

# Diabetic retinopathy prevention for all: Introduction of a novel diabetic retinopathy screening programme to improve access to preventive services in populations of medically underserved areas in Central Greece – Our experience so far.

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## Introduction

Diabetic retinopathy is a major complication of poorly controlled glucose and constitutes the most common cause of vision loss among people with diabetes and a significant cause of blindness worldwide.<sup>(1),(2)</sup>

Early diagnosis and management of the disease can decrease significantly associated visual loss that negatively affects quality of life in diabetic patients.<sup>(1)</sup>

The goal of our scientific team was to introduce an annual diabetic retinopathy screening programme in a primary healthcare setting for diabetic patients of medically underserved areas in Central Greece.

## Objectives

To establish an annual diabetic retinopathy screening programme for diabetic patients of rural areas in Central Greece.

To increase access to relevant services and educate patients about the adverse ophthalmological complications of diabetes mellitus.

To explore epidemiological factors affecting participation to regular screening services for diabetic retinopathy.

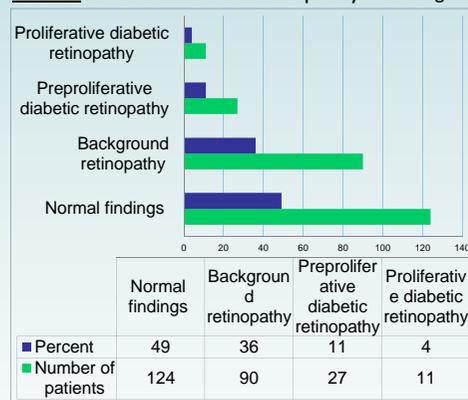
To timely diagnose and classify diabetic retinopathy lesions and refer patients for specialized treatment.

## Methods

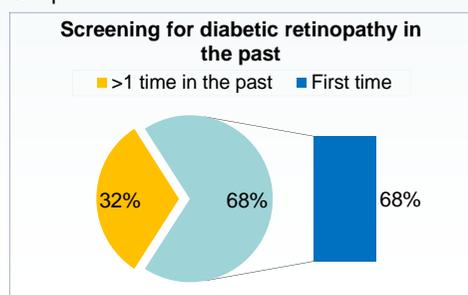
We have examined 252 patients with diabetes mellitus in the Community Medical Center of Farkadona in Greece during the time period between January and June 2016. We have used a standardized form to obtain medical history in addition to a questionnaire specific to quality aspects of screening for diabetes mellitus complications. The fundoscopy was performed with the use of a slit lamp CSO SL980 together with a Volk Digital Wide Field lens. Staging of the observed findings and further referral to a Specialist Ophthalmologist was based on evidence from the NHS diabetic eye screening (DES) programme originally implemented in the United Kingdom.<sup>(4)</sup>

## Results

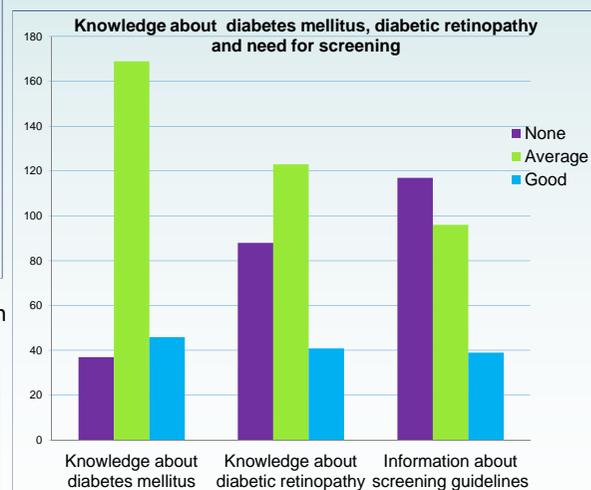
**Chart 1:** Results of diabetic retinopathy screening



**Chart 2:** Screening for diabetic retinopathy in the past



**Chart 3:** Knowledge about diabetes mellitus, diabetic retinopathy and need for screening



## Conclusions

This project was the first coordinated effort to introduce a diabetic retinopathy screening programme in a primary healthcare setting in the Health Region of Thessaly and Central Greece.

The results of this effort indicate that primary healthcare could serve a vital role in management of diabetic patients, in terms of increased awareness and education regarding the disease and its complications (chart 3) and also through provision of effective screening services.

In the future, implementation of teleophthalmology programs has the potential to transform preventive eye screening care by improving access to specialized public health structures, especially for populations of medically underserved areas.<sup>(5)</sup>

## References

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