

## [Retinopathy and risk factors in diabetic patients from Al-Madinah Al-Munawarah in the Kingdom of Saudi Arabia.](#)

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### Source

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### Abstract

#### BACKGROUND:

Diabetes mellitus is accompanied by chronic and dangerous microvascular changes affecting most body systems, especially the eye, leading to diabetic retinopathy. Diabetic retinopathy without appropriate management is emerging as one of the leading causes of blindness. Therefore, it is necessary to improve the early diagnosis of diabetic retinopathy, reduce the risk of blindness, and identify relevant risk factors.

#### METHODS:

This descriptive study was designed to estimate the prevalence of retinopathy and its staging in diabetic patients attending the diabetes clinic at King Fahd Hospital in Al-Madinah Al-Munawarah, Kingdom of Saudi Arabia, from 2008 to 2010. Patients completed a questionnaire, underwent a full medical assessment carried out by the treating clinicians, and were examined for evidence of diabetic retinopathy using standard ophthalmic outpatient instruments.

#### RESULTS:

In total, 690 randomly selected diabetic patients of mean age  $46.10 \pm 11.85$  (range 16-88) years were included, comprising 395 men (57.2%) of mean age  $46.50 \pm 11.31$  years and 295 women (42.8%) of mean age  $45.55 \pm 12.53$  years. The mean duration of diabetes mellitus was  $11.91 \pm 7.92$  years in the women and  $14.42 \pm 8.20$  years in the men, and the mean total duration of known diabetes mellitus was  $13.35 \pm 8.17$  years. Glycated hemoglobin was higher in men ( $8.53\% \pm 1.81\%$ ) than in women ( $7.73\% \pm 1.84\%$ ), and this difference was statistically significant ( $P \leq 0.0001$ ). Of the 690 diabetic patients, 249 (36.1%) had retinopathy. Mild nonproliferative diabetic retinopathy was present in 13.6% of patients, being of moderate grade in 8% and of severe grade in 8.1%. A further 6.4% had proliferative diabetic retinopathy.

#### CONCLUSION:

Regular screening to detect diabetic retinopathy is strongly recommended because early detection has the best chance of preventing retinal complications.