

OUTLINE AND EVALUATE BIOLOGICAL THERAPIES FOR SCHIZOPHRENIA (8 and 16 marks)



Biological treatments for schizophrenia have proved quite successful. The main option used nowadays is antipsychotics in which there are two types; conventional and atypical.

“Conventional antipsychotics” are based on the dopamine hypothesis and work by blocking D2 receptors to reduce the effects of dopamine and thus reduce the symptoms. Secondly **“atypical antipsychotics”** work by blocking serotonin receptors as well as dopamine. They temporarily occupy the D2 receptors and then rapidly dissociate to allow normal dopamine transmission and so attempt to control both positive and negative symptoms.

However the appropriateness of drug treatment is debatable. While it may be a more humane approach than ECT or restraints that were used in the past and they are relatively cheap (they are free at point of delivery in the UK) and can allow schizophrenics to live a relatively normal life, it is questionable as to whether they are suited for all schizophrenics.

Around 30% of patients appear to be drug resistant. The fact that not all patients respond to the drug's highlight the fact that there must be some other factors involved other than the dopamine system on which the drugs work on. This idea was shown by Vaughn who concluded that antipsychotics did work but only for those living with hostility and criticism at home. This demonstrates clearly that the drugs must interact with environmental triggers and thus may be better used combined with psychological therapies too and so are an incomplete therapy on its own.

Nevertheless, a meta-review by Davis showed the effectiveness of antipsychotics. He found that relapse occurs in 55% of patients taking a placebo drug but only occurred in 19% of those taking the real drug. This would seem to support the use of drugs. However, there is a problem with using placebos as it is not a fair comparison; those taking the placebo would actually be in a state of drug withdrawal and so the previously blocked dopamine system would become flooded and totally overwhelmed with dopamine which could explain the relapses found in the placebo condition. Furthermore, it is illogical to state that drugs do effectively combat schizophrenia when compared to a placebo as 45% of people on the placebo did not relapse which raises questions as to how effective the treatments actually are in comparison.

Even if they did seem effective, a huge problem with the appropriateness of drug treatment is the side effects they cause. Even though atypical's seem to produce less side effects as they bind to receptors for a shorter amount of time, the conventional antipsychotics can lead to type 2 diabetes and tardive dyskinesia which occurs in around 75% of patients and is irreversible in 30% of cases. This raises ethical issues, especially as the schizophrenic might not be in a fit state to give their fully informed consent and so it puts into question the appropriateness of the treatment.

These side effects could affect the effectiveness of the treatment as patients may stop the treatment if they are worried about developing tardive dyskinesia. Furthermore the treatment is not a cure because if the drugs are stopped the symptoms return in over 80% of patients so it seems that they just control the symptoms.

An additional issue is that when using drugs, patients are seen as passive recipients of their treatment and not partners which could lead to disempowerment and helplessness. However they

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can make patients stable enough and have enough insight to be able to take part in psychological therapies like CBT and this could help to empower them in their own treatment.

Further issues with the use of medication is that with those suffering from paranoid schizophrenia who struggle with the belief that they are trying to be controlled by external forces may not be willing to take their medication due to the paranoia that they are being “drugged up” to make them more passive and more able to be controlled by these external forces.

A different biological therapy that has been used in the past is ECT. However it is not a mainstream therapy and was abandoned as a treatment after the discovery of drugs. Nevertheless, the idea behind it was that schizophrenia was rare in people with severe epilepsy so they believed that seizures somehow reduced symptoms.

However, when ECT was compared to drugs, results favoured the drugs. This therefore highlights the effectiveness of drugs and the inappropriateness of ECT.

Overall, despite all the limitations on drug treatment they have shown to improve the quality of life for schizophrenics by allowing them to lead a fairly normal life and they have also been very cost-effective for society as patients can now be treated outside a hospital setting.