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Sir,

Benefits of early awareness in age-related macular degeneration

We commend the fresh perspectives offered by Cervantes-Castaneda *et al*¹ on the possible lack of benefit of early awareness in age-related macular degeneration (AMD).

However, the basis of such a conclusion is questionable in view of several limitations and inadequacies of the study design. Fundamentally, the determination of early awareness of AMD may be biased as it was solely based on the patients' recall of having been previously diagnosed of AMD, given oral supplementation or advised Amsler monitoring. More details could also be provided with regards to the source of such diagnosis and recommendations as clinical competencies and management of AMD may be variable across the spectrum of general practitioners, optometrists and ophthalmologists. Furthermore, we agree that even in patients who were aware of their condition, it is difficult to assess their compliance to treatment and self-examination regimens, which could then influence the rate of detection of neovascular AMD. Lastly, the single-centre design and the associated geographical bias, although minimised by the peculiar referral pattern in the study region, preclude the generalisation of findings to the population.

Contrary to what the authors had suggested, we believe that the benefits of early awareness of AMD are far reaching.² Awareness of diseases promotes positive

health-seeking behavioural changes in patients; patient education³ and a prior diagnosis of chronic eye diseases, such as AMD,⁴ are associated with increased utilisation of eye-care services. Coupled with effective counselling by clinicians, an early awareness of AMD allows the patient to take an active approach towards self-monitoring (with the Amsler chart remaining as a simple and inexpensive home-based test of choice despite its low sensitivity⁵) and regular eye follow-up. These may also facilitate the detection of other age-related eye diseases such as cataract and glaucoma as well.

As such, it may be premature to disprove the benefits of early awareness in the long-term management of AMD.

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Sir,

Reply to Woo *et al*

We thank Woo *et al* for their insightful comments. Our study aimed to evaluate how many patients with age-related macular degeneration (AMD) are aware of their disease before developing choroidal neovascularization (CNV) and to assess whether such awareness confers benefit. Unfortunately, we found that many patients were not aware that they had AMD, and that prior awareness did not confer benefit for patients who develop CNV.

With respect to the remarks of Woo *et al*, in Israel, AMD is diagnosed and treated by ophthalmologist and not by family physicians or optometrist. The study evaluated awareness from the patients' perspective and its consequences; we did not focus on the different recommendations that different care providers might suggest. We agree with Woo *et al* that compliance may vary among patients; this is probably one of the major factors underlying poor benefit from awareness by itself. Finally, the referral pattern for photodynamic treatment in Jerusalem was not 'peculiar' as Woo *et al* state, but rather appropriate according to the national health insurance system in Israel.

Although the review by Woo and Au Eong¹ is interesting, neither it nor the other two manuscripts that Woo *et al* mention²⁻³ provide data suggesting visual benefit from early awareness to AMD. Our study delineated major limitations of the current treatment algorithm for AMD in the Jerusalem area as many patients are not diagnosed during the non-neovascular stage of the disease and as diagnosis by itself is not sufficient to improve the outcome. Conceivably, at least to a certain extent, our conclusions apply to other communities. As ophthalmologists, it is our role to optimize such treatment algorithms to maximize visual benefits. Identifying weaknesses of current algorithm is a first step towards improving it. We should not ignore miss concepts even if they are long-standing or backed by theories that were never supported by data.

We strongly believe that early awareness can be important given that patients use oral supplements according to the AREDS study recommendations and that they adhere to a routine follow-up examination schedule.⁴ Efforts must be invested in improving the number of patients that are diagnosed and who follow

these recommendations, as according to our findings, awareness by itself is not sufficient to improve the outcome in patients who develop CNV.

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