METHODOLOGY
CHAPTER 3

METHODOLOGY

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METHODOLOGY

3.1 STATEMENT OF THE PROBLEM

The present research aims is the management of psychological problems, viz., Anxiety, Phobia and Dissociative Disorder with the use of three psychological intervenes and techniques of (1) cognitive (2) systematic desensitization (3) progressive muscular relaxation. We have to find out the relative efficacy of these techniques. In the treatment of psychological problems with behavior therapy. It is necessary to start with progressive muscular relaxation before the application of cognitive behavior therapy and systematic desensitization the patients have to be given the muscle relaxation.

Thus, the aim of the present results is to see the relative impact of psychological treatment techniques for the treatment of the problems of the patients.

3.2 HYPOTHESIS

It is hypothesized that the treatment techniques applied will be effective and there will be no relapse.
3.3 RESEARCH DESIGN

The present study proposes to apply the psychological intervention techniques for the treatment of cases of anxiety, phobia and dissociative reactions. It is a **qualitative and utility research**. Since the research is concerned with the treatment of psychological problems and thus improving their ability to adjust in the society and family make it a **qualitative research**.

**Utility research** is research in which the subjects of the study are the direct beneficiary of the research (Dubey, 2002). The present research proposes to treat the problems of the patient thus they were directly benefited and put in this research in the category of utility research.

We have used a before after experimental model to assess the impact of psychological intervention to the people suffering from psychological disorders. The impact of the intervention techniques has also been assessed during the follow up programmes after the sixth months of the treatment.

3.4 SAMPLE

The study is related to three neurotic disorders viz., Anxiety, Phobia and Dissociative disorders. In each disorder there were 10 patients. The sample of the study has been selected from the department of psychiatry, King George Medical College, Lucknow and various psychological
clinics in Lucknow. The subjects were categorized by the clinicians in three neurotic disease Anxiety, Phobia and Dissociative Disorder it is also called hysterical neurosis. All the patients in anxiety were categorized in generalized anxiety disorder, phobic patients were related to Nyctophobia (darkness) and in dissociative disorder all the patient were related to dissociative identity disorder. The characteristic of the sample is presented in table-1.

**Table-1 : Presenting the Sample of the study**

<table>
<thead>
<tr>
<th>Characteristics of Patients</th>
<th>Anxiety</th>
<th>Phobia</th>
<th>Dissociative Disorder</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Patients</td>
<td>Male</td>
<td>Female</td>
<td></td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Age range (Yrs.)</td>
<td>30-40</td>
<td>30-40</td>
<td>30-40</td>
</tr>
<tr>
<td>Educational standard</td>
<td>Graduation</td>
<td>Graduation</td>
<td>Graduation</td>
</tr>
<tr>
<td>Income</td>
<td>10,000</td>
<td>10,000</td>
<td>10,000</td>
</tr>
<tr>
<td>Duration of illness (Yrs.)</td>
<td>1-2</td>
<td>1-2</td>
<td>1-2</td>
</tr>
</tbody>
</table>

A sample of 30 patients of which 10 were in each category of disorder anxiety, phobia and dissociative reactions were selected for the present study. Their age range was 30-40 years, their educational standard was graduation, and their monthly income was 10,000.
3.5 THERAPEUTIC TECHNIQUES APPLIED

The study is related to three neurotic disorders Anxiety, Phobia and Dissociative Disorder. There are 10 patients in each disorder. The patients were characterized by the clinicians in different categories of psychological problems. Thereafter the following treatment techniques were applied in different combinations:

1. Cognitive Behavior Therapy
2. Systematic Desensitization
3. Jacobson’s Progressive Muscular Relaxation Technique

3.5.1 Cognitive Behavior Therapy

Behavior therapy is the attempt to utilize systematically that body of empirical and theoretically knowledge which has resulted from the application of the experimental method in psychology and its closely related disciplines (Physiology and neurophysiology) in order to explain the genesis and maintenance of abnormal patterns of behavior and to apply that knowledge to the treatment or prevention of those abnormalities by means of controlled experimental studies of the single case, both descriptive and remedial.

The objective of this therapy is the provision of new learning opportunities; e.g. to detach anxiety from innocuous events or to teach the missing skills that produce discomfort and to examine the problem in
historical perspective and search for the 'hidden causes' of problem behaviors, taking no positive action about the aberrant behavior itself. The behavioral approach alternatively looks very particularly at habits or symptoms as they currently exists and may well pay little or no attention to the individuals history.

This is a technique which has been used, e.g. by Paul in 1966 to measure public speaking anxiety. The test involved having subjects give a short speech before a small audience while trained observes rated the occurrence of visible aspects of anxiety. This technique has since been modified to assess anxiety produced by other stimuli and also effective in all neurosis.

In this study, each 10 patients as all neurotic disorder is under the treatment of the cognitive therapy show the better response of anxiety patient. Depression patient also show the better performance in daily routine they also practice daily the thoughts and theoretical knowledge. Symptoms are also reduced day by day. The patients feels relax situation and his orientation in time place should be formally assessed by direct questioning.

3.5.2 Systematic Desensitization

Systematic desensitization is one of a variety of methods for breaking down neurotic anxiety response habits in present days. A physiological
state inhibitory of anxiety is induced in the patient by means of muscle relaxation and he is then exposed a weak anxiety arousing stimulus for a few seconds. If the exposure is repeated several times, the stimulus progressively loses its ability to evoke anxiety. This method has given us the power to overcome a great many neurotic habits, often in a short time and also affect those neuroses in which the stimuli controlling the neurotic reactions were in no way brought into the interpersonal situations in which the assertive behavior was induced.

The potency of relaxation in systematic desensitization has been experimentally demonstrated. Working independently on spider and snake phobias. The basis for desensitization may be not emotional reconditioning but changing the subjects cognitions about his internal reactions to the feared object. Another idea that has recently been put forward is that much of the effect of systematic desensitization depends on therapeutic instructions.

In this technique anxiety hierarchy is a list of stimuli on a theme, ranked according to the amount of anxiety the stimulus evoking greatest anxiety at the top of the list. Some times hierarchy construction is an easy matter. The raw data from which hierarchies are constructed come from four main sources:

(a) The patient history
(b) Responses to the Willoughby questionnaire which reveals anxieties mainly in certain interpersonal contexts

(c) Fear survey schedule

(d) Special probing into situations in which the patient feels unadaptive anxiety.

The most preferred method for the treatment of fears and phobias has, of course been the use of systematic desensitization, following the procedures advocated by Wolpe (1961) training in relaxation, the construction of hierarchies systematically and with the usual precautions. It will be remembered that the same alternatives arises here as in the case of the measurement of the strength of a phobia. That is, the desensitization procedure may be carried out in the absence of the real objects of fear by imaging the objects visually or it can be carried out by direct exposure to real objects which approximate successively the objects producing the greatest amount of fear. Wolpe has argued generally that the reduction in anxiety generated to real situations almost completely.

Sometimes, the inadequacies of a hierarchy become evident only after attempts as desensitization have begun when it may be seen that the anxiety level does not diminish after repeated presentations of the week. Constructing hierarchies is whether the items constitute a reasonably
evenly-spaced progression. If items are too similar, time will be wasted; if adjacent items differ too widely in anxiety-evoking potential, progress will be halted upon moving from the lesser to the greater. The patient may even occasionally be further sensitized, i.e. conditioned to higher levels of anxiety as the result of severe anxiety being evoked. In phobias in which anxiety increases with proximity to the feared objects small changes in the physical dimension affect anxiety more with increasing closeness of the object.

The first desensitization session is introduced by saying “I am now going to get you to relax; and when you are relaxed, I will ask you to imagine certain scenes. Each time a scene is clear in your mind indicate this by raising your index finger. While the patient sits or lies comfortably with his eyes closed, the process to bring about as deep as possible a state of relaxation by the use of such words as the following: now your whole body becomes progressively heavier and all your muscles relax, let go more and more completely. We shall give your muscles individual attention.

1. Relax the muscles of your forehead (Pause 5-10 seconds).
2. Relax the muscles of your jaws and those of your tongue (Pause).
3. Relax the muscles of your eyeballs.
4. The more you relax, the calmer you become (Pause).
5. Relax the muscle of your neck (Pause).

6. Let all the muscles of your shoulders relax. Just let yourself go (Pause).

7. Now relax your arms (Pause).

8. Relax all the muscles of your trunk (Pause).

9. Relax the muscles of your lower limbs. Let your muscles go more and more. You feel so much at ease and so very comfortable”.

Desensitization session, which is always partly exploratory it seeks some feed back about the state of the patient, asking him to state on the subjective scale how much anxiety he feels. Since visualization was clear and there was evidence of decrease of anxiety with each repetition of a scene.

In the present study the patients of each neurotic disorder is under the treatment of systematic desensitization. In this technique the hierarchy construction is a list of stimuli on a theme, ranked according to the amount of anxiety we evoke. The another method is relaxation in which patient sits or lies position, comfortably with his eyes closed go as deep as possible a state of relaxation. This technique revised three times in a day. The anxiety patients symptoms reduced by more practice, they all practiced this exercise three times in a day. After completing his task the patient feel relax and visualization was clear and there was evidence of
decrease of anxiety with each repetition of scene. Phobic patient also cooperate in specific undertakings that involves placing himself in situations of which he is afraid, there was a strong tendency to apply a standard technique and then assess any change in the patients phobic state. After treatment of phobic patient the symptom are reduced in long processing under the treatment of systematic desensitization technique.

3.5.3 Jacobson’s Progressive Muscular Relaxation Technique

The method is called ‘progressive’ as it proceeds through all the major muscle groups, contracting and relaxing them. One at a time leading eventually to a completely relaxed state. When a group of muscles is tensioned for a few seconds and then instantly relaxed a greater decrease of tension may be achieved. Progressive relaxation can be used to relax the body completely or to relax only certain parts.

Dr. L.E. Burns, Area Department of clinical psychology, Birch Hall Hospital, Rochdale OL129QN. Lancashire has been given the following instructions by a tape recording of relaxation instructions method and exercises.

Relaxation of the arms

- Sit back in your chair as comfortably as possible, breath in and out normally close your eyes and relax.

- Keep relaxed but clench your right first.
• Make the muscles of your lower arm and hand even tighter.

• Monitor the feelings of tension.

• Now relax; let all tension go.

• Allow the muscles of your lower arm and hand to become completely limp and loose.

• Notice the contrast in the feelings.

• Again clench your right first-tighter and tighter.

• Hold the tension and monitor the feelings.

• Relax, there should be no signs of tension in your hand or lower arm.

• Notice the feelings of relaxation again.

• Press harder: make the muscles more tense.

• Now tense the right biceps again.

• Make the muscles harder, tighter, more tense.

• Monitor the feelings of tension.

• Relax. Let the tension go completely.

Concentrate on the whole of your right arm. Relax it now, more and more deeply; relax it further and further.

**Relaxation of the Facial Muscles**

• Focus on your forehead muscles.

• Raise your eyebrows upward (keeping your eyes closed) and wrinkle your forehead
• Relax; smooth it out; let the tension go completely.
• Now contract the forehead muscles-raise the eyebrows, frown, wrinkle the muscles.
• Study the feelings of tension.
• Relax; smooth the forehead muscles.
• Observe the pleasant feelings of relaxation in the muscles.
• Pay attention to your eyes, upper cheeks and nose.
• Squint the eyes tightly; wrinkle the nose.
• Examine the feelings of relaxation-allow the muscles to become even more deeply relaxed.
• Once again, tense the eyes, upper cheeks and nose.
• Now make the muscles considerably more tense.
• Reflect on the feelings of tension.
• Relax totally.
• Now concentrate on your jaws and chin.
• Clench your jaws; bite your teeth; pull the side of your mouth outwards.
• Now focus on the whole of your face.
• Allow all the muscles to become more and more deeply relaxed. No signs of tension; no signs of firmness.
• Let the relaxation develop; let it grow deeper and deeper.
Relaxation of the Neck Muscles

- Concentrate on the neck muscles.
- Press your head firmly against the back of the chair.
- Press back with more force, making the muscles more and more taut.
- Monitor the feelings of tautness.
- Relax. Let the tension dissipate completely.
- Repeat the exercise tensing the neck muscles.
- Again, perceive the feelings of pressure.
- Relax-let it go.
- Monitor the enjoyable sensations of relaxation.

Relaxation of the shoulders, chest, lower back and stomach

- Relax your whole body completely.
- Take a slow deep breath.
- Notice the feelings of relaxation while breathing in and out normally.
- Again observe the feelings of tightness.
- Breath in and out normally.
- Enjoy the relaxation feelings.
- Concentrate on the stomach muscles.
- Now relax; let all signs of tension go.
• Focus now on the whole of the pain part of your body-shoulders, chest and stomach.

• Let the whole of this area become more and more relaxed, give in to the feelings of relaxation completely. Allow yourself to become more and more deeply relaxed.

**Relaxation of the thighs, calves and feet**

• Press your right heel into the floor. Press it down harder.

• Notice the feelings of tension in the thigh.

• Relax, keep relaxing. Monitor the relaxation.

• Reflect on the pleasant feelings of relaxation now.

• Tense the muscles by curling the toes of your right foot downwards.

• Make the muscles more tense.

• Recognize the feelings of the rigid muscles.

• Now let the feelings go. Just relax.

• Hold and observe the tense feelings.

• Relax. Enjoy the feeling of comfort.

• Concentrate on your right foot.

• Tense it, by curling your toes upwards.

• Have the muscles become more and more taut.

• Monitor the feelings.

• Relax. Let all the tension go out of the muscles.
• Notice how relax the foot muscles feel.

This relaxation technique practiced for 45 minutes involved gradually tensing and relaxing the various skelto-muscular subsystems, ultimately resulting in a progressive-deep-muscle-relaxation.

The client was asked to slowly tense up a particular muscle, while observing, or becoming aware of the increasing muscle tensions-to reach the maximum muscle tension and to be aware of that and to stop tensing and start relaxing slowly – maintaining an awareness of the increasing muscle relaxation. The client was asked to reach a deep level of relaxation of that particular muscle and then to repeat the whole sequence once again, that was repeating the tensing and relaxing the particular muscle group twice.

The various muscle groups, which were tensed and relaxed, as per the following instructions.

• Flex the fingers of the left hand, and relax.

• Flex the fingers of the right hand, and relax.

• Flex the fingers of both hands, and relax.

• Flex the fingers of the hands and fold the forearms, and relax.

• Hold the body between both the arms, and relax.

• Raise the shoulders, and relax.

• Extend the toes downwards, and relax.
• Flex the toes upwards, and relax.
• Tight the knees, and relax.
• Arch the lower-back, and relax.
• Contract the abdominal muscles, and relax.
• Enlarge the abdominal muscles, and relax.
• Breath-out completely, and relax.
• Breath-in completely, and relax.
• Press the back of the hand down on the floor, and relax.
• Turn the head to the right, and relax.
• Turn the head to the left, and relax.
• Raise the head up, and relax.
• Bite the teeth, and relax.
• Open the mouth, and relax.
• Put the tongue out, and relax.
• Press the tongue against the upper palate, and relax.
• Press the tongue against the lower palate, and relax.
• Squeeze the nose, and relax.
• Close the eyes tightly, and relax.
• Raise the eye-brows and squeeze the forehead muscles (Frontalis), and relax.
• Relax the whole-body (repeated thrice).
• Count from 10 to 1, and go into deeper and deeper relaxation levels gradually with each count.

• Visualize a relaxing scenery-like: Lying on a grass-land amidst a thickly vegetated forest-feeling the softness of the grass-seeing the hues of plants and flowers, hearing the birds and insect voices-and the noise of a distant waterfall smelling the fragrances of flowers experiencing the touch of breeze over the body.

• Remove the scene from the mind’s eye and count from 1 to 10, and come out of the relaxation gradually with each count and open the eyes.

Although the individual can gain benefit from practicing 45 minutes of relaxation daily. The ultimate goal is for him to use these skills to control tension in any area of his life. Just as an individual learns over a period of time to become tense, so the process can be reversed and the relaxation skills become habitual.

3.6 PROCEDURE

Patients in each group were put in three sub groups. First subgroup is treated by only progressive relaxation for two weeks. The second subgroup of patients were treated by progressive muscular relaxation combined with systematic desensitization. The third subgroup were
treated by the combination of progressive muscular relaxation and cognitive behavior therapy. In first and second subgroup, there were three patients in each while in third subgroup there were four patients. The therapeutic procedure were applied everyday in the morning for an hour individually to each patient for a period of 30 days. The effectiveness of the treatment was assessed by the clinical interview.