

(shot) rather than potential benefit for recovery (7). Training practitioners in how to make appropriate offers of LAIs in a way that strengthens the therapeutic alliance is necessary and would advance shared decision-making. Surveys of practitioners show that many believe LAIs should be used for patients who are poorly adherent. Unfortunately, in mental health centers, only those who refuse medication are clearly identified as poorly adherent. In reality, medication refusers, unwilling to take either oral medications or LAIs, represent a small minority of patients that are fairly easy to identify. Many other patients are willing to take medication, but do not take it regularly due to distraction, forgetfulness, wavering insight and logistical problems. These are the individuals that need to be identified and offered a trial on LAIs. A simple checklist of warning signs that identifies individuals not receiving maximum benefit from their current oral treatments may help prescribers to identify people who may benefit from LAIs. While there are reasons other than poor adherence that could explain poor outcomes, these warning signs should at least get prescribers to consider whether making an offer of LAIs would be appropriate. Such an identification system should be supported by administrators.

Many patients are unaware that LAI medications are a potential treatment and have never been offered these compounds. Patients need to be provided understandable, helpful information regarding the pros and cons of LAIs versus oral medication. Simple decision-aids focused on this issue could be used by case managers

or peer counselors. This effort prior to physician visits could support an improved shared decision-making dialogue between the prescriber and patient during visits.

Concerning psychosocial interventions for adherence, among the most promising are the use of environmental supports to prompt the taking of medication and the creation of habit-behaviors around taking oral medication. We have demonstrated improvements in adherence and outcomes in multiple studies with the use of cognitive adaptation training (2,8). This involves weekly home visits to set up individualized alarms, checklists, and organize belongings to assist individuals in taking medications regularly. We have also shown that effective prompts can be delivered with electronic devices, eliminating the need for home visits (2). Pill counts conducted on unannounced home visits correlate very highly with self-report of adherence, as long as the self-report is dose specific (“Did you take your medication just now?”; “Did you take your medication today?”). Simple cell phone applications could be used to check medication adherence each day with very little cost.

In summary, there are simple, practical measures that can be used to identify potential adherence problems, and solutions that can be applied in community mental health settings.

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Non-adherence and its consequences: understanding the nature of relapse

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The article by Kane et al draws attention to the enormous challenge of non-adherence in treating individuals with psychotic disorders and the

need to devise better ways of dealing with it.

Non-adherence is common to most chronic medical conditions, with

multiple factors likely contributing simultaneously to its existence in individual patients. Rates of non-adherence are particularly high in those disorders where there may be no immediate consequences of treatment discontinuation (1). For example, one study found that only 50% of patients with hypertension for whom drug treatment is initiated persisted on treatment 1 year later (2). There is a risk that schizophrenia may be considered to fall into this category, as some patients may survive treatment gaps for considerable periods without adverse consequences. However, this is not the case for the majority. Relapse rates are very high after treatment discontinuation, and in many cases recurrences occur within weeks of stopping treatment (3). To make matters worse, there are no reliable early warning signs to assist patients, carers or clinicians in identifying individuals at imminent risk of relapse (4). In fact, when relapses occur, rather than appearing gradually, symptoms typically return abruptly and rapidly reach high levels of severity (5). In other words, an approach of carefully observing patients in whom non-adherence is suspected, with a view to introducing rescue medication at the first sign of recurrence, is unlikely to be effective in real-world settings.

While treatment goals in schizophrenia and other psychotic disorders should include components such as remission and recovery, the need for sustained medication adherence is to a large extent driven by the risks of harm and distress associated with relapse. Although surprisingly few studies have prospectively assessed the consequences of relapse, it is generally recognized that they may be far-reaching. For example, in an international survey conducted by the World Federation of Mental Health, caregivers cited the following consequences of relapse: inability to work (72%), hospitalization (69%), attempted suicide (22%), and imprisonment (20%). Caregivers also reported significant disruption of their own lives (61%), worsening of their

own mental health (54%) and worsening of their financial situation (26%) (6). In addition to these psychosocial consequences, there is a risk of biological harm, insofar as disease progression in the form of emergent treatment refractoriness may occur in a subset of patients after each relapse (7,8).

Taken together, all of these factors point to the need for new, more effective strategies for addressing medication non-adherence in psychosis. As pointed out by Kane et al, effectively addressing non-adherence in psychotic disorders poses specific challenges. Two of these challenges demand special attention. The first concerns impairment of insight, which is one of the most prominent manifestations of psychotic disorders (9). The nature of psychotic illness is such that it impairs the individual's ability to recognize the presence of illness and the need for indefinite maintenance treatment – a fact that may not always be sufficiently recognized by clinicians. Therefore, placing the burden of responsibility on patients themselves to maintain sustained medication adherence would be unrealistic. The second consideration concerns the recognition of the very high occurrence of comorbid substance abuse in individuals with psychotic disorders, and the aggravating role it plays in non-adherence (10).

Psychosocial programs addressing adherence should be developed accordingly, taking into account both the impairment of insight and the need to effectively address substance abuse. Similarly, more reliance should be placed on pharmaceutical interventions that improve adherence. More widespread use of depot antipsychotics is indicated, particularly in the early stages of illness when the benefits of continuous treatment are most likely to be observed.

Greater recognition of the extent and impact of non-adherence has not yet translated into widespread changes in clinical practice. In real world clinical settings around the world, few formalized psychosocial interventions

addressing adherence exist, and depot antipsychotics are hopelessly underutilized and frequently only considered after many years of illness. In the context of currently available treatments, combining depot antipsychotics with appropriate psychosocial interventions appears to be our best option for effectively addressing non-adherence in psychotic disorders.

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