**Medication dosages and Paradoxical effects**

Psychotropic medications have so many unexpected and paradoxical side-effects. Effective dosages are wide, often being an order of magnitude, 10 X. This makes dosage titration vital to avoid side-effects or for the medication to even have an effect.

These complicating issues are more obvious with psychotropic medication because the brain has many feedback loops that either amplify or suppress an intervention. For example, some serotonin receptors stimulate, others suppress, even where the receptors are on the nerve will result in different effects. “Serotonin binds to auto-receptors on the presynaptic neuron to regulate the synthesis and release of serotonin.”

Homeostasis is vital and most psychiatric conditions are when there is an imbalance. Giving medication is an attempt to either change the brains set points or modify the feedback loops.

Negative feedback stabilises, positive feedback amplifies. Too much negative feedback results in less or minimal effect. Too much positive feedback results in unexpected impact or even an ever increasing out of control effect, like a screaming microphone. That is why you should expect the unexpected. By understanding what is happening you can explain why either a low dose or a very high dose may work best for an individual. When you get an unexpected outcome think about why this could be happening and use the insight to plan future management.

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