

## THE EFFECT OF HOMOEOPATHIC MEDICINES ON ANXIETY, DEPRESSION, WELL BEING AND PHYSICAL SIGNS AMONG PATIENTS WITH LOW BACK PAIN

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### *Abstract*

To study whether there is any difference in the effect of homoeopathic medicines, placebo, homoeopathic medicines in combination with placebo on anxiety, depression, well being and physical signs among patients with pathological low back pain and somatoform low back pain. The sample consisted of 439 patients including patients with pathological low back pain and somatoform low back pain. The patients in these two category were further classified into three groups based on the type of intervention used such as - patients treated with homoeopathic medicines, patients treated with placebo and patients treated with homoeopathic medicines in combination with placebo. The findings of this study shown that homoeopathic treatment had a highly significant role in reducing the low back pain of patients with pathological low back pain that had a physical pathology when compared to patients with somatoform low back pain. Patients with pathological low back pain and somatoform low back pain who received homoeopathic medicines had higher reduction in Pain, functional disability, anxiety and depression whereas enhancement in well being followed by the patients who received homoeopathic medicine in combination with placebo. Patients who received placebo had least relief.

### *Keywords:*

*Homoeopathy,  
Pathological low back  
pain, Somatoform low back  
pain, Placebo, anxiety,  
Depression, Well being,  
Physical signs.*

### **I. Introduction**

Homeopathic prescription is based on the law of similar, minimum dose, single remedy and drug proving on healthy human beings. A homoeopathic medicine is capable of healing those symptoms, which it was capable of producing during the process of drug proving. According to the method of preparation of the medicine from the drug substance, the end product contains only the dynamic healing and curative power of the drug devoid of any original crude substance. This is done by the method of potentisation. This method activates vital force to such a reactive level that the body becomes capable of eliminating the disease.

The popularity of Homoeopathy has brought not only recognition but also envy from other disciplines of medicine. The most outstanding criticism is that Homoeopathy is nothing more than a placebo. In medical research, placebos are given as control treatments and depend on the use of measured deception. *The Lancet* of August 27, 2005 featured a cluster of articles highly critical of homeopathy which attracted considerable media attention. They mentioned 'homeopathy is no better than placebo' based on a meta-analysis of clinical trials of homeopathy compared with clinical trials of allopathic (conventional medicine) Shang, 2005. The meta analysis was accompanied by a short, anonymous editorial entitled 'The end of homoeopathy' calling for 'doctors to be bold and honest with their patients about homeopathy's lack of benefit and commentary from the Dutch epidemiologist Jan Vandenbroucke (2005), reflecting on the 'growth of truth', including the relationship between bias, background knowledge and the concordance of clinical results with laboratory science findings.

Criticism and accusations from various quarters in medical field and scientists and even beneficiaries of homoeopathy are however rampant, especially after the publication in Lancet. This has created confusion not only among the common people, but also among the homoeopathic clinicians. A strong viewpoint has emerged from among homoeopathic professionals to question the irrational prejudices and criticisms leveled against the system. The investigator takes it as a challenge to scientifically study the rationality and scientific efficacy of homoeopathic medicines. The present study intends to either prove or disprove the accusations that the homoeopathic medicines are nothing but placebo. For this purpose the investigator focuses her study on patients suffering from low back pain, the most common musculoskeletal disorder ever reported.

Low back pain (LBP) is one of the most common and incapacitating disorders in modern society. About 80-88% of people experience incapacitating low back pain during their adult lives. Though acute low back pain in most of the cases is a self limiting transient problem, chronic low back pain and its associated disabilities represent a significant health problem. High degree of co morbidity is seen with reports of psychological symptoms and complaints along with chronic back pain patients. Chronic back pain patients (CBLP) often show a fear and depression related behavior with social retreat and less physical activity. Increasing pain is associated with decreasing muscular capacity of the spine stabilizing muscular system. Psychiatric disorders are significantly prevalent in those reporting CLBP compared to those without CLBP in general population. The fewer the neurological and structural deficit found by somatic examination, more the psychiatric symptoms. More wide spread pain is associated with more disability. Number of pain complaints has been found to increase the likelihood of psychopathology. Anxiety, depression, a number of coping strategies and a sensation of being sick all time are associated with chronic LBP and its chronicity.

LBP often causes severe emotional, physical, economic and social stress and has a negative impact on the patients and their families. Pain is the chief symptom of spine complaints. Pain is a complex experience that involves peripheral nociception, neuropathic problems and the psychological status of the individual. Most studies of inter relationships between LBP and psychological factors emphasize behavioral aspects, compensation payments, secondary gain or depression. These approaches describe the psychological and behavioural effects of unremitting LBP. However, all of the known anatomic, demographic, and psychosocial factors that might cause CLBP do not explain the symptoms in a significant number of subjects (Linton, 2000, Clauw, William & Lauerman, 1999). These individuals are sometimes referred to as having “idiopathic” or “nonspecific” CLBP.

A somatoform disorder is a mental disorder of MUS (medically unexplained syndromes) variety which is characterized by symptoms that suggest physical illness or injury – symptoms that cannot be explained fully by a general medical condition or by the direct effect of a substance, and are not attributable to another mental disorder. Somatoform pain disorder is pain that is severe enough to disrupt a person's everyday life. Up to 50 percent of primary care patients present with physical symptoms that cannot be explained by a general medical condition. Some of these patients meet criteria for somatoform disorders (Barsky, 1995, de Waal 2004).

The investigator had taken up the present study with the intention to find an answer to the allegations that the homoeopathic medicines are not in any way better than placebo. The study was designed in such a way as to differentiate the effects of homoeopathic medicines, placebo and homoeopathic medicines in combination with placebo on patients with pathological low back pain and patients with somatoform low back pain. For having a deeper scientific exploration the investigator has selected certain physical variables as well as psychological variables to be studied. The variables are pain & functional disability, anxiety, depression, wellbeing and physical signs related to low back pain.

## II. Objectives

1. To study whether there is any difference in the effect of homoeopathic medicines, placebo, homoeopathic medicines in combination with placebo on anxiety, depression, well being and physical signs among patients with pathological low back pain.

2. To study whether there is any difference in the effect homoeopathic medicines, placebo, and homoeopathic medicines in combination with placebo on anxiety, depression and well being among patients with somatoform low back pain.

### III. Hypotheses

- 1 There will not be any significant difference in Pain & functional disability among patients with pathological low back pain when treated with homoeopathic medicines, treated with placebo and treated with homoeopathic medicines in combination with placebo.
- 2 There will not be any significant difference in Pain & functional disability among patients with somatoform low back pain when treated with homoeopathic medicines, when treated with placebo and when treated with homoeopathic medicines in combination with placebo.
- 3 There will not be any significant difference in Anxiety among patients with pathological low back pain when treated with homoeopathic medicines, treated with placebo and treated with homoeopathic medicines in combination with placebo.
- 4 There will not be any significant difference in Anxiety among patients with somatoform low back pain when treated with homoeopathic medicines, treated with placebo and treated with homoeopathic medicines in combination with placebo.
- 5 There will not be any significant difference in Depression among patients with pathological low back pain when treated with homoeopathic medicines, treated with placebo and treated with homoeopathic medicines in combination with placebo.
- 6 There will not be any significant difference in Depression among patients with somatoform low back pain when treated with homoeopathic medicines, treated with placebo and treated with homoeopathic medicines in combination with placebo.
- 7 There will not be any significant difference in Well-being among patients with pathological low back pain when treated with homoeopathic medicines, treated with placebo and treated with homoeopathic medicines in combination with placebo.
- 8 There will not be any significant difference in Well-being among patients with somatoform low back pain when treated with homoeopathic medicines, treated with placebo and treated with homoeopathic medicines in combination with placebo.

### IV. Materials and methods

**Research design:** pre post experimental design.

**Sample:** Sample for the study was selected using systematic random sampling method.

The sample for the study was selected through the camps organised exclusively for patients with low back pain. The camps were organised by Back Pain Research Clinic of Dr.Padiar Memorial Homoeopathic Medical College, Chottanikkara. Out of the total number of 1142 patients, 673 patients met with the inclusion exclusion criteria. From among the 673 patients sample was selected randomly. For the purpose of study, low back pain was categorized into two- low back pain with positive physical signs (pathological low back pain) and low back pain without any recognizable physical signs (somatoform low back pain disorder). 225 patients who reported at least one of the signs positive based on the physical examination checklist were randomly selected and included under the category of pathological low back pain (Category I). 225 patients who did not have even a single sign positive based on the physical examination check list were randomly selected and were included under the category of somatoform low back pain. The inclusion of the somatoform low back patients was based on the DSM IV (APA 2000) classification for somatoform diagnostic criteria.

The patients in the Category I and II were further classified into three groups based on the type of intervention used as follows (Table 1).

– group I receiving homoeopathic medicines, group II receiving placebo and group III receiving homoeopathic medicines combined with placebo.

Only chronic cases having at least 6 months of history were selected for the study. The medicines were prescribed based on the homeopathic principles.

Seven patients from category I group and 4 patients from category II were dropped out from the follow up. Thus the final sample consisted of 439 patients with low back pain.

*Table showing number of patients with different intervention*

	Type of low back pain	
	Cat I pathological	Cat II somatoform
Total No of Patients	218	221
Treatment with Homoeopathic medicine	73	73
Treatment with Placebo	70	75
Treatment with Combination	75	73

#### Tools used

1. Hamilton anxiety rating scale (Hamilton 1959)
2. Beck depression inventory (Beck 1961)
3. PGI General well being measure (Verma & Verma 1989)
4. Oswestry disability inventory (Fairbank 1980)
5. Personal information data sheet (developed by investigator).

#### Procedure

A fully informed written consent was obtained from each and every patient before the beginning of intervention. The tools were administered to the patients individually. The instructions were read out and explained. Doubts were cleared and clarifications were given to the patients. The inventories were collected and checked for their completeness. The completed inventories were scored as per the manuals. The scored data were coded and subjected to statistical analyses.

#### Statistical techniques

The statistical techniques used was ANCOVA

## V. Results

Table 1: Means and standard deviations of pre-test and post- test scores in Pain when treated with homoeopathic medicines, treatment with placebo and with homoeopathic medicines in combination with placebo

*Table 1*

	N	Pathological low back pain	
		Pre-test Mean $\pm$ SD	Post-test Mean $\pm$ SD
Homoeopathic Remedies	73	21.33 $\pm$ 5.87	14.30 $\pm$ 6.87

Placebo	70	22.19± 5.16	20.01 ±5.42
Combination	75	21.63 ±7.03	15.28± 5.63

F = 22.173\*\* and p = 0.000. \*\* Significant at 0.01 level

It is seen from the table that the F value is 22.17. The value is highly significant (0.01 level). The mean value of Pain of patients with pathological low back pain after homoeopathic medicines (Category I) is 14.30. The mean value for the Category II which received placebo is 20.01. The mean value of Pain for the Category III which received homoeopathic medicines in combination with placebo is 15.28. The mean values show that the category which received homoeopathic medicines alone had a better reduction in the score followed by the category which received the combination. The category which received placebo alone had only a minimal decrease in the Pain scores. The hypothesis that there will not be any significant difference in Pain among patients with pathological low back pain when treated with homoeopathic medicines, when treated with placebo and when treated with homoeopathic medicines in combination with placebo.

Table 2 Means and standard deviations of pre-test and post-test scores in Pain of patients with somatoform low back pain when treated with homoeopathic medicines, with placebo and with homoeopathic medicines in combination with placebo

**Table 2**

	N	Somatoform low back pain	
		Pre-test Mean ±SD	Post-test Mean ±SD
Homoeopathic Remedies	73	22.05± 7.46	17.75± 7.71
Placebo	75	19.53± 6.29	19.57± 8.09
Combination	73	20.38± 6.49	16.16± 6.70

F = 18.017\*\* and p = 0.000. \*\* Significant at 0.01 level.

It is seen from the table that the F value is 18.01. The value is highly significant (0.01 level). The mean value of patients with somatoform low back pain (Category I) when treated with homoeopathic medicines is 17.75. The mean value of the category of patients which received placebo was 19.57. The mean of the category which received homoeopathic remedies in combination with placebo are 16.16. The mean scores indicates that the category which received homoeopathic medicines had a better reduction in Pain followed by the category which received homoeopathic medicines in combination with placebo.

The category which received placebo did not have any reduction in Pain. The hypothesis that there will not be any significant difference in Pain among patients with somatoform low back pain when treated with homoeopathic medicines, when treated with placebo and when treated with homoeopathic medicines in combination with placebo is rejected.

Table 3: Means and standard deviations of pre-test and post test scores in Anxiety of patients with pathological low back pain when treated with homoeopathic medicines, with placebo and with homoeopathic medicines in combination with placebo

**Table 3**

	N	Pathological low back pain	
		Pre-test Mean $\pm$ SD	Post-test Mean $\pm$ SD
Homoeopathic Remedies	73	10.41 $\pm$ 5.86	7.25 $\pm$ 5.86
Placebo	70	11.56 $\pm$ 6.99	11.94 $\pm$ 7.81
Combination	75	8.99 $\pm$ 4.88	6.87 $\pm$ 3.78

F = 8.986\*\* and p = 0.000. \*\* Significant at 0.01 level.

The table shows that the F value is 8.98. This value is significant at 0.01 levels. The mean value of the Category I which received homoeopathic medicines is 7.25. The same for the Category II which received placebo is 11.94 and for the Category III which received homoeopathic medicines in combination with placebo is 6.87. From the table it can be seen that there was a higher reduction in Anxiety in the Category I which received homoeopathic medicines followed by the Category III which received homoeopathic medicines in combination with placebo. The category which received placebo did not show any reduction in their Anxiety. Hence the hypothesis that there will not be any significant difference in Anxiety among patients with pathological low back pain when treated with homoeopathic medicines, treated with placebo and treated with homoeopathic medicines in combination with placebo is rejected.

Table 4: Means and standard deviations of pre-test and post test scores in Anxiety of patients with somatoform low back pain when treated with homoeopathic medicines, with placebo and with homoeopathic medicines in combination with placebo

**Table 4**

	N	Somatoform low back pain	
		Pre-test Mean $\pm$ SD	Post-test Mean $\pm$ SD
Homoeopathic Remedies	73	10.03 $\pm$ 7.19	8.07 $\pm$ 5.60
Placebo	75	9.56 $\pm$ 6.07	9.24 $\pm$ 6.28
Combination	73	7.78 $\pm$ 5.95	6.70 $\pm$ 4.63

F = 13.425\*\* and p = 0.000. \*\* Significant at 0.01 level.

It is found from the table that the F value is 13.42. The value is highly significant (0.01 level). The mean value of Anxiety of patients with somatoform low back pain which received homoeopathic remedies (Category I) is 8.07. Similarly the category which received placebo scored 9.24 and the category which received homoeopathic medicines in combination with placebo scored 6.70. This indicates that the patients who received homoeopathic medicines had a better reduction in Anxiety followed by the category which received homoeopathic medicine in combination with placebo. The category which received placebo had reduction in Anxiety. Hence the hypothesis that there will not be any significant difference in Anxiety among patients of low back pain with somatoform pain disorder when treated with homoeopathic medicines, treated with placebo and treated with homoeopathic medicines in combination with placebo is rejected.

Table 5 Means and standard deviations of pre-test and posttest scores in Depression of patients with pathological low back pain when treated with homoeopathic medicines, with placebo and with homoeopathic medicines in combination with placebo

**Table 5**

	N	Pathological low back pain	
		Pre-test Mean $\pm$ SD	Post-test Mean $\pm$ SD
Homoeopathic Remedies	73	10.85 $\pm$ 7.19	6.66 $\pm$ 6.56
Placebo	70	7.30 $\pm$ 5.63	7.19 $\pm$ 4.48
Combination	75	10.79 $\pm$ 7.36	5.01 $\pm$ 3.60

F = 7.267\*\* and p = 0.001. \*\* Significant at 0.01 level.

The table shows that the F value is 7.267. The value is highly significant (0.01 level). The mean score of Depression of patients with pathological low back pain which was treated with homoeopathic medicines alone (Category I) is 6.66. Similarly the Category II which received placebo scored 7.19 and the Category III which received homoeopathic medicines in combination with placebo scored 5.01. This indicates that the category which received homoeopathic medicines in combination with placebo had a better reduction in Depression followed by the category which received homoeopathic medicines in combination with placebo. The category II which received placebo had the least reduction in the score. Hence the hypothesis that there will not be any significant difference in Depression among patients with pathological low back pain when treated with homoeopathic medicines, treated with placebo and treated with homoeopathic medicines in combination with placebo is rejected.

Table 6: Means and standard deviations of pre-test and posttest scores in Depression of patients with somatoform low back pain when treated with homoeopathic medicines, with placebo and with homoeopathic medicines in combination with placebo

**Table 6**

	N	Somatoform low back pain	
		Pre-test Mean $\pm$ SD	Post-test Mean $\pm$ SD
Homoeopathic Remedies	73	9.96 $\pm$ 7.44	7.59 $\pm$ 6.71
Placebo	75	8.85 $\pm$ 6.22	9.49 $\pm$ 7.58
Combination	73	6.79 $\pm$ 6.32	5.74 $\pm$ 6.82

F = 4.160\* and p = 0.017. \* Significant at 0.05level.

The table shows that the F value is 4.16. The value is significant at 0.05 level. The mean value of Depression of patients with somatoform low back pain which received homoeopathic medicines after treatment is 7.59. The mean value of the Category II which received placebo is 9.49 and mean value of the Category III which received homoeopathic medicines in combination with placebo is 5.74. The table shows that there is significant difference between the three categories in Depression. The category which received Homoeopathic medicine had better reduction of Depression followed by the category which received homoeopathic medicines in combination with placebo. The category which received placebo alone did not have a reduction in the depression. Hence the hypothesis that there will not be any significant difference in Depression among patients with somatoform low back pain when treated with homoeopathic medicines, treated with placebo and treated with homoeopathic medicines in combination with placebo is rejected.

It is seen from the table that the F value is 7.55. The value is highly significant (0.01 levels). The mean value of well being of the patients with pathological low back pain which received homoeopathic medicines (Category I) is 8.07. The same for the Category II which received placebo is 6.77 and for the Category III which received homoeopathic medicines in combination with placebo is 11.21. The mean values indicate that category which received homoeopathic medicines in combination with placebo had better improvement in Well being followed by the category which received homoeopathic medicines alone. The category which received placebo alone did not show any difference. Hence the hypothesis that there will not be any significant difference in well-being among patients with pathological low back pain when treated with homoeopathic medicines, treated with placebo and treated with homoeopathic medicines in combination with placebo is rejected.

Table 7: Means and standard deviations of pre-test and post-test scores in Well being of patients with pathological low back pain when treated with homoeopathic medicines, with placebo and with homoeopathic medicines in combination with placebo.

Table 7

	N	Pathological low back pain	
		Pre-test Mean $\pm$ SD	Post-test Mean $\pm$ SD
Homoeopathic Remedies	73	5.92 $\pm$ 7.31	8.07 $\pm$ 6.88
Placebo	70	6.06 $\pm$ 6.26	6.77 $\pm$ 5.72
Combination	75	5.57 $\pm$ 5.85	11.21 $\pm$ 7.06

F = 7.555\*\* and p = 0.001. \*\* Significant at 0.01 levels.

Table 8: Means and standard deviations of pre-test and post-test scores in Wellbeing of patients with somatoform low back pain when treated with homoeopathic medicines, with placebo and with homoeopathic medicines in combination with placebo

Table 8

	N	Somatoform low back pain	
		Pre-test Mean $\pm$ SD	Post-test Mean $\pm$ SD
Homoeopathic Remedies	73	5.62 $\pm$ 5.38	8.81 $\pm$ 5.51
Placebo	75	5.56 $\pm$ 5.56	7.40 $\pm$ 6.35
Combination	73	9.10 $\pm$ 6.34	10.70 $\pm$ 6.55

F = 1.609 and p = 0.203.

It is seen from the table that the F value is 1.60. The value is not significant. This indicates that there is no significant difference between the three categories in wellbeing. Hence the hypothesis that there will not be any significant difference in well-being among patients with somatoform low back pain treated with homoeopathic medicines, treated with placebo and treated with homoeopathic medicines in combination with placebo is accepted.

## VI. Findings

1. Patients with pathological low back pain who received homoeopathic medicines had higher reduction in Pain & functional disability followed by the patients who received homoeopathic medicine in combination with placebo. Patients who received placebo had least relief.



2. Patients with somatoform low back pain had higher reduction in Pain & functional disability when treated with homoeopathic medicines followed by patients who received homoeopathic medicine in combination with placebo. Patients who received placebo did not show any reduction in Pain & functional disability.
3. Patients with pathological low back pain had higher reduction in Anxiety when treated with homoeopathic medicines followed by patients who received homoeopathic medicine in combination with placebo. Patients who were treated with placebo did not show a significant reduction in Anxiety.
4. Patients with somatoform low back pain had higher reduction in Anxiety when treated with homoeopathic medicines followed by patients who received homoeopathic medicine in combination with placebo. Patients did not show significant reduction in Anxiety when treated with placebo.
5. Patients with pathological low back pain had higher reduction in Depression when treated with homoeopathic medicines in combination with placebo followed by patients who received homoeopathic medicine in combination with placebo. Patients who were treated with placebo did not show a significant reduction in Depression.
6. Patients with somatoform low back pain had higher reduction in Depression when treated with homoeopathic medicines followed by patients who received homoeopathic medicine in combination with placebo. Patients did not show significant reduction in Depression when treated with placebo.
7. Patients with pathological low back pain had better enhancement of Well being when treated with homoeopathic medicines in combination with placebo followed by patients who received homoeopathic medicines. Patients who were treated with placebo did not show a significant enhancement of well being.
8. Patients with somatoform low back pain had shown similar reduction in well being after treatment with homoeopathic medicine, after treatment with placebo and after treatment with homoeopathic medicine in combination with placebo.

## VII. Discussions

Patients with pathological low back pain and patients with somatoform low back pain had shown significant difference in Pain when treated with homoeopathic medicines alone. The findings had shown that homoeopathic treatment had a highly significant role in reducing the low back pain of patients with pathological low back pain that had a physical pathology when compared to patients with somatoform low back pain. It can be inferred from the finding that homoeopathy could give better relief to Pain in patients with pathological low back pain when compared to the patients with somatoform low back pain.

The placebos are nonmedicated substances which are similar in external characteristics except for the medicinal property. It is customary to use placebos in controlled trials for the sake of comparison. Puhl et al (2011) in a study had shown that placebos could give clinically meaningful change in LBP scores. The findings of Puhl et al (2011) are contradictory to the findings of the present study.

Both the groups of patients had pain experiences which could not be managed with an inert substance. This shows that placebo is not an alternative to therapeutic agents. The findings of the present study disagree with the report by Shang (2005) that homoeopathy is nothing but placebo.

Patients with pathological low back pain who received homoeopathic medicines had higher reduction of pain followed by the patients who received homoeopathic medicines in combination with placebo. The patients who received homoeopathic medicines in combination with placebo also had higher reduction in pain. The placebo was found to be ineffective in reducing the pain of patients with pathological low back pain. The finding stresses the significant role of homoeopathic medicines in pain reduction. But patients with somatoform low back pain who received homoeopathic medicines showed the highest reduction in pain followed by those who received homoeopathic medicines in combination with placebo. It was seen that patients with somatoform pain had reported no reduction in pain when treated with placebo alone. But the high level of reduction in pain reported when treated with medicines in combination with placebo may be due to the effect the placebo could make in the psychological state of the somatoform patients. But it should be noted here that the placebo has effect only when used in combination with homoeopathic medicines.

There are two prominent theories for why the placebo effect exists. The conditioning theory according to Bennedetti, Pollo & Colloca (2007) suggests that when a neutral stimulus is paired with an unconditioned stimulus (such as the active drug) the neutral stimulus elicits a response, resulting in a conditioned response. This may be the reason for action of homeopathic medicines with placebo. In contrast, the expectancy theory, according to Stewart-Williams & Podd, 2004, is based on the patient expectations. The response to a stimulus depends on what response is expected from the stimulus. These patient expectations may not account for all of the placebo effect, but they are the most significant factor of the expectancy theory. Patients with pathological pain as well as somatoform pain who had received homeopathic medicines had shown a highest reduction in anxiety followed by the patients who received homeopathic medicines in combination with placebo.

Patients who had received placebo alone had shown no reduction in anxiety. Anxiety is a co morbidity which is associated with low back pain. The reduction in pain should result in reduction in anxiety. The reduction in anxiety may be due to the fact that homeopathy manages co morbid states also when treated according to symptom similarity. Studies related to the effectiveness of homeopathy in anxiety disorders related to low back pain were not found reported. But there were studies related to the effectiveness of Homeopathy in anxiety of other disorders.

The patients with pathological low back pain who received homeopathic medicines in combination with placebo had shown highest reduction in depression followed by the patients who had received homeopathic medicines alone. A comprehensive search of major biomedical databases to review the research evidence on the effectiveness of homeopathic medicines on depression by Pilkington, Kirkwood, Rampes, Fisher, & Richardson (2005) found the effectiveness to be limited due to the lack of clinical trials of high quality.

The present study indicates that homeopathic medicines along with placebo can considerably improve the well being of patients with pathological pain. Witt (2009) in study on the individualized homeopathic treatment on chronic low back pain disorders has found that the homeopathic treatment improves the quality of life. The finding of the present study agrees with the finding of Witt (2009). A finding with a difference was obtained in the case of patients with somatoform low back pain in well being. Here even the placebo has enhanced the well being of the somatoform patients well being is a subjective feeling which need not be due to a disease condition requiring medication whereas pain, anxiety and depression are conditions which require more rigorous management. Even a lengthy case taking procedure is seen to result in a feeling of subjective well being. Goldman and Ausiello (2008) in an article on the reasons for the growth of homeopathy and other complementary medicine has mentioned that the willingness of practitioners to commit adequate time to listen to patients and to touch them physically and emotionally as a possible reason for their growth.

## VIII. Conclusion

The investigator had taken up the present study with the intention to find an answer to the allegations that the homeopathic medicines are not in any way better than placebo. The study was designed in such a way as to differentiate the effects of homeopathic medicines, placebo and homeopathic medicines in combination with placebo on patients with pathological low back pain and patients with somatoform low back pain. Patients with pathological low back pain and with somatoform low back pain had reduction in anxiety, depression, well being and physical signs when treated with homeopathic medicines and who received homeopathic medicine in combination with placebo. Patients who were treated with placebo did not show a significant reduction.

## IX. Acknowledgements

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