

# Conservative Therapy through Adequate Doctor Patient Interaction Improves outcomes in Patients Suffering from Mild and Moderate Knee Osteoarthritis

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**Keywords:** Knee osteoarthritis (KOA), Non-pharmacological interventions (NPIs)

In India, prevalence of the KOA is more than 30 %.(1) Patients suffering from KOA have a poor quality of life due to intractable and perpetual pain swelling & buckling.(2) Basically, KOA is a chronic disease. There is a definite role of conservative therapy in management of KOA. It needs lots of attention of the Orthopedists/ physiotherapists as well as the family members for attaining best outcome of the therapy. This rarely happens. When KOA patients go to consult an Orthopaedist in OPD there is too much overcrowding. Doctors don't have enough time for explaining conservative treatment in detail to them (3). Necessary investigations are advised. Their prescription includes analgesics, list of exercises, dietary advice. Then the patient is referred to physiotherapy section. Patients are given verbal instructions in hardly 2-3 minutes which doesn't make any sense to them. Consequently, the patients often end up doing exercise wrongly. Rather than benefitting them this aggravates the condition.

In view of such problems the authors conducted a trial to compare the impact of two packages of NPIs (provided through booklets, supervised sessions and videos) on pain of KOA patients reporting at PGIMER Chandigarh (CTRI/2014/01/004270). The intervention package resulted in significant improvement in WOMAC and VAS scores in mild to moderate KOA cases recruited in the study. Patients forgot exercises in spite of demonstration of the same in routine OPDs. Hence, video/brochures certainly were handy for guiding the patients about correct way of doing exercises. Patients liked this mode of training.

There were regular interactions between researcher & the patients. She also exchanged mobile numbers with the patients. In this high-tech era, anyone to one personal interaction is highly valued by people. This was witnessed in our study also where; intimate personal interaction with the KOA patients and their caregivers by the researcher was lapped up eagerly by them. They felt immensely relieved by discussing various issues related to KOA and its management with the researcher. Queries and apprehensions of patients were duly satisfied by the investigator.

Overall, 75 out of 123 patients enrolled in this study had moderate to severe pain initially. At the end of 12 months of intervention only 2 patients remained in these categories; 57 patients (46%) reported complete relief in symptoms. Rest reported only mild pain at the end of the intervention phase. Some patients reported that they stopped taking analgesics (17.8%) and few reported reductions in frequency of analgesic intake (13.8%) after they started participation in the

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**How to cite this article:** Sharma M, Singh A, Dhillon MS et al. Conservative Therapy through Adequate Doctor Patient Interaction Improves outcomes in Patients Suffering from Mild and Moderate Knee Osteoarthritis. *Int J HealthCare Edu & Med Inform* 2017; 4(3&4): 1-2.

**Digital Object Identifier (DOI):** <https://doi.org/10.24321/2455.9199.201712>

ISSN: 2455-9199

study. Subjective feedback from the patients also revealed appreciable benefits of the intervention. *"Main 70% theek hun, goliyan nahi khanda, tuhada bada dhanwad, mainu pvt walon ne operation keha si, hun ni karwana"* (I have 70% relief. I have also stopped taking pain killers).

A composite set of specific exercises was used in current study (standing quadriceps stretch, supine hamstring stretch, short arc lift, isometric quadriceps exercise, isometric quadriceps with medial rotation of hip, quadriceps isometrics in sitting position, Hamstring isometric, Hip abduction). Counselling about nutrition & weight reduction was also done along with and telephonic reminders for compliance.

Patient education sessions were held in a separate room established in the Physical and Rehabilitation Department of PGIMER. They were given customised training for 30 – 40 minutes in a separate room in OPD. This proved to be major advantage. It provided a comfortable ambience for doing the exercises through laptop based training videos developed on KOA exercises. This helped in elimination of error or chance of doing exercises wrongly. It was quite convenient and comfortable to the patients as well as the researchers. It was a welcome contrast to the crowded OPD set up seen in most public sector hospitals. This helped the patients to discuss with the therapists at length about the relevant details. Pain coping skills were also imparted to them. They were trained in performing meditation at home.

KOA management regime requires a significant level of adherence. To achieve this, focus in the present study was on developing good adherence behavior. Hence patients were reminded telephonically about their follow up visits. Many studies have also shown that monthly telephone calls to KOA patients helped in improving compliance with exercise regime when compared with a usual-care group.(4)

The present study is first of its kind for KOA patients in India, which had follow up period of 12 months. At follow up visits, patients were encouraged to share their experiences about disease and treatment protocols with the other KOA patients present in the intervention room. This approach helped in arousing a fellow feeling among them. Moreover, it improved self-management.

Children and spouses of the patients were also involved in the training sessions. This strategy adopted in the current study also paid rich dividends. The findings obtained in

present study suggested involvement of family members had a good impact on self-efficacy and motivation.

Weight reduction is an important component of KOA management regime. Of course it is advised by Orthopedists. But in OPD setting it is more or less a 'lip service'. In fact it was observed that maximum benefit was in those patients who reduced their weight. And it took a lot of cajoling and individualized attention of the investigator. This is almost impossible in crowded OPDs.

One common observation in Indian set up is that KOA patients are a demoralized lot. They need to be told that conservative therapy will certainly help in mild and moderate KOA and eventually surgery will be performed only in severe KOA. In the current study, confidence building measures used for KOA patients improved the outcomes.

Now, the challenge is 'how to replicate' this idea in hospitals across the country. This requires allocation of a separate room with requisite staff deployed therein OPDs. Booklet/ brochure/ videos developed by us for KOA management need to be further validated. Physiotherapists should provide training of exercises through brochures and videos. Orthopaedic surgeons should lay emphasis on conservative therapy in mild/ moderate KOA cases. They should spend more time with patients in OPDs. More listening is required for enhancing patient's satisfaction and confidence.

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