Homoeopathic management of irritable bowel syndrome affirming on stress as a contributory factor through Kentian method of evaluation

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Abstract

Background: Irritable Bowel Syndrome is a common gastro-intestinal disorder with a psychophysiological basis which manifests symptoms on physical plane and has mental causation.

Objective: To ascertain the role of homoeopathic treatment in patients of irritable bowel syndrome affirming on stress as a contributory factor through Kentian method of evaluation and to assess the changes on the standardized scales.

Materials and Methods: A prospective observational study was conducted in OPD, IPD and POPDs of Bakson Homoeopathic Medical College and Hospital and Dr. D.P. Rastogi Central Research Institute of Homoeopathy, Noida for 18 months on patients aged 18 to 50 years of both sexes irrespective of socio-economic status having clinical features of Irritable Bowel Syndrome satisfying Rome IV criteria and were treated with homoeopathic medicines prescribed on the basis of totality of symptoms with the help of Kentian method of evaluation. A total of 30 cases were assessed after taking consent using IBS-SSS (Irritable Bowel Syndrome- Symptom Severity Score) scale and PSS (Perceived Stress Scale). The response to treatment were assessed with a minimum of 3 months follow up at 15 days interval and scales were filled up at 1 month interval for statistical analysis.

Results: The study revealed that out of 30 patients improvement was found in 25 patients (83%). Clinical indications of 16 remedies were obtained for IBS affirming on stress as a contributory factor after evaluating the totality of symptoms with the help of Kentian method, repertorising with Kent Repertory and finally referring with different literatures of Materia Medica. Middle age adults were suffered more than other age group, males are more in number than females, married people have a greater number than unmarried and diarrhoea predominant IBS (IBS-D) was more common than other types. Lycopodium was frequently indicated among polycrests (n=6) according to this study and 200 potency showed great results among centesimal potencies. Change in IBS-SSS and PSS scores were statistically significant.

Conclusion: The data of the study showed positive effect of Homoeopathic medicines in patients suffering from IBS affirming on stress as a contributory factor. Further randomised controlled trials are warranted.

Keywords: Irritable bowel syndrome, stress, homoeopathic simillimum, irritable bowel syndrome-symptom severity score, perceived stress scale, IBS-D

1. Introduction

Irritable Bowel Syndrome (IBS) is a functional gastro-intestinal disorder characterized by abdominal pain and alterations in bowel habits. There are 3 types of IBS i.e. IBS with constipation (IBS-C), IBS with diarrhoea (IBS-D) and IBS with mixed bowel habits (IBS-M)\(^1\). The main cause of the disease is not entirely apparent as various factors play key roles in it's etiology. Recently disturbance of the bidirectional brain-gut axis has been increasingly established as a conceptual model of IBS pathophysiology which includes disturbance of function in the enteric, autonomic and/or central nervous system. Diagnosis is based on ROME IV Criteria which states that there must be recurrent abdominal pain, on average, at least 1 day per week in the last 3 months, associated with 2 or more of the following criteria: a) related to defecation b) associated with a change in frequency of stool c) associated with a change in form (appearance) of stool. This criteria fulfilled for the last 3 months with symptom onset at least 6 month before diagnosis\(^2\). Although it is not a life threatening condition, yet people with IBS have a reduced quality of life that may affect their educational, social and occupational achievements\(^3\).

As stress can result in overactivity or underactivity along hypothalamic-pituitary-adrenal axis, autonomic nervous system, metabolic and immune system, it can alter brain-gut...
interactions, there by affecting different physiological functions of the gastro-intestinal tract \[4\]. In a previous study by BENNETT et al. evaluated prospectively and concluded that chronic life stress leads to increase in intensity of symptoms of IBS diagnosed with modified ROME Criteria \[5\]. After reviewing available literature and studies on IBS and it’s relation to stress as a causative factor an effective approach should be done for the management of IBS on the basis of level of stress.

Homoeopathic system of medicine is based on holistic and individualistic approach in which both mental and physical symptoms are considered. Homoeopathy plays a very strong role in psychosomatic disorders as it also believes in treating the person as a whole by giving importance to mental generals. In Aph. 225 of Organon of Medicine, Dr. Hahnemann states about somatic diseases from emotional origin i.e. “There are, however, as has just been stated, certainly a few emotional diseases which have not merely been developed into that form out of corporeal diseases, but which, in an inverse manner, the body being but slightly indisposed, originate and are kept up by emotional causes, such as continued anxiety, worry, vexation, wrongs and the frequent occurrence of great fear and fright. This kind of emotional diseases in time destroys the corporeal health, often to a great degree” \[6\].

As this disease is psychosomatic and for this holistic approach is needed to treat it homeopathically with special focus on mental generals which can be done with the concept of analysis and evaluation of symptoms. Evaluation of symptoms implies the principle of grading or ranking of different kinds of symptoms in order of priority, which are to be matched with the drug-symptoms in order to cover the characteristic totality in a natural disease condition with that of the drug disease \[7\]. So the key for similium is the grading of symptoms. There are various methods of evaluation of symptoms i.e Hahnemannian method, Boenninghausen Band and Kentian method. Each of the groups though have different philosophy and approach on symptomatology, at least do agree on the “symptom complex” that express the totality of symptoms which leads to final application of the law of similars \[7\]. According to Kentian method of evaluation Dr. Kent ranked all symptoms of the patient in to:

1. General
   - (a) Mental
   - (b) Physical

2. Particular

3. Common

4. Rare, Uncommon, Peculiar, Strange Characteristic, Unique in General, Particular and Common.

So mental symptoms whenever found in a case, rank high. All symptoms of will and affections, including desires and aversions, are the most important, as they relate to the innermost in man. Of less value are those relating to the intellect, while those of memory are to be ranked lowest \[7\].

| Mental generals \[7\] | Understanding | Intellect |
|---------------------|---------------|-----------|
| Will | Understanding | Intellect |
| Loves, hates and emotions (suicidal), loathing of life, lasciviousness, revulsion to sex, sexual perversions, fears, greed, eating emotionality, smoking, drinking, drugs, dreams, homicidal tendencies, desire or aversion to company, family, friends, jealousy, suspicion, obstinacy, contravenes, depression, loquacity, weeping, laughing, impatience, conscientiousness. | Delusions, delirium, hallucinations, mental confusion, loss of time sense. | Memory, concentration, mistakes in writing and speaking. |

According to Dr Kent, if mental symptoms are marked especially if it is a change from normal than they are of the utmost importance to the case, so the remedy will be curative if these symptoms are given highest standing in repertorial analysis \[7\]. So in case of psycho-somatic disorders Kentian method of evaluation proved the best one for treating somatic diseases of emotional origin.

As this study will help to treat IBS on the basis of mental generals, this will be a qualitative study in comparison to others. Till date there are very few available research studies on homoeopathic management of IBS on the basis of level of stress as a contributory factor, hence a significant necessity for such work is required. This study aims at the treatment of sick individual having IBS by prescribing homoeopathic similimum on the totality of the case with primary focus on mental generals. It also entails the usefulness of homoeopathic similimum in management of IBS by assessing IBS-Symptom Severity Scale and Perceived Stress Scale. Hence, homoeopathy can prove to be highly effective in such cases. There are so many adverse effects in allopathic treatment like purgatives for constipation will cause diarrhoea, medication for diarrhoea will cause constipation etc. By Homeopathic approach we can get better result with minimal cost and no adverse effects.

2. Aim and objectives

This study aimed at ascertaining the effect of homoeopathic treatment for irritable bowel syndrome affirming on stress as a contributory factor through Kentian method of evaluation.

The primary objective of this study was to find the level of stress by using Perceived Stress Scale and to assess clinical utility of homoeopathic similimum in patients with IBS affirming on stress by improvement in symptom severity and intensity via IBS-SSS (symptom severity score) scale and PSS Scale from baseline to 3rd month of follow up. The secondary objectives intended to obtain a group of homoeopathic remedies most useful for IBS affirming on stress as a contributory factor.

3. Materials and Methods

3.1 Study design and Sample size

In a prospective observational study, a total of 43 patients were screened out of which 4 patients didn’t give consent and 9 patients didn’t came for follow up, so they came in dropped out list and 30 patients were enrolled for the study. Data analysis was conducted on scales used for data of 30 patients who had follow up for at least 1 month and maximum of 3 months who attended OPD, IPD and POPDs of Bakson Homoeopathic Medical College and Hospital and Dr. D.P. Rastogi Central Research Institute of Homoeopathy, Noida, Uttar Pradesh. The patients were briefed regarding the objectives, methods, of the study along with the risks and benefits of homoeopathic treatment in such chronicity of complaints. Out of all the cases, the ones accounting to the inclusion and exclusion criteria of the study were enrolled. Before enrolment, written informed consent was taken from the selected patient.
3.2 Inclusion and Exclusion criteria
Patients aged 18 to 50 years of both sexes irrespective of socio-economic status having clinical features (signs and symptoms) of Irritable Bowel Syndrome satisfying Rome IV criteria and having a score more than zero in Perceived Stress Scale were included in the study. Patients having clinical features like unexplained weight loss, bleeding PR, persistent diarrhea, having disease symptoms secondary to organic cause like celiac disease, inflammatory bowel disease and lactose malabsorption, having abnormal findings in laboratory investigations like low Hb suggestive of anemia, presence of micro organisms in stool, subjects with active treatment suffering from some advanced systemic diseases, subjects under allopathic treatment and hospitalized treatment failure, pregnant and lactating females, patients without proper follow up and patients who had not given consent were excluded from this study.

3.3 Assessment parameters
The following scales were used to assess changes in severity of IBS symptoms and severity of stress level. (Table-7):

3.3.1 IBS-SSS Scale (By C Y Francis On 1997): At baseline and at every follow up. The scale contains 5 questions related to bowel habits and each of the 5 questions generates a score from 0 to 100 points, with a maximum total score of 500 points. Mild IBS = 75-174 Points, moderate IBS = 175-299 Points; and severe IBS = 300 Points or more.

3.3.2 PSS (Perceived Stress Scale By Sheldon Cohen On 1983) for assessing the severity of stress: At baseline and at end of follow up. The scale contains 10 questions and each of the 10 questions generates a score from 0 to 4 points, with a maximum total score of 40 points. Low stress = 0-13 points, moderate stress = 14-26 points; and high perceived stress = 27-40 points.

Dr. Kent’s evaluation lays highest emphasis to mental generals then to physical generals including modalities and characteristic particulars for the final stage of differentiation. So this study focuses on providing a better understanding of the clinical utility of mental generals in patients with IBS with the help of Kentian method of evaluation for final selection of medicine and finding the level of stress by PSS before and after treatment as the scale contains questionnaire emphasizing mental general symptoms. The IBS-SSS Scale was used to assess the overall changes in level of severity of IBS after prescribing homoeopathic remedies.

3.4 Intervention and Statistical analysis
3.4.1 Choice of remedy and potency
The prescription was made according to the totality of symptoms obtained from case taking. The totality of symptoms are evaluated with Kentian method and the similimum with the particular case was prescribed after correlation from Materia Medica And Kent Repertory. Lower potencies were prescribed at the beginning of the treatment to avoid unnecessary aggravations. The potencies were raised according to the progression and regression of improvement of the case. When there was no change observed in the follow up, without any new symptoms appearing, the medicine was continued except that the potency selected was raised to a higher potency. When there was a slight improvement noticed usually the same potency was continued. If marked improvement was observed and the appearance of recurrence of symptoms was noticed, the patient was prescribed Saccharum Lactis. The study duration being 6 months, patients were followed up monthly for assessment on both the scales but only the baseline and last follow up scores were considered for statistical analysis.

3.4.2 Statistical Analysis: All cases enrolled in the study with at least one month follow up (n=30) were included in the final analysis. Paired t-test was used for scores of pre and post observation in both the scales.

4. Observations and Results
A total of 43 patients were enrolled in the study, 13 dropped out and 30 had a minimum of one follow-up. Baseline socio-demographic and other information like distribution of age, gender, marital status, occupation, and types of IBS were compiled and tabulated (Table 1). The various remedies used for prescriptions with the most effective potency in centesimal scale leading to improvement were compiled and tabulated (Table 2) as per the objective of the study. As per the other objectives of the study, the data was analyzed which evidently proved the results to be significant. The values at the baseline and at 3rd month follow up were calculated for both the scales of all the 30 cases. The scores of both the scales were compared after treatment and found to be less from the baseline showing the severity of disease has improved. Severity of IBS before and after treatment as per IBS-SSS Scale and severity of stress before and after treatment as per PSS Score were calculated and number of patients in each group before and after treatment were tabulated (Table 3). Percentage of patients showing improvement after treatment in IBS were also mentioned (Table 4).

The Analysis of paired differences (t test) was done for both the scales, and result was found to be statistically significant in both the scales (Table 5). Improvement was observed in symptoms for the maximum number of cases. The improvement was comparatively higher for the cases which followed up for longer duration, than the ones which followed up for less duration but the statistical analysis is done on the basis of 3rd month follow up data. The most significant change is found in the perceived stress scale. (Result significant at $p<0.05$, 95% Confidence interval). Hence, there is no doubt that stress score of IBS patients improved significantly by homoeopathic medicines. After statistically analyzing the data of IBS-SSS Scale the result was found to be significant [95% Confidence interval, $p<0.05$ two-tailed]. Hence, there is no doubt that severity of IBS was reduced significantly by homoeopathic medicines. Therefore after assessing the result of IBS- SSS and PSS Scores with the help of statistical analysis, it is concluded that the symptomatology in IBS cases improved.
significantly. Table 6 shows the objectives according to the observations obtained regarding them with the respective results.

5. Discussion
The study aimed at observing and treating the patients suffering from IBS by prescribing Homoeopathic Similimum with the help of Kentian method of evaluation and by assessing the change in Symptomatology via IBS-SSS scale and Perceived stress scale questionnaire. During the study conducted on a batch of 30 Patients, it was observed that: Out of 30 cases, 19 (63.33%) were male and 11 (36.67%) were female. 16 (53.33%) patients suffering from IBS were observed in middle age adults group (36-50 years) and 14 (46.66%) were young adults (18-35 years). It shows 20 (66.66%) married people reported for IBS and 10 unmarried (33.33%). So married people were more affected with the disease. In terms of occupation, disease shows more prevalence in homemakers (5 cases), students (5 cases) and workers (3 cases) and people doing more mental work like engineer, teacher, businessman, clerk, banker, librarian, manager etc were reported total 14 cases. People doing more physical work like farmer and truck driver reported only 3 cases. In terms of IBS types 9 (30%) reported having IBS-C and 13 (43%) having IBS-D, only 8 (27%) were of IBS-M. So, IBS-D is more predominant in this study. Lycopodium, Nux vomica, Natrum muriaticum, Arsenic album and China were more prescribed medicine with improvement. Other medicine which showed improvement were Thuja, Merc sol, Opium, Anacardium, Argentum nitricum, Colchicum, Ferrum met, Nat carb, Merc dul, Alumina, and Mag carb. Homoeopathic medicines were prescribed on the basis of individualization and were found effective. 200 potency was most prescribed with improvement in 22 cases and 1M was also prescribed in 3 cases with improvement. Around 8 cases were in severe grade before treatment which become only 1 after treatment. 18 were in moderate grade which become 11 and 4 were in mild grade which become 18 at end of treatment as severity of other cases decreased after treatment. This indicates a shift of majority of patients to lower scores as per IBS-SSS for IBS, and thus better results are found after the treatment. Change in severity of stress before start of treatment and at end of treatment was also observed. Around 25 cases were in severe grade before treatment which become only 3 cases after treatment, 4 cases were in moderate grade which become 5 cases and 1 case was in mild grade which become 22 cases at the end of treatment as severity of other cases decreased to become mild. This indicates a shift of majority of patients to lower scores as per PSS score for Stress and thus better results are found after the treatment. Lastly 25 (83.33%) cases show improvement and only 5 (16.67%) cases show no improvement. The result is statistically significant for both the scales; hence, homoeopathic similimum is effective in treating IBS cases affirming on stress as a contributory factor. But it was little difficult for patients to understand the Perceived Stress Scale questionnaire. A better case format recommended to emphasize mental picture of patients in psychosomatic disease like IBS. Improvement is assessed in this study but no criteria to assess degree of improvement. As the study setting had limitations, to establish a conclusive role due to the COVID 19 pandemic & short span of the duration of the study, large scale studies can be undertaken to achieve it. A larger sample size could have affected the conclusions derived from this study considerably. Study would have been more scientific, if comparison could be made with a control group on conventional treatment. Only centesimal scale was used in this study, comparison of centesimal with LM scale or Decimal scale could be made or result of other cases decreased after treatment. This indicates a shift of majority of patients to lower scores as per PSS score for Stress and thus better results are found after the treatment. Lastly 25 (83.33%) cases show improvement and only 5 (16.67%) cases show no improvement. The result is statistically significant for both the scales; hence, homoeopathic similimum is effective in treating IBS cases affirming on stress as a contributory factor.

Table 1: Distribution of patients by age, gender, marital status, occupation, disease diagnosis and type

| Age                  | No. of patients | Percentage |
|----------------------|-----------------|------------|
| Young adults (18-35) | 14              | 46.66%     |
| Middle age adults (36-50) | 16      | 53.33%     |
| Older adults (50 above) | Not included in study |          |
| Total                | 30              |            |

| Gender distribution | No. of cases | Percentage |
|---------------------|--------------|------------|
| Male                | 19           | 63.33%     |
| Female              | 11           | 36.66%     |
| Total               | 30           |            |

| Marital status      | No. of cases | Percentage |
|---------------------|--------------|------------|
| Married             | 20           | 66.66%     |
| Unmarried           | 10           | 33.33%     |
| Total               | 30           |            |

| Occupation | No. Of patients |
|------------|-----------------|
| 1. Student | 5               |
| 2. Engineer| 2               |
| 3. Teacher | 2               |
| 4. Businessman | 2   |
| 5. Clerck  | 2               |
| 6. Banker  | 1               |
| 7. Farmer  | 2               |
| 8. Worker  | 3               |
| 9. Librparian| 1               |

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| Distribution of types of IBS | No. of cases | Percentage |
|-----------------------------|-------------|------------|
| IBS-C                       | 9           | 30%        |
| IBS-D                       | 13          | 43%        |
| IBS-M                       | 8           | 27%        |
| Total                       | 30          |            |

Table 2: Medicine prescribed with improvement and potency most effective in IBS cases

| S. No. | Medicine prescribed     | No. of patients | Percentage |
|--------|-------------------------|-----------------|------------|
| 1      | *Lycopodium*            | 6               | 24%        |
| 2      | *Natrium Muriaticum*    | 2               | 8%         |
| 3      | *Nux vomica*            | 2               | 8%         |
| 4      | *Arsenicum album*       | 2               | 8%         |
| 5      | *China officinalis*     | 2               | 8%         |
| 6      | Opium                   | 1               | 4%         |
| 7      | Anacardium              | 1               | 4%         |
| 8      | *Argentum Nitricum*     | 1               | 4%         |
| 9      | *Mercurious Solubilis*  | 1               | 4%         |
| 10     | *Ferrum Metallicum*     | 1               | 4%         |
| 11     | *Natrium Carbonicum*    | 1               | 4%         |
| 12     | *Thuja Occidentalis*    | 1               | 4%         |
| 13     | *Mercurious Dulcis*     | 1               | 4%         |
| 14     | *Alumina*               | 1               | 4%         |
| 15     | *Magnesium Carbonicum*  | 1               | 4%         |
| 16     | *Colchicum Autumnale*   | 1               | 4%         |

Table 3: Severity of IBS before and After Treatment as Per IBS-SSS and Severity of Stress Before and After Treatment as Per PSS Score

| Severity of IBS before and after treatment as per IBS-SSS | No. of cases | Before treatment | After treatment |
|----------------------------------------------------------|--------------|-----------------|-----------------|
| Mild                                                     | 4            | 4               | 18              |
| Moderate                                                 | 18           | 18              | 11              |
| Severe                                                   | 8            | 8               | 1               |

| Severity of stress before and after treatment as Per PSS SCORE | No. of Cases | Before treatment | After treatment |
|---------------------------------------------------------------|--------------|-----------------|-----------------|
| Mild                                                          | 1            | 1               | 22              |
| Moderate                                                      | 4            | 4               | 5               |
| Severe                                                        | 25           | 25              | 3               |

Table 4: Improvement Status

| Improvement Status In Cases After Treatment | No. Of cases | Percentage |
|--------------------------------------------|--------------|------------|
| Improvement                                | 25           | 83%        |
| No Improvement                             | 5            | 17%        |
Table 5: Statistical analysis of data

| Scale                     | Mean Difference | SD (degree of freedom = 29) | SE  | T-value | P value(at 95% confidence interval) |
|---------------------------|-----------------|-----------------------------|-----|---------|-----------------------------------|
| IBS-SSS scale             | 87.08           | 58.83                       | 10.75 | 8.108   | <0.05                             |
| Perceived Stress Scale    | 17.6            | 9.45                        | 1.72 | 10.232  | <0.05                             |

Table 6: The objectives of the study corresponding to their respective observations and results obtained

| Objectives                                                                 | Observations                                                                 | Results                                                                                           |
|---------------------------------------------------------------------------|-----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| To assess the level of stress by perceived stress scale                   | There was improvement observed in score of perceived stress scale after treatment. | Significant improvement was observed on analyzing the data and the results were tabulated in table 5. |
| To assess clinical utility of homoeopathic similimum in patients with IBS by improvement in symptom severity and intensity via IBS-SSS (symptom severity score). | There was improvement observed in score of IBS-SSS scale after treatment. | Significant improvement was observed on analyzing the data and the results were tabulated in table 5. |
| To obtain a group of homoeopathic remedies most useful for IBS affirming on stress as a contributory factor | The symptoms showed improvement in most of the cases; no cases worsened | The objectives was achieved and tabulated in table 2 and 3. |
| role of homoeopathic treatment for IBS affirming on stress as a contributory factor | Homoeopathic similimum are useful for the treatment of IBS affirming on stress as a contributory factor | Significant improvement was observed on analyzing the data and the results were tabulated in table 4 and 5. |

Table 7: IBS-SSS Scale

| How severe is your pain?                                                                                               |
|-----------------------------------------------------------------------------------------------------------------------|
| 0 | No pain | Not very severe | Quite severe | Severe | Very severe |
| 100 |

| If currently in pain, how severe is your abdominal pain?                                                             |
|-----------------------------------------------------------------------------------------------------------------------|
| 0 | No pain | Not very severe | Quite severe | Severe | Very severe |
| 100 |

| If you currently have abdominal distention, how severe is it?                                                         |
|-----------------------------------------------------------------------------------------------------------------------|
| 0 | No distention | Not very severe | Quite severe | Severe | Very severe |
| 100 |

| How satisfied are you with your bowel habits?                                                                          |
|-----------------------------------------------------------------------------------------------------------------------|
| 0 | Very happy | Quite happy | Unhappy | Very unhappy |
| 100 |

| How much does your IBS affect or interfere with your life in general?                                                   |
|-----------------------------------------------------------------------------------------------------------------------|
| 0 | Not at all | Not much | Quite a lot | Completely |
| 100 |

**NOTE:** Each of the five questions generates a score from 0 to 100 points, with a maximum total score of 500 points. Mild IBS = 75 to 174 points; moderate IBS = 175 to 299 points; and severe IBS = 300 points or more.
PERCEIVED STRESS SCALE

The questions in this scale ask you about your feelings and thoughts during the last month. In each case, you will be asked to indicate by circling how often you felt or thought a certain way.

Name __________________________________________ Date ____________

Age _____ Gender (Circle): M F Other _____________

| 0 = Never | 1 = Almost Never | 2 = Sometimes | 3 = Fairly Often | 4 = Very Often |
|-----------|-----------------|--------------|-----------------|---------------|
| 1. In the last month, how often have you been upset because of something that happened unexpectedly? 0 1 2 3 4
| 2. In the last month, how often have you felt that you were unable to control the important things in your life? 0 1 2 3 4
| 3. In the last month, how often have you felt nervous and “stressed”? 0 1 2 3 4
| 4. In the last month, how often have you felt confident about your ability to handle your personal problems? 0 1 2 3 4
| 5. In the last month, how often have you felt that things were going your way? 0 1 2 3 4
| 6. In the last month, how often have you found that you could not cope with all the things that you had to do? 0 1 2 3 4
| 7. In the last month, how often have you been able to control irritations in your life? 0 1 2 3 4
| 8. In the last month, how often have you felt that you were on top of things? 0 1 2 3 4
| 9. In the last month, how often have you been angered because of things that were outside of your control? 0 1 2 3 4
| 10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them? 0 1 2 3 4

Figuring your PSS score:

You can determine your PSS score by following these directions:

First, reverse your scores for questions 4, 5, 7, & 8. On these 4 questions, change the scores like this: 0 = 4, 1 = 3, 2 = 2, 3 = 1, 4 = 0.

Now add up your scores for each item to get a total. My total score is ________.

Individual scores on the PSS can range from 0 to 40 with higher scores indicating higher perceived stress.

Scores ranging from 0-13 would be considered low stress.

Scores ranging from 14-26 would be considered moderate stress.

Scores ranging from 27-40 would be considered high perceived stress.

The Perceived Stress Scale is interesting and important because your perception of what is happening in your life is most important. Consider the idea that 2 individuals could have the exact same events and experiences in their lives for the past month. Depending on their perception, total score could put one of those individuals in the low stress category and the total score could put the second person in the high stress category.
6. Conclusion
The incidence is maximum in middle age adults and least in young adults. Males more affected than females. Married people are generally more affected from IBS. People having mental activity predominant occupation suffer most in comparison to physical activity predominant occupation. IBS-D found to be more prevalent than IBS-C and IBS-M. The most prescribed remedies are Lycopodium, Nux vom, Natrium mur, China and Arsenicum album. The most benefitted potency is 200C with improvement in 22 cases. 25 out of 30 cases showed improvement and level of severity of IBS decreased from severe to moderate or mild. As the result is statistically significant so homoeopathic similimum are useful for the treatment of IBS affirming on stress as a contributory factor based on Kentian method of evaluation. The results can further be verified by taking up large scale pragmatic studies based on controlled trials with longer study duration.

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8. Conflict of Interest
Author declares that there is no conflict of interest.

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