

The WAGER Vol. 5(18) - Psychopharmacology Primer #1: SSRIs

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Not since the advent of oral contraceptives has a drug had such a profound effect on American culture as Prozac. Commenting on the social impact of Prozac, author Elizabeth Wurtzel titled her first book Prozac nation. What exactly is Prozac, and how important is it in the treatment of pathological gambling? The development of new psychotropic medications may be the most important frontier of addiction treatment research currently being pursued. In this first installment of its Psychopharmacology Primer, the WAGER takes a closer look at Prozac and functionally similar medications.

Prozac is a selective serotonin reuptake inhibitor (SSRI). Other common SSRI drugs include Zoloft, Paxil, Celexa, and Luvox [for more information about Luvox, see [WAGER 4(1)]]. Serotonin is one of several chemicals that transmit information from one nerve cell to another. When a pre-synaptic nerve receives an electrical message, it releases serotonin. The serotonin molecule carries the message from the pre-synaptic cell to the post-synaptic cell. After the message is delivered, the serotonin is reabsorbed by the pre-synaptic cell that initially released it. Sometimes, too much serotonin is reabsorbed. SSRIs impede the reuptake process.

Compared with earlier antidepressants, SSRIs have fewer and less bothersome side effects. However, SSRIs are significantly more expensive than older medications. The table below presents information about the most common SSRIs.

	Trade name	Manufacturer	Typical dosage range (mg.)	Generic available ?	Price per 100 pills	Most common side effects
Citalopram hydrobromide	Celexa	Forest	20-60	No	20mg: \$161.00 40mg: \$168.00	Fatigue, nausea, upset stomach, dry mouth
Fluvoxamine maleate	Luvox	Solvay	50-300	No	50mg: \$198.67 100mg: \$204.37	Nausea, upset stomach, fatigue
Paroxetine hydrochloride	Paxil	SmithKline Beecham	10-50	No	10mg: \$189.33 20mg: \$189.20 30mg: \$214.80	Fatigue, nausea, upset stomach, weakness
Fluoxetine hydrochloride	Prozac	Dista	10-80	No	10mg: \$218.67 20mg: \$224.54	Nausea, upset stomach, nervousness
Sertraline hydrochloride	Zoloft	Pfizer	25-200	No	50mg: \$176.23 100mg: \$181.33	Nausea, upset stomach, tremor

* Prices quoted represent the cheapest wholesale prices found by Dr. David Burns. The actual retail price paid by the consumer may be higher.

Are SSRIs a good treatment option for pathological gamblers? It is still unclear whether the pharmacodynamics of Prozac and other drugs can actually treat addictions by themselves. However, SSRIs are highly effective in treating comorbid depression and anxiety that often accompany addictions. As our knowledge of the neurobiology of addiction increases, so will our understanding of how psychotropic medications can play a vital role in therapeutic regimens.

Table Source: Burns, D.D. (1999). Feeling good: The new mood therapy. New York: Avon Books.