

## Use of tablet, smartphone and myopia: where is the evidence?

Giuseppe La Torre<sup>1</sup>, Elena Pacella<sup>2</sup>

<sup>1</sup> Department of Public Health and Infectious Diseases, Sapienza University of Rome, P.le A. Moro, 5 - 00185 Rome, Italy

<sup>2</sup> Department of Sense Organs, Sapienza University of Rome

\*Corresponding author: Prof. Giuseppe La Torre, Department of Public Health and Infectious Diseases, Sapienza University of Rome, P.le A. Moro, 5 - 00185 Rome, Italy, Tel.: +39-49694308; e-mail: giuseppe.latorre@uniroma1.it

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Some days ago several Italian newspapers reported the news on a possible relation between the use of tablet, smartphone and myopia (Figure 1). The information was not new, since this is an issue already presented on international newspapers last year, on October 2013.

But the question we would like to share with our readers is: “is there a scientific evidence of this relationship?”.

Myopia is a very frequent pathological condition in the general population, and recognize several etiopathogenetic factors, both individual (genetic) and environmental. It may be a clinical condition with different type of evolution, from mild to severe cases, that could lead also to blindness [1].

Epidemiological data indicate that this refractive defect is widely spread all over the world, with large geographical differences. The prevalence among adults over 40 years is 45% and 10% in European and Asiatic population, respectively.

In the middle of the 1990’s, Mutti and Zadnik [2] performed an overview of the scientific literature on topics concerning the use of video display terminals (VDTs) and factors related to proposed etiologies for myopia. The results of their review demonstrated that at that time there was no evidence in the literature suggesting there is a significant increase in the risk of myopia onset or progression from the use of VDTs by adults.

And what about for children?

A scientific approach in presenting this issue, even on newspapers and magazines, must be based paying attention not to the expert opinion, but on what the

scientific literature is saying on that particular issue. As an example, if one is interested in the relation between tobacco smoking and uveal melanoma, a systematic review on this issue [3] can be useful in determining what is the current available evidence.

So, we performed a very quick search on available scientific literature databases, such as PubMed and Scopus using the following keywords:

“children AND myopia AND tablet” and “children AND myopia AND smartphone”. Interestingly, the first search string retrieved 2 papers, not pertinent, and the second one no papers.



Sei in: Repubblica > Salute > Prevenzione > La vista perduta dei ragazzi, boom ...

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### La vista perduta dei ragazzi, boom miopia. Tablet e pc finiscono sotto accusa

In Italia la percentuale di chi è costretto a far uso di occhiali è balzata in quarant'anni dal 13 al 25%. La colpa è della 'visione corta' dovuta all'aumento della vita al chiuso, ma gli esperti puntano il dito anche sul tempo eccessivo trascorso a guardare gli schermi luminosi di strumenti e giochi digitali

di CRISTIANA SALVAGNI

Lo leggo dopo

ROMA - Non vedere più in là del proprio naso è la spiacevole sensazione provata da sempre più giovani italiani. Sono raddoppiati i miopi rispetto a 40 anni fa: erano il 13 per cento, oggi sono il 25 per cento della

Figure 1 – News on myopia and tablet on an Italian newspaper.

So, again, where is the evidence of the relationship between the use of tablet or smartphone and myopia? The answer is nowhere, because there is no scientific evidence on this relationship.

We are very interested in underlining that the improper use of tablet and smartphone could contribute

to a negative evolution of myopia, especially if preventive measure are not respected, including the use of corrective lenses. And we must not forget that for severe cases of

myopia, high technological procedures are needed [4]. Finally, the question is another: “are there any commercial interests behind this false news?”.

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