How do Visual Rehabilitation and Social Support Affect Visual Functioning?

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PURPOSE

One goal of vision rehabilitation is to improve visual function. Several studies have managed to demonstrate that patients benefit from low vision services (Lindsay et al., 2004; Walter et al., 2015). Specifically, a statistically significant improvement on VF-14 scores after vision rehabilitation has been shown (Scott et al., 1999). For this reason, a higher VF-14 result is normally expected in people who have used rehabilitation services compared to those who have not.

McCabe et al. (2000) reported that the functional abilities of patients undergoing rehabilitation improved in a similar way across both patients who were dependent on their families in performing daily activities and those whose families were not involved, indicating that social support does not further improve the perception of visual function.

The present study investigated whether VF-14 scores differ among individuals with various levels of social support as well as whether differences in visual functioning are apparent among groups that utilized or were aware of low vision rehabilitation services.

METHOD

The present study was conducted as part of the Montreal Barriers Study, utilizing its infrastructure data base. Participants were recruited in the waiting rooms of four urban university-affiliated ophthalmology departments on the island of Montreal. They were all eligible for free low vision rehabilitation services, under the definition of visual impairment by the Quebec Ministry of Health (VA < 20/70 or VF < 60 deg in the better eye with best standard correction).

They underwent a semi-structured interview, which contained questions about demographic variables. In addition, several psychological scales were administered, measuring subjective perception of aspects such as visual function, depression, coping quality and response bias.

For the present analysis, participants were grouped by 2 variables:

- Awareness of low vision rehabilitation services
- Did not know = unaware of the existence of low vision rehabilitation (n = 127)
- Heard but did not go = aware but chose not to utilize rehabilitation (n = 60)
- Heard and went = aware and have utilized rehabilitation services (n = 253)

- Social Support
- Independent = Lives independently or alone (n = 247)
- Some Support = Lives with limited social support, i.e. spouse or family member (n = 120)
- Dependent = Lives in dependent environment, i.e. retirement home (n = 73)

RESULTS

Analysis of Variance (ANOVA) indicated a main effect of Awareness, whereby all three groups differed from each other. Individuals who had chosen to seek rehabilitation services generally reported the lowest VF-14 scores, followed by those who chose not to utilize the services, followed by the group that was unaware which reported the highest VF-14 scores.

In addition, a main effect of Perceived Support was statistically significant, whereby participants who lived independently scored higher on the VF-14 than those who required some or full support.

The effect sizes for both Awareness and Support were .17 and .10, respectively, accounting for a relatively small amount of variance in the data.

The interaction effect was not statistically significant.

CONCLUSION

In the present study, individuals who had undergone rehabilitation scored lowest on the VF-14. Initially, this finding may seem counterintuitive; however, we believe that persons who still manage to function reasonably well despite their impairment may not seek information or access to services (see poster abstract # 85200 about stigma). This behaviour has previously been reported (Rees, et al. 2007). It needs to be kept in mind that the present data are cross-sectional and do not represent differences based on follow-up after service provision. In addition, the type of services that were utilized and the time since service provision varied greatly.

It is possible that eye care professionals are more likely to inform their patients about rehabilitation options once vision has declined considerably, explaining part of the differences in the group that was unaware.

As for the effect of social support, individuals who perceive their visual functioning as higher may still be able to maintain independent living. However, it is not possible to come to any conclusions about causality in the present study.

References


