THE OPHTHALMOLOGICAL EXAMINATION FOR THE BUS DRIVER LICENCE IN ITALY: A POTENTIAL RISK FOR SAFETY AT WORK AND FOR THE GENERAL POPULATION

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Introduction

- The Italian law prescribes that ophthalmological examination for obtaining driving licence does not undergo the responsibility of occupational health doctors.
- This evaluation has to be carried out by other medical doctors from public health service, usually utilizing only few tests with a variable periodicity usually every five years.
Methods

• To evaluate the efficacy of this ophthalmological screening, we analyzed the ophthalmological status in 249 bus drivers working in 13 different companies.

• Every bus driver was visited by a specialized ophthalmologist who carried out a complete clinic evaluation of every worker.
Methods

We particularly considered:

- natural and best corrected vision at near / at far;
- actual visual correction at near and at far;
- ocular motility;
- stereopsis;
- possible presence of asthenopia related to work;
- ocular colour screening capability
Results

Among the 249 workers examined:

- 48 workers (19.3%) had a not well corrected visus at far,
  (an error at least of +/- 0.75 dioptres).
Results

Among the 127 drivers examined, aged more than 45:

- 52 workers (41.0%) had a not well corrected vision at near,
  (an error at least of +/- 0.50 dioptres).
Results

Among the 249 workers examined:

- 35 (14.1%) drivers had an unbalanced ocular motility;
- in 17 cases this fact had not been previously detected.
Results

Among the 249 workers examined:

- 21 (8.4%) drivers had relevant alterations in colour screening capability, (using Ishihara tests)
Results

Among the 249 workers examined:

• 25 (10.0%) drivers had a relevant deficit in their stereopsys.
Results

Among the 249 workers examined:

- 43 drivers referred a frequent occupational asthenopia (more than two symptoms more than twice a week)
Results

Among the 249 workers examined:

- 63 (25.5%) drivers had at least one of the relevant ocular alterations listed above
Results

Among the 127 drivers examined, aged more than 45:

- 51 workers (40.2%) had at least one of the relevant ocular alterations listed above
Results

Among the 63 drivers who had at least one of the relevant ocular alteration 51 (81.0%) were aged more than 45.
Discussion

• The results obtained showed that a big part of the bus drivers examined, who had regularly obtained and confirmed their driving licence, had one or more relevant alterations of the ophthalmological parameters evaluated.

• This fact can worse their correct driving capability and especially their reaction time.
Discussion

• This fact is a risk for the drivers’ safety and for the safety of the passengers and of the general population.

• Consequently we think that actual Italian procedure of ocular evaluation for the obtainment and maintenance of bus driving licence has to be improved.
Conclusion

We think that:

• more ophthalmological tests and a more complete evaluation should be carried out during clinical controls for bus drivers.

• stricter parameters should be used for the concession of the bus driving licence.

• more frequent clinical controls should be compulsory, especially for bus drivers aged more than 45 years old.