PSYCHOPATHOLOGY

WHAT THE SPEC SAYS:-

- A) definitions of abnormality,
- B) the behavioural, cognitive and emotional characteristics of phobias,
- C) the behavioural, cognitive and emotional characteristics of depression,
- D) the behavioural, cognitive and emotional characteristics of OCD,
- E) the behavioural approach to explaining and treating phobias,
- F) the cognitive approach to explaining and treating depression,
- G) the biological approach to explaining and treating OCD,

A)

- **STATISTICAL INFREQUENCY DEFINITION:** occurs when an individual has a less common characteristic. This model argues that behaviours that are statistically rare should be seen as abnormal. What is regarded as statistically rare depends on normal distribution; most people will be around the mean for the behaviour in question with declining amounts of people away from the mean. Usually any behaviour that has less than 5% of the population doing / showing it, it is perceived as being abnormal. For example, intellectual disability disorder can be identified using this model. The average IQ is sear at 100, and only 2% of people fall below 70. These individuals may be diagnosed with this disorder as such a low IQ is infrequent.
  - **Not all infrequent behaviours are abnormal, in fact some rare behaviours and characteristics are desirable for example high intelligence is statistically rare but desirable.**
  - **Not all abnormal behaviours are infrequent. For example, depression is experienced by around 10% of the population which suggests depression is so common as to NOT be seen as abnormal under this definition.**
  - **A strength of the statistical deviation disorder is that it has real-life application in the diagnosis of intellectual disability disorder. This allows for an objective and value free assessment of the level of mental disability being experienced.**
- **DEVIATION FROM SOCIAL NORMS:** concerns behaviour that is different from the accepted standards of behaviour in a community or society. The definition draws a line between socially desirable and undesirable behaviours, labelling those who do not adhere to what society deems as acceptable at that period in times as mentally abnormal. For example, antisocial personality disorder as one important symptom is an absence of prosocial internal standards and a failure to conform to lawful or culturally ethical behaviour.
  - **A strength is that it allows the consideration of the social dimensions of a behaviour; this means it allows for our understanding that a behaviour may be normal in one situation but not another.**
  - **Many individuals break social norms but they are defined as 'eccentric' rather than mentally ill.**
  - **A problem with this definition is that norms change over time, for example until 1990 homosexuality was classified as a mental illness and sufferers were often subjected to barbaric treatments as a result. This means that we cannot truly define any certain act as 'abnormal' because as norms change so must our beliefs about what constitutes' 'abnormal' behaviour.**
- **FAILURE TO FUNCTION ADEQUATELY:** occurs when someone is unable to cope with ordinary demands of day-to-day living. This behaviour is considered abnormal when it causes distress leading to dysfunction. In order to assess the degree of dysfunction, Rosenhan and Seligman identified seven features of abnormality (e.g. stress, irrationality, unpredictability and the violation of moral standards) and the more features are shown, the more abnormal they are.

For example, schizophrenia is when a person can have disturbing hallucinations which can lead to bizarre behaviour; they experience distress and they can be irrational and unpredictable around other people.

- **A strength is that it allows the assessment of the degree of abnormality. The more symptoms the sufferer shows the more abnormal they are, and therefore practitioners can decide who needs psychiatric help for their mental abnormality.**
- **However, abnormality is not always accompanied by dysfunction; for example psychopaths can commit murder and still appear normal.**
- **There is a problem over deciding who has the right to define behaviour as dysfunctional, for example what may be seen as irrational and unpredictable to one person may not seem so to another.**

- **DEVIATION FROM IDEAL MENTAL HEALTH:** occurs when someone does not meet a set of criteria for good mental health. Rather than identifying what is abnormal, Jahoda identified six characteristics of what is to be normal and an absence of these characteristics indicated abnormality e.g. positive attitude to one's self, resisting stress, autonomy, self-actualisation. The more they fail to meet, the further away from normality they are. This definition therefore perceives mental abnormality in a similar way to the perception of physical health and looks for an absence of wellbeing. For example, depression illustrates this definition as sufferers generally have low self-esteem, they can struggle to make decisions and they experience high levels of stress concerning their low mood condition.

- **A strength is that it takes a positive approach to mental problems by focusing on what is desirable rather than what is undesirable.**
- **This definition has been accused of having an over demanding criteria – at any given moment most people do not meet all the ideas so in effect we are all 'abnormal.'**
- **The criteria is also difficult to measure. Jahoda argued that mental health can be considered like physical health but diagnosing mental health is far more subjective in the absence of x-rays ect…**

B)

BEHAVIOURAL

- **PANIC:** a phobic person may panic is response to the presence of the phobic stimulus. Panic may involve a range of behaviours including crying, screaming or running away. Children may react slightly differently, for example by freezing, clinging or having a tantrum.
- **AVOIDANCE:** unless a sufferer makes a conscious effort to face their fear they tend to go to a lot of effort to avoid coming into contact with the phobic stimulus. This can make it hard to go about daily life.
- **ENDURANCE:** the alternative to avoidance is endurance, in which a sufferer remains in the presence of the phobic stimulus but continues to experience high levels of anxiety. This may be unavoidable in some situation, for example for a person who has an extreme fear of flying.

EMOTIONAL

- **ANXIETY:** phobias are classes as anxiety disorders and so by definition they involve an emotional response of anxiety and fear. Anxiety is an unpleasant state of arousal. This prevents the sufferer relaxing and makes it very difficult to experience any positive emotion. Anxiety can be long term. Fear is the immediate and extremely unpleasant response we experience when we encounter or think about the phobic stimulus.
- **UNREASONABLE:** emotional responses are unreasonable. For example, the anxiety and fear produced from the fear of seeing a spider is wildly disproportionate to the danger posed by the spider itself.

COGNITIVE

- **SELECTIVE ATTENTION:** if a sufferer can see the phobic stimulus it is hard to look away from it. Keeping our attention on something really dangerous is a good thing as it gives us the best chance of reacting quickly to a threat, but this is not us useful when the fear is irrational. A pogonophobic will struggle to concentrate on what they are doing if there is someone with a beard in the room.
- **IRRATIONAL BELIEFS:** the phobic will know that their beliefs are irrational. However, this kind of belief increases the pressure on the sufferer to perform well in social situations.
- **COGNITIVE DISTORTIONS:** the phobic's perceptions of the phobic stimulus may be distorted. For example, an omphalophobic is likely to see belly buttons as ugly and/or disgusting.

C)

BEHAVIOURAL

- **ACTIVITY LEVELS:** typically sufferers of depression have reduced levels of activity, making them lethargic. This has a knock-on effect, with sufferers tending to withdraw from work, education and social life. In extreme cases this can be so severe that the sufferer cannot get out of bed. In some cases depression can lead to the opposite effect – known as psychomotor agitation. Agitated individuals struggle to relax and may end up pacing up and down a room.
- **DISTRUPTION TO SLEEP AND EATING BEHAVIOUR:** depression is associated with changes to sleeping behaviour. Sufferers may experience reduced sleep, particularly premature waking, or an increases need for sleep. Similarly, appetite and eating may increase or decrease, leading to weight gain or loss. The key point is that such behaviours are disrupted by depression.
- **AGGRESSION AND SELF-HARM:** sufferers of depression are often irritable, and in some cases they can become verbally or physically aggressive. This can have serious knock-on effects on a number of aspects of their life. Depression can also lead to physical aggression directed against the self. This includes self-harm, often in the form of cutting, or suicide attempts.

EMOTIONAL

- **LOWERED MOOD:** this is a defining element of depression and is more pronounced than in the daily kind of experience of feeling lethargic and sad. Patients often describe themselves as 'worthless' and 'empty.'
- **ANGER:** sufferers of depression frequently experience anger, sometimes extreme anger. This can be directed at the self or others. On occasion such emotions lead to aggressive or self-harming behaviour.
- **LOWERED SELF-ESTEEM:** self-esteem is the emotional experience of how much we like ourselves. Sufferers of depression tend to report reduced self-esteem, in other words they like themselves less than usual. This can be quite extreme, with some sufferers of depression describing a sense of self-loathing.

COGNITIVE

- **POOR CONCENTRATION:** the sufferer may find themselves unable to stick with a task as they usually would, or they might find it hard to make decisions that they would normally find straightforward. Poor concentration and poor decision making are likely to interfere with the individual's work.
- **NEGATIVE THOUGHTS:** sufferers are declined to pay more attention to negative aspects of a situation and ignore the positives. Sufferers also have a bias towards recalling unhappy events rather than happy ones.
- **ABSOLUTIST THINKING:** most situations are not all-good or all-bad, but when a sufferer is depressed they tend to think in these terms. They sometimes call this 'black and white thinking'. This means that when a situation is unfortunate they tend to see it as an absolute disaster.

D)

BEHAVIOURAL

- **COMPULSIONS:**
  1. COMPULSIONS ARE REPETITIVE- sufferers of OCD feel compelled to repeat a behaviour. A common example is hand washing.
  2. COMPULSIONS REDUCE ANXIETY- around 10% of sufferers show compulsive behaviour alone. The vast majority of compulsive behaviours are performed in an attempt to mange the anxiety produced by obsessions.
- **AVOIDANCE:** some sufferers attempt to reduce anxiety by keeping away from the situations that trigger it and this can in itself interfere with leading a normal life.

EMOTIONAL

- **ANXIETY AND DISTRESS:** powerful anxiety accompanies both obsessions and compulsions. Obsessive thoughts are unpleasant and frightening and the anxiety that goes with these can be overwhelming.
- **ACCOMPANYING DEPRESSION:** anxiety can be accompanied by low mood and lack of enjoyment in activities. Compulsive behaviour tends to bring some relief from anxiety but this is temporary.
- **GUILT AND DISGUST:** OCD sometimes involves other negative emotions such as irrational guilt or disgust, which may be directed against something external like guilt or at the self.

COGNITIVE

- **OBSESSIVE THOUGHTS:** for around 90% of OCD sufferers the major cognitive feature of their condition is obsessive thoughts. These vary from person to person but are always unpleasant. An example is worries of being contaminated by dirt and germs.
- **COGNITVE STRATEIGIES TO DEAL WITH OBSESSIONS:** people respond to obsessions by adopting cognitive coping strategies. These may help manage anxiety but can make the person appear abnormal to others and can distract them from everyday tasks.
- **INSIGHT INTO EXCESSIVE ANXIETY:** people suffering from OCD are aware that their obsessions and compulsions are not rational. In fact this is necessary for a diagnosis of OCD as if someone believed their obsessive thoughts were based on reality that would be a symptom of a quite different form of a mental disorder.

E)

- **EXPLAINING PHOBIAS: THE TWO-PROCESS MODEL**

The behavioural approach emphasises the role of learning in the acquisition of behaviour. In 1960 Hobart Mowrer proposed the two-process model based on the behavioural approach to phobias. This starts that phobias are acquired (learned in the first place) by classical conditioning and then continue because of operant conditioning.

ACQUISITION BY CLASSICAL CONDITIONING- classical conditioning involves learning to associate something of which we already have no fear (neutral stimulus) with something that already triggers a fear response (unconditioned stimulus). In 1920 John Watson created a phobia in a 9-month-old baby called 'Little Albert'. Albert showed no unusual anxiety at the start of the study. When shown a white rat he tried to play with it. However, the experimenters then set out to give Albert a phobia. Whenever the rat was presented they made a loud, frightening noise by banging an iron bar close to Albert's ear. This noise is an unconditioned stimulus which creates an unconditioned response of fear. When the rat a neutral stimulus and the unconditioned stimulus are encountered close together in time the NS becomes associated with the UCS and both now produce the fear response – Albert became frightened when he saw the rat. The rat is now a conditioned response. This condition then generalised to similar objects. For example, he

displayed distress to the sight of a non-white rabbit, a fur coat and Watson wearing a Santa Claus beard made out of cotton balls.

MAINTENANCE BY OPERANT CONDITIONING- responses acquired by classical conditioning usually tend to decline over time. However, phobias are often long lasting. Mowrer had explained this as the result of operant conditioning. This takes place when out behaviour is reinforced or punished. Reinforcement tends to increase the frequency of a behaviour. This is true of both negative and positive reinforcement. Mowrer suggested that whenever we avoid a phobic stimulus we successfully escape the fear and anxiety that we would have suffered if we had remained there. This reduction in fear reinforces the avoidance behaviour and so the phobia is maintained. This is an example of negative reinforcement.

- **The two-process model was a definite step forward when it was proposed in 1960 as it went beyond Watson and Rayner's concept of classical conditioning. It explained how phobia's could be maintained over time and this had important implications for therapies because it explains why patients need to be exposed to their feared stimulus. Once a patient is prevented from practising their avoidance behaviour the behaviour ceases to be reinforced and so it declines. The application to therapy is a strength of the two-process model.**
- **There are some aspects of phobic behaviour that require further explaining. In 2007 Bounton points out, that evolutionary factors probably have an important role in phobias but the two-factor theory does not mention this. For example, we easily acquire phobias of things that have been a source of danger in our evolutionary past, such as fears of snakes or the dark and this is called biological preparedness. However, it is quite rare to develop a fear of cars or guns, which are actually much more dangerous to most of us today than spiders or snakes. Presumably this is because they have only existed very recently and so we are not biologically prepared to learn fear responses towards them. This phenomenon of preparedness is a serious problem for the two-process theory because it shows there is more to acquiring phobias than simple conditioning.**
- **Sometimes people develop a phobia and are not aware of having had a related bad experience and this is a limitation that the two-process model does not explain.**

- **TREATING PHOBIAS:**

SYSTEMATIC DESENSITISATION- this is a behavioural therapy designed to gradually reduce phobic anxiety through the principle of classical conditioning. If the sufferer can learn to relax in the presence of the phobic stimulus they will be cured. Essentially a new response to the phobic stimulus is learned and this is called counter conditioning. It addition it is impossible to be afraid and relaxed at the same time, so one emotion prevents the other. This is called reciprocal inhibition. There are three processes involved in SD : Firstly, THE ANXIETY HIERARCHY is put together by the patient and therapist. This is a list of situations related to the phobic stimulus that provoke anxiety arranged in order from least to most frightening. Secondly, RELAXATION the therapist teaches the patient to relax as deeply as possible. This might involve breathing exercises or, alternatively, the patient might learn mental imagery techniques. Finally, EXPOSURE the patient is exposed to the phobic stimulus while in a relaxed state. This takes places across several sessions, starting at the bottom of the anxiety hierarchy and moving up. Treatment is successful when the patient can stay relaxed in situations high on the anxiety hierarchy.

- **Research shows that SD is effective in the treatment of specific phobias. For example, in 2003 Gilroy followed up 42 patients who had been treated for spider phobia in three 45 minute sessions of SD. A control group was treated by relaxation without exposure. At both three months and 33 months after the treatment the SD group were less fearful than the relaxation group. This is a strength because is shows that SD is helpful in reducing the anxiety in spider phobia and that the effects are long-lasting.**
- **The alternatives to SD – flooding and some cognitive therapies are not well suited to some patients. For example, those with learning difficulties. As this can make it**

very hard for some patients to understand what is happening during flooding or to engage with cognitive therapies that require the ability to reflect on what you are thinking. For these patients SD is probably the most appropriate treatment.

- **A strength of SD is that patients prefer it. Those given the choice of SD or flooding tend to prefer SD. This is largely because it does not cause the same degree of trauma as flooding.**

FLOODING- flooding involves immediate exposure to a very frightening situation. Flooding sessions are typically longer than SD sessions as one can usually last two or three hours. Sometimes only one long session is needed to cure a phobia. Classical conditioning terms this process as extinction. A learned response is extinguished when the conditioned stimulus is encountered without the unconditioned stimulus. The result is that the conditioned stimulus no longer produces the conditioned response. Flooding is not unethical but it is an unpleasant experience so it is important that patients give fully informed consent to this traumatic procedure and that they are fully prepared before the flooding session.

- **Flooding is highly effective and quicker than alternatives. This quick effect is a strength because it means that patients are free of their symptoms as soon as possible and that makes this treatment cheaper.**
- **Flooding appears to be less effective for more complex phobias like social phobias. This may be because social phobias have cognitive aspects. This type of phobia may benefit more from cognitive therapies because such therapies tackle the irrational thinking.**
- **Perhaps the most serious issue for flooding is the fact that it is a highly traumatic experience. The problem is not that flooding is unethical but that patients are often unwilling to see it through to the end. This is a limitation because time and money are sometimes wasted preparing patients only to have them refuse to start or complete treatment.**

F)

- **EXPLAINING DEPRESSION:**

BECK'S COGNITIVE THEORY OF DEPRESSION- In 1967 American Psychiatrist Aaron Beck suggested a cognitive approach to explaining why some people are more vulnerable to depression than others. FAULTY INFORMATION PROCESSING, when depressed we attend to the negative aspects of a situation and ignore positives. We also tend to blow small problems out of proportion and think in 'black and white' terms. NEGATIVE SELF-SCHEMAS this is a package of ideas and information developed through experience. They act as a mental framework for the interpretation of sensory information. A self-schema is the package of information we have about ourselves. We use schemas to interpret the world, so if we have a negative self-schema we interpret all information about ourselves in a negative way. THE NEGATIVE TRIAD a person develops a dysfunctional view of themselves because of three types of negative thinking that occur automatically, regardless of the reality of what is happening at the time and this is the negative triad. A) Negative view of the world. B) Negative view of the future. C) Negative view of the self.

- **This theory of depression has good supporting evidence. For example, in 2000 Grazioli and Terry assessed 65 pregnant women for cognitive vulnerability and depression before and after birth. They found that those women judged to have been high in cognitive vulnerability were more likely to suffer post-natal depression.**
- **A strength of this explanation is that it forms the basis of a cognitive behavioural therapy. All cognitive aspects of depression can be identified and challenged in CBT. These include the components of the negative triad that are easily identifiable. This means a therapist can challenge them and encourage the patient**

to test whether they are true. This is a strength of the explanation because it translates well into a successful therapy.

- **Beck's theory explains neatly the basic symptoms of depression, however depression is complex. Some depressed patients are deeply angry and Beck cannot easily explain this extreme emotion. Some sufferers of emotion also suffer from hallucinations and bizarre beliefs. Very occasionally depressed patients suffer Cotard syndrome, the delusion that they are zombies. Beck's theory cannot easily explain these cases.**

ELLIS'S ABC MODEL- In 1962 Albert Ellis suggested a different cognitive explanation of depression. He proposed that good mental health is the result of rational thinking, defined as thinking in ways that allow people to be happy and free of pain. To Ellis, conditions like anxiety and depression result from irrational thoughts. He used the ABC model to explain how irrational thoughts affect our behaviour and emotional state. A – ACTIVATING EVENT Ellis focused on situations in which irrational thoughts are triggered by external events. According to Ellis we get depressed when we experience negative effects and these trigger irrational beliefs. B – BELIEFS Ellis called the belief that we must always succeed or achieve perfection 'musturbation'. 'I-can't-stand-it-itis' is the belief that it is a major disaster whenever something does not go smoothly. C – CONSEQUENCES when an activating event triggers irrational beliefs there are emotional and behavioural consequences. For example, if you believe you must always succeed and then fail at something this can trigger depression.

- **There is not doubt that some cases of depression follow activating events. Psychologists call this reactive depression and see it as different from the kind of depression that arises without an obvious cause. This means that Ellis's explanation only applies to some kinds of depression and is therefore only a partial explanation for depression.**
- **A strength of this explanation is that it has led to a successful therapy. The idea that, by challenging irrational negative beliefs, a person can reduce their depression is supported by research evidence. This is turn supports the basic theory because it suggests that the irrational beliefs had some role in the depression.**
- **This explanation does not explain the anger associated with depression or the fact that some patients suffer hallucinations and delusions.**

- TREATING DEPRESSION: COGNITIVE BEHAVIOUR THEORY

CBT is the most commonly used psychological treatment for depression and a range of other mental health problems. CBT begins with an assessment in which the patient and the cognitive behaviour therapist work together to clarify the patient's problems. They jointly identify goals for the therapy and put together a plan to achieve them. One of the central tasks is to identify where there might be negative or irrational thoughts that will benefit from challenge. CBT then involved working to change negative and irrational thoughts and finally put more effective behaviours into place. Some CBT therapists do this by using techniques purely from Beck's cognitive therapy or Ellis's rational emotive behaviour therapy. Most draw on both.

CBT: Beck's cognitive therapy- the idea behind cognitive therapy is to identify automatic thoughts about the world, the self and the future. Once identified these thoughts must be challenged. This is the central component of the therapy. As well as challenging these thoughts directly, cognitive therapy aims to help patients test the reality of their negative beliefs. They might therefore be set homework such as to record when they enjoyed an event or when people were nice to them. In future sessions if patients say that on one is nice to them or there is no point in going to events , the therapist can then produce this evidence and use it to prove the patient's statements are correct.

CBT: Ellis's rational emotive behaviour therapy (REBT)- this extends the ABC model to the ABCDE model. D stands for dispute and E for effect. The central technique of REPT is to identify and dispute irrational thoughts. Ellis identified different methods of disputing. For example, empirical argument involves disputing whether there is actual evidence to support the negative

belief. Logical argument involves disputing whether the negative thought logically follows the facts.

- **There is a large body of evidence to support the effectiveness of CBT for depression. For example, a study by March et al in 2007 compared the effects of CBT with antidepressant drugs and a combination of the two in 327 adolescents with a main diagnosis of depression. After 36% weeks 81% of the CBT group, 81% of the antidepressants group and 86% of the CBT plus antidepressants group were significantly improved. This suggests that there is a good case for making CBT the first choice of treatment in public health care systems like the national health system.**
- **Some cases of depression can be so severe that patients cannot motivate themselves to engage with the hard cognitive work of CBT. They may not even be able to pay attention to what is happening in a session. Although it is possible to work around this by using medication, this is a limitation of CBT because it means it cannot be used as the sole treatment for all cases of depression.**
- **One of the basic principles of CBT is that the focus in therapy is on the present and the future, not the patient's past. This is in contrast to some other forms of psychological therapy. Some patients are aware of the link between their childhood experiences and current depression and want to talk about their experiences. They can find this 'present-focus' very frustrating.**

G)

- **EXPLAINING OCD:**

GENETIC EXPLANATIONS- OCD is a condition that largely understood as biological in nature. Genes are involved in individual vulnerability to OCD. Lewis in 1936 observed that of his OCD patients 37% had parents with OCD and 21% had siblings with OCD. This suggests that OCD runs in families, although what is probably passed on from one generation to the next is genetic vulnerability not the certainty of OCD. According to the diathesis-stress model certain genes leave some people more likely to suffer a mental disorder but it is not certain – some environmental stress is necessary to trigger the condition. CANDIDATE GENES: researchers have identified genes, which create vulnerability for OCD, called candidate genes. Some of these are involved in regulating the development of the serotonin system. OCD IN POLYGENIC: this means that OCD is not causes by a single gene but that several genes are involved. DIFFERENT TYPES OF OCD: one group of genes that cause OCD in one person but a different group of genes may cause the disorder in another person. The term used to describe this is aetiologically heterogeneous. There is also some evidence to suggest that different types of OCD may be the result of particular genetic variations, such as hoarding disorder and religious obsession.

- **There is evidence from a variety of sources for the idea that some people are vulnerable to OCD as a result of their genetic make-up. One of the best sources of evidence is twin studies. For example, in 2010 Nestadt reviewed previous twin studies and found that 68% of identical twins shared OCD as opposed to 31% of non-identical twins. This strongly suggests a genetic influence on OCD.**
- **Psychologists have been unsuccessful in pinning down all the genes involved in OCD. One reason for this is because it appears that several genes are involved and that each genetic variation only increases the risk of OCD by a fraction. The consequence is that a genetic variation is unlikely to ever be very useful because it provides little predictive value.**
- **Environmental factors can also trigger or increase the risk of developing OCD. For example, in 2007 Cromer found that over half the OCD patients in his sample had a traumatic event in their past, and that OCD was more severe in those with more than one trauma. This suggests that OCD cannot be entirely genetic in origin, at**

least not in all cases. It may be more productive to focus on the environmental causes because we are more able to do something about these.

NEURAL EXPLANATIONS- The genes associated with OCD are likely to affect the levels of key neurotransmitters as well as structures of the brain. These are neural explanations. THE ROLE OF SEROTONIN: this is a neurotransmitter which is believed to help regulate mood. If a person has low levels of serotonin then normal transmission of mood-relevant information does not take place and mood and sometimes other mental processes are affected. At least some cases of OCD may be explained by a reduction in the functioning of the serotonin system in the brain. DECISION-MAKING SYSTEMS: some cases of OCD seem to be associated with impaired decision making. This in turn may be associated with abnormal functioning of the lateral (side bits) of the frontal lobes of the brain as these are responsible for logical thinking and making decisions. There is also evidence to suggest that an area called the left parahippocampal gyru, associated with processing unpleasant emotions, functions abnormally in OCD.

- **There is evidence to support the role of some neural mechanisms in OCD. For example, some antidepressants work purely on the serotonin system, increasing levels of this neurotransmitter. Such drugs are effective in reducing OCD symptoms and this suggests that the serotonin system is involved in OCD.**
- **Research has also identified other brain symptoms that may be involved sometimes but not system has been found to always play a role in OCD. We cannot therefore really claim to understand the neural mechanisms involved in OCD.**
- **There is evidence to suggest that various neurotransmitters and structures of the brain do not function normally in patients with OCD. However, this is not the same as saying that this abnormal functioning causes the OCD. These biological abnormalities could be a result of OCD rather than its cause.**

- **TREATING OCD: DRUG THERAPY**

Drug therapy for disorders aims to increase or decrease levels of neurotransmitters in the brain or to increase/decreases their activity.

SSRIs- the standard medical treatment used to tackle the symptoms of OCD involves a particular type of antidepressant drug called a selective serotonin reuptake inhibitor. SSRIs work on the serotonin system in the brain. Serotonin is released by certain neurons in the brain. It is released by the presynaptic neurons and travels across a synapse. The neurotransmitter chemically conveys the signal from the presynaptic neuron where it is broken down and re-used. By preventing the re-absorption and breakdown of serotonin SSRIs effectively increase it's levels in the synapse and thus continue to stimulate the postsynaptic neuron. This compensates for whatever is wrong with the serotonin system in OCD. Dosage and other advice vary according to which SSRI is prescribed. A typical daily dose of Fluoxetine is 20mg although they may be increases if it is not benefiting the patient. The drug is available as capsules or liquid. It takes three to four months of daily use of SSRIs to have much impact on symptoms.

COMBINING SSRIs WITH OTHER TREATMENTS- drugs are also used alongside CBT to treat OCD. The drugs reduce a patient's emotional symptoms, such as feeling anxious or depressed. This means that patients can engage more effectively with the CBT.

ALTERNATIVES TO SSRIs- where an SSRI is not effective after three to four months the dose can be increased or it can be combined with other drugs. Alternatives work well for some people and not at all for others. TRICYCLICS are sometimes used, such as Clomipramine. These have the same effect on the serotonin as SSRIs but more severe side-effects and so are kept in reserve for patients do not respond to SSRIs. SNRIs: these are serotonin-noradrenaline reuptake inhibitors. These are a second line of defence for patients who don't respond to SSRIs and they increase the levels of serotonin as well as another different neurotransmitter – noradrenaline.

- **An advantage of drug treatments in general is that they are cheap compared to psychological treatments. Using drugs to treat OCD is therefore good value for a public health system like the NHS. As compared to psychological therapies SSRIs are also non-disruptive to patients' lives.**

- **Drugs can have side-effects. For example, some patients suffer from indigestion, blurred vision and loss of sex drive. These side effects are usually temporary. Such factors reduce effectiveness because people stop taking the medication.**
- **OCD is widely believed to be biological origin. It makes sense, therefore, that the standard treatment should be biological. However, it is acknowledged that OCD can have a range of other causes, and that in some cases it is a response to a traumatic life event. This may mean that drugs are not the appropriate form of treatment for this type of OCD.**