

Review of: "Effectiveness of a novel multi-modal intervention for family caregivers of persons with age-related macular degeneration: a randomised controlled trial."

Carolyn Schwartz¹

¹ DeltaQuest Foundation (United States)

Potential competing interests: No potential competing interests to declare.

This manuscript describes a randomized trial to evaluate a psychological intervention to help caregivers of people with age-related macular degeneration. The study utilized a crossover trial design, so participants were randomized to either receive immediate treatment or eventual treatment after being on a wait list for some period of time.

While the intervention addresses a meaningful and heretofore relatively uninvestigated problem, the study suffered from a number of methodological weaknesses. First, the recruited participants represented only 10% of those approached. Second, the intervention arm lost about a third of its participants due to their withdrawing from the study. It seems the intervention schedule was too demanding. Given that the focus of the intervention was on caregivers whose burden was of concern, such an outcome suggests that the intervention needs to be rethought: can it be made less demanding of time? For example, could the sessions be done by Zoom rather than in person? Could there be fewer sessions?

The statistical analysis seemed problematic because several continuous outcomes were analyzed as binary outcomes, thereby reducing power. Further, the analyses might have been more elucidating if the authors had focused on effect sizes (e.g., Cohen's d) instead of statistical significance.

That they focused on statistical significance, however, makes it even more problematic to report the results as if the lack of statistically significant differences can be summarized as "non-significant improvements." If the differences are not significant, they are not improvements.

Perhaps the authors can build on lessons learned in this failed trial to come up with a more feasible intervention, and a better approach to statistical analysis. The problem remains important, and thus worth continued effort.