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Purpose

- AMD is a leading cause of blindness worldwide and primary eye-care providers play a critical role in its recognition and management.
- However, AMD cases may still be mis-diagnosed or not suitably managed for a variety of reasons.
- There is also a paucity of published data on current practice patterns in the primary care detection of AMD.
- This study explored the perceived utility of advanced imaging and contemporary clinical practice patterns regarding AMD using a *cross-sectional survey* of optometrists.

Methods

- An anonymous survey was distributed online to practicing optometrists in Australia and New Zealand using Survey Monkey.
- The survey focused on five key areas:
 - Demographics (questions 1-10)
 - Clinical skills and experience (questions 11-19)
 - AMD assessment (questions 20-21)
 - AMD management (questions 22-30)
 - Evidence based practice (questions 31-32)

Results

- A minimum of 178 responses were required to represent the 4752 and 690 practicing optometrists in Australia and New Zealand respectively at a 95% confidence level and a 10% confidence interval.
- Data from 214 questionnaires completed in its entirety were included in the analysis.
- Average exposure to AMD cases was 11% or 4 patients/week.
- At least 63% of respondents expressed above average or excellent competency in diagnosing and managing AMD and performing traditional techniques such as slit lamp fundoscopy.

AMD related test procedure

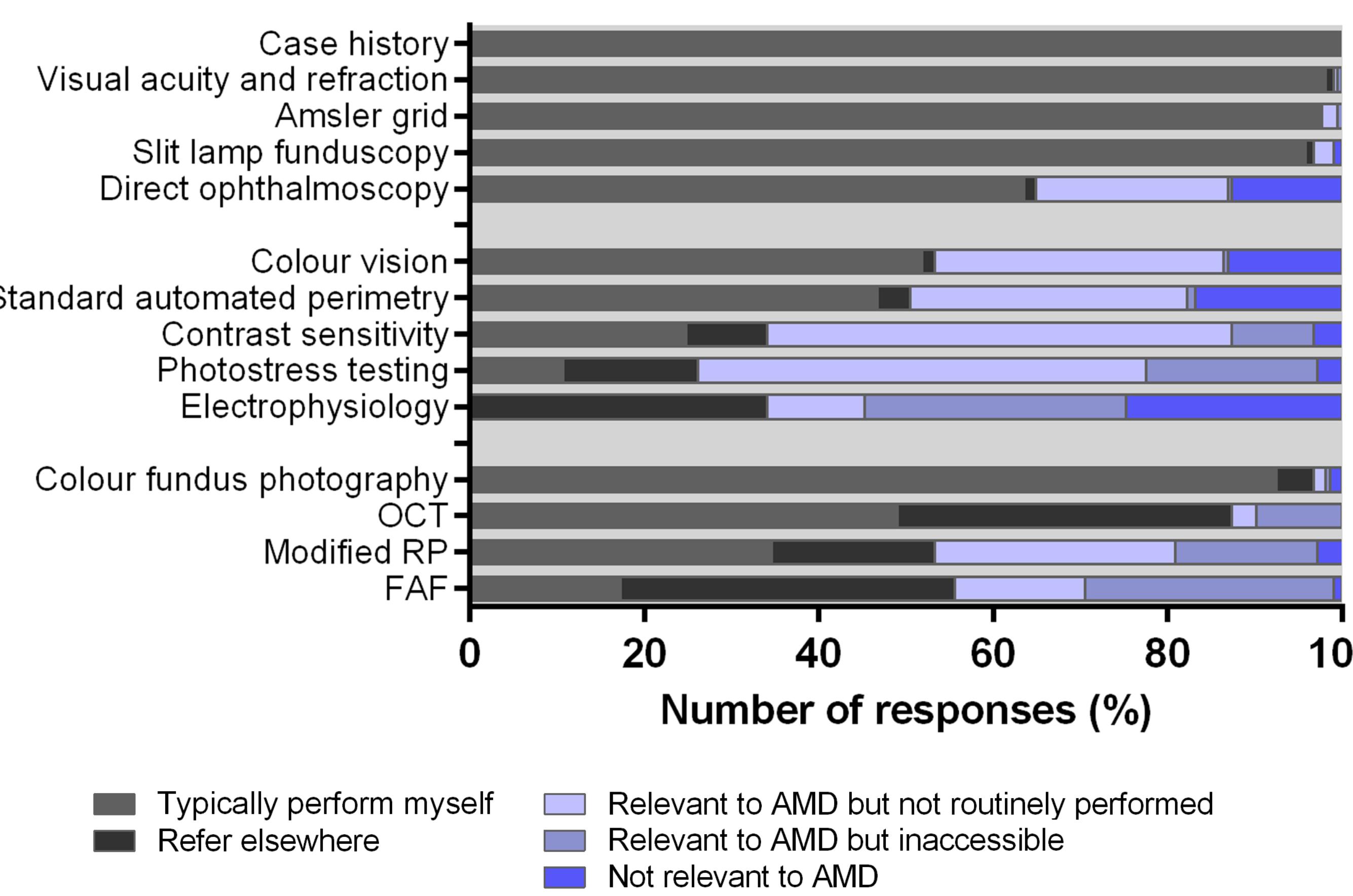


Figure 1. Routine service delivery in AMD

- Routine procedures for AMD assessment include: case history (100%), visual acuity and refraction (98%), Amsler grid (98%), slit lamp fundoscopy (96%) and colour fundus photography (93%).
- Functional testing and advanced imaging showed greater variation in service delivery and trended towards colour vision testing (routinely performed by 52% of respondents) and OCT (49%).

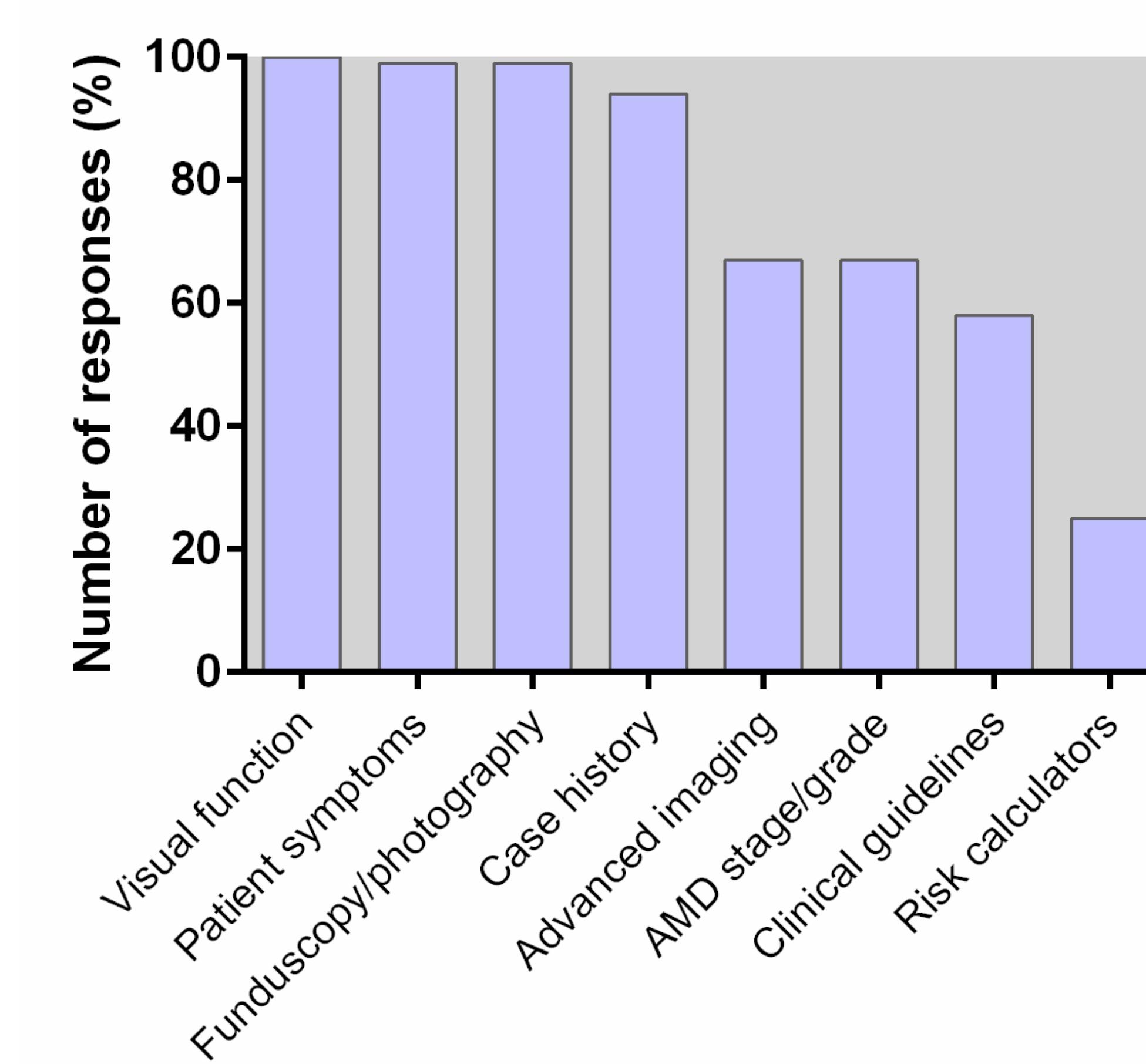


Figure 2. Factors applied in the routine clinical management of AMD

- For AMD management, >90% of respondents applied the case history, symptoms and signs from visual function and traditional testing.
- 67% applied signs from advanced imaging, 67% applied the AMD stage, 58% applied clinical guidelines and 25% applied risk calculators.

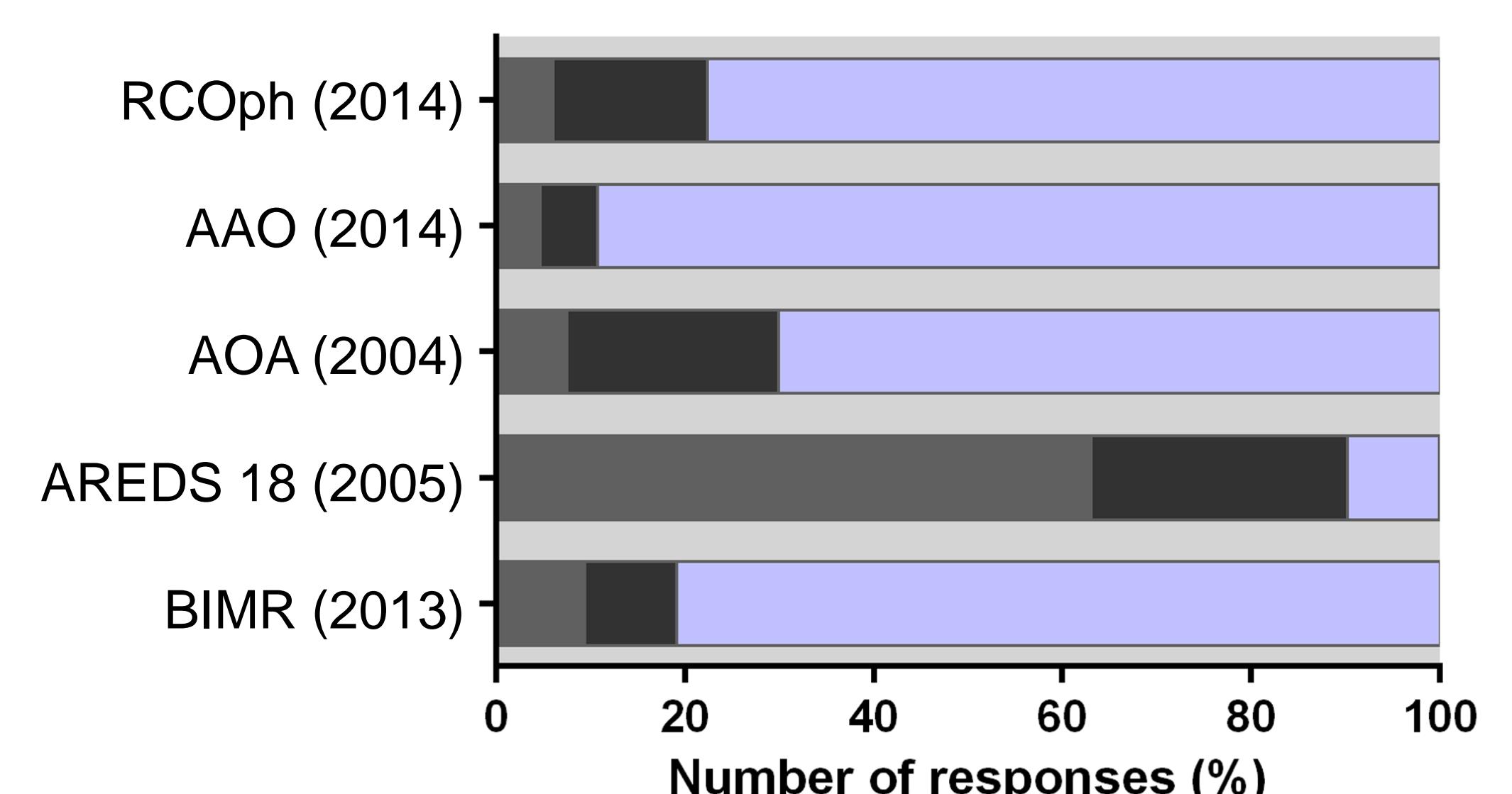
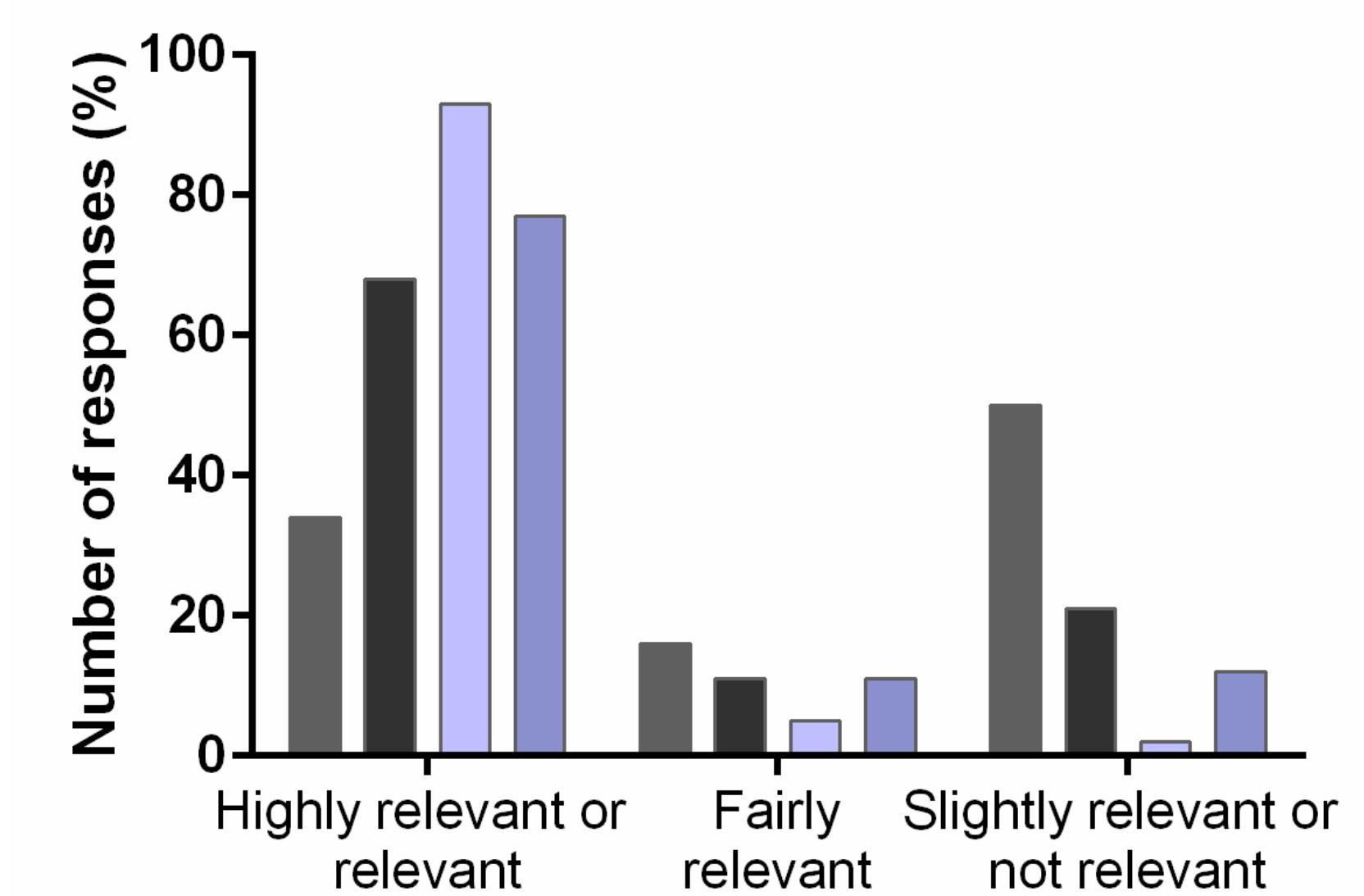


Figure 3. Awareness of AMD clinical guidelines

Nutritional supplements



68% and 34% rated nutritional supplements as highly relevant or relevant (top two responses from a 5 point scale) in early AMD and normal aging changes, contrary to the evidence base.¹

- Normal aging changes
- Early AMD
- Intermediate AMD
- Advanced AMD

Figure 4. Rated relevance of nutritional supplements in different stages of AMD

Discussion

- Optometrists self-report high levels of practice competency and knowledge.
- Based on a high frequency of responses, routine optometric assessment of AMD patients is consistent with currently available optometric standards and grading scales.²⁻⁴
- Advanced imaging modalities and functional tests were considered relevant to AMD though performed less often.
- Awareness of clinical guidelines was low overall, which may relate to more than half of the respondents indicating nutritional supplements as relevant in early AMD.

Conclusion

In health systems where optometrists provide primary eye care, a suitable level of diagnostic accuracy and evidence based management is required. These results highlight a clinical paradigm shift toward advanced imaging and the use of OCT in the assessment of AMD.

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