



A Prospective Study On The Effectiveness Of Relationship Of Remedies Chapter In Boenninghausen's Therapeutic Pocket Book In Treating Osteoarthritis Of Knee

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Abstract: Thirty cases selected from OPD, IPD and Peripheral health centre of Sarada Krishna Homoeopathic Medical College and Hospital by purposive sampling technique. Duration of the study 1 year. Detailed case taking was done in the pre-structured case format which was followed by case processing and repertorisation. The cases were assessed using Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC) pain scale. The assessment was done during the first visit and were also assessed after medicinal intervention for evaluation. The cases were analyzed in the subsequent follow-ups and in cases where there was no significant improvement, there were worked out in 7th chapter, relationship of remedies of BTPB for further prescription. The study results show that female population is more affected, subjects in the age group of 50-59 years are predominantly seen. Among the 30 cases, 60% (n=18) cases had moderate improvement, 33.33% (n=10) cases had mild improvement, 3.33% (n=1) case each, had no improvement and marked improvement respectively, after second prescription using 7th chapter of the Boenninghausen's Therapeutic Pocket Book when compared to the first prescription. The cases were administered with remedies after repertorising in 7th chapter of the Boenninghausen's Therapeutic Pocket Book and in reference to materia medica for arriving at a remedy. It was also evident based on the WOMAC scoring before and after medicinal intervention, in all 30 cases significant improvement was seen.

KEYWORDS: Western Ontario and McMaster Universities Osteoarthritis Index, Relationship of remedies, Boenninghausen's Therapeutic Pocket Book, Osteoarthritis of Knee

I. INTRODUCTION

Knee osteoarthritis is a common condition marked by the progressive degradation of the knee joint, namely the cartilage that provides cushioning between the bone ends. As previously said, this ailment is predominantly prevalent among the older demographic, although it can also impact younger persons, particularly those who have had joint damage or have pre-existing disorders such as rheumatoid arthritis.^[1]

The WHO emphasizes the increasing worldwide occurrence of osteoarthritis and its significant influence on public health. Recent data indicates that the global prevalence of osteoarthritis has increased by 113% since 1990, affecting an estimated 528 million people in 2019. Significantly, the vast majority of instances of osteoarthritis, around 73%, manifest in those aged 55 and above, with females accounting for 60% of those impacted. The knee is the most often affected joint among those who are afflicted, followed by the hip and hand.

Knee osteoarthritis is the most often diagnosed type of arthritis, and its prevalence is projected to rise as a result of longer life expectancy and higher rates of obesity. Approximately 13% of women and 10% of men aged 60 and above are estimated to have symptomatic knee osteoarthritis.^[2] The prevalence of this condition increases to over 40% among individuals over 70 years old. This is demonstrated by the significant rise in the prevalence of knee OA, which increased by 32.7% between 2005 and 2015 and is now the primary cause of

years lived with disability (YLD) globally.^[3] Furthermore, the incidence of knee osteoarthritis is higher in girls as compared to males. Curiously, it is worth noting that not all persons who show signs of knee osteoarthritis on X-rays actually suffer symptoms. A study revealed that just 15% of patients with these findings reported experiencing symptoms. The annual occurrence rate of symptomatic knee osteoarthritis is roughly 240 occurrences per 100,000 individuals, regardless of their age.^[4]

NEED OF THE STUDY

The WHO emphasizes the increasing worldwide occurrence of osteoarthritis and its significant influence on public health. Recent data indicates that the global prevalence of osteoarthritis has increased by 113% since 1990, affecting an estimated 528 million people in 2019. Significantly, the vast majority of instances of osteoarthritis, around 73%, manifest in those aged 55 and above, with females accounting for 60% of those impacted. The knee is the most often affected joint among those who are afflicted, followed by the hip and hand. Furthermore, a significant proportion of individuals with osteoarthritis, amounting to 344 million, encounter moderate to severe symptoms that necessitate rehabilitation therapies. Projections suggest that the prevalence of osteoarthritis will continue to increase due to the aging of populations, rising rates of obesity, and a higher number of joint traumas. Significantly, although osteoarthritis is more common in older individuals, it is not exclusively caused by aging, emphasizing the complex and multiple origins of the condition. Moreover, it underscores the necessity for continuous research and intervention endeavours focused on enhancing patient outcomes and tackling the intricate difficulties linked to this incapacitating ailment. The essential usage of conservative treatment with medicinal intervention is the best mode of treatment in case of such degenerative diseases. The holistic approach in homoeopathic system will aid in alleviating the pain and improve the quality of life of the patient.

The conceptual prescription based on symptom similarity can hence be applied clinically in such conditions and further applying the knowledge of Repertory for second prescription in cases that had minimal improvement using "Relationship of remedies" chapter in Boenninghausen Therapeutic Pocket book.

II. RESEARCH METHODOLOGY

2.1 Population and Sample

A total of 30 cases were taken from OPDs and IPDs of Sarada Krishna Homoeopathic Medical College based on purposive sampling. Detailed case taking was done in the pre-structured case format which was followed by case processing and repertorisation. The cases were assessed using Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC) pain scale^[5]. The assessment was done during the first visit and were also assessed after medicinal intervention for evaluation. The cases were analyzed in the subsequent follow-ups and in cases where there was no significant improvement, there were worked out in 7th chapter of BTPB for further prescription.

2.2 Data and Sources of Data

Data collected through direct interview, observational method and WOMAC Questionnaire for pain assessment. It contains 24 components divided into 3 subscales as follows:

Pain: during walking, using stairs, in bed, sitting or lying and standing upright.

Stiffness: after first waking and late in the day

Physical Function: using stairs, rising from sitting, standing, bending, walking, getting in / out of a car, shopping, putting on / taking off socks, rising from bed, lying in bed, getting in / out of bath, sitting, getting on / off toilet, heavy domestic duties, light domestic duties.

The questions are scored on a scale of 0-4, corresponding to None (0), Mild (1), Moderate (2), Severe (3) and Extreme (4).

2.3 Theoretical framework

A total of 30 cases were taken from OPDs and IPDs of Sarada Krishna Homoeopathic Medical College based on purposive sampling. Detailed case taking was done in the pre-structured case format which was followed by case processing and repertorisation. The cases were assessed using Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC) pain scale.

2.4 Statistical tools and econometric models

For statistical analysis paired t-test has been used to assess the improvement in knee pain after the administration of homoeopathic medicines. Since, p value is <0.05, the study is effective and administration

of remedies after using relationship of remedies chapter in subsequent follow-ups proved effective and the scoring in WOMAC scale has also reduced in the post-assessment.

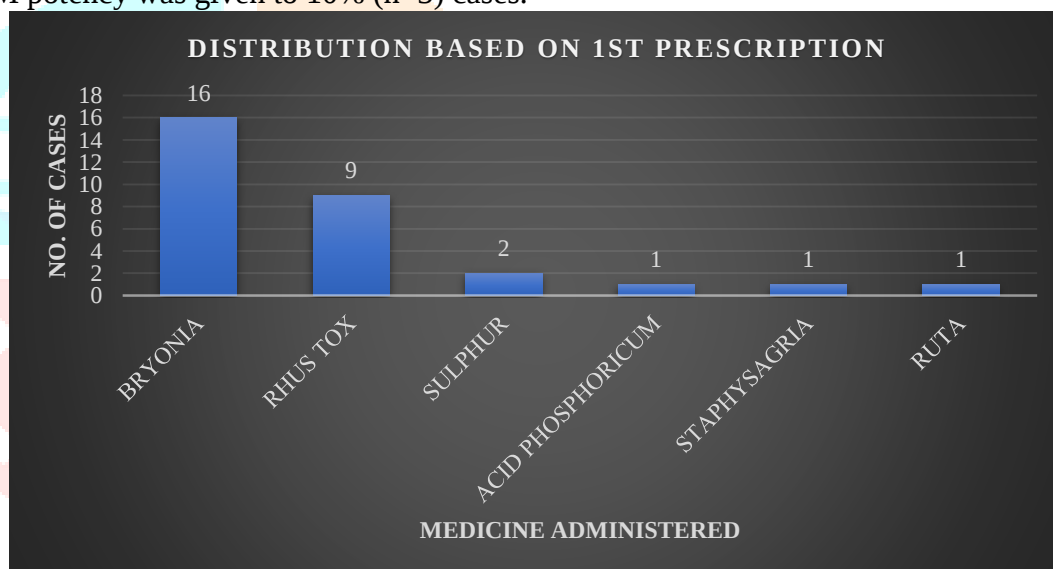
III. RESULTS AND DISCUSSION

3.1 Results

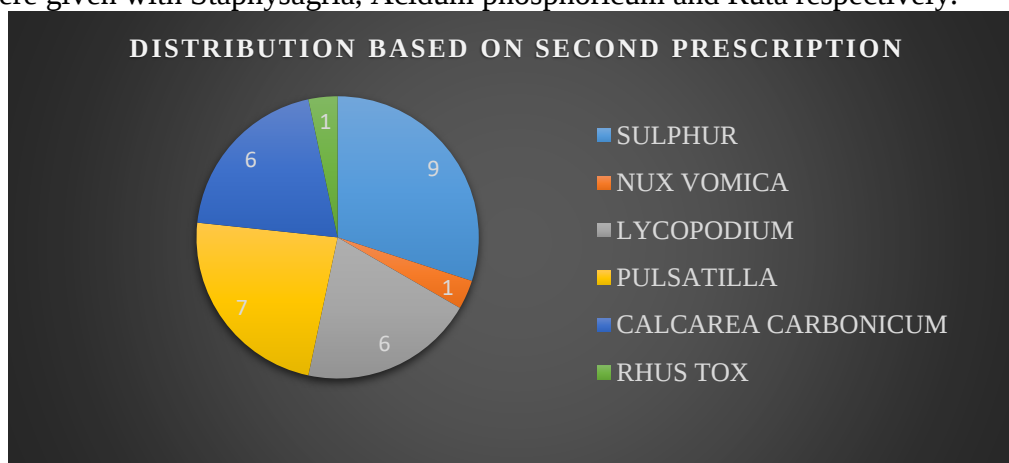
Among the 30 cases included in the study, the maximum number of cases were females being 70% (n=21) and 30% (n=9) were male. Among the 30 cases selected in the study 67% (n=20) of them were under the age group of 50-59 years, 16.66% (n=5) of the cases belong to the age group of 60-69 years, 13.33% (n=4) were under 70-79 years of age and 3.33% (n=1) were from the age group of 80-89 years. Among the 30 cases selected in the study 60% (n=18) are house wives, 16.66% (n=5) cases of business, 6.66% (n=2) cases of mason, 3.33% (n=1) case of fisherman, 3.33% (n=1) case of retired teacher, 3.33% (n=1) case of factory workers, 3.33% (n=1) case of farming, 3.33% (n=1) case of coolie. Among the 30 cases, based on family history of Osteoarthritis of knee 46.66% (n=14) have strong family history from their mother and sister. 40% (n=12) case are having only maternal history, 13.33% (n=4) cases have history from maternal, paternal and sister.

Among the 30 cases 3.33% (n=1) case had no improvement, 33.33% (n=10) cases had mild improvement, 60% (n=18) cases had moderate improvement and 3.33% (n=1) case have marked improvement after second prescription using 7th chapter of the Boenninghausen's Therapeutic Pocket Book when compared to the first prescription.

Among the 30 cases selected, 200th potency was given to 80% (n=24), 1M potency was given to 10% (n=3) cases and LM potency was given to 10% (n=3) cases.

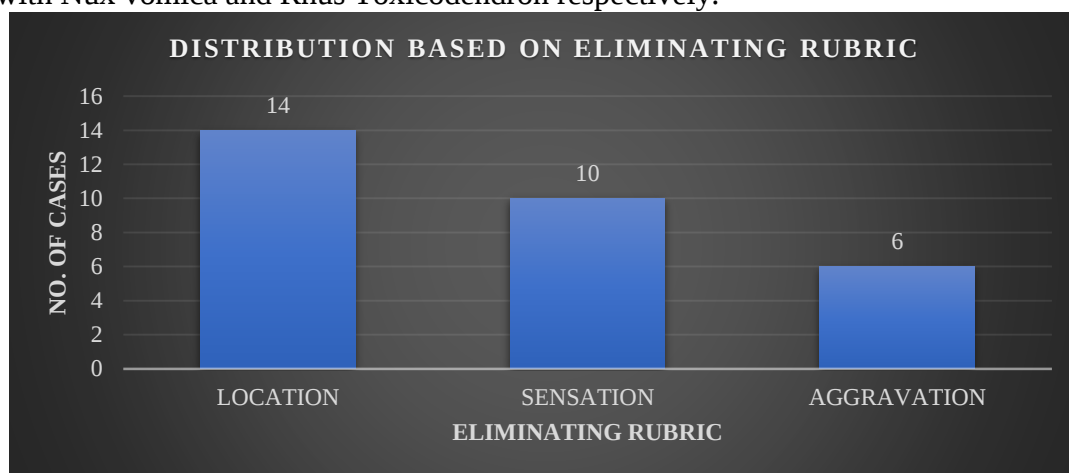


Among the case selected for the study based on the inclusion criteria, case taking and case processing was done and based on symptom similarity medicines were selected. In the 30 cases, Bryonia alba was given to 53.33% (n=16), Rhus Toxicodendron was given to 30% (n=9), Sulphur was given to 6.66% (n=2), 3.33% (n=1) cases were given with Staphysagria, Acidum phosphoricum and Ruta respectively.

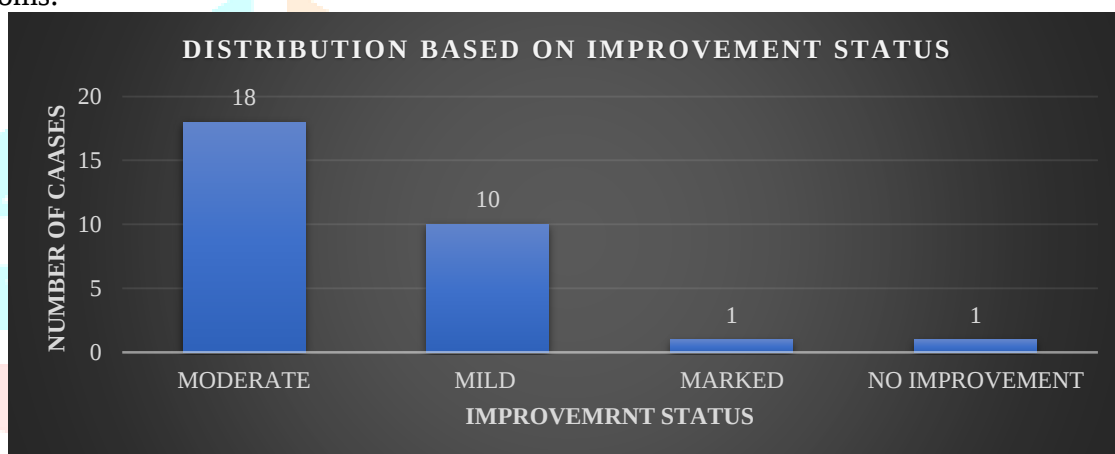


The cases which didn't have significant improvement in the first prescription were worked out in the relationship of remedies chapter in Boenninghausen's therapeutic pocket book for second prescription. Among the 30 cases 30% (n=9) cases were given with Sulphur, 23.33% (n=7) cases were given with Pulsatilla,

20% (n=6) cases were given with *Lycopodium clavatus* and *Calcarea carbonicum* and 3.33% (n=1) cases were each given with *Nux vomica* and *Rhus Toxicodendron* respectively.



Among the 30 cases that were repertorised using relationship of remedies chapter in Boenninghausen's Therapeutic Pocket Book, it was observed that the following rubrics were highly used as Eliminating rubric and are as follows, Location was used as eliminating rubric in 46.66% (n=14) cases, 33.33% (n=10) Sensation was the eliminating rubric and in 20% (n=6) cases, aggravation was used as the eliminating rubric based on the symptoms.



The cases that showed only mild improvement (n=10) and no improvement was seen in one case, these were repertorised again in 7th chapter of the Boenninghausen's Therapeutic Pocket Book based on the available symptoms and re-assessment was done using WOMAC score and all cases showed marked improvement eventually.

3.2 DISCUSSION

In the 30 cases during the first prescription based on repertorisation and symptom similarity, *Bryonia alba* was given to 53.33% (n=16). The cases which didn't have significant improvement in the first prescription were worked out in the relationship of remedies chapter in Boenninghausen's therapeutic pocket book for second prescription. Among the 30 cases 30% (n=9) cases were given with Sulphur, 23.33% (n=7) cases were given with Pulsatilla, 20% (n=6) cases were given with *Lycopodium clavatus* and *Calcarea carbonicum* and 3.33% (n=1) cases were each given with *Nux vomica* and *Rhus Toxicodendron* respectively. Among the 30 cases that were repertoried using relationship of remedies chapter in Boenninghausen's Therapeutic Pocket Book, it was observed that the following rubrics were highly used as Eliminating rubric and are as follows, Location was used as eliminating rubric in 46.66% (n=14) cases, 33.33% (n=10) Sensation was the eliminating rubric and in 20% (n=6) cases, aggravation was used as the eliminating rubric based on the symptoms. Based on the WOMAC scoring before and after medicinal intervention, in all 30 cases significant improvement was seen, which thus concludes that relationship chapter of Boenninghausen's therapeutic pocket book is highly effective. The study also concludes that, repertorisation using the relationship of remedies chapter provides a set of deep acting remedies which can be differentiated in reference to homoeopathic materia medica. Hence, the 7th chapter, Relationship of remedies of Boenninghausen's Therapeutic Pocket Book is highly effective in treating Osteoarthritis of Knee.

IV.ACKNOWLEDGMENT

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