



ORIGINAL ARTICLE

Argentum Nitricum: An Alternative Medicine for GAD

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ABSTRACT

Generalized Anxiety Disorder (GAD) is characterized by feelings of intense uneasiness, fear, mood swing, overexcitement, stress and overthinking about daily life. The present investigation intends to evaluate the therapeutic efficacy of selected homoeopathic medicine Argentum Nitricum (group A) from Kent's Repertory in 1 M potency thrice a week to placebo (group B) in the treatment of GAD using the Spielberger STAI-Y scale assessment. Both men and women aged between 35-55 years were selected for the studies at general shopkeepers, students, housewives aged between 35-55 years were selected at the OPD from Achal Homoeopathic centre, Etah (U.P.) under treatment of dr. R.P. Singh and author sat next chair to him saw the patients symptoms and medicine given by physician and remained touch with patients. The result showed that from group A (N=20), improved (75%), mild (20%), and 5% had a severe level of anxiety. from group B (N=20), 50% were mild, 40% have severe anxiety and 10% have improved, respectively according to the level of anxiety on the post-test STAI-Y anxiety scale. The result found as Paired sample t-test values for an unequal variance for group A (State & Trait pre & post) were 13.32 and 11.35 indicated a significant difference (<0.05) in the first & final scores in intervention group A. In conclusion, the homoeopathic medicines selected from Kent's repertory in 1M potency were adequate for the treatment of GAD.

Keywords: Spielberger STAI-Y Scale, OPD, anxiety, kent's repertory, placebo

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INTRODUCTION

Anxiety is a natural human response to a threatening situation. [1]

It is a manifestation of the fight and flight response controlled by the sympathetic nervous system. During this response the body and mind become aroused and alert to prepare for attack or escape from the threat. [2]

However According to the American Psychiatric Association (1994) [3] anxiety is described as a state of altered mood with marked negative affect and anticipation of future misfortune and danger.

This belief of threat, whilst over exaggerated is manifested thrubodily and mental signs and symptoms and might end up debilitating. Anxiety, while inside regular levels, has established to be an crucial motivational drive, maximizing overall performance and attention.[4], however it turns in to Generalized tension sickness (GAD) while is marked through excessive, exaggerated tension and fear approximately normal existence activities for no superficial reason. GAD reasons emotions of excessive tension, fear, or anxiety approximately regular existence [5]. GAD is the maximum not unusual place tension sickness in older in more youthful adults; different tension problems are much less not unusualplace, but a huge percent of college students revel in anxiousness or apprehension at some stage in examinations. However, a few college students enjoy take a

look at associated tension to this kind of diploma that it could intrude with analyzing and cause negative instructional results (The American Counselling Association, 2004). Levels of tension in a selected state of affairs may be decided the usage of the State-Trait-Anxiety-Inventory. State tension is the tension self at gift cross-segment moment (state) as a transitory emotional reaction to a demanding state of affairs and is exemplified with the aid of using, I feel, irritating now. Trait tension is the routine tendency to be troubled in general (a trait), a long lasting persona function that might predispose men and women and is exemplified through, I frequently feel, tense. STAI-Y has been broadly used clinically to evaluate tension in clinical and psychiatric populations.

Anxiety is an emotion, and subjective individual experience comes under neurosis. Homoeopathic medicines and psychotherapy are helpful in the treatment of Generalized Anxiety Disorder (GAD). The clinical research evidence on homoeopathy in the treatment of anxiety and GAD were systematically reviewed [7, 8, 10, 11].

The present study aims to assess the therapeutic effect of selected homoeopathic medicine, Argentum Nitricum in higher potency (1M) brand name WSI compared to placebo in the management of GAD using the Spielberger STAI-Y scale.

Null Hypothesis (H0): There is no significant difference in result between group A patients receiving Homoeopathic medicine, Argentum Nitricum in higher potency 1M and group B patients receiving placebo.

Alternative Hypothesis (H1): There will be a significant difference in results between group A patients receiving Homoeopathic medicine, Argentum Nitricum in higher potency 1M and group B patients receiving placebo.

MATERIALS AND METHODS

Study Design:

Randomized Controlled Study-Single Blinded.

Study Population:

General shopkeepers, students, housewives aged between 35-55 years were selected at the OPD from Achal homeopathic centre, Etah (U.P.) under treatment of dr. R.P. Singh and author sat next chair to him seeing the patients symptoms and medicine given by physician and remained touch with patients. no prescription was given by author as he only analysed the result output of experimental and placebo patients during his summer vacations.

Study Duration:

The study was conducted for 6 months (4 months for follow-up, and two months for data collection, analysis and compilation). The patient's follow-up was done at the interval of 7-14 days on Sundays.

Sample Size:

A total number of 40 participants or subjects or volunteers were screened, which were randomly allocated by using computer-based randomization into the following two groups ie., Group -A and Group - B respectively.

Intervention:

Group A: (N=20 cases) received homoeopathic medicine Argentum Nitricum, 1M selected based on the totality of symptoms using Kent's repertory in 1M potency, 10 drops with some warm water thrice a week in the evening corroborating Homeopath Classic 8.0 version with due consultation Materia Medica by Dr. R.P. Singh.

Group B: (N=20 cases) received Placebo

Medicine Dispensing:

The pharmacist gave prescribed medicine to patients.

Follow up:

The follow-up of the cases was done at an interval of 7-14 days, as per the severity of the case for four months. For initial 2 months author appeared with Dr. as he was availing his summer vacations, during which he learnt different things about homeopathy by virtue of Dr. Singh. During this duration many patients came even before the scheduled date in the event of experiencing any troublesome symptoms or severe illness. After 2 months, next 2 months author used to arrive on Sundays to see and investigate the patients status.

At each follow-up, the patient's improvement was evaluated in detail in witness and eye watch of author with particular references to changes in general wellbeing, changes in the presenting symptoms, and the appearance of any new symptoms. In addition to that, vital signs, mental status examination and cross-checking of the self-assessment anxiety work diary (based on the DSM-IV Diagnostic criteria questionnaire) were also done. After carefully evaluating the follow-up criteria, the remedy was repeated in the same potency.

Plan of analysis/statistical tools:

To compare STAI pre and post-treatment scores for both groups paired t-test was applied using SPSS 20.0 version. Independent t-test was applied to compare the pre and post-treatment. Scores between the two treatment groups. Data analysis was done using a Microsoft Excel sheet based on STAI-Y pre and post-test scores before and after treatment of GAD and symptomatic assessment.

RESULT

Table 1: Distribution of cases of GAD according to the result obtained from STAI-Y scale pre-test

No. of Cases (n)	Mild	Severe
Group -A (without medicine or placebo)	10	10
Group -B (without medicine or placebo)	12	08

Table 2: Distribution of cases of GAD according to the result obtained from STAI-Y scale post-test

No. of Cases (n)	Improved	Mild	Severe
Group-A with medicine	15	4	01
Group-B with placebo	02	10	08

The distribution according to the level of anxiety based on the pre-test STAI-Y score given in table 1., shows cases (N=20) out of them 10 were suffering from mild level of anxiety and 10 from severe level of anxiety in group A volunteers and in group B volunteers (N=20), out of them 12 were suffering from mild level of anxiety and 08 from severe level of anxiety.

Out of 20 cases of GAD according to a level of anxiety on the post-test STAI-Y Anxiety Scale in group-A, the result shows that 20% were mild, 5% had a severe level of anxiety, and 75% have improved respectively. According to the level of anxiety observed in the

post-test STAI-Y Anxiety Scale from group- B, the result shows that out of N=20 of GAD, 50% were mild, 40% had a severe level of anxiety, and 10% has improved (Table.2).

To accomplish the goal, a paired t-test was done for each Arm (N=20) to calculate the difference before and after the treatment score, and a paired sample t-test was carried out to know the difference in the mean of both Arms. In this study, a sample size of 40 was taken for the pre-test STAI Y assessment. Out of 40 cases of GAD, the statistical analysis was done for the sample size of N=40, after considering the four drops out during the study. So the degree of freedom is {group A; N=20 (DF=N-1=19), group B; N=20 (DF=N-1=19)}, the level of significance is < 0.05 .

Table 3: Paired sample t-test for an unequal variance for Group A (State & Trait)

Group A	Mean	SD	SE mean	95% Confidence Interval of the Difference		T	DF	Significance (2-Tailed)
				Lower	upper			
State Pre & Post Test	15.63	5.12	0.87	14.2	19.6	11.21	19	.00
Trait Pre & Post Test	16.98	6.12	1.01	13.23	20.11	9.34	19	.00

Table 4: Paired sample t-test for an unequal variance for Group B (State & Trait)

Group B	Mean	SD	SE mean	95% Confidence Interval of the Difference		T	DF	Significance (2-Tailed)
				Lower	upper			
State Pre & Post Test	32.00	4.1	0.71	1.76	4.56	3.10	19	.00
Trait Pre & Post Test	43.22	5.8	0.84	2.0	6.89	3.48	19	.00

The results of the paired sample t-test for the unequal variance for group A (State & Trait) indicate a significant positive difference (<0.05) in the first & final scores in intervention group A, given in Table 3. The analysis shows that the mean & SE value for state pre & post-test is 15.63 ± 0.87 and TRAIT pre & post-test is 16.98 ± 1.01 in group A, which supports the null hypothesis. Further, the level of Anxiety was improved for maximum cases after the homoeopathic medicine Argentum Nitricum, 1M was provided in group A volunteers. A paired sample t-test for an unequal variance for group B (placebo) is shown in Table.4 (State & Trait), suggesting that there is no significant difference (< 0.05) in the pre & post-test scores of State and Trait assessment scale in group-B volunteers. The analysis shows that the mean & SE value for State pre & post-test is 32.00 ± 0.71 and Trait pre & post-test is 43.22 ± 0.84 in group B volunteers. State and Trait score p-value (<0.05) indicates a significant difference between the State and Trait score in group-A volunteers, the intervention group, treated with homoeopathic medicine, compared to group-B volunteers, the control group with placebo. Further, the result shows a significant improvement according to the State and Trait scale in intervention group A compared to the control group with placebo, i.e. group B.

DISCUSSION

In this study, the prescribed homoeopathic medicine was Argentum Nitricum. Homoeopathic remedies are used in the treatment of GAD.

Kulkarni [12] said that cardiovascular responses including multiplied blood strain and pulse price because of emotional pressure may be efficaciously dealt with

homoeopathically. The researcher attracts one's interest to treatment like Argentum Nitricum in instances of anticipatory tension.

Further, the extent of Anxiety became stepped forward for max instances after the homoeopathic medicine become supplied in organization A volunteers. Homoeopathic treatment Argentum Nitricum of 30 C efficiency after continual management in rodents and concluded that Argentum Nitricum had anxiolytic effects. Still, the usage of low doses and excessive dilutions is endorsed to keep away from toxicity. The end result received from this gift look at indicates an impact of homoeopathic remedy for GAD instances in organization A. Homoeopathic remedy can be powerful within the control of sufferers with GAD. These findings had been showed via way of means of Bonne et al., [13] which resulted within the impact of homoeopathic remedy on intellectual signs and symptoms of GAD failed to fluctuate from that of placebo and concluded that development in each situations became substantial. [14] Spiel Berger State- Trait Anxiety Inventory STAI-Y assessment the usage of pre-take a look at & post-take a look at and follow-up sample and the findings propose that homoeopathic remedy may be an powerful technique to deal with tension and melancholy disorders.

A look at performed through Traub [15] confirmed very substantial reaction on topics like in presnt have a look at, which corroborated with this have a look at. He researched on College College students below exam situations, confirmed that with the aid of using the use of a complicated treatment containing Kalium phosphoricum 200CH, Argentum Nitricum 200CH and Gelsemium sempervirens 200CH, emotions of tension reduced via way of means of 42% and idea interference reduced through 88%. This demonstrates that homoeopathic treatments have an impact on check associated tension and can be very powerful in treating this condition.

The present study examined locating additionally proves that prescribed homoeopathic medicinal drug for remedy influences GAD, primarily based totally at the outcomes acquired from STAI-Y assessment, pre-test and post- test take a look at score. The end result received from observes of Coppola and Montanaro confirmed an impact of homoeopathic remedy on intellectual signs and symptoms of GAD and did not fluctuate from that of a placebo and concluded that development in each situation changed into substantial [16]. In other research with the aid of using Pelser [17] and Thomson [18] on the Technikon Witwatersrand confirmed various outcomes pertaining to check associated tension and urinary cortisol ranges. Sample groups have been too small and consequences statistically insignificant and no precise traits have been cited in relation with perceived ranges of hysteria and homoeopathic remedy. This output does now no longer corroborate with present investigation.

In accordance with this assertion Baker et al.,[19] carried out a take a look at to decide the impact of Argentum Nitricum 12X on take a look at tension. This look at turned into installation to copy and amplify a preceding examine via way of means of Stanton (1981) wherein a dramatic discount become visible in take a look at tension with the usage of Argentum Nitricum 12X. The revised Test Anxiety Scale becomes used to degree tiers of strain in sixty check aggravating subjects. The effects of this examine did now no longer mirror the Stanton (1981) observe and validated that Argentum Nitricum 12X does now no longer lessen check tension in a widespread populace of tertiary students. The Baker et al., (2003) observations substantiated the declaration made that homoeopathy is an individualised remedy wherein a collection of comparable human beings with the identical circumstance can every acquire a totally specific treatment primarily based totally on their person manifestation of that unique circumstance. While Boericke [20] states that the healing efficiency variety for Argentum Nitricum is among the 3rd and 30th efficiency and that high-quality outcomes might be completed inside this efficiency variety. It can consequently be taken into consideration to apply a decrease efficiency to decide the impact of the treatment on tension. However in present observation dose turned into taken higher, 1M and resulted excellent relief in GAD.

The state-trait anxiety stock shape Y is a quick self-score scale to assess state and trait uneasiness or anxiety. Detection of pervasive anxiety "proneness" and cutting-edge signs and symptoms 20 STAI-Y represents an enormous and commendable improvement withinside the conceptualization and dimension of tension. Research with the STAI has fairly contributed to recognising the significance of distinguishing among the strength of anxiety as a transitory emotional condition and person variations in tension as a particularly solid persona trait. In the existing study, group A (State & Trait) suggests a big high quality significant difference (<0.05) withinside the pre & post- test check rankings in homoeopathic intervention.

The evaluation rankings from group B (placebo) recommend no widespread distinction withinside the pre & post- test check rankings of the State and Trait evaluation scale. Placebo wasn't taken into consideration to have any precise effect; results visible in group B are because of the additive results of the natural direction of the sickness and the non-precise results. [9] The records of this observe suggests that the carried out homoeopathic remedy can be powerful in handling sufferers with GAD. The scope of remedy consists of each somatic manifestations of anxiety and the maximum profound important panicity affecting the subject [22]. Further the effects proven extensive variations among the ranges of anxious signs and symptoms on pre and post-evaluation (Psychomorbidity Assessment Scale- PAS) and individualized homoeopathic medicinal drug changed into located powerful in lowering tension signs and symptoms in sufferers and identical have been showed withinside the present examine. The average (STAI) State rating at go to 2 reduced through greater than five factors. In contrast, the stai-trait rating reduced via way of means of extra than 2 factors and advised that treating tension and sleep issues with homoeopathic-complicated medicinal drug can produce exceptional upgrades even in a brief period. The determined outcomes have been now no longer laid low with sex, age or baseline tension. The present examine indicates that the p-value (<0.05) similar to pre & post- test take a look at State and Trait rating, which shows that there's a good sized distinction among the State and Trait rating and development in group-A, handled with homoeopathic medication, in comparison to group- B, the manipulate institution with placebo.

CONCLUSION

This study highlights that GAD could be prevalent in any category of subjects/volunteers in the different age groups under study. Further, homoeopathic medicines selected from Kent's repertory in 1M potency were effective for treating GAD, and the analysis shows an improvement in the levels of anxiety for group-A than group-B using STAI-Y.

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