MORE THEN 90% back pain is caused by how we involve in our daily occupation, yes it’s your job/ work/ physical participation in your life (too much sitting, and slouching around, too little exercise, over weight and chronic stress.

It doesn’t mean that you stop doing work, definitely we need to work, but in a way your body accepts it.

Back ache are the gift like buy one get one free of modern civilization, which is characterized by a sedentary life style, improper food habits, wrong postures coupled with a lot of mental tensions, spinal or extra spinal cause.

Let’s see how Mr. X got his active life back after OCCUPATIONAL THERAPY treatment.

Mr. X 28 years old Mechanical engineer, was very active from his child hood participated in various sports, scout and guides etc.

First time Mr. X got back pain when he was doing monkey ladder, his continuous physical and mental stress related to his job, aggravated his back pain to the extent which made him to rethink about his future and carrier. But as an Occupational Therapist we took challenge with him to continue the same job without back pain, but how!!

Ms. Y presently an Occupational Therapist, at the age of 14 years she met with RTA, which led to disc prolapse. This present occupational therapist had dream of to be an Odishi dance artist, which got washed out due to back pain. But after 7 years happiest moment for her life, when she performed in annual function of her college, she expressed this all because of appropriate Occupational Therapy.
But it’s a Big Question, what exactly occupational therapy is!?

In simplest term, Occupational Therapy is a form of treatment where we help people to understand and learn how you should do your job whatever it is (occupation, household task, sports, driving ...), in a way that it follow normal body biomechanics, which should not hurt your back.

Let’s check out what this big term **biomechanics** means: biomechanics is the science of movement of a living body, including how muscles, bone, tendons, and ligaments work together to produce movement. Or we can say, the application of kinesiology in daily life activities and to the prevention and correction of problems related to posture.

Occupational Therapy practitioners are uniquely qualified with ergonomics, to provide services in independent living settings, as they have an understanding of dynamic interplay between the individual and the environment, and can suggest and implement modification to enhance the individual’s ability to function in a given environment. An occupational therapist can help employers identify hazards that may contribute to on-the-job injury, and determine how it can be eliminated.

**Let’s begin,**

Occupational therapist initiate with analyzing activity/job and the context in which the activity is performed, as well as the consumers ability to perform the task. The therapist would then identify barriers to performance and make recommendation accordingly.

**As Prevention Is Better Than Cure:**

Top 10 points to prevent lower back pain

1. Good posture
2. Make the right moves
3. Level of height
4. Sleep right
5. Practice relaxation technique
6. Identify feeling of exertion and pain
7. Drop the load
8. Strengthen your abdominal muscles
9. Take a break
10. Perform back strengthening activities

**Recent technique** we use to reduce the burden of the chronic low back pain is the use of a 'Back School Programme'. This is a brief therapy that uses a health education method to empower participants through a procedure of assessment, education and skill development. The 'Back School Programme' was effective in improving patients' Quality of Life.

The predominant interventions used in the 'Back School Programme' are physical training, activity therapy and exercises. It has been shown that the programme reduces back pain, decreases the time lost from work and improves patient functioning. Effectiveness of treatments for chronic pain should consider outcomes in six core domains: pain, physical functioning, emotional functioning, patient global ratings of satisfaction, negative health states, and adverse events, and patient disposition.

We need to reflect back to Mr. X who developed his back pain through repetitive physical strain on his back which got double from mental stress from his job, Occupational Therapist started intervention from Mr. X office where he spends 8-10 hrs every day, by analyzing all the factors associated with back pain, we recommended:

**First**- regular break in your job

**Second**- few small modification to his workstation (height of chair and table with proper ergonomics to maintain normal spine alignment), frequent use material within his arm reach.

**Third**- as he is mechanical engineer, analysis of frequent use instruments, at worksite and modification in some instrument as per requirement.
Fourth: detailed explanation and demonstration for maintaining proper posture during working on instruments.

Fifth: suggestion for doing regular therapeutic activity to improve strength of his back and abdomen muscles.

Here few Guidelines for safe material handling which we suggested Mr.X and his employer:

- Physical indication that demands are exceeding abilities
  - Person is struggling to lift, carry, push or pull the object
  - Unable to walk normally when carrying, pushing or pulling an item
  - Start to sweat or face turns red, unable to maintain normal breathing
  - Unable to safely control the item so they may use momentum or “throw” the weight
  - Extension of neck and back
  - Arms are straight – unable to keep elbows bent, - shoulder rounded

  ➢ Making the best of difficult situations
    - Reduce force on the spine by keeping knees bent and centre and centre of gravity low
    - Use a wide stance or diagonal stance to reduce strain on the spine
    - Get help – a team/carry will reduce load
    - Use tool and equipments- cart, leverage, clamps, lift truck
    - Being in good physical condition helps lower the risk of injury when difficult material handling situations are encountered

  ➢ Take a few minutes to think it out
    - Hurrying only increases risk of injury
    - Avoid wear and tear on soft tissues

  ➢ Plan the lift
    - How you could complete the task with half as much physical strength
    - Clear the area before lift/carry/push/pull

  ➢ Break the task into a series of steps
REDUCING INJURY RISK FACTORS

- Targeted stretch - spine, shoulder, hips
- Consult an occupational therapist or health care professionals to begin a targeted spine work conditioning program
- Improve general physical condition and
- Cardiovascular fitness