Discussion
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The present study was conducted in the Department of Medicine, M.L.B. Medical College, Jhansi and conducted from November 2003 to April 2004. The subjects were taken from the diabetes OPD, General Medicine OPD and wards.

This study included 100 patients detected within 6 months. Of the 100 patients studied 60 were males and 40 were females, maximum number of patients were in 40 – 59 years age group.

If we consider the clinical presentation at the time of diagnosis, nearly 76% has classical symptoms like polydypsia, polyuria and weight loss. This compared with UKPDS where nearly 60 – 65% patients were with classical symptoms.

About 20% patients had symptoms of infection e.g. burning during micturation, vaginal itching, Balanoprophritis. Nearly 15% patients had features of neuropathy in the form of tingling and numbness. This compares with UKPDS where 20 – 25% patients presented with symptoms of parasthesia. But our findings are in contrast to Singh et al who reported a prevalence of 47% of neuropathy in newly diagnosed patients.

Approximately 12% patients presented with vague symptoms like vertigo, headache, heaviness in eyes. Nearly 6% patients were
incidentally diagnosed while coming for other symptoms of cataract operation, posted for other operations. This finding is somewhat similar to that observed in Third National Health And Nutrition Examination Survey (NHANES) where 6.7% of the patients were found to be diabetic on routine detection. This is an unusual finding, and can be explained by the fact that most of the diabetes patients coming to diabetes clinic are city dwellers, who have access to better medical facility and come early.)

Of all these patients, 4 patients had Pulmonary Tuberculosis at the time of diagnosis. Various workers have reported the prevalence of Tuberculosis from 0.5 – 15%.

A positive family history was found in 20% patients.

If we look at the BMI of the cases studied (According to WHO guidelines) 58% in normal range, 31 cases are overweight and 11 patients were obese.

The cases of BMI below 18.5 are not included in the study.

These findings are in consent with the observations of various workers notably Mckeiuge et al in England and Banerji et al, that Indians are at an exaggerated risk of insulin resistance due to excess body fat composition and by the fact they are centrally obese as judged by their waist circumference. Fernando et al found obesity in nearly 16% of patients.
According to Asia Pacific guidelines in which 41 patients are normal, 41 are over weight and 18 are obese. This finding compares with Fernando et al.

Waist circumference were > 85 cms in 21 females and more than 102 cms in 12 males.

The urinary protein was < 30 mg/l in 85% patients between 30 – 300 mg% i.e. microalbuminuria in 15% patients. This comprises with Brookmoyer et al, who found the prevalence of nephropathy to be 8 – 18%.

The distribution of Blood Pressure in 100 patients according to JNC VII guidelines showed that 48% had normal BP, 21 were prehypertensive and 31 were hypertensive. This finding is near to UKPDS, which reported a prevalence of 39% in newly diagnosed patients. Fernando et al found hypertension in 23% patients.

The Ankle Brachial Blood Pressure Index was 1 or greater than 1 in 94 patients and in between 0.9 to 1 in 6 patients.

Out of 100 patients 88 showed the normal fundus on examination and 12 patients had some abnormality detected in the form of macular edema, exudates, hemorrhages and cotton wool spots.
We have done Fluorescine angiography in 20 patients out of which 4 had macular edema and vascular leak. Neovascularization was not seen in any case.

These findings are close to UKPDS, which reported 82% normal fundus and 18% patients had retinopathy at the time of diagnosis. None of the patient was found to have proliferative retinopathy changes.

When we look at the lipid profile of the patients, 54% of the patients had total cholesterol in desirable range i.e. < 200 mg/dl, 30% had borderline high cholesterol and 16% had high cholesterol.

LDL cholesterol was optimal in 26%, above optimal in 40%, 34% had high LDL cholesterol.

Nearly 93% patients had borderline high and high triglyceride level.

HDL level was < 40 mg% in 48% and > 40 mg% in 52% males, while HDL was < 50 mg % in 88% females and > 50 mg% in 12% females. This comprises with Strong heart study by Howard et al, who found that dyslipidemia in women tends to be more common than men.