

## AB097. Barriers and facilitators related to the use of optical low vision aids, a scoping review

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**Background:** In recent decades, several studies have been performed in the field of (non-)use of assistive technology devices (ATs) and have found that many variables are likely to be involved in the decision-making process of whether a person with a disability uses or abandons their aids. In low vision rehabilitation, high variability rates and a variety of reasons for non-use of low vision aids has been reported. Determinants of non-use of ATs have previously been categorized into personal factors, ATs factors, environmental factors of the user, and intervention factors. It is probable that some of these factors are also associated with the use of optical low vision aids (OLVAs). Thus, using a framework about adherence with medical interventions, the aim of this scoping review was to explore barriers and facilitators related to OLVAs (non-)use.

**Methods:** Existing guidelines of the scoping review Methods were used to examine and summarize the extent, range, and nature of findings regarding factor categories associated to OLVAs usage. Searches were conducted using the following online databases: Embase, MedLine, and ERIC without limitation on publication dates. A combination of key words and MeSH terms was used based upon the identified core concepts of the research question: (I) low vision; (II) assistive technology; and (III) adherence. A charting form, a flow chart of the study selection process, and a combination of a descriptive numerical analysis and a thematic analysis of 24 studies were performed.

**Results:** The results of this review indicate high variability rates (range: 13–50%,  $M = 24\%$ ,  $SD = 10\%$ ) of people possessing OLVAs but not using them. Most authors do not use a precise definition of “non-use”, and when a definition is provided, the terminology is inconsistent. As expected, the four categories of variables identified are likely to be involved in OLVAs’ (non-)use: (I) the largest number of concerns were personal factors. Several aspects regarding personal characteristics were identified, such as demographic, physical, psychological, social-emotional, and occupational factors. Some variables, such as age, diagnosis and visual acuity were reported as contradictorily influencing the OLVAs’ usage; (II) ATs factors were associated with quality, appearance, practical aspects of use and the very type of OLVAs; (III) environmental factors referred to social support, physical barriers, expectations of the social environment, presence of a helper, and stigmatization; (IV) finally, intervention factors consisted of taking into account user’s opinions, positive health care experiences, instruction and training, provision processes, delivery periods, and follow-up services.

**Conclusions:** This scoping review provides the preliminary evidence that factors related to OLVAs non-use could be classified into the same four typical categories described in the theory of non-adherence. These results suggest that strategies intended to enhance adherence might be for OLVAs should focus on these four aspects of device use.

**Keywords:** Low vision; assistive technology; optical low vision aid (OLVA); adherence

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