From intervention to regular practice

A lighting assessment kit for low vision rehabilitation

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Introduction

One of the objectives of low vision rehabilitation practices is to be evidence-based, however translating scientific results to general practice can be a challenge: Due to diverging professional, geographical, or cultural contexts, and the uncertainty of putting external knowledge into practice and routines. Even if the contexts are somehow corresponding, the structural framework differs from an intervention to the everyday practice.

An intervention on a recovery based, holistic lighting assessment conducted during the winter seasons of 2018 and 2019 (Øien et al. 2021), showed significant results on the quality of life among the 60 visually impaired citizens participating.

Based on the hands-on experience of the consultants, in conversation with a researcher studying low vision practices, this poster discuss how aspects of this intervention can be translated to and implemented in the regular practice of low vision rehabilitation.

Findings

As shown in Figure 1, the three steps of the intervention included:

1) a lighting assessment in the home of the participant, guided by a narrative interview, VR googles, visual tests, and an occupational performance measure
2) assessment of the visual acuity by an optometrist, followed by an assessment of different light and arrangements in a lighting lab, and
3) communication of the suggested adjustments and a follow up on any adjustments or rearrangements conducted by the participants.

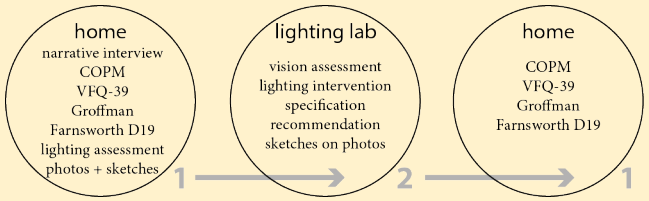

Figure 1. The multi-sited intervention "Better Light Better Living" was situated in the home, in the lighting lab, and back in the home.

In the regular practice, time and resources were often short and the consultants would not beforehand know what the situation demanded due to lighting – resembling the situation in the 25 centers across Denmark (Øien, 2022). Consequently, the consultants have accustomed a modified version of the lighting assessment that were better suited to their regular practice where flexibility and ease of use were important aspects. Lessons learned from the intervention, and included in their 'modified version', were to start off in the home, and assess, demonstrate, and test different lighting solutions in the specific context and in relation to the activities of concern.

A suitcase, featuring different types of lamps, headlamps, a range of different bulbs and spectrometer, carpenter's rule, camera, pen and paper for documentation, constituted a mobile version of the lighting lab.

Figure 2. The suitcase was equipped with a collection of basic luminaires, which has continually been updated with new products.

Additionally, the narrative interview and occupational performance measure with associated schemas were maintained in this 'light version' to facilitate the lighting assessment. Since its implementation in the autumn 2019, the content of the suitcase has been updated, both due to the products, shown in Figure 2, and the methods, shown in Figure 3, where sketches in the current version are made directly on the digital photos on the iPad.

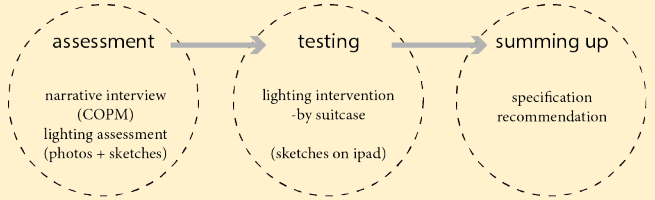

Figure 3. The modified version of BLBL, situating assessment, testing, and summing up within the home.

Conclusion

The findings show that in everyday practice, time can be short and different situations can occur during a consultation, which require the tool kit to be flexible. The suitcase enable the consultants to conduct the assessment, testing, and summing up, without re-locating between the home and the lighting lab, in cases where this is problematic or inconvenient. This practice knowledge will support the further work on preparing for implementation of the lighting assessment in other low vision practices and a dissemination across low vision services in Denmark.

Acknowledgements

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