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Treatment of Schizophrenia Without Neuroleptics: Psychosocial Interventions Versus Neuroleptic Treatment

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It is commonly believed that reversal of schizophrenia is accomplished primarily through neuroleptic drug treatment, but this belief can only be maintained by ignoring a great deal of material published in the scientific literature. Randomized studies comparing psychosocial treatment programs without neuroleptics to drug-based programs were sought out for review, and six were found. Long-term outcomes were statistically equivalent or superior in the nondrug group in all six studies, even those where the quality of the psychosocial treatment was questionable. In studies with psychosocial interventions that appeared to have higher quality, both short- and long-term results were equivalent or superior without neuroleptics. These findings suggest that neuroleptics interfere with long-term recovery and, if appropriate psychosocial interventions are available, are not even necessary for short-term behavior control.

This article follows an earlier review that also questioned the current use of neuroleptics (Irwin, 2004). The earlier paper began with a brief history of treatments used in the 200 years prior to the introduction of the first neuroleptic, chlorpromazine, showing that the "treatments" used were actually cruel forms of torture and abuse. New "treatments" were routinely claimed as breakthroughs only to be discarded after a few years of use. A review of all studies of the long-term course of schizophrenia published since 1970 was then provided. This review found that 20% to 64% of people diagnosed with schizophrenia recovered, and most of the people with the best outcomes had discontinued neuroleptics. The study with the best long-term outcomes was done in a nonindustrialized country where no neuroleptics were used.

The earlier paper also reviewed all available randomized, placebo-controlled studies of chlorpromazine that included people with no history of neuroleptic exposure and that had at least 1 year of follow-up. Surprisingly, only three studies meeting these criteria were found. All three studies found better outcomes in the placebo group at long-term follow-up, with two of the three having statistically significant differences. The authors of the two studies with significant results resisted these findings, in one case by creating an implausible hypothesis and in the other by only publishing subgroup data. They continued to endorse neuroleptic use despite their negative findings, which probably indicated author bias in favor of drug treatment. By the time the first two studies were published in 1967, neuroleptics had already been the standard of care for many years, and the negative results were completely ignored.

The current article consists of a detailed review of all randomized studies that have compared a psychosocial intervention without neuroleptics to an intervention that included neuroleptics.

RESULTS OF PSYCHOSOCIAL TREATMENT PROGRAMS WITHOUT NEUROLEPTICS—RANDOMIZED TRIALS

A number of studies have compared psychosocial treatments without neuroleptics to treatment with neuroleptics. Attempts were made to identify all available randomized studies, and six were found. They are presented in order of publication.

Rogers, Gendlin, Kiesler, and Traux (1967)

A team of therapists led by Carl Rogers performed a randomized clinical trial comparing person-centered therapy without neuroleptics to neuroleptic-based hospital care (Rogers et al., 1967). They started with 16 people diagnosed with chronic schizophrenia, 16 with acute schizophrenia, and 16 who did not have any known psychiatric problems. They then matched them in pairs and randomly chose one from each pair to receive psychotherapy without neuroleptics and one to receive standard neuroleptic-based hospital care. Therapy was given twice a week for up to 2.5 years. Because they recognized the subjective nature of several outcome variables, they had a number of different people assess outcomes including blinded reviewers, neutral observers, the therapists, and the patients themselves.

Several statistically significant differences were found, all of which favored the therapy group. Advantages for the therapy group included: better ability to handle interpersonal relationships, less emotional distance from the experiences they described, more appropriate expression of emotions, and better ability to face their environment and themselves. The psychotherapy group also had greater ability to live outside of the hospital, spending an average of only 117 days in the hospital in the year after the therapy ended as compared to 219 days for the group that received standard hospital care. Although this was a marked difference, it did not reach statistical significance ($p = 0.10$).

Healthy therapeutic relationships, as indicated by levels of genuineness, congruence, and empathy, were significantly correlated with positive outcomes. These qualities were considered by Rogers to be the key elements in the success of any therapy. Subjects in therapeutic relationships that lacked empathy and genuineness, however, actually showed a slight worsening of their psychological and emotional state. This suggests that unhealthy relationships, even with experienced psychotherapists, may actually hinder recovery:

> It suggests that whether we are dealing with psychotics or normals, delinquents or neurotics, the most essential ingredient for change will be found in the attitudinal qualities of the person-to-person relationship. (Rogers et al., 1967, p. 92)

Another interesting finding was that the therapists in this study consistently rated their empathy and genuineness in opposite directions from those of the unbiased observer and the client, with statistically significant differences. When they gave themselves an especially high rating, both the observer and the client gave lower than average ratings, but when they gave themselves low ratings, the observer and client tended to give high

ratings. Since the observer probably made the most objective assessments, this suggests that the people diagnosed with schizophrenia were better judges of the quality of the therapeutic relationship than the therapists.

The authors outlined why they did not want the psychotherapy group to receive neuroleptics:

> Another reason for being concerned about chemotherapy was that many of the drugs used tend to decrease the individual's experience of his emotions and his awareness of what troubles him, hence possibly impeding the process of psychotherapy. Such drugs may also have a tiring, dulling effect, with consequent loss of energy to invest in any relationship. We therefore reached an agreement with the hospital that our research patients who were in therapy should not receive tranquilizing drugs. (p. 27)

Despite their efforts, some patients were prescribed neuroleptics by hospital staff for short periods until the therapy team realized what had happened and asked that the drugs be stopped.

Limitations of the study included the small sample size, lack of a placebo or no-treatment control group, and the contamination of some of the nondrug group with short-term neuroleptic treatment. A notable strength was the use of patient reviews of outcomes, something absent from nearly every study ever done on people diagnosed with schizophrenia. Another strength was the attempt to assess the quality of the therapy, something not done in any of the other five studies to be reviewed.

May (1968), and May, Tuma, Yale, Potepan, and Dixon (1976, 1981)

May and colleagues (1976, 1981) randomized 228 people who had been newly diagnosed with schizophrenia to one of five treatment approaches: psychotherapy without medication, psychotherapy with medication, medication alone, ECT, or milieu therapy. All groups received milieu therapy in addition to their assigned treatment, so those receiving milieu alone served as the control group. The neuroleptic used was trifluoperazine (Stelazine), and psychotherapy was given twice a week for 24 weeks, on average. A number of scales and indices were used to assess outcomes such as total days hospitalized, global assessments of functioning, psychological state, and social competence. If a subject was not considered to have improved significantly after 6 to 12 months of treatment, they were labeled a "limited success" and switched to neuroleptics plus group therapy. After discharge from the hospital, treatments were no longer controlled, but yearly assessments were performed, and information was gathered from patient interviews, families, outpatient social workers, and hospital records.

Although initial results favored medication alone, at 2 years the only significant difference was in number of days hospitalized. At 3-, 4- and 5-year assessments there were no statistically significant differences between the drug and control group on any measures, with nearly identical scores in most. There were, however, persistent trends showing a negative effect from psychotherapy in this study. The psychotherapy alone group did worse than the control group in nearly every measure, although the differences were not statistically significant. For example, at 3 and 4 years there were more total days in the hospital, lower global assessments of functioning, worse ratings of psychopathology, less time working, and poorer social functioning in the psychotherapy alone group than in the control group. This suggests that the psychotherapy given in this study actually hindered recovery.

There were a number of problems with the psychotherapy in this study that may account for its negative effects, as several critiques of the study have pointed out. Karon (1989) questioned the quality of the psychotherapy because of lack of experience and low expectations in the therapists. He pointed out that the therapy was done by people with little experience working with nonmedicated schizophrenics, only one of the psychotherapy supervisors had any experience with psychotherapy of schizophrenic patients after residency, and some of the supervisors even expressed the opinion that psychotherapy was not an appropriate treatment of schizophrenia. The authors themselves argue that indirect effects of psychotherapy probably fostered chronicity, without questioning the quality of the therapy.

There are some other limitations to this study besides the questions about the quality of psychotherapy. There was no placebo given to any group, so that true drug effects cannot be distinguished from placebo effects. There was lack of blinding for most assessments, and the subjects themselves were not allowed to assess outcomes. A strength was the large sample size, more than twice the size of the next largest study in this review, which gave this study relatively high statistical power.

Grinspoon, Ewalt, and Shader (1972) and Messier, Finnerty, Botvin, and Grinspoon (1969)

Grinspoon and colleagues randomized 41 people diagnosed with chronic schizophrenia to three groups: 21 stayed in their hospital setting where they were continued on neuroleptics, 10 were given placebo for 13 weeks and then restarted on neuroleptics (thioridazine) with added psychotherapy, and 10 were given placebo for 13 weeks and then continued on placebo with added psychotherapy. A variety of scales of psychopathology and global functioning were used to assess outcomes, and the number of inpatient days was also recorded.

Patients who received medication showed better short-term outcomes while in the hospital, but 5 years later there were no statistically significant differences on any measures (Messier et al., 1969). At 5 years, trends favored psychotherapy in two areas: they had less psychotic symptoms and were better able to live outside the hospital; 65% of psychotherapy patients were living in the community at 5 years, compared to only 37% of hospital controls ($p = .07$). Nonsignificant trends comparing the two psychotherapy groups were mixed: those without neuroleptics had better living status, but worse recreational and work status. The authors gave possible explanations for all trends except the one favoring the nondrug group, stating: "We have no explanation for the fact that the living status of the placebo group has improved more than the drug group; we tend to view that as an artifact" (p. 1126). This appears to reveal an obvious bias in favor of drug treatment in the study authors.

There are several other limitations to this study besides possible bias. This was actually a drug-withdrawal study since the subjects had been on neuroleptics for years prior to starting the study. Drug withdrawal symptoms would tend to create a bias against the placebo group, and 13 weeks is not enough time to eliminate withdrawal effects (Breggin & Cohen, 1999). Another weakness of the study is that 11 of the 20 patients receiving psychotherapy had also previously received at least one course of ECT, or insulin shock therapy, or both. These treatments may reduce cognitive functioning and make one more resistant to psychotherapy. The therapists, although experienced in psychotherapy, had very little experience with psychotherapy of chronic schizophrenic patients, and had

little experience with patients from the cultural and socioeconomic level of those in the study. They also participated without pay, which may have reduced their motivation. In Karon's critique he points out that the most senior psychotherapist in the study also expressed doubt about the quality of the psychotherapy (Karon, 1989, p. 115). Finally, the study did not use blinded clinical reviews or ask the subjects to assess the outcomes of treatment.

Paul, Tobias, and Holly (1972), and Paul and Lentz (1977)

Paul and colleagues (1972) randomly switched half of 52 chronically hospitalized people diagnosed with schizophrenia to placebos without telling either the staff or the subjects that this was being done. All subjects had been on low-dose neuroleptics for many years, and the staff and subjects were only informed that "different drugs" were being prescribed together with positive suggestions about their effectiveness (p. 108). While this would be considered unethical today, it allowed a rare opportunity to test the effects of staff and patient expectations on outcomes of clinical trials. These "triple-blind" conditions were designed to eliminate negative expectations in patients and staff that were thought to accompany placebo treatment. All subjects had been transferred to a new mental health center prior to changing their medications and had been divided into two groups, one receiving milieu therapy and one social learning therapy. Half of each group was then placed on placebo and the other half maintained on low-dose neuroleptics. Several scales of behavioral and psychological functioning were used, with tallies done every 4 weeks for 17 weeks.

Both groups had marked improvement, but the group not receiving neuroleptics actually responded significantly more rapidly than the drug-maintenance group ($p < .01$) (Paul et al., 1972, p. 112). When the study period ended 17 weeks later the groups had equalized, and the placebo group and the drug group had exactly the same scores. The authors argue that "progressive social-environments may render maintenance by low-dosage psychotropic drugs essentially superfluous" (p. 113), but caution that the same may not be true of patients on higher doses of neuroleptics. They also argue that the lack of withdrawal effects was due to several factors: low doses of neuroleptics cause less withdrawal than high doses, triple-blind conditions removed negative expectations, and secondary medications to control side effects were continued for several weeks after the neuroleptics were stopped.

> The complete absence of either acute psychotic episodes or "withdrawal symptoms" upon abrupt discontinuation of active drugs further supports previous findings which suggest that the latter reactions may result primarily from staff-patient expectancy effects, or from withdrawal of medications prescribed to control side effects before psychoactive drugs have cleared the system. (p. 113)

At the end of the study both placebo and drug patients were openly weaned from their "medications," still without revealing that placebos had been used in half of them. An equivalent number of psychotic episodes occurred in each group, further suggesting that expectations played a role in initiating psychotic episodes (p. 113).

Limitations of the study include the small sample size, previous courses of ECT in 46% of subjects, insulin coma in 27%, and no patient ratings. This study will probably never be repeated because of the lack of informed consent, making the missing patient-derived outcomes particularly unfortunate.

Karon and VandenBos (1981)

Karon and VandenBos (1981) randomized 36 patients to three groups: psychotherapy without medication, psychotherapy with medication, and routine hospital treatment consisting primarily of neuroleptics. The authors intended to take only newly diagnosed people, but discovered well into the study that they had been deceived by the subjects and their families. Many of the subjects had had several prior admissions.

The trial was designed to avoid flaws in previous studies: Both therapy teams included an experienced supervisor with over 10 years' experience doing psychotherapy with both medicated and unmedicated schizophrenics of the same ethnic and socioeconomic background as those included in the study, all therapists were paid for their services, and rigorous blinding of evaluators was observed. Results with less experienced therapists were compared with those of experienced therapists.

Psychotherapy was given for a total of 20 months, starting with three to five sessions a week for several weeks before reducing to weekly sessions. Results were tallied at 6, 12, and 20 months using a variety of scales, and hospitalization data were collected for a total of 44 months. Therapists were allowed to wean patients in the medicated group from neuroleptics if they showed improvement, but had no control over the length of hospitalization.

At 6 months, the subjects of the experienced therapists in both the drug and nondrug groups had statistically significant improvements over hospital controls on both scales for thought disorder, and also had significantly reduced hospital stays. Subjects of inexperienced therapists did not do as well at 6 months, and the two groups with neuroleptics had better scores than the nondrug group. By 12 months, subjects receiving psychotherapy from both experienced and inexperienced therapists had better scores than the hospital comparisons, and these findings were even stronger at 20 months.

At 20 months the best outcomes were in the nonmedicated group receiving therapy from the experienced supervisor. Among inexperienced therapists, the nonmedicated group had greater improvement in thought disorder and in global functioning, but medicated subjects had reduced hospital stays. Subjects receiving psychotherapy, whether medicated or unmedicated, had outcomes superior or equivalent to hospital controls on all measures. The experienced supervisor in the combined psychotherapy and medication group weaned people off neuroleptics more frequently than did the inexperienced therapists, and his subjects had better outcomes than subjects of less experienced therapists.

Weaknesses of the study included small sample size, limited number of experienced therapists, and heterogeneity of subjects since chronic and first-onset schizophrenics were unknowingly mixed. Strengths included rigorous blinding of evaluators, comparisons of experienced and inexperienced therapists, and excellent follow-up (subjects were paid to come in for evaluations).

Mosher, Vallone, and Menn (1995) and Bola and Mosher (2003)

The Soteria project used two houses, Soteria and Emanon, which were small home-like settings for people newly diagnosed with schizophrenia. They were designed as non-drug alternatives to hospitalization, and at least 40 reports of their results have been published (Bola & Mosher, 2003; Gosden, 2001; Mosher, 1999; Mosher & Menn, 1978; Mosher et al., 1995). Two cohorts were followed, one with consecutive assignment ($n = 79$) and one with random assignment ($n = 100$).

Soteria subjects were exposed to an intensive interpersonal milieu with a low staff to resident ratio. Staff were nonprofessionals selected and trained to expect recovery and to validate the experience of psychosis. Neuroleptics were not used in the first 6 weeks, except in unusual and carefully outlined situations. After 6 weeks, a treatment conference was held with the subject, the staff, and a consulting psychiatrist to decide if medications would be started. People in the hospital control group were given routine hospital care of the 1970s: All were treated with neuroleptics and after discharge were referred to a variety of outpatient psychiatric services. Eight outcome measures were used that included scales of psychopathology, social, behavioral, and occupational functioning, as well as number of readmissions and total days hospitalized. Assessments were performed at 6 weeks and 2 years after discharge.

All the outcome measures were either superior to or statistically equivalent for people randomized to Soteria house, with 85% to 90% of Soteria subjects able to return to the community without need for psychiatric hospitalization (Gosden, 2001). At 2-year follow-up, Soteria subjects in the randomized cohort had higher occupational levels and better ability to live independently, and all other outcomes were statistically equivalent. The non-randomized cohort also had better social and occupational functioning, as well as reduced levels of psychopathology, compared to hospital controls. Seventy-six percent of the Soteria subjects never received any neuroleptics while living there, and only 3% received them throughout the entire 6 weeks. Fifty-seven percent had never received any neuroleptics during the entire 2-year follow-up period. In comparison, 94% of the hospital controls received neuroleptics continuously for the first 6 weeks, and 100% received at least some neuroleptic treatment.

Because the initial study used DSM-II diagnostic criteria, Bola and Mosher (2003) reanalyzed the 2-year outcome data using DSM-IV criteria, combining the results for both cohorts. All outcomes showed either nonsignificant trends or statistically significant advantages for those treated at Soteria. Significant differences were found in scales of psychopathology, work status, and social functioning. People who fit DSM-IV criteria for schizophrenia had even more significant outcomes than those who did not, with large effect sizes, as outlined by Cohen (1987).

Weaknesses of this study include lack of placebo controls, no patient-derived outcomes, and contamination of the nondrug group with neuroleptics. Despite these flaws, the positive results for Soteria, with its nonprofessional staff and informal therapeutic approach, are striking. Mosher and colleagues (1995) give the following explanation for Soteria's success:

> Why . . . do we find treatment of schizophrenia without antipsychotic drugs as effective as treatment with them? We believe the answer to this critical question appears to be that the special social environments of the experimental facilities are very different from those of psychiatric wards in general hospitals . . . personality test data from Soteria project staff show them to be significantly more tolerant, flexible, and non-judgmental when compared with hospital ward staffs . . . The small size and adequate undistracted staff of the experimental setting made them immediately available and flexibly responsive . . . The potential healing value of human relationships was given primacy . . . Maybe most importantly, the houses felt like home to the participants. (p. 170)

This description sounds very similar to a description of "moral treatment" as it was initially applied by Quakers in the early 1800s. The Quakers also used a home-like setting, and stated that they did "little more than to assist nature" in the healing process (Whitaker,

2002). They claimed that 70% of subjects recovered and returned to respectable places in society, but their methods were eventually abandoned when organized psychiatry reasserted itself in the mid-1800s. Soteria met with a similar fate; its results were completely ignored and its funding canceled, after 12 years of operation.

> As a clinical program, Soteria closed in 1983. . . . Despite many publications, 37 in all, Soteria disappeared from the consciousness of American psychiatry. Its message was difficult for the field to acknowledge, assimilate, and use. It did not fit the emerging scientific, biomedical character of American psychiatry, and in fact called nearly every one of its tenets into question. In particular, it demedicalized, dehospitalized, deprofessionalized, and deneurolepticized what has been called psychiatry's sacred cow—schizophrenia. (Mosher, 1999, p. 148)

DISCUSSION

The six studies reviewed here suggest that long-term outcomes in people diagnosed with schizophrenia are better with psychosocial treatment programs that do not use neuroleptics than they are with drug-based programs. All available randomized studies comparing nondrug programs to programs that used neuroleptics were sought out, and all the long-term outcomes were superior to or statistically equivalent in the nondrug groups. Five of the six studies included long-term data, and three of these had statistically superior outcomes in the nondrug group. One of the three had superior outcomes with experienced therapists, but results with inexperienced therapists were mixed, suggesting that the quality of the psychosocial program significantly affects the results (Karon & VandenBos, 1981). This possibility is supported by the findings of Rogers and colleagues (1967) that patients in healthy therapeutic relationships, as rated by blinded reviewers, improved, while patients in unhealthy relationships worsened.

Five of the six studies included short-term data. Two found better short-term outcomes in the nondrug group, two had better outcomes in the neuroleptic group, and one had mixed results. Questions about the quality of the therapy in the two studies with negative outcomes raise the possibility that neuroleptics may not even be necessary in the short-term, if appropriate psychosocial interventions are available.

One limitation of the studies is that the subjects were only asked to rate their own outcomes in one of the six trials, and family ratings were not used in any of the trials. While clinician and staff ratings are valuable, they are hardly a substitute for evaluations from the subject themselves or from people who know the subject intimately. Another weakness is the lack of placebo controls in several trials. It should also be noted that none of the studies had a true "control" group, which would consist of people who were simply left alone. It is possible that people labeled as schizophrenic might find their own ways to recovery if allowed to do so, and that the worse outcomes with neuroleptics occurred because they actually impair long-term functioning.

There are several lines of evidence suggesting that neuroleptics inhibit recovery. As mentioned in the introduction, a review of all studies on the long-term course of people diagnosed with schizophrenia found that the best outcomes, with 64% of people completely recovered, occurred in a nonindustrialized country where no neuroleptics were used (Irwin, 2004). All three randomized studies of chlorpromazine in people with no prior exposure to neuroleptics had better outcomes in the placebo group at long-term follow-up,

two with statistically significant differences. The authors of the two significant studies continued to endorse neuroleptic use as the "treatment of choice" despite their negative findings (Irwin, 2004).

Although newer "atypical" neuroleptics are claimed to have fewer adverse effects than older neuroleptics, the FDA specifically forbade claims of increased safety or efficacy because of biased study designs (Whitaker, 2002). Studies performed after the drugs came into the market have confirmed the FDA's suspicions. The new drugs are called "atypical" because they supposedly cause fewer extrapyramidal side effects, but risperidone was found in several studies to actually cause more extrapyramidal symptoms and other adverse effects than older neuroleptics (Knable, 1997; Rosebush, 1999; Sweeney, 1997). Olanzapine has become the most common "atypical" neuroleptic used on people diagnosed with schizophrenia (Rosenheck, Leslie, & Sernyak, 2001), but a recent study comparing olanzapine to an older, "typical" neuroleptic found no difference in extrapyramidal side effects and no difference in efficacy (Rosenheck et al., 2004). There was also no difference in positive or negative symptoms of schizophrenia, compliance, drop-out rates, or overall quality of life (Rosenheck et al., 2004). This study took into account many critiques that the FDA had made about previous studies. These previous studies, which had been funded by the pharmaceutical company sponsoring olanzapine, had used very high doses of the older drug, haloperidol, and had not used medicines to control the side effects of haloperidol appropriately.

Newer neuroleptics are also claimed to cause less tardive dyskinesia (TD), a disfiguring movement disorder that results from relatively long-term exposure. This disorder is often permanent, and is one of the most feared adverse effects of neuroleptic medications. In the study by Rosenheck and colleagues (2004), however, there was no significant difference in a 42-point TD scale between olanzapine and haloperidol. In a secondary analysis, after excluding some patients, there was a borderline significant 3.95-point advantage for olanzapine ($p = 0.048$). A review of all available studies that focused on TD rates with newer neuroleptics was recently published (Correll, Leucht, & Kane, 2004). They found that while they appeared to be associated with less TD than older neuroleptics, most studies were biased by using a higher dose of haloperidol than is ordinarily used, and by using a relatively low dose of the newer drugs. There was also a very biased patient population since the trials were all done on people who were abruptly withdrawn from typical neuroleptics at the entry to the study. Despite this problem, the annual incidence of TD was quite high in some studies, and there was evidence of a dose response relationship. For example, risperidone at an average dose of 0.96 mg resulted in an annual TD incidence of 2.6% in elderly patients; but at a dose of 3.7 mg the annual incidence was 13.4% despite the patients being 9 years younger, on average. According to the manufacturer of risperidone, the "usual effective dose" is between 4 and 8 mg per day, so both 0.96 mg and 3.7 mg are less than the minimum expected maintenance dose. Even so, the 3.7 mg dose would cause TD in more than 50% of this population after only a few years. Another study focusing on the prevalence of TD actually found that the rate increased in the past 20 years, from 20% in 1981 to 43% in 2000, despite the introduction and widespread use of atypical neuroleptics, adding further evidence that TD is also a problem with the newer drugs (Halliday et al., 2002).

The "proven" efficacy of newer neuroleptics versus placebo is also questionable. All of the studies sent for FDA approval started with chronic subjects already taking neuroleptics that were abruptly withdrawn before being assigned to placebo or neuroleptic

treatment. This "placebo washout" procedure, which is a standard part of all clinical trials of psychiatric drugs, creates a built-in bias against placebo because drug withdrawal effects may be mislabeled as symptoms of an underlying illness (Breggin & Cohen, 1999; Whitaker, 2002).

There are a number of reasons why the medical community and the lay public continue to ignore evidence that people diagnosed with schizophrenia do better without neuroleptics. Neuroleptics had become the standard of care years before any long-term studies were performed. The reputation of modern psychiatry was therefore intertwined with the reputation of neuroleptics before the negative long-term outcomes were encountered, a problem which continues today. Since neuroleptics do succeed in quickly quieting disturbing inmates, families and staff are relieved and sometimes even enthusiastic about the results. The idea that psychosis is a physical disease has always been appealing because it absolves people of guilt. Unfortunately, it also makes them powerless, limiting their primary role to one of encouraging "compliance" with psychiatric drug regimens. The drugs are associated with many intolerable side effects, however, and patients continue to be much less enthusiastic about them, usually refusing to take them unless forced to do so.

The history of the "treatments" forced on people labeled mad or insane shows how far people will go to suppress disturbing behavior. Old methods included "stripes," "blows," "purges," restraints, straightjackets, simulated drowning, induction of severe vomiting, near-starvation diets, specially constructed "swinging chairs," creation of chronic open sores, surgical removal of organs, genital mutilation, "wet packs," metrazol convulsions, insulin comas, electroshock, and frontal lobotomy, all of which were regularly forced on patients without their consent. The victims quickly learned to stop talking about their fears, and to hide any evidence of madness as best they could, allowing "mad doctors" to claim success (Irwin, 2004; Whitaker, 2002). "Modern" methods involve the use of potent psychoactive drugs with severe short- and long-term side effects, which are regularly forced on patients without their consent. These drugs are heavily sedating and succeed in quickly quieting people down. Like the older treatments, they are based in the idea that psychospiritual distress comes from a biological imbalance, which absolves people of guilt but makes them powerless to help. As Mark Twain is attributed to have said, "History does not repeat itself, but it rhymes."

While there may be people who do better with neuroleptic treatment, the overall negative results reviewed here are difficult to reconcile with today's climate emphasizing lifelong neuroleptic drugs and forced treatments. Adequate informed consent would necessitate that the subject be informed about the negative long-term outcomes, as well as the risk of drug addiction and withdrawal, TD, weight gain, chronic fatigue, diabetes, and other adverse effects. All programs, including nondrug programs, should be voluntary. While most people would probably willingly accept placement in a home-like setting such as Soteria house, it is ultimately their choice to make.

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