# Factors associated with functional disability in older adults with cataract: integrative review

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## Abstract

*Objective*: to identify the scientific evidence available in the literature on factors associated with functional disability in older people with cataract. *Methods*: integrative literature review carried out in PubMed, Web of Science, LILACS and CINAHL databases. Original articles that answered the guiding question were included: what is the scientific evidence on the factors associated with the functional disability of older people with cataract? *Results*: six articles were included, most were published from the year 2000 (n=4) and carried out in America (n=3). Longitudinal (n=3) with level of evidence IV, and cross-sectional (n=3) with level of evidence VI predominated, and that performed path analysis (n=3). Based on the findings, three thematic categories emerged: demographic characteristics; related to eye, physical and mental health, and behavioral. *Conclusion*: the functional disability of older people with cataract may be the result of demographic, related to eye, physical and mental health, and behavioral characteristics.

**Keywords:** Aged. Activities of Daily Living. Cataract. Visual Acuity.

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## INTRODUCTION

Cataract, the clouding of the lens, is the most common cause of decreased visual acuity and reversible blindness in the world, and one of the most prevalent chronic diseases in the older population[1]. The prevalence of cataract is 17.6% in those under 65 years of age; 47.1% between 65 and 74 years and 73.3% in individuals over 75 years of age[1]. It is noteworthy that this condition is related to increased morbidity and mortality among older people, due to the greater risk of falls, depression and functional disability[2–5].

Functional disability is commonly determined by the difficulty and/or need for help to perform daily tasks of different levels of complexity, which are essential for maintaining independence and autonomy[6]. According to the degree of difficulty and vulnerability to functional changes, activities of daily living (ADL) can be stratified into: basic (BADL), instrumental (IADL) and advanced (AADL)[6]. Functional disability occurs in a hierarchical way[7], in which older people have difficulties to perform activities that require greater complexity, independence and social participation, measured by the AADL[8], later for those related to commitments and/or daily tasks, evaluated by the IADL[9] and finally self-care measures measured by BADL[10].

In the study that analyzed secondary data from 11,177 older Brazilians, a prevalence of functional incapacity for IADL was 28.0%, and for BADL, 15.5%[11]; similarly, in a systematic review conducted with older people in China, the prevalence of functional disability was 26.2%, being 20.5% for BADL, and higher among women (28.5%) compared to men (22.7%)[12]. In the survey among 1,750 individuals aged 60 years and over assisted by Family Health Strategy teams, in Montes Claros (MG), it was observed that 71.3% of the older people with cataract were dependent for performing ADLs[5].

Functional disability, together with visual changes caused by cataract, can limit self-care and social participation, negatively impacting the human aging process[2–5]. Thus, research that systematizes knowledge about factors associated with functional disability can support the definition of priorities and health interventions.

In this perspective, the integrative review is considered a useful tool to gather and synthesize scientific knowledge[13], enabling the planning of actions aimed at older people with cataract, based on evidence-based practice. Thus, the results of this study may help to advance knowledge, based on the definition of priority areas on the subject.

Thus, this research aims to identify the scientific evidence available in the literature on factors associated with functional disability in older people with cataract.

## METHODS

Bibliographic study, integrative literature review, with a research protocol registered on the *Open Science Farmework* platform (https://osf.io/mc6fv/) and based on six steps for its elaboration[13].

In the first stage, the theme of the review was defined, the factors associated with the functional disability of older people with cataract, and the research question was established, through the *Patient-Intervention-Comparison-Outcomes* (PICO) strategy, as follows: what is the scientific evidence on factors associated with functional disability in older people with cataract? From the acronym in question, the following stood out: "P", referring to the target population, older people with cataracts; as "I" (exposure), the associated factors; the "C" (comparison) was not applied; and item "O" (outcome), represented, in this question, by functional disability.

Based on the guiding question, the inclusion criteria were defined: original articles that described the factors associated with the functional disability of older people with cataract, without delimitation of time frame and language, published in scientific journals and available electronically. Literature reviews, case reports, monographs, dissertations, theses, abstracts published in annals of scientific events, book chapters, books, manuals, editorials, reviews, letters to the editor and study protocols were excluded.

The search for studies was carried out in May 2021 on the Portal of Periodicals of the Coordination for the Improvement of Higher Education Personnel

(CAPES), with access through the Federated Academic Community (CAFe), with the following databases being consulted: MEDLINE/PubMed (via *National Library of Medicine*), *Web of Science*, Latin American and Caribbean Literature in Health Sciences (LILACS) and *Cumulative Index to Nursing and Allied Health Literature* (CINAHL).

The search and selection of studies were performed by two researchers simultaneously and independently. To perform the search, combinations with the following Health Sciences Descriptors (DeCS) were used: *"older people", "daily activities", "cataract", "phacoemulsification", "visual acuity", "vision disorders", "blindness", "visually impaired persons";* and the *Medical Subject Heading (MeSH), "older people", "activities of daily living", "cataract", "phacoemulsification", "visual acuity", "vision disorders", "blindness" and "visually impaired persons",* combined by using the Boolean operators AND and OR.

The articles found were imported into the WebRayyan QCRI - *Qatar Computing Research Institute* (https://rayyan.qcri.org/welcome) application/website, for the identification and exclusion of duplicates and the management of the final sample selection process.

For data extraction, we used a form containing information regarding the title, authors, year and place of publication, method (study design, sample, measurement instruments) and main results. This last item was grouped into thematic categories, considering the most relevant aspects identified in the articles. Article evaluation and data extraction were performed independently by two reviewers (NNO and NGNO), with disagreements resolved by a third reviewer (EMI).

A critical analysis of the methodology of the selected articles was carried out by applying the *Newcastle-Ottawa Scale* (NOS), for longitudinal studies[14], and the adapted NOS[15], for cross-sectional studies, which evaluate publications, through the provision of stars, in three broad perspectives: selection of study groups, comparability of groups and appropriateness of exposure or outcome of interest. It is noteworthy that the higher the number of stars received in each domain, the higher the quality of the study being evaluated14. The *Agency for Healthcare Research and Quality* (AHRQ) classification of scientific evidence levels was also used: I - systematic review or meta-analysis; II - randomized clinical trials; III- clinical trials without randomization; IV - cohort and case-control studies; V - systematic review of descriptive and/or qualitative studies; VI - descriptive or qualitative study; and VII - opinion of authorities and/or report of specialist committees[16].

Data synthesis was performed descriptively considering the construction of categories, which addressed the results of original studies on factors associated with functional disability in older people with cataract.

## RESULTS

The *Preferred Reporting Items for Systematic Review and Meta-Analys for Scoping Reviews* (PRISMA)17 diagram was used to present the stages of article selection (Figure 1).

Searches in the databases resulted in 3,614 articles, 763 of which were excluded due to duplicates. After analyzing the title and abstract, 14 studies were selected for full reading. Then, eight articles were excluded because they did not meet the population (n=1) and outcome (n=7) criteria established through the PICO strategy. Therefore, six articles made up the final sample (Figure 1).

Of the six articles analyzed, most were published from the year 2000 (n=4) and carried out in America (n=3). Studies of the longitudinal type (n=3), level of evidence IV and cross-sectional (n=3), level of evidence VI[16], and that performed path analysis (n=3) predominated (Chart 1).

It is noteworthy that the studies diverged in relation to the classification of cataract (self-reported or diagnosed by means of an ophthalmological examination); and functional capacity assessment instruments, using the *Functional Assessment Inventory* (FAI)[18]; Functional Disability Index in Cataract Patients (VF-14)19,20; adapted scores from ADL[21]; and standardized scores, such as the Katz Index and the *Lawton & Brody* and AADL scales[7,22] (Chart 1).

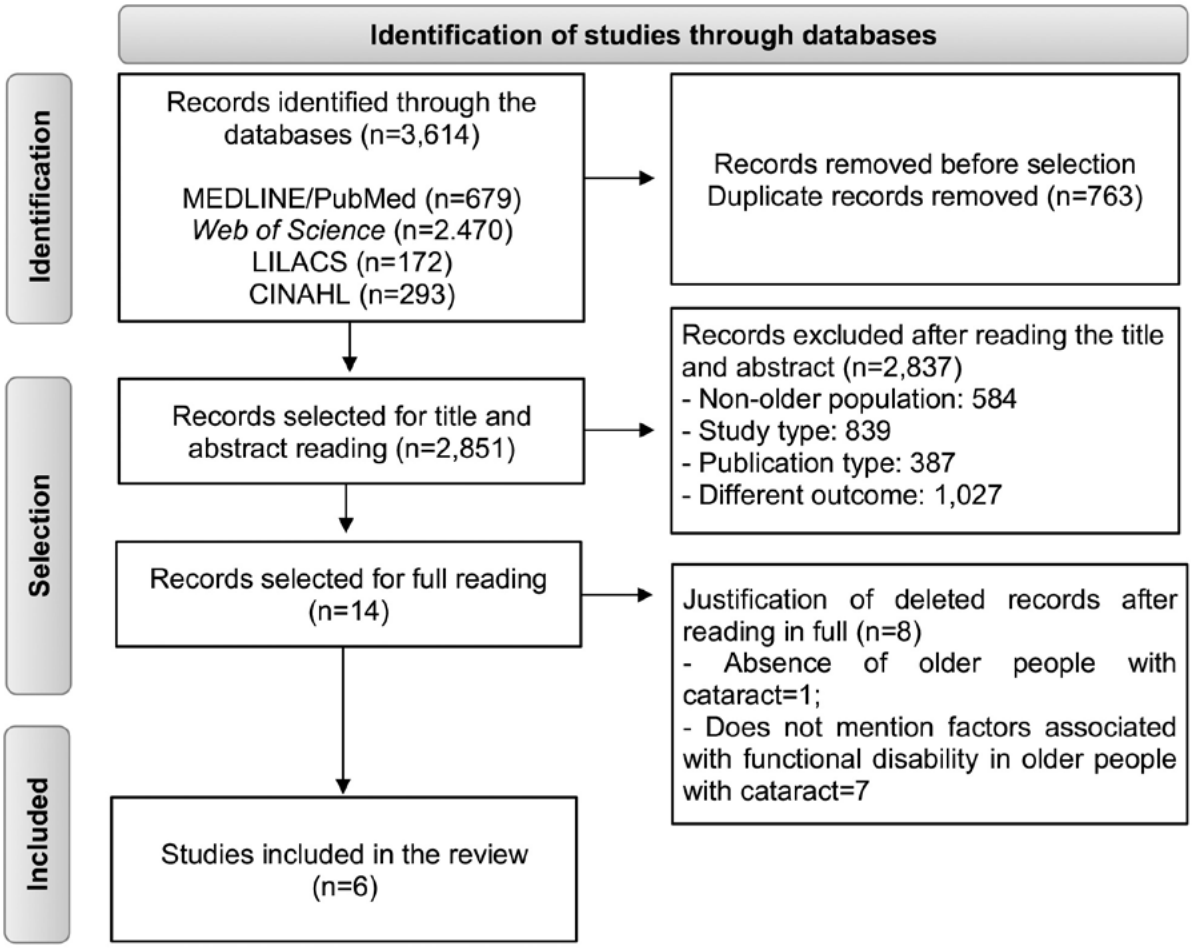


**Figure 1.** Flowchart of the study selection process.

**Chart 1.** Compiled description of studies included in the integrative review

| Author, year, place | Study design, general characteristics of the sample and statistical analysis | Cataract classification | Functional capacity among older people with cataract (instrument and occurrence) | Methodological quality (*NOS*) | Level of Scientific Evidence (AHRQ) |
|---|---|---|---|---|---|
| Borges et al. (2014)[22]<br><br>Distrito Federal, Brazil | Cross-sectional observational study, with 100 older people, 50% with cataracts, of these 52% women and 60% aged 70 years or over.<br><br>Simple *Poisson* regression. | Self-reported bilateral cataract. | *Katz* Index (dependent: in one or more ADL), Lawton & Brody Scale (dependent/ semidependent for one or more IADL).<br><br>Among older people dependent for BADL and IADL, 59.7% and 57.8% had cataract, respectively.. | 7/10 | VI |

to be continued

Continuation of Chart 1

| Author, year, place | Study design, general characteristics of the sample and statistical analysis | Cataract classification | Functional capacity among older people with cataract (instrument and occurrence) | Methodological quality (*NOS*) | Level of Scientific Evidence (AHRQ) |
|---|---|---|---|---|---|
| Elam et al. (1988)[18]<br><br>Tennessee, USA | Prospective observational cohort study, with 164 older people, 77% women, mean age of 76.5±4.8 years.<br><br>Path analysis. | Preoperative diagnosis of cataract. | FAI, ranging from 13 (best functional capacity) to 39 (worst functional capacity) points.<br><br>Average FAI = 14.1±1.8. | 6/9 | IV |
| Espallargues et al. (1998)[19]<br><br>Barcelona, Spain | Prospective observational cohort study with 218 older people, 61% of whom were women, mean age of 70.5±8.7 years.<br><br>Multiple linear regression. | Preoperative diagnosis of cataract. | VF-14, ranging from 0 (worst perceived visual functional capacity) to 100 (best possible perceived visual functional capacity) points.<br><br>Preoperative average VF-14 = 64±27 | 6/9 | IV |
| Tavares et al. (2020)[7]<br><br>Minas Gerais, Brazil | Cross-sectional observational study, with 957 older people, with 268 with cataract; of these, 67.2% were women, 50.4% were between 70 and 79 years of age.<br><br>Path analysis. | Self-reported cataract. | *Katz* Index, *Lawton & Brody* Scale, AADL Scale (higher scores for BADL and lower scores for IADL and ADL indicate greater functional disability).<br><br>BADL score = 0.13±0.39; IADL = 17.67±3.42; AADL = 5.11±2.40. | 10/10 | VI |
| Knoll et al. (2004)[21]<br><br>Germany | Prospective observational cohort study, with 134 individuals, 69% women, mean age of 71.63±9.52 years.<br><br>Path analysis. | Preoperative diagnosis of cataract. | Difficulty performing ADL, with 0 = very easy and 4 = very difficult.<br><br>Preoperative average = 1.14±0.69 (0-4 points) | 5/9 | IV |
| Walker et al. (2006)[20]<br><br>Sidney, Australia | Cross-sectional observational study, with 105 participants, 58% women; mean age of 73.69±7.10 years.<br><br>Multiple logistic regression. | Preoperative diagnosis of posterior subcapsular cataract. | VF-14, ranging from 0 (worst perceived visual functional ability) to 100 (best possible perceived visual functional ability) points.<br><br>Average score = 78.75 ± 15.91. | 6/10 | VI |

Note: NOS – *Newcastle-Ottawa Scale*; AHQR – *Agency for Healthcare Research and Quality;* BADL – Basic activities of daily living; IADL – Instrumental activities of daily living; AADL – Advanced Activities of Daily Living; FAI – *Functional Assessment Inventory*; VF-14 – Functional Disability Index in Cataract Patients.

Based on the findings of the studies included in this integrative review (n=6), three thematic categories of factors associated with functional disability in older people with cataract were listed, as shown in Chart 2.

The functional disability of older people with cataract occurs in a hierarchical manner, in which dependence for AADL is associated with IADL and the latter with BADL[7] (Chart 2).

In the category of demographic characteristics, it was found, among older people with cataract, that older age was associated with functional incapacity for BADL[22] and IADL[20]. Furthermore, it was observed that the worst cognitive ability mediated the association between older age and functional disability for ADL[18] (Chart 2).

Characteristics related to eye, physical and mental health were identified. It was identified that the worst visual acuity was associated with functional disability for BADL[21], IADL and ADL[20]. High/low visual difficulty[22] and worse physical performance[7] were associated with functional disability for BADL and IADL, as well as higher numbers of impaired components of the frailty phenotype and depressive symptoms for IADL and AADL[7], and the highest level of stress for AADL and ADL[20]. Lower contrast sensitivity was associated with functional disability for ADLs and greater difficulty in driving, considered an AADL[20] (Chart 2).



In addition to the aforementioned variables, functional disability for BADL was associated with the presence of three or more morbidities[21,22]. Functional disability for IADL was also associated with less conscientiousness[21] and greater anxiety[20]. Worse health status was a factor associated with functional disability for ADL[19], as well as lower cognitive capacity and greater binocular visual impairment[18] (Chart 2).

Regarding behavioral characteristics, it was identified that physical inactivity was associated with functional incapacity for BADL among older people with cataract[22] (Chart 2).

**Chart 2.** Thematic categories of factors associated with functional disability in older people with cataract.

| Categories | BADL | IADL | AADL | VF-14 | FAI |
|---|---|---|---|---|---|
| Demographic characteristics | Age >70 years ($p$=0.037)[22] | Higher average age (β= -0.21; $p$=0.04)[20] | - | - | Higher age, mediated by worse cognitive ability (β=-0.09)[18] |
| Characteristics related to the state of eye, physical and mental health | Having three or more morbidities ($p$=0.037)[22]; ($p$<0.001)[21]<br><br>High/low visual difficulty ($p$=0.001)[22]<br><br>Worse physical performance (β=-0.20; $p$<0.05)[7]<br><br>Functional disability for IADL (β=-0.20; $p$<0.05)[7]<br><br>Worse visual acuity in the eye to be operated on ($p$<0.05) and in the eye contralateral to the operated one ($p$<0.05)[21]<br><br>Less conscientiousness ($p$<0.01)[21] | High/low visual difficulty ($p$=0.001)[22]<br><br>Worse physical performance (β=0.21; $p$<0.05)[7]<br><br>Higher number of compromised frailty phenotype components (β=-0.27; $p$<0.05)[7]<br><br>Lower participation in AADL (β=0.28; $p$<0.05)[7]<br><br>Less conscientiousness ($p$<0.01)[21]<br><br>Higher level of depression (β=-0.28; $p$=0.010)[20]<br><br>Higher level of anxiety (β=0.31; $p$=0.03)[20]<br>Worse contrast sensitivity (β=0.24; $p$=0.03)[20] | Higher number of compromised frailty phenotype components (β=-0.36; $p$<0.05)[7]<br><br>Higher number of depressive symptoms (β=-0.28; $p$<0.05)[7]<br><br>Higher level of stress (β=-0.45; $p$<0.001)[20]<br><br>Worse visual acuity (β=-0.54; $p$<0.001)[20]<br><br>Worse contrast sensitivity, greater difficulty driving (β=0.32; $p$=0.02)[20] | Worse general health status (β=-0.23; $p$<0.001)[19]<br><br>Higher level of stress (β=-0.20; $p$=0.004)[20]<br><br>Worse visual acuity in the eye with the worst vision (β=-0.38; $p$<0.001)[20]<br><br>Worse contrast sensitivity (β=0.24; $p$=0.03)[20] | Worse cognitive ability (mental state) (β=0.51; $p$<0.001)[18]<br><br>Greater binocular visual impairment (β=0.51; $p$<0.001)[18] |
| Behavioral characteristics | Physical inactivity ($p$=0.013)[22] | - | - | - | - |

Note: BADL – Basic activities of daily living; IADL – Instrumental activities of daily living; AADL – Advanced activities of daily living; VF-14 - Functional Disability Index in Cataract Patients; FAI - *Functional Assessment Inventory*.

## DISCUSSION

The current integrative review identified that there are demographic factors, aspects of eye, physical and mental health, and behavioral factors associated with the functional disability of older people with cataract.

Age was identified as a demographic factor directly associated with the functional disability of older people with cataract[20,22]. In a Brazilian study, older people with cataract, who belonged to the older age group, had a higher prevalence of functional disability ($p$=0.046)[22]. Similarly, there was a significant association between older age and functional disability for IADL (p=0.040)[20] in older Australians. Still, in the investigation carried out among American older people, older age, mediated by worse cognitive ability, was indirectly associated

with functional disability (β=-0.09)[18]. In the older population, in general, it is possible to observe greater susceptibility to functional and cognitive decline[18,23,24] and the onset of cataracts[1]. Thus, older age, added to this health condition, must be considered in the care provided, as it can cause other adverse events such as reduced autonomy and independence, which negatively impact the quality of life of older people[7].

Furthermore, an association was observed between the functional disability of the older people with cataract and ocular health characteristics, such as visual difficulty[18,20–22], both measured by visual acuity, which interferes with functional capacity in BADL, AAVD, VF-14 and FAI[18,20,21]; and measured by the *Melbourne Edge Test* (MET), which assesses visual sensitivity to contrast, and influences functional capacity for IADL, AADL and VF-14[20]. These findings are consistent with previous studies[5,25,26], which highlighted the positive correlation between the self-report of low visual acuity for far and/or near with the difficulty in performing BADL and IADL[25]; and the 2.68 times greater chance of older people with self-reported visual difficulties, far and/or near, to develop functional disability for BADL ($p$<0,001)[26]. In the survey with Brazilian older people, the presence of self-reported cataract was associated with functional incapacity for ADL (PR=1.09, $p$<0.001)[5]. In this scenario, we can see the epidemiological relevance of cataract, the current most common cause of reversible blindness in the world[1], considering that cataract surgery is able to improve, in a statistically significant way ($p$<0.001), visual acuity, measured by the *Snellen* table[27]; and improve quality of life, autonomy and ADL performance among older people[2].

Regarding the worst contrast sensitivity, assessed by the MET, in the current integrative review, an association with greater difficulty in driving a car, considered an AADL, was found (β=0.32; $p$=0.020)[20]. This fact is in agreement with the scientific literature, which demonstrates that reduced contrast sensitivity has a positive correlation with driving difficulty, among drivers with cataract (r=0.404, $p$=0.027)[28], and that there is a worse score of difficulty in driving when compared to those without the aforementioned condition ($p$<0.001)[28], intensified adversity in situations where the environmental contrast is impaired, such as driving in the rain ($p$=0.034)[28,29], inducing the affected driver to avoid such adverse situations[29]. It is also known that the increase in cataract intensity significantly reduces the ability of the older person to drive[30].

In addition to aspects related to visual capacity, it was found in the current integrative review that the lowest physical performance score was directly associated with greater functional incapacity for BADL (β=-0.20; $p$<0.05) and IADL (β=0.21; $p$<0.05) among the older people with cataract[7]. Corroborating this finding, a Brazilian study observed that the physical performance of older women improved between 30 ($p$=0.030) and 60 days ($p$<0.001) after cataract surgery[31]. The reduction in visual acuity, caused by the aforementioned condition, can cause changes in balance and mobility and, consequently, a greater propensity for functional disability[31,32]. The elaboration of strategies for the treatment and/or correction of the visual deficit imposed by the cataract is necessary to minimize and/or avoid functional and psychosocial losses in the future. Furthermore, these data show the demand for investments aimed at health promotion and disease prevention, since the worst physical performance is subject to intervention by health professionals.

As well as the worst physical performance, the frailty syndrome was also identified as a factor associated with the functional disability of Brazilian older people with cataract (β=-0.27; $p$<0.05)[7]. In a survey carried out among English people aged 65 years and over, who were not frail and had visual problems, a higher risk for the development of pre-frailty and frailty was observed after four years (OR=2.07, 95%CI 1.32-3.24)[33]. This fact reinforces the possibility that age-related eye diseases also influence the frailty syndrome, which makes it essential to identify this association, which is still little explored in the scientific literature[34]. Slow gait speed and reduced level of physical activity, factors evaluated in screening for frailty syndrome[35], can be compromised in the presence of cataracts in older people. Considering that the referred syndrome is one of the factors associated with the functional disability of older people[36], and that there is a possible relationship between the frailty syndrome and cataract[7], screening for vision problems in

primary care is necessary, seeking referral to the ophthalmologist, when necessary, for early diagnosis.

The current integrative review also identified cognitive and psychological factors associated with functional disability in older people with cataracts, such as worse mental arithmetic and remote and recent memories[18], depressive symptoms[7], conscientiousness[21], stress, depression and anxiety[20].

The highest level of stress was related to functional disability for AADL, specifically recreational activities, and with a worse score in the VF-14 instrument, representing greater disability[20]. Furthermore, higher levels of anxiety and depression were associated with functional incapacity for IADL[20]. Regarding depression, a Brazilian study among community-dwelling older people with self-reported cataract, the greater number of depressive symptoms was associated with incapacity for AADL[7].

The performance of basic or complex ADL depends on the integrity of functional systems, including mood[6]. Mood disorders such as anxiety and depression are common in older people and have been associated with a higher risk of developing functional disability[37]. Likewise, these disorders also affect older people with impaired vision[38], which is an important component related to physical functioning, mobility and independence[20]. In this context, it appears that screening for depressive symptoms in older people with cataracts should be included in the approach of professionals, in order to avoid functional decline.

In addition to depressive symptoms, it was found that the negative changes recorded in the ADL evaluated through the FAI, one year after cataract surgery, were indirectly associated with the initial impairment of cognitive functions, and directly with the changes in such functions that occurred in the period[18]. The finding demonstrates the relevance of maintaining cognition for performing ADL, independently and autonomously[6], especially among older people with vision issues, such as cataracts.

In addition, it was identified that more conscientious older people with cataracts tended to report less difficulty in performing ADLs of different levels of complexity, at three different evaluation moments: preoperatively, one week and six weeks after cataract surgery[21]. In addition, conscientiousness was responsible for 7% of the variation that occurred in the change in functional capacity from the preoperative to the postoperative period[21].

Conscientiousness, a personality trait, can be determined by cognitive, social, psychological and health characteristics in older people[39]. A study showed that older people were more likely to have high scores on conscientiousness when compared to adults, indicating that traits adapt to events that occur at each stage of life[40]. Even when exposed to challenging scenarios, conscientious people are more likely to face situations with more competence, a phenomenon called successful self-regulation[21], which may explain the lower report of difficulty in performing ADL, regardless of the limitation caused by cataract.

The repercussions caused by reduced visual acuity or reversible blindness associated with eye diseases such as cataracts are known, however, the psychological impacts have not received due attention, as vision loss is treated as a physical problem[41]. Considering that there is evidence of an association between mental illness and functional disability, it is necessary to expand the understanding of the psychological effects, especially in people with eye problems who suffer from mental disorders[41], through mental health exams[38] to identify those with potential risk of developing functional disabilities, and, consequently, maintaining autonomy and independence[37].

The associations between the presence of polymorbidity[21,22] and worse general health status[19] with the functional disability of older people with cataract were also evidenced in the current review. Similarly, in the scientific literature, the relationship between physical health and functional decline among individuals aged 60 years or older is observed, so that the presence of five or more morbidities was associated with functional disability both for BADL ($p$=0.023) and for IADL ($p$=0.017)[36]. In an Indian study, it was found that older people who had any chronic comorbidities were 2.1 more likely ($p$=0.009) to be functionally incapable than those

without such conditions[42], and that the self-report of chronic comorbidities was positively related to difficulties in BADL and IADL[25]. In this scenario, it is noteworthy that morbidities are also frequent in individuals with senile cataract, according to a survey developed in Turkey, in which 74.6% of the older people with cataract had at least one systemic disease[43], especially arterial hypertension (46.9%), followed by diabetes *mellitus* (32.6%)[43]. Diabetes mellitus has been proven to be a risk factor for lens opacification and acceleration of cataract development in older people[44], especially of the specific posterior subcapsular type[45]; for which high blood pressure, gout and use of calcium channel blockers for more than five years were also risk factors[46].

In the current integrative review, it was observed that behavioral factors, such as physical inactivity[22], are also associated with functional disability in older people with cataract. The decline in sensory functions, especially visual ones, that occur with advancing age[31], can compromise the participation of older people in physical and social activities, favoring sedentary behavior, with consequent repercussions on physical performance, a determining factor for reducing functional decline[7,31,32]. Physical activity is considered one of the most effective interventions to minimize changes related to body composition that occur during the human aging process[47], in addition to helping in the prevention and/or rehabilitation of functional losses[36]. Thus, it appears that the early diagnosis of cataract and the encouragement of physical activity for older people, through health professionals, are necessary for the maintenance of functional capacity.

As possible limitations of the present review, we can mention the diversity of instruments used in research for the assessment of functional disability and cataract, as well as the lack of standardization of these instruments in terms of classification and/or scoring, which can influence the interpretation and comparison of results. In addition, some studies identified considered, in their analyses, the older population together with middle-aged adults, which suggests the need for future investigations comparing the groups. Another issue to be highlighted is the need for future research with designs that allow a cause and effect relationship, to expand the understanding of the associated factors, since half of the identified studies are cross-sectional, and one explored path analysis.

## CONCLUSION

It is evident, therefore, that the functional disability of the older people with cataract is associated with advanced age, presence of morbidities, worse physical performance, impairment of the components of the frailty phenotype, physical inactivity, and aspects of eye (impaired visual acuity and contrast sensitivity) and mental health (stress levels, anxiety, depressive symptoms, and less conscientiousness).

However, the findings also show that there is still little research on this topic in the current literature, and new studies that focus on the impacts of cataract treatment on the functional capacity of older people would contribute to the improvement of surgical indications with a view to preventing functional decline and improvement in the quality of life of this population. In addition, intervention studies are suggested that address the modifiable factors associated with the functional disability of older people with cataract, such as physical inactivity, from a multidimensional perspective that addresses the particularities of this public.

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