Measuring the effectiveness of therapy

There are many issues related to this:

* For how long must a person show a relief from their symptoms?
* Is the total absence of symptoms required?
* Should only observable behavioural changes be used?
* Can quantitative data be used?
* Who decides whether the therapy is successful?

Psychologists use **outcome studies**, which focus on the result, did the patients show improvement or not. The difficulty is that each individual will have experienced the disorder to a different degree.

There is support for the claim that most treatments seem to have some positive effect. **Smith et al** (1980) did a meta-analysis of 475 studies and found that overall most therapeutic approaches seemed to produce improvements. Overall, the researchers imply that it is the act of having therapy that is therapeutic, rather like the placebo effect.

It is worth remembering that all therapies have certain factors in common. For example, they all involve a warm interpersonal relationship, reassurance, support and the opportunity to gain insight into his or her experience. **Bennun and Schindler** (1988) found that the best indicator for success in therapy is how favourably clients rated their therapist during the initial session. Those that like their therapist reported more improvement.

Biomedical approaches to treatment

Background information

Biomedical approaches to treatment are based on the assumption that biological factors are *involved* in the disorder. This does not necessarily mean that biological factors *cause* the disorder, but that they are involved in changes in brain chemistry (neurotransmitters and hormones).

Since the 1950’s the use of psychoactive drugs has become widespread. The drugs typically operate by affecting transmission in the nervous system of neurotransmitters such as dopamine and serotonin. Basically the outcome is to increase or decrease the levels of available neurotransmitter in the synaptic gap.

Why are drugs used?

* They can help change a person’s mood in a positive direction.
* Depending on the severity of the disorder they may be the only appropriate response in order to stabilize a patient. Once stabilized, other treatments can be used.

Issues with the drug approach

* Drugs have side effects.
* There is not a full understanding of how symptoms and neurotransmitters are linked.
* Neither is it known why drugs work for some people and not others.

Biomedical approaches to the treatment of major depressive disorder

These are used to elevate the mood of people suffering from depression. The most common group of drugs used is **SSRI’s** Selective Serotonin Re-uptake Inhibitors. They take 7-14 days to work.

*Explain how SSRI’s work. Use the following clip to help you.*

*[www.youtube.com/watch?v=KispXWwDaOc](http://www.youtube.com/watch?v=KispXWwDaOc)*

*Name two types of SSRI’s*

*State three side effects of SSRI’s*

**Neale et al 2011** conducted a meta-analysis of published studies on the outcome of antidepressants versus placebo. The study found that patients who do not take antidepressants have a 25% risk of relapse, compared to 42% who have been on medication and then stopped it. The researchers concluded that antidepressants interfere with the brain’s natural self regulation and increase the risk of relapse.

Evaluation of biomedical approaches to the treatment of major depressive disorder

+ Drugs are able to help 60-80% of people with depression **Bernstein** **et al 1994**.

+ Most psychiatrists agree that modern drugs provide effective long-term control for mood disorders and may help to prevent suicide.

+ Drugs reduce the need for hospitalization, but lower numbers may also be due to changing ideas with regards to hospital treatment.

- **Kirsch et al 2008** reviewed 47 clinical trials published by the US FDA (Food and Drug Administration), on the effectiveness of antidepressants. Read article via the link on wiki.

They claimed that medical treatment was not more effective than a placebo and that depressed patients can improve without biochemical treatment. According to Kirsch, antidepressants should generally only be prescribed to the most depressed patients OR if alternative methods have failed.

- **Leuchter and Witte 2002** The design was double blind. The 51 patients had their brains scanned over 9 weeks and it was found that although both produced changes in brain functioning, the changes were different. Placebo patients had an increased activity in the pre-frontal cortex; these changes took 1-2 weeks to occur. Whereas antidepressant patients had decreased activity in the pre-frontal cortex, these changes took place within 2 days of starting treatment. It is not known why a placebo works but this study shows that it is better than no treatment. The researchers argue that the brain does not respond in the same way to drugs and placebo but mental health improved in both cases. To conclude it was found that depressive patients receiving drug treatments improved just as well as patients receiving a placebo. This indicates that although medication is effective, there may be other ways to help people who suffer depression.

**- Blumenthal et al 1999** found that exercise was just as effective as SSRI’s in treating depression in an elderly group of patients.

**- Elkin et al 1989** carried out an outcome study that included 28 clinicians who worked with 280 patients diagnosed with MDD. Individuals were randomly assigned to different treatment groups: antidepressant, interpersonal therapy or CBT or another form of therapy. A control group was given a placebo together with weekly therapy sessions. The placebo/drug group was conducted as a double blind design. All patients were assessed at the start, after 16 weeks and after 18 months of treatment.

Results showed that 29% recovered in the placebo group. 50% recovered in the antidepressant (also worked fastest), interpersonal therapy and CBT groups. In conclusion there is no difference in effectiveness between those groups.

**-**Side effects

**-**Drugs are effective in reducing the symptoms but are **not a cure**.

*Think:*

*Would it be acceptable to give patients placebo pills instead of antidepressants?*

*Are pharmaceutical companies and their marketing of antidepressants to blame for their increased use?*

*Write down: Evaluate the use of one approach to the treatment of MDD*

Biomedical approaches to the treatment of bulimia nervosa

People who suffer from bulimia nervosa often suffer from depression also (comorbidity), therefore antidepressants have been investigated as a treatment.

**McGilley and Pryor 1998.** A study with 382 patients using Prozac. Results showed a 29% reduction of vomiting for patients using the drug compared to a 5% reduction for those given a placebo. Higher doses of the drug also resulted in a 67% reduction in binge eating and 56% reduction in vomiting.

These results have been replicated by **Goldstein et al 1995** who found that Prozac reduced binge eating by 51% compared to 17% in patients given a placebo. The **US FDA** has approved the use of Prozac for the treatment of bulimia nervosa based on such studies.