

The Prevalence of Inherited Color Vision Deficiency Among Male School Children Aged 14-18 in the Palestinian Governorate of Nablus

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Abstract:

BACKGROUND:

Inherited color vision deficiency (CVD) is one of the most common inherited vision disorders. It is a sex-linked recessive trait with a prevalence that is both racial and gender dependent. The frequency of color vision deficiency in Palestine has not been studied previously. This study surveyed the prevalence of inherited CVD among male-school students aged 14-18 in the Palestinian governorate of Nablus.

METHODS:

Six hundred thirty-four male subjects (N=634) aged 14-18 from Palestinian Governorate of Nablus were randomly selected and screened using Ishihara pseudoisochromatic plates. Subjects who failed Ishihara screening were tested further with a computer software of Farnsworth-Munsell 100 Hue test.

RESULTS:

Out of the 634 male participants, 597 were included and (48males) 8.0% of them demonstrated red-green CVD. 5.4%, 2.3% and 0.3% of the 48 males exhibited deutan, protan and total color vision defects, respectively.

CONCLUSION:

The results show that the prevalence of red-green CVD among the male school children from Palestinian Governorate of Nablus is not significantly different from that of male populations in nearby and Western countries. Key words: Color vision deficiency, Ishihara color test, Prevalence, Redgreen defects, Palestine, Males, Nablus.