RESEARCH ARTICLE

AN OBSERVATIONAL STUDY OF OPD MANAGEMENT VERSUS HOME MANAGEMENT IN LOW BACK ACHE PATIENTS

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Manuscript Info

Objective: To study the effectiveness of OPD management versus home management in low back ache patients.

Material and Method: Participants aged between 27 to 55 years suffering from low back pain for more than 3 months were inducted in the study. They were divided into two groups, one which was provided intervention at home and the other which was given physiotherapy in OPD setting.

Interventions: A pre and post assessment was done at 4 months based on Oswestry low back pain disability questionnaire. Analysis was done by application of Independent sample t test. P value less than 0.04 was taken as significant.

Results: A total of 10 participants were equally divided for OPD and home management. Oswestry low back pain disability questionnaire was administered pre and post intervention and Independent T test was applied to find the difference between the mean pre test and post test scores for OPD and home managed patients which were taken 4 months apart. A significant difference was observed as p value was < 0.00.

Conclusions: The study concluded that OPD management for chronic low back ache not only reduce the pain but also reduces chance of disability. But patient satisfaction was higher in home manage group in comparison to OPD in personal care.

Introduction:-

Low back pain (LBP) is a common disorder involving the muscles, nerves, and bones of the back.¹ Pain can vary from a dull constant ache to a sudden sharp feeling.² Low back pain may be classified by duration as acute (pain lasting less than 6 weeks), sub-chronic (6 to 12 weeks), or chronic (more than 12 weeks).² The condition may be further classified by the underlying cause as mechanical, non-mechanical, or referred pain.³ The symptoms of low back pain usually improve within a few weeks from the time they start, with 40–90% of people completely better by six weeks.⁴

In most episodes of low back pain, a specific underlying cause is not identified or even looked for, with the pain believed to be due to mechanical problems such as muscle or joint strain.⁵ If the pain does not go away with conservative treatment or if it is accompanied by “red flags” such as unexplained weight loss, fever, or significant problems with feeling or movement, further testing may be needed to look for a serious underlying problem.⁶ In
In this study, total 10 patients of low back pain were involved. In which 5 patients received physiotherapy sessions at Kanpur Physiotherapy Centre, Kanpur and other 5 patients followed only home programme management. The duration of study was four months. Patients were selected having age between 27 to 55 years and having LBP more than three months of duration. Patients coming to the OPD of Kanpur Physiotherapy Centre were included in this study. Those who fulfilled the inclusion criteria were asked to sign the informed consent after being explained the objectives and duration of the study. On the choice of the participants they were assigned either the OPD management group or home management group. All the participants were interviewed and were asked to fill the questionnaire at the time of induction in the study. The questionnaire consisted of close ended questions. First part recorded the demographic profile of the patients and the second part of Questionnaire was based on reliable standard scale (Oswestry low back pain disability), one of the most commonly used outcome measures for individuals with low back pain. The Oswestry Questionnaire encloses ten questions about patient’s functioning, and self-centeredness from the patient’s perspective in the context of physiotherapy management program can improve and maintain functional status, mental and psychosocial function, and self-efficacy to manage future symptoms for 1 year among primary care patients with ALBP. Cooper et al 2008 determined the patient-centeredness from the patient’s perspective in the context of physiotherapy for chronic low back pain. There were 25 patients who received physiotherapy for low back pain within 6 months. There was evidence of betterment in chronic low back pain.

Physiotherapy is one of the effective plans for LBP and can be provided at home as well as in OPD. Exercises and some physiotherapy modalities like hot or cold therapy can be given in some cases, pain modulating agents like TENS can be used for temporary pain relief. Postural control is taught to the patient to overcome any muscle imbalance.

Material and Method:-
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Results:-
A total number of 10 patients were participated in this study. Male patients were 4 and female were 6. The patients were selected on the basis of chronic low back ache more than three months. Independent T test was applied to find the difference between the mean pre-test and post-test scores for OPD and home managed patients which were taken four months. A significant difference was observed as p value was < 0.000. When paired t test was applied to find the difference in the pre and post home scores of home managed group mean score for pre-test was 25.31+ 5.8 and for the post-test was 05.27+ 5.2 with a highly significant p value of 0.000. When paired t-test was applied to find the difference in the pre and post home scores of OPD managed group mean score for pre-test was 08.31+ 8.7 and for the post-test was 10+7.8 with a highly significant p value of 0.000.

When intensity of pain was compared between the pre-test and post-test and type of pain management there was a reduction of severity of pain from 30% (n=3) to 20% (n=2) in OPD treated patients as compared to home treated patients where reduction was seen from 20% (n=2) to 30% (n=3). Significant reduction in the number of people suffering from pain was observed. Initially in the pre-test, n=5 of the people in the OPD management group had moderate to severe pain, number decreased to n=2 after 4 months. As compared to home management group where initially all the participants had moderate to severe pain after 4 months their number decreased to n=3. The effect of chronic pain on travelling when assessed revealed that n=4 were able to travel without any pain but after 4 months of intervention the number increased to n=8 in OPD managed group. Significant difference was observed in the home managed group where 50% of participants showed improvement after 4 months. Initially n=3 patients were able to sit without pain for longer duration of time in OPD group. After 4 months intervention another 5 patients showed improvement. Marked improvement was observed in home management group. Initially there was no one in this group who could sit without pain but after intervention n=6 patients were able to sit without pain for longer duration.

Discussion:-
The effectiveness of home management versus OPD management in low back ache patients was assessed using a self administered questionnaire. The two groups were followed over a period of four months and pre and post test were carried out on all the 10 patients.

In this study, the pain intensity was shown to improve from 40% to 8% in OPD managed group, French S. Cameron stated that heat therapy, cold compression therapy can reduce symptoms of acute and sub acute low back ache \[17\]. In our study, use of same modalities with manual therapy improved pain by 49%. Regarding home management, T.M. Damush et al \[18\] affirmed that self-management program can improve LBP. He conducted a research on long-term effects of a self-management program for patients with acute low back pain. Similarly in our study, the group following home programme in our study revealed 72% betterment in pain. When comes to personal care Damush TM \[18\] stated marked improvement in functional status, mental functioning, and self-efficacy when managed at home, in our study which revealed 62% improvement in personal care.

Ebadi S, et all concluded that the therapeutic ultrasound and exercise treatment for chronic non specific low back pain is beneficial and found both function (17%) and pain (24%) improved post treatment \[19\]. In our study showed 37% to 60% improvement in OPD managed group and 15% to 43% improvement in home managed group.

Conclusion:-
The study concluded that OPD management for chronic low back ache not only reduces pain but also reduces the chance of disability. But patient satisfaction was higher in home manage group in comparison to OPD in personal care.

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| Sarfraz M et al. Effectiveness of Home Management versus OPD Management in Low Back Pain Patients | Home Management (n=50) | P Value |
|-----------------------------------------------|------------------------|---------|
| **Patient** | | |
| Intensity of Pain | | 0.165 |
| Mild | 35 | 70 | 27 | 54 | |
| Moderate | 11 | 22 | 16 | 32 | |
| Severe | 4 | 8 | 7 | 14 | |
| Person Care | | 0.003 |
| Can Look After Independently | 36 | 72 | 28 | 56 | |
| Partially Dependent | 12 | 24 | 20 | 40 | |
| Totally Dependent | 2 | 4 | 2 | 4 | |
| Lifting | | 0.313 |
| Can Lift Heavy Weights | 34 | 68 | 26 | 52 | |
| Can Lift Medium Weights | 14 | 28 | 17 | 34 | |
| Can Lift only Light Weights | 2 | 4 | 7 | 14 | |
| Walking | | 0.065 |
| Can Walk Max. 1 mile to 100 yards | 31 | 62 | 40 | 80 | |
| In bed most of the time | 0 | 0 | 0 | 0 | |
| Sitting | | 0.116 |
| Can Sit without Pain | 33 | 66 | 26 | 52 | |
| Can Only Sit Max. 1 hour | 16 | 32 | 23 | 46 | |
| Cannot Sit at all | 1 | 2 | 1 | 2 | |
| Standing | | 0.163 |
| Can Stand as long as I want | 34 | 68 | 28 | 56 | |
| Can Stand Max. 1 hour | 16 | 32 | 21 | 46 | |
| Pain Prevents from Standing | 0 | 2 | 1 | 2 | |
| Sleeping | | 0.000 |
| Can Sleep without being disturbed by Pain | 42 | 84 | 31 | 62 | |
| Can Sleep only for 2-6 hours | 8 | 16 | 19 | 38 | |
| Pain Prevents from Sleeping | 0 | 0 | 0 | 0 | |
| Social Life | | 0.004 |
| Normal | 48 | 96 | 41 | 82 | |
| Social Life          |         |         |         |         |
|---------------------|---------|---------|---------|---------|
| Restricted Social   | 2       | 4       | 7       | 14      |
| No Social Life      | 0       | 0       | 2       | 4       |
| **Travelling**      | Can     | Travel  | without| Pain    |         |
|                     | Can     | between | mins-2 | hours   | 39      | 78      | 27      | 54      | 0.149   |
|                     | Travel  | 11      | 22      | 23      | 26      |
|                     | between | 30      | 11      | 22      | 23      | 26      |
| Pain Prevents from | 0       | 0       | 0       | 0       |         |         |         |         |
| Travelling          | 0       | 0       | 0       | 0       |
| **Employment/Home**| Making  | Near    | Normal | Office/Home | 35      | 70      | 27      | 54      | 0.006   |
|                     | Making  | Normal  | Office/Home | activities |         |         |         |         |
|                     | Making  | Normal  | Office/Home | activities | 35      | 70      | 27      | 54      | 0.006   |
|                     | Moderate to Light Work | 15 | 30 | 18 | 36 |
|                     | No Work | 0       | 0       | 5       | 10      |