

14 - Gender differences in psychopharmacology

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- Antipsychotic response is shown to be superior in women
- In chronically ill population, men are found to require twice as high a dose as women for effective maintenance.
- Women have higher antipsychotic plasma levels than men after receiving the same dose of the drug.
- The enzyme CYP1A2 appears to be less active in women than in men, leading to relatively higher blood concentrations of olanzapine and clozapine in women.
- The volume of distribution of lipophilic drugs, such as antipsychotics, is greater in women than in men
- In women, the blood volume is smaller, but lipid compartments are larger. This prolongs the half-life of antipsychotics in the body, leading to accumulation over time, a phenomenon that becomes important when administering depot injections. After a steady state is achieved, dosing intervals for women should be longer than for men.
- Acute dystonia, long thought to be more prevalent among men, has been shown now to be more frequent in females at equivalent doses. Earlier clinical studies had not taken into account the fact that young male patients were commonly given higher doses than women.
- Pulmonary embolism (a rare problem seen with drugs that have an affinity for the serotonin 5-HT_{2A} receptor) and tardive dyskinesia appear to be more common in women.

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