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#### The Role of Retail Pharmacy in the Treatment of Mental Illness

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## ABSTRACT

Mental illness treatment in the United States has developed and changed drastically in the past century. Where in the early 1900s, one with a severe mental illness would be institutionalized, today, the same person could be treated with psychotherapy and medications.

Pharmacists are the modern bridge to aid those with mental illness to live on their own and contribute to society.

## MENTAL ILLNESS IN THE US

Due to deinstitutionalization campaigns in the 1900s, there has been a drastic increase in research for a chemical "restraint" for those with mental illness<sup>[2]</sup>. The stigma for mental illness in the US has slightly improved but the varied availability of medications and outpatient therapy has made the common person more comfortable with seeking help when experiencing mental illness.

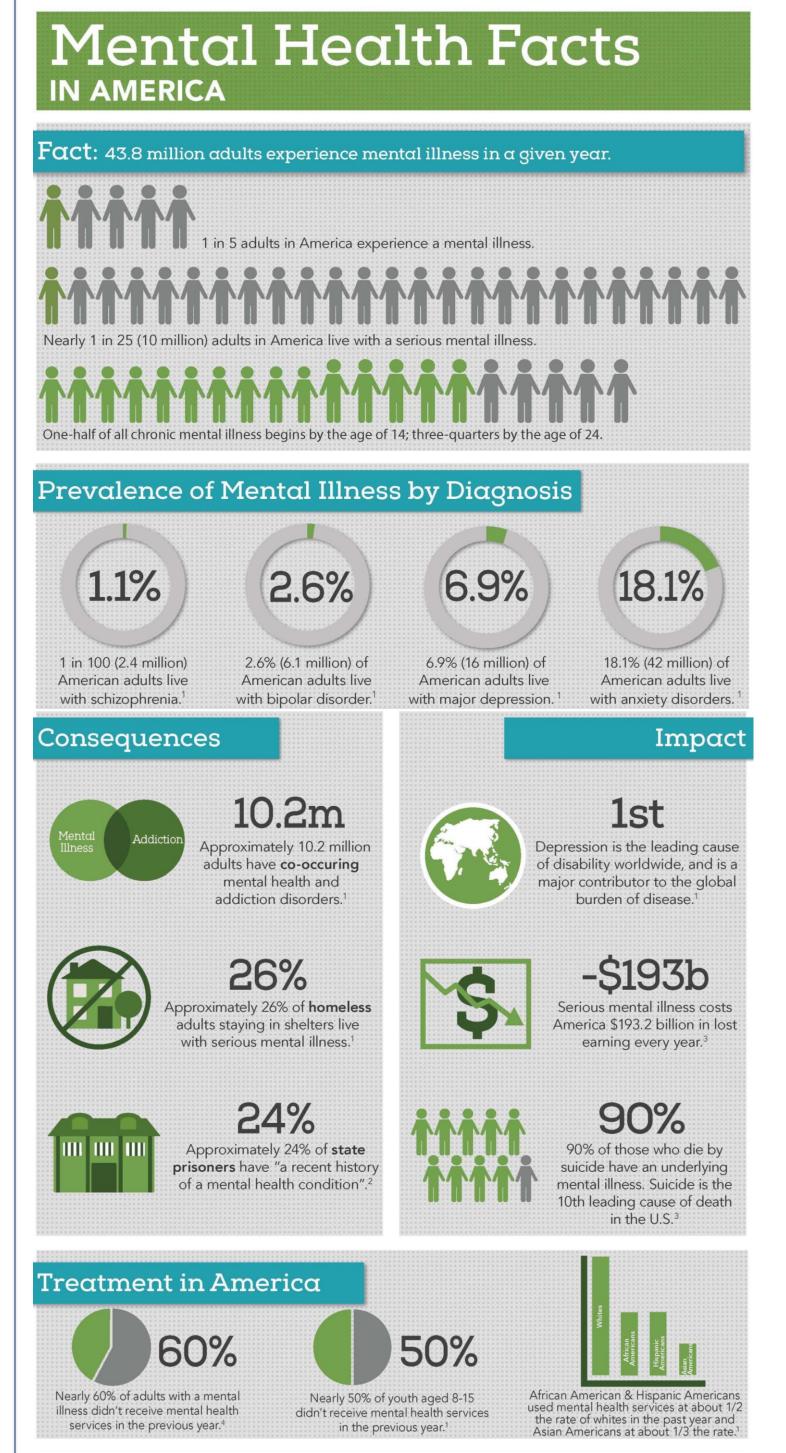


Figure 1a. Twenty percent of Americans experience a mental illness. About 2.4 million live with schizophrenia in the United States. Half of all chronic illnesses begin by the age of 14[1].

**Figure 1b.** More than 10 million adults live with a mental illness while also battling substance addiction. Serious mental illness costs the US \$193.2 billion in lost earning every year[1].

# The Role of Retail Pharmacy in the Treatment of Mental Illness

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### HISTORY OF ANTIPSYCHOTICS

Antipsychotic medications were found through the efforts to synthesize antimalarial drugs during WWI and WWII. Antihistamines that were manufactured at this time were found to be "agent[s] to potentiate anesthesia"[3]. These effects were desirable in being able to sedate those with severe psychosis or having psychotic episodes. A majority of funding for antipsychotic medications comes from private industrial support instead of public research organizations.

Antipsychotic medication development started with the fortunate mistake of synthesizing chlorpromazine followed shortly by most of the typical antipsychotic drugs. The introduction of clozapine in 1990 changed the face of schizophrenic treatments and opened the gateway for atypical antipsychotic drugs with little to no extrapyramidal symptoms.

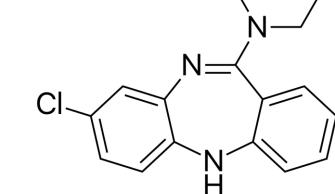


Figure 2. Clozapine

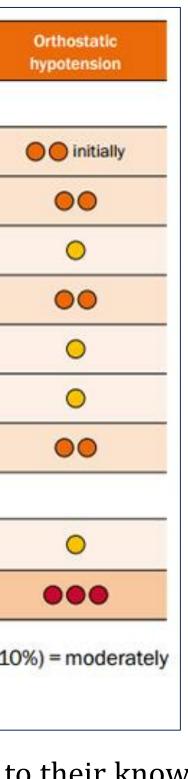
## **CLASSES OF ANTIPSYCHOTICS**

Antipsychotic medications are divided into two different classes based on when they were released and the extrapyramidal symptoms (EPS) that accompany the drug. Classes include typical and atypical. Within the "typical" class are low potency and high potency drugs. The difference between typical and atypical drugs have to do with their extrapyramidal symptoms (EPS) and when they were first released for use to the public.

						_
	Extrapyramidal	Sedation	Weight gain	Hyperglycaemia	Anticholinergic	
Atypical antipsyc	hotics					
Risperidone	••	o initially	00	••	•	
Quetiapine	0*		00		••	
Olanzapine	0					
Clozapine	0	•••	•••			
Amisulpride	00.	0	0	0	•	
Aripiprazole	0	0	0	•	0	
Ziprasidone	0	00	0	0	0	
Typical antipsych	otics					
Haloperidol		0	00	••	0	
Chlorpromazine	••					

Approximate frequency of adverse effects: (<2%) = negligible or absent; (>2%) = infrequent; (>10%) = moderately frequent; (>30%) = frequent. \* rarely a problem at usual therapeutic doses

**Figure 3.** This chart shows typical and atypical medications in addition to their known EPS and their severities. [4]



## PHARMACISTS AND THEIR ROLE

Pharmacy atmosphere exists in different environments.

- Retail Pharmacy
- In-patient Pharmacy
- Out-patient Pharmacy
- Clinical Pharmacy
- Research

Retail pharmacists are responsible for counseling patients, helping with medication management and preventative care screenings. They strive to educate patients on proper use of medication and potential drug interactions. [5]



Figure 4. CVS manages more than 1.9 billion prescriptions annually and more than 5 million customers every day.

#### **RETAIL PHARMACY AND MENTAL ILLNESS**



"Pharmacists help fill the gaps in patient care by educating patients, monitoring medications, and administering injections prescribed by other health care professionals" [6].

Properly diagnosed schizophrenia can be managed with medication and psychotherapy. With mental disorder diagnoses on the rise, pharmacist are instrumental in aiding the general population with information and care so they can independently manage their illnesses.

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