychiatry* 38:100-113, 2015
8. Burns T: Assisted outpatient treatment services and the influence of compulsory treatment. *American Journal of Psychiatry* 171:228, 2014
9. Rosenberg L: Assisted outpatient treatment: we can do better. *Journal of Behavioral Health Services and Research* 41:251-253, 2014
10. Lehman AF, Lieberman JA, Dixon LB, et al: Practice guideline for the treatment of patients with schizophrenia, 2nd ed. *American Journal of Psychiatry* 161:1-56, 2004
11. Alvarez-Jimenez M, Priede A, Hetrick SE, et al: Risk factors for relapse following treatment for first episode psychosis: a systematic review and meta-analysis of longitudinal studies. *Schizophrenia Research* 139:116-128, 2012
12. Suzuki T, Uchida H, Takeuchi H, et al: A review on schizophrenia and relapse: a quest for user-friendly psychopharmacotherapy. *Human Psychopharmacology Clinical and Experimental Journal* 29:414-426, 2014
13. Muench J, Hamer AM: Adverse effects of antipsychotic medications. *American Family Physician* 81:617-622, 2010
14. Ho BC, Andreasen NC, Ziebell S, et al: Long-term antipsychotic treatment and brain volumes: a longitudinal study of first-episode schizophrenia. *Archives of General Psychiatry* 68:128-137, 2011
15. Nasrallah HA: Haloperidol clearly is neurotoxic. Should it be banned? *Current Psychiatry* 12:7-8, 2013
16. Leucht S, Tardy M, Komossa K, et al: Maintenance treatment with antipsychotic drugs for schizophrenia. *Cochrane Database of Systematic Reviews* 5:CD008016, 2012
17. Wunderink L, Nieboer RM, Wiersma D, et al: Recovery in remitted first-episode psychosis at 7 years of follow-up of an early dose reduction/discontinuation or maintenance treatment strategy: long-term follow-up of a 2-year randomized clinical trial. *JAMA Psychiatry* 70:913-920, 2013
18. Gleeson JF, Cotton SM, Alvarez-Jimenez M, et al: A randomized controlled trial of relapse prevention therapy for first-episode psychosis patients. *Journal of Clinical Psychiatry* 70:477-486, 2009
19. Harrow M, Jobe TH, Faull RN: Does treatment of schizophrenia with antipsychotic medications eliminate or reduce psychosis? A 20-year multi-follow-up study. *Psychological Medicine* 44:3007-3016, 2014
20. Harrow M, Jobe TH: Does long-term treatment of schizophrenia with antipsychotic medications facilitate recovery? *Schizophrenia Bulletin* 39:962-965, 2013
21. Takeuchi H, Suzuki T, Bies RR, et al: Dose reduction of risperidone and olanzapine and estimated dopamine D₂ receptor occupancy in stable patients with schizophrenia: findings from an open-label, randomized, controlled study. *Journal of Clinical Psychiatry* 75:1209-1214, 2014
22. Insel T: Director's Blog: Antipsychotics: Taking the Long View. Bethesda, Md, National Institute of Mental Health, 2013. Available at www.nimh.nih.gov/about/director/2013/antipsychotics-taking-the-long-view.shtml
23. Torrey EF, Stanley J: "Assisted outpatient treatment": an example of newspeak? In reply. *Psychiatric Services* 64:1179-1180, 2013
24. Nathanson E, Nunn P, Uplekar M, et al: MDR tuberculosis: critical steps for prevention and control. *New England Journal of Medicine* 363:1050-1058, 2010