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LETTER TO THE EDITOR

Myopia: Insights from a population-based survey

Editor,

Recent studies confirm that the prevalence of myopia in Europe is rising continuously and has possibly been worsened by the effects of the recent pandemic (Sanz Diez et al., 2023). High myopia, which probably represents 5% of all myopias in Europe, carries the highest risk of visual complications into adulthood, while even low and moderate myopia carries considerable risks. The current incidence evolution should be considered a public health threat. Preventing non-syndromic high myopia is now possible, due to recent environmental, pharmacological or optical intervention, provided these are initiated early enough in childhood. As no specific coordinated public health screening programme is likely to be set up in Europe in the near future, as has been the case for several east-Asian countries, various initiatives have arisen to better inform the population. In this context, a recent survey was independently conducted by Ipsos (*Institut Public de Sondage d'Opinion Secteur*), as part of a national myopia prevention campaign, aiming to better define the needs of future educational actions.

A total of 3601 adult participants, constituting a representative sample of the French population, were selected using the quota sampling method (gender, age, social class, region). It included a subgroup of 1449 parents of children younger than 18. All questions were validated by a board of myopia specialists. The main results of the study are reported in Table 1. When asked for the definition of myopia (a vision blurred for both near and distant vision/a vision blurred for near vision, while good for distant vision/a vision blurred for near vision getting worse with ageing/a vision blurred for distant vision, while good for near vision), a majority of participants gave a wrong definition (51% in the general population and 54% in the parents' sample). The signs of myopia are poorly known, while the risk factors for developing myopia are largely unfamiliar—less than a quarter of participants (23%) know that spending time outside reduces the risks of developing myopia. Only 16% of the participants know that the complications of high myopia can eventually lead to blindness; these complications are mostly unknown. Only 7% of the participants know that refractive surgery does not prevent the complications of myopia. Only 39% of the participants know that it is possible to slow down myopia progression.

The results of this survey show that the level of knowledge about myopia in the general French population is very poor. Five years ago, a questionnaire among parents of 8- to 13-year-old Irish pupils showed that only 46% considered that myopia presented a health risk to their children, and that also 46% considered myopia as an optical inconvenience (McCrann et al., 2018). Considering the major influence parents have on their children's lifestyle choice, the authors stressed on the necessity of public education about myopia, in order to change behaviours. Little has been made since then and while scientific knowledge about myopia prevention and control has tremendously increased (Sarkar et al., 2023), the level of public information does not seem to have improved. By remaining unaware of the very existence of intervention for preventing and controlling myopia, parents are unlikely to take their children to professionals. The effectiveness of eye health promotion programmes in improving behaviours of preschool or primary school pupils has been demonstrated (Kirag & Temel, 2018; Mehravaran et al., 2018). Improving parents' knowledge about myopia, therefore, seems an accessible and urgent necessity. It is a crucial condition for the future of healthcare access.

TABLE 1 Selected results of the IPSOS survey about myopia.

Among the following, which ones are risk factors of myopia?				
		Answers given		
Risk factors	Expected answers	Yes	No	I don't know
Ethnic origin	Yes	14%	47%	39%
Daily time spent reading	Yes	26%	43%	31%
Little exposure to day light	Yes	34%	30%	36%
Intense work during studies	Yes	42%	27%	31%
Hereditary factors	Yes	65%	14%	21%
Daily time spent in front of a screen	Yes	68%	12%	20%
Tiredness	No	46%	28%	26%
Exposure to environment pollution	No	22%	35%	43%
Alcohol consumption	No	17%	42%	41%
Sedentary lifestyle	No	19%	43%	38%
Tobacco consumption	No	16%	43%	41%
Having blue or green eyes	No	18%	46%	36%
Food intakes	No	18%	47%	35%

Note: In the survey, the propositions were mixing in a random fashion both known risk factors of myopia (expected answers: yes) and control variables (expected answers: no).

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The role of face-down positioning in full-thickness macular hole treated with inverted internal limiting membrane flap technique

Editor,

Post-operative face-down positioning (FDP) after air–gas exchange is considered a critical step in the surgical management of full-thickness macular hole (FTMH). FDP is thought to improve the contact between the gas bubble and FTMH, thus maximizing the hole closure rate (Tadayoni et al., 2011). However, FDP may be challenging for the elderly and patients with comorbidities, for whom there is a high risk of post-operative complications, including skin breakdown, pulmonary embolism, ulnar nerve neuropathy and muscle atrophy. Furthermore, the importance of post-operative FDP for a favourable outcome of FTMH surgery is still controversial, since published data on this topic derive from heterogeneous studies with different surgical approaches, making it difficult to draw solid conclusions. Recently, inner limiting membrane (ILM) flap techniques for FTMH surgery has become increasingly popular and showed high rates of FTMH closure. We therefore assessed whether post-operative FDP may improve the anatomical and functional outcome in FTMH eyes treated with pars plana vitrectomy (PPV) with inverted ILM flap technique. All subjects underwent an extensive ophthalmic examination and retinal imaging before and after surgery, including best-corrected visual acuity (BCVA) and macular OCT. Preoperatively, the minimal horizontal diameter of each FTMH was measured. OCT verification of FTMH closure was performed 1 month post-operatively. FTMH closure was defined as the presence of an uninterrupted sensory retina covering the fovea. Flat-open closure was not considered a surgical success. Subfoveal restoration

TABLE 1 Patient characteristics at baseline.

	FDP group	No-FDP group
	N = 35	*N* = 35
Gender, *n* (%)		
Male	11 (31.4%)	11 (31.4%)
Female	24 (68.6%)	24 (68.6%)
Mean age, years (SD)	68.4 (5.1)	69.2 (7.2)
Phakic eyes, *n* (%)	27 (77.1)	28 (80.0)
Mean BCVA, LogMAR (SD)	0.85 (0.42)	0.73 (0.45)
Mean FTMH size, μm (SD)	446.4 (194.9)	432.9 (142.6)
FTMH size category, *n* (%)		
Small (<250 μm)	4 (11.4)	4 (11.4)
Medium (250–400 μm)	10 (28.6)	11 (31.4)
Large (>400 μm)	21 (60)	20 (57.2)

Abbreviations: BCVA, best-corrected visual acuity; FDP, face-down positioning; FTMH, full-thickness macular hole; SD, standard deviation.