SUMMARY

Pain is the symptom for which most patients seek medical assistance. Since only the sufferer and not the observer perceives pain, it can have no precise definition. Sir Thomas Lewis described the situation succinctly when he said that pain is "known to us by experience and described by illustration". Webster defines pain as the sensation one feels when hurt mentally or physically, especially distress, suffering, great anxiety, anguish, grief etc., as opposed to pleasure - or, a sensation of hurting or strong discomfort in some part of the body caused by an injury, disease, or functional disorder and transmitted through the nervous system."

The notion that pathology of various vertebral column structures is the prevalent cause of low back pain, was challenged by Krum (1976) who studied 8000 patients in two New York hospitals presenting with low back pain. He concluded that in 60 percent, the pain was due to muscular dysfunction while only 20 percent showed conclusive evidence of vertebral or disc pathology.

The chronic low backache is a very common problem all over the world. The present study "Chronic low back pain - an radiological assessment" was carried out to
evaluate the various causes of low back pain. Main aim of the study was to evaluate the various incidences and etiological factors of low back pain and its comparison to Western society. The study carried out in the Department of Radiology, M.I.E. Medical College & Associated Hospital, Jhansi. One hundred patients were selected from those attending the Out Patient Department of the hospital, having complaint of chronic low back pain. In the present study, cases included in age group 10 - 39 years.

The detailed history, duration of complaints, intensity of pain, its radiation, postural relation were noted. Detailed examination including general and local examination of lumbo-sacral spine was done. Routine blood and urine was done. Patients were subjected for radiological examination of lumbo-sacral spine. Plain X-ray of lumbo-sacral spine in antero-posterior, lateral and oblique projection were done. In few cases, contrast examination in the form of myelography was done.

In the light of the present work and with a view of studies in the past from literature, the following can be concluded.

On the 100 patients having complaints of chronic low backache attending O.P.D. of this hospital, the maximum age group were in their 3rd decade of life (41 - 50 years).
66 percent. The majority of cases were females (57%).

In both sexes, the maximum occurrence was in 41 - 50 years age group.

Hult, L. in 1984 found that males ranging in the age group of 25 - 69 years were the most affected. His finding were attributed to 60 percent of male population.

As per their physical activity in present study, the hard working group was having more problem, 60 percent.

Nagora (1979) found an incidence of low back pain in about 10 percent of individuals who did heavy work and an incidence of about 6 percent for those considered to be doing light work, for an overall average of about 13 percent.

In our study, the common symptoms of low backache, the stable type of pain was present in maximum cases (52%). Mild pain observed in most of the cases (56%). Maximum cases having complaints of pain more than one year (76%). Other symptoms were painful restriction of movement and few cases were having involvement of bowel and bladder and lower limb also.

Out of 100 cases, only 79 cases showing some radiological sign. The rest of 21 percent were carried out detailed history and it was found that their pain was either due to improper use of posture or their working condition causes then, low back pain.
In present series, maximum cases were found of osteoarthritis (30%) followed by osteoporosis (10%).

Ishrak et al. (1969) revealed that over one half of the women 45 years of age and over had X-ray evidence of osteoporosis in the lumbar spine.

Other common pathological causes were old healed Pott's spine (8%), loss of lumbar lordosis (7%), prolapsed inter-vertebral disc (7%), spondylolisthesis (6%) and spondylosis (6%).

Beverly & Levine (1949) reported incidence of spinal tuberculosis to be 3.3 percent.

Krause (1970) concluded that in 60 percent, the back pain was due to muscular dysfunction.

Pheasant (1977) published the figures for entire state of California, nearly one half of the patients were hospitalized with prolapsed disc, or symptomatology indicative of disc disease.

George (1978) reported incidence of spondylolisthesis as about 3.8 percent.

In present study, congenital anomaly like spina bifida (4%), diastematomyelia (15) and congenital vertebral fusion (12%) were also a consumative factor of low back pain.
Dittrich (1939) reported that 3 percent of all spines showing spine bicauda results.

One case of lumbar canal stenosis (1%) was found which was proved by myelography, in this series.

Sandoz et al (1976) observed spinal canal stenosis in 10 percent cases.

In our study, osteomalacia was found in 3 percent cases. Old traumatic collapse were found in 3 percent of cases.

Wilson and Katz (1969) found only 1 in 280 cases of stress fractures in military trainee.

In present series, Calve's disease was found in 1 percent and one percent showing secondary deposit in the spine.

Nugent et al (1950) reported seven additional cases, two were in adolescent and one had Scheuermann's disease.

Epstein (1976) reported the most common tumors which account for more than 60 percent of spinal metastasis, are from the breast, the prostate, lung, kidney, thyroid and colon.

From the above, it was concluded that chronic low back pain was a common problem in 6th decade of life particularly in females. Most vocal coming were low
back pain. The most common presenting symptoms were mild stable type of low back pain. About one fifth cases showing no radiological finding and it was observed that improper use of posture causing low back pain to them. The commonest pathological condition causing low back pain was osteo-arthritis.

Besides this, the proper use of posture and mild to moderate degree of exercise can prevent such common problem of low back pain.