



## EFFECT OF PLACEBO TECHNIQUE IN THE MANAGEMENT OF PSYCHOGENIC STUTTERING - A CASE REPORT

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**ABSTRACT** Inability to talk continuously or smoothly is a problem that interferes with ones emotional, educational and social functioning. The person affected by this problem is unable to take jobs that require fluent speaking and high level of social interaction. Stuttering can result due to different causes. Although developmental stuttering is commonest among children and adults yet there are people who acquire stuttering due to neurological or psychological causes. The treatment options for neurological and psychogenic stuttering vary from those techniques that are favourable for developmental stuttering. This study deals with the use of a placebo in treating a young adult who developed stuttering due to a psychological cause. Three weeks fluency therapy was done with stuttering modification and fluency shaping techniques paired with the placebo. Significant improvement in the speech fluency was noticed and changed behaviour was stabilized and generalized.

**KEYWORDS :** Dysfluency, Disfluency, Psychogenic, Hysterical

### INTRODUCTION:

Stuttering is a communication disorder that mainly affects the continuous smooth flow of words in speech. This effortless flow of words can be interrupted due to neurological, psychological or developmental factors. Psychogenic stuttering is therefore a fluency disorder which stems from psychological and emotional conflicts, prolonged stress or exposure to a psychologically traumatic experience. It is widely acknowledged that stuttering can be the result of any underlying neurological cause. Neurological stuttering is dysfluent speech noticed after a neurological event such as stroke, trauma, and thalamotomy. Psychogenic stuttering can occur in conjunction with neurological problems. Psychogenic stuttering is also been called as hysterical stuttering (Blumel, 1935; Freud, 1966). Onset is considered sudden and temporally related to a significant event. It is primarily characterized by repetition of initial or stressed syllables, little affected by choral reading, white noise, initial trial of feedback, singing, or different speaking situations and initially there will be no islands of fluency (Deal, 1982). The disorder is manifested via the voluntary motor system (articulation and phonation) and exhibit bizarre quality of disfluencies and secondary behaviors (Roth, Aronson & Davis, 1989). In a retrospective study which revealed no specific age of onset but most often before the age of 60 years. Men are affected as often as women. Patients with psychogenic stuttering also do not differ from the general population as to educational level or hand preference (Baumgartner & Duffy, 1997).

There are different types of late-onset stuttering and psychogenic stuttering is one among them. Even though the existence of psychogenic stuttering is already recognized by Henry Head (1922), compared to other types of stuttering psychogenic stuttering has received far less attention in literature.

Numerous authors have described about the characteristics of psychogenic stuttering but diagnosing it is not always straight forward. Even the treatment options widely vary and there is no single effective therapy to manage the disorder. Hence the present study aims to profile the assessment and management of an individual with psychogenic stuttering.

Management of psychogenic stuttering is done by a team of professionals. Speech Language pathologists along with a neurologist, psychologist and ENT specialist play a vital role in the assessment and management of the patient. The role of family and friends is also significant in the treatment of this problem.

### METHODOLOGY:

#### Participant:

A single 20 year old participant [Since psychogenic stuttering is rare in occurrence] was recruited for the current study. The participant was not given any indication on the intension of task. The candidate did not have previous history of stuttering, family history of stuttering and head injury, fever and no other neurological problem was reported.

Patient was an undergraduate student and with average performance in academics. Neurological and psychological referral was made prior to therapy.

#### Resource Material:

Stuttering Severity Index (SSI), Overall Assessment of the Speaker's Experience of Stuttering (OASES), masking procedure [audiological] was the formal resource material used.

#### Instrumentation:

A standard group of laptop running on windows vista operating system was used. PRAAT Voice recording and analysis software version 5.1 version was used to record the participant responses. Double channel GSI audiometer for doing the masking procedure.

#### Procedure:

Patient came to the department with the complaint of stammering. A detailed case history was taken and Stuttering Severity Index (SSI) and The Overall Assessment of the Speaker's Experience of Stuttering (OASES) were administered on the patient. Masking was used to differentially diagnose the case with developmental stuttering. Neurology and psychiatry referrals were made and reports obtained prior to the therapy sessions. The participant's speech was recorded in a quiet set-up with the surroundings being devoid of any sort of disturbance using a voice recorder. The participant was made to speak in a situation where the participant developed psychogenic stuttering. Assessment of the case revealed the provisional diagnosis as severe psychogenic stuttering. Three weeks of therapy was given to the patient using placebo technique (massaging gently on the laryngeal area) paired with fluency shaping and stuttering modification techniques used to reduce the laryngeal tension and to minimize excessive anxiety and fear of speaking. Within this short period of time we could see an appreciable change in the client.

### RESULTS AND DISCUSSION

The patient was provisionally diagnosed as having severe psychogenic stuttering. Stuttering behaviours (core and secondary) seen in the patient were part word repetitions, initial syllable repetitions of all words in an utterance. Both content & functional words were stuttered. Unusual struggle behaviour, tightly closing of eyes, breathlessness, vertigo sensation, deviant jaw movements, not maintaining eye contact, and unusual hand movements were present. Stuttering modification was carried out using placebo technique as the management strategy and a significant difference was noticed by the end of 3<sup>rd</sup>, 5<sup>th</sup>, 7<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> session. First three days therapy was given for 45 minutes and a significant decrease in core behaviours such as syllable and word repetition were noted. Breathlessness, eye closing, hand movements, vertigo sensation showed considerable changes. Level of anxiety towards communication task reduced.

The 4<sup>th</sup> and 5<sup>th</sup> sessions were held on alternative days. The patient was also given relaxation exercises and underwent counselling under a

professional counsellor. Further the repetitions both syllable and word level decreased and patient appeared comfortable in speaking instances. Secondary behaviours were significantly decreased.

6<sup>th</sup> and 7<sup>th</sup> sessions were carried out with two days gap in between and patient had very little disfluency, except a few content words were stuttered. Fear and anxiety reduction was significant in the 8<sup>th</sup> and 9<sup>th</sup> sessions and 10<sup>th</sup> and 11<sup>th</sup> sessions were carried out to stabilize and maintain the changes in speech fluency.

The results of the present study revealed a positive co-relation between placebo technique and psychogenic stuttering. These correlation were significant at  $p < 0.05$ . After 5 sessions of therapy using placebo technique and two counselling sessions the patient was assessed again and the provisional diagnosis for the second attempt was moderate psychogenic stuttering. Third attempt of assessment was taken after about one month and this revealed that the provisional diagnosis of the client was mild psychogenic stuttering. OASES rating scale was given pre and post therapy. The client reported significant decrease in the blocks and even marked reduction in fear and anxiety. The feedback obtained from parents and friends was supportive of the client's view on stuttering. The results of the present study revealed a positive correlation between placebo technique and psychogenic stuttering. These correlation were significant at  $p < 0.05$ .

## CONCLUSION

Stuttering affects communication badly, be it due to psychological cause or neurological cause. The present study investigated if placebo technique could be used as a management technique for psychogenic stuttering and the importance of multidisciplinary intervention. The results revealed that psychogenic stuttering can be managed using this method considerably and the contribution of a multidisciplinary approach was also confirmed. The results of the present study revealed a positive co-relation between placebo technique and psychogenic stuttering. Hence placebo technique can be regarded as an effective tool for treatment for psychogenic stuttering which is more objective and time saving.

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