

Glaucoma Patients in Finland and Their Visual Prognosis. Data of the Finnish Register of Visual Impairment During the 30 Years

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Purpose

Finnish Register of Visual Impairment is a national register regulated by the Act and Decree on National Personal Records. The Social Insurance Institution of Finland (Kela) reimburse the medical costs of glaucoma patients and registers their use. Based on these registries the number of glaucoma patients and the visual impairment (VI) due to glaucoma was evaluated. The changes of VI caused by glaucoma during the past 30 years were analyzed in three 10-year cohorts 1980s, 1990s, and 2000s.

Methods

The number of the glaucoma patients was analyzed from the database of the Social Insurance Institution of Finland, the demography of the Finnish Population was analyzed from the data of the Population Register Center. Statistical analysis of the visually impaired (VI) persons in the register (n= 42.626 of which 16.747 were alive) in Finland (population 5,4 million) was analyzed in three 10 year cohorts in order to get information on the age at the time of the notification of VI, the severity of the impairment and the mean age of the death of the patients. VI in the Register was determined on the basis of WHO definition. WHO classes 3-5 were regarded as blind.

Results

According the Register data glaucoma is the second leading cause of blindness in Finnish population over 65 years, after AMD.

The total number of the glaucoma patients in Finland was 83.675 of which 73.957 were 60 years or older and 30.942 older than 80 years.

The prevalence of glaucoma in Finnish population is exponentially increasing with the age being 11,5% at 80 years of age or older.

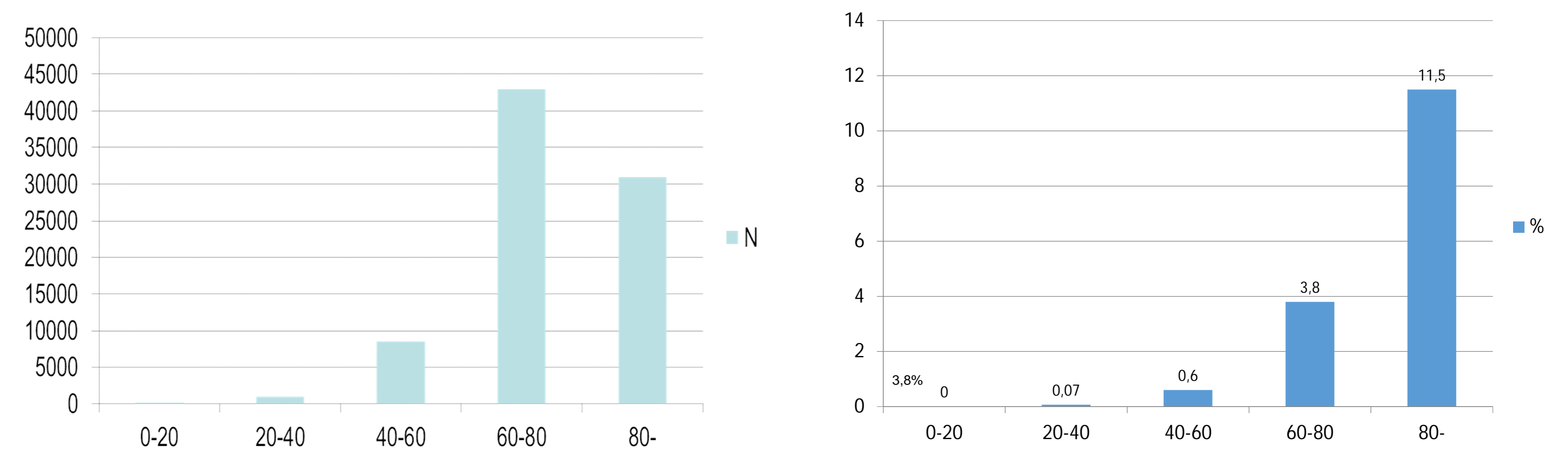


Figure 1. (A) Age of glaucoma patients in Finland 2012. (B) Prevalence of glaucoma in Finland 2012.

Table I. Number of registered visually disabled glaucoma patients in Finland in 2012.

Age	N	Total
20-40	12	1049
40-60	43	Females 662
60-80	265	Males 387
80+	729	

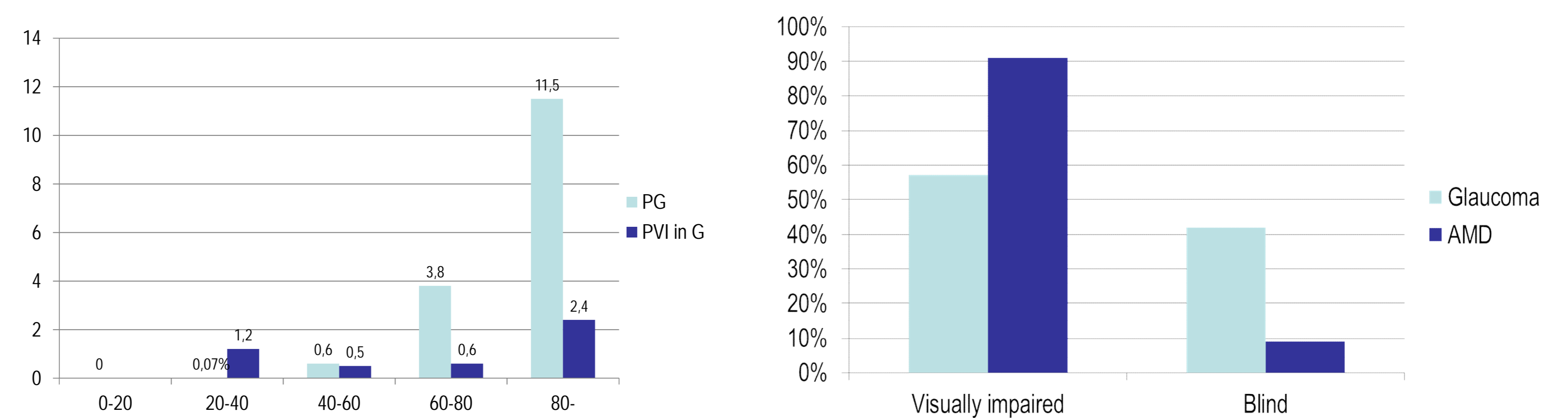


Figure 2. (A) Prevalence of glaucoma patients (PG) and visual impairment among glaucoma patients (PVI in G) in different age groups.

(B) Severity of visual impairment caused primarily by glaucoma and AMD

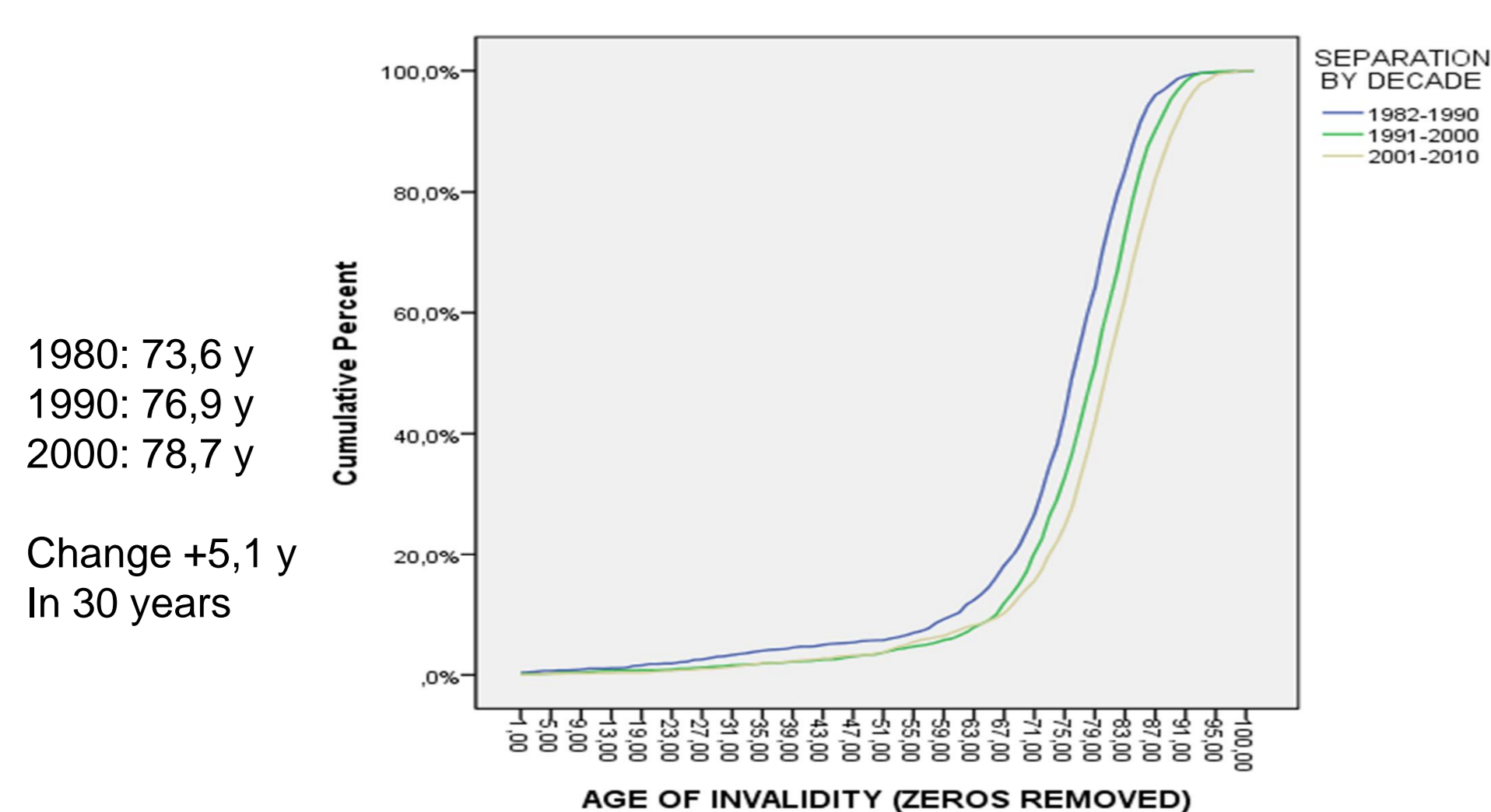


Figure 3. The mean age at the time of visual impairment. The beginning of visual impairment was deferred by 5,1 years in 30 years

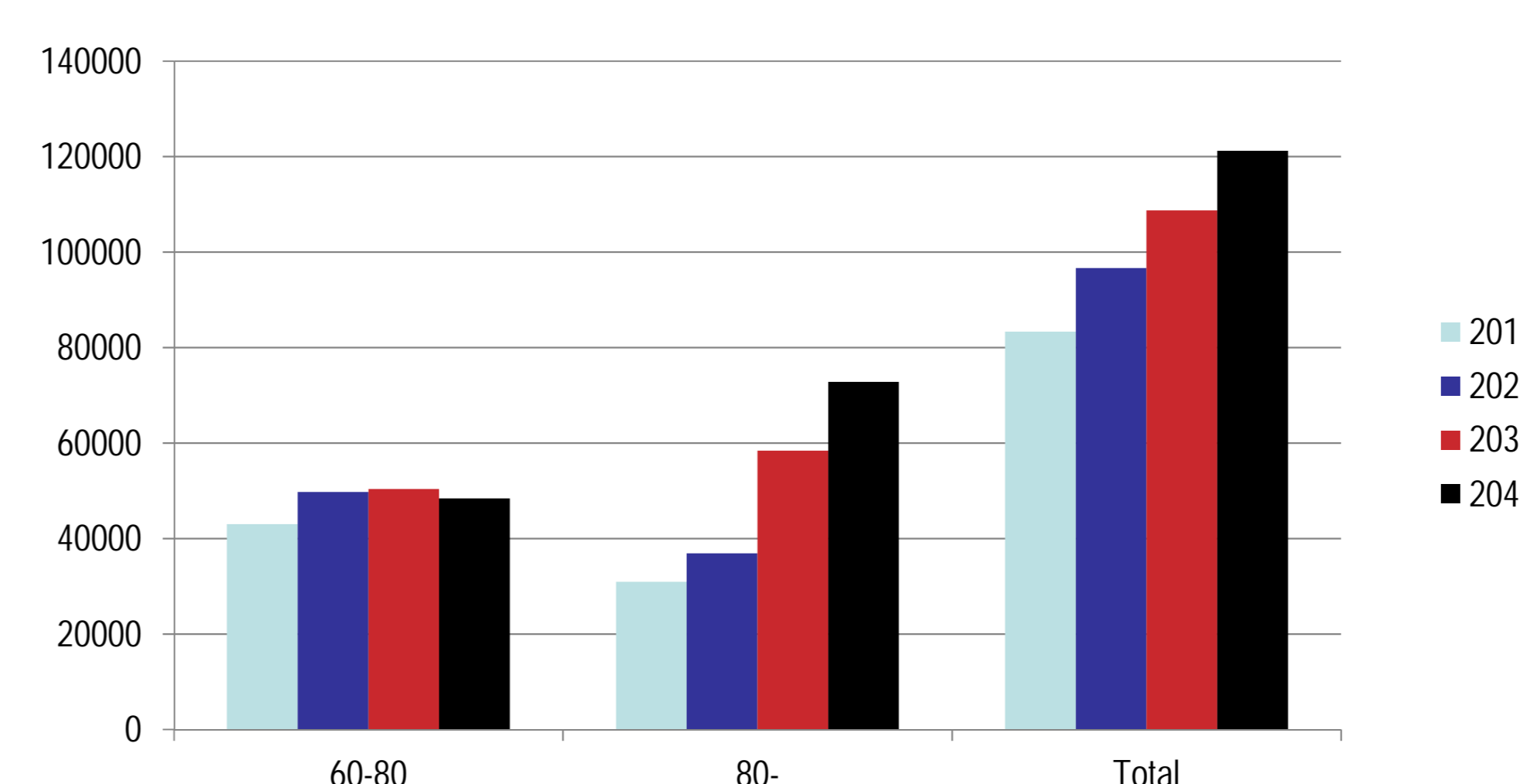


Figure 4. Estimated number of glaucoma patients in Finland in the forthcoming years. Estimates are based on the population data from Finnish Population Register Center and from the calculated data on the prevalence of glaucoma among the various age groups.

Conclusions

- Glaucoma is the second leading cause of visual impairment in Finland and its prevalence is very strongly influenced by the age.
- During the past 30 years the age of the beginning of visual impairment has been deferred by 5,1 years.
- The aging population will increase the number of glaucoma patients from 83.675 to 120.000 and the number of glaucoma patients over 80 years by 135% to 72.000 by 2040.
- Despite of the compensating favorable progress in prevention of blindness due to glaucoma the number of visually impaired people in Finland is estimated to increase.

Commercial Relationships: None