am part of a surgeon group from Germany and Belgium that convened to study the potential of psychometric patient profiles for identifying suitable patients for multifocal lens implantation. Based on our experience, clinical outcomes and patient satisfaction do not always correlate. Therefore, we surgeons are in need of a better platform to align patient expectations and psychological profiles with the selection of patient-satisfying refractive surgery. Preliminary results of the Happy Patient Project, a program aimed at improving and standardizing patient selection for multifocal IOLs, showed correlations between psychometric parameters and patient satisfaction.

STUDY PARAMETERS
Surgeons were free to use any multifocal IOL or a combination of multifocal IOLs for bilateral lens implantation during the study. The project included a comprehensive evaluation of subjective patient data, starting with a preoperative psychometric questionnaire that included parts of the NEO Personality Inventory (NEO PI-R) and the Compulsiveness Inventory, a preoperative patient questionnaire that assessed the patient’s current visual satisfaction and expectations, and a postoperative patient satisfaction questionnaire. Competence, tidiness, sense of duty, ambition, self-discipline, and deliberateness were selected as study parameters, and the clinical outcome was assessed by a Web-based documentation system provided as a research grant by Abbott Medical Optics Inc. (Santa Ana, California). Follow-up visits were scheduled for 3 and 9 months postoperatively.

During this project, 159 patients (mean age, 62 ±11 years; range, 19–86 years) eligible for bilateral multifocal IOL implantation were recruited. Sixty percent of patients were women. The indication for surgery was cataract in 57% and refractive lens exchange in 43% of patients. Preoperative sphere ranged from -10.00 to 8.50 D; 63% of patients were hyperopic, 4% were emmetropic, and 33% were myopic. Mean preoperative cylinder was -0.65 D (range, 0.00 to -6.00 D). The same lens model was implanted in both eyes in 81% of patients, and the remaining patients underwent a mix-and-match approach.
In general, excellent visual results at all distances were achieved with all multifocal lenses in this project (Figure 1), which included the Tecnis ZM900 and ZMA00 IOLs (Abbott Medical Optics Inc.), the ReZoom (Abbott Medical Optics Inc.), the AT.LISA (Carl Zeiss Meditec, Jena, Germany), and the AcrySof IQ ReStor +4.0 and +3.0 IOLs (Alcon Laboratories, Inc., Fort Worth, Texas). Binocular UCVA was 0.9 for distance and 1.0 for near. Distance BCVA, near UCVA, and distance UCVA remained constant between the 3- and 9-month follow-up visits (Figure 2). Twenty percent of patients experienced photopic phenomena but described them as tolerable. Spectacle independence was high, with approximately 90% of patients not needing spectacles for distance vision (Figure 3).

Evaluation of the preoperative patient questionnaire revealed that 81% of patients were prepared to wear glasses for small print and 61% would accept wearing them for computer work. When asked for which activities glasses were not accepted, the highest percentage of patients answered shopping (64%), followed by driving (58%). This finding might possibly be related to patients who prefer to be spectacle independent in public places. Interestingly, 42% of men and 35% of women reported that they would accept some limitation of visual quality such as glare, halos, reduced contrast sensitivity, and reduced night vision. Patients who reported occasional use of spectacles were asked for which distance they needed correction. Men more frequently required correction for distance or for reading; women more often wore spectacles for intermediate vision.

The postoperative questionnaire revealed an almost equally high overall level of satisfaction between men and women, with only a slightly higher score for men. More than 90% of patients reported a high or very high satisfaction level. Satisfaction increased over time, most probably related to the neural adaptation process.

CONCLUSION

Analysis of correlations between the psychometric profile and postoperative patient expectations is quite complex. Efforts of the Happy Patient Project will be continued. What we have learned thus far is that patients are less happy with multifocal lenses when their personality profile showed high levels of control, tidiness, consciousness, and ambition. These patients also had a harder time tolerating blurred vision and halos. Additionally, we have uncovered a correlation between patient expectations, clinical findings, and postoperative patient satisfaction. It is too early to propose a one-for-all patient selection questionnaire to improve postoperative satisfaction, but the project has provided useful indications on how to better select patients for refractive lenses.

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TAKE-HOME MESSAGE

- The Happy Patient Project applies psychometric parameters to identify suitable patients for multifocal lenses.
- Patients were less happy with multifocal lenses when their personality profile showed high levels of control, tidiness, consciousness, and ambition.