



Older Adults Knowledge and Attitude Toward the Cataract at Primary Health Care Centers in Baghdad City

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Abstract: **Background:** A cataract distorts the eye's lens, which at first impairs vision and later leads to blindness if untreated. Increased light sensitivity, poor night vision, seeing double pictures, and eventual utter blindness are the results. **Objectives:** The study aims to assess older adults' knowledge and attitude toward cataracts and identify the relationship between the sociodemographic characteristics of older adults' knowledge and attitude toward cataracts. **Methods:** descriptive study design among 200 older adults selected by convenience sample. The study tool is a questionnaire comprising 3 parts (sociodemographic characteristics, knowledge, and attitude). The data was collected by the interview method. **Result:** The finding indicated that (60%) of older adults at age (60-65) years, (64.5%) are males, (29.5%) have secondary school graduates, and 71(35.5%) are housewives. The grand mean and standard deviation of knowledge are (1.55±0.22). The grand mean and standard deviation of attitude are (2.06±0.46). There is a significant difference between the mean score of older adults' knowledge with age and education at p-value (0.000 & 0.03), respectively. Also, there is a significant difference between the mean score of older adults' attitudes with age at p-value (0.000). **Conclusion:** It is essential to check the vision health status of old age people. Enhance the awareness about cataract risk factors, prevention, and treatment.

Key Words: older adults; knowledge; attitude; cataract

I. INTRODUCTION

Ageing is a global phenomenon old age is not in itself an illness, but is a normal element of the human life cycle. Ageing is a normal, universal, progressive, irreversible process. It is an inevitable physiological phenomenon. The human life span follows an established pattern birth to death. Then there occurs a steady decrease physical and mental capacities.

Cataract is defined by the WHO as a clouding of the eye's lens, which at first impairs vision but can progress to blindness if ignored. Increased light sensitivity, reduced night vision, double images and absolute blindness are all symptoms of this condition. Even though most cataracts are caused by age, there are very rare cases where a cataract is a result of eye trauma, inflammation, and some other eye illnesses [1].

Cataract is the major cause for visual impairment among individuals of developing and poor countries. It is a multifactorial condition, wherein opacification of the eye lens occurs, generating greater light scattering [2].

The term "cataract" refers to the opacification of the lens of the eye. Vision problems, such as glare, haloes around

lights, and difficulty reading in low light are all signs of cataracts. Cataract formation is influenced by a number of risk factors. Age, sun exposure, trauma, tobacco use, and usage of anabolic steroids and other performance-enhancing drugs are the most common causes of skin aging. Cataract formation is frequently influenced by a combination of two or more of these risk factors [3], [4].

Visual impairment is closely connected with fair or poor health state and restricted exercise. Age-related eye problems raise the risk for accidents, falls, and hip fractures. Age-related eye illnesses can impede the capacity of older persons to lead an independent life, consequently severely altering their lifestyle. A relationship exists between the loss of vision and loss of overall function [5].

Dementia is a significant risk factor for visual impairment. There are more than 35 million people worldwide who are affected by cataracts, which causes blindness in about 20 million of them. The majority of people over the age of 65 who are at high risk of developing dementia suffer from cataracts. In terms of the link between cataract removal and cognitive decline or dementia, however, there are inconsistent

data [6].

Cataract is the most common cause of blindness in the 116 countries included by the WHO program for the prevention of blindness's blindness data bank. Nearly half a billion individuals suffer from serious vision loss, and cataracts are responsible for 17 million of them. In 43.6 percent of the country, cataracts were listed as the leading cause of blindness [7].

Among people under 65, cataract prevalence is less than 5%; by the time they reach 75, that number rises to about 50%. As a result, cataracts are now considered a disease connected with growing older [8].

More than a third of the world's blind people are women, with 191 million people suffering from mild to severe vision impairment (MEVI) (60 percent). A high incidence of age-related blindness in South Asian nations (4.4 percent vs. 6.0 percent) is nevertheless lower than in Sub-Saharan countries, but the prevalence of MEVI is slightly greater in South Asian countries than in Oceania (23.6 percent) (18.9 percent) [9].

Worldwide, cataract is the leading cause of blindness and the second leading cause of impaired vision, impacting people of all ages and ethnic backgrounds and driving up the expense of healthcare systems. One billion of the 2.2 billion people with vision impairment worldwide have vision impairments that might have been prevented. 65.2 million of the 1 billion potential avoidable vision impairments are cataract-related [10].

Knowledge is a consciousness of the presence of something and information and understanding of a specific issue of the world in general which is obtained by experience or studying, knowledge is to comprehend specific topic or of the world in general. In psychological views, Attitude is a relatively persistent structure of beliefs, attitudes, and behavioral tendencies towards socially relevant things, people, events or symbols [11].

Insufficient knowledge (about the risk factors, nature of the disease, and treatment alternatives) was shown by several studies to be a major factor in patients delaying prompt treatment. Other factors included poor financial standing, immobility, incorrect perception, residual vision, and erroneous perception. The most important element in preventing cataract from developing, starting routine eye exams, and putting early interventions into place is knowledge about cataract. As a result, the disease's impact is reduced. A prerequisite for developing health education and promotion initiatives is also to measure cataract knowledge. The burden of preventable causes of blindness and visual impairment is thought to be reduced in poor countries by health education and promotion [12].

The burden of eye disorders can be reduced by health promotion, which will ultimately reduce the number of people who are blind or have impaired vision. Research on people's attitudes and knowledge can help health care practitioners create more effective health promotion and education initiatives [13].

The study aim to assess older adults' knowledge and attitude toward cataract, and identify relationship between the socio-demographic characteristics of older adults' knowledge and attitude toward cataract.

II. METHODS

STUDY DESIGN

Descriptive study design conducted at the period of 1st of April 2022 to 19st May 2022 to assess older adults' knowledge and attitudes toward cataract at primary health care centers in Baghdad city

SITTING

The study carried out at 5 primary health care centers in Baghdad city.

SAMPLING

The study sample is 200 older age adults selected by non-probability sampling (convenience sample). They were selected from 5 primary health care centers in Baghdad city.

INSTRUMENT

The study tool is a questionnaire composed from 3 parts. first part related to the socio demographic characteristics of the sample (age, gender, level of education, occupation). The second part is scale measure knowledge about cataract composed of (12) items determined by dichotomous scale (yes, and no). The third part is scale to measure the attitude about cataract composed of (9) items determined by 3 likert scale from agree to disagree [1].

RATING AND SCORING OF INSTRUMENTS

Knowledge scale (1-1.33) low level, (1.34-1.67) moderate level, and (1.68-2) high level.

Attitude scale (1.1.66) negative attitude, (1.67-2.33) neutral attitude, and (2.34-3) positive attitude.

VALIDITY

The validity of the instrument done by content validity, content validity of the instrument was determined by panel of experts who have had more than 5 years of experience in their field in relation to explore the lucidity, relevancy, and adequacy of the questionnaire in order to accomplish the goals of the present study. The correction of the questions items was done and changed according to the notes and recommendations of the experts.

RELIABILITY

The reliability of the instrument done by pilot study conducted among 20 sample and excluded from the original study to identify the facilities and problems that face the researcher in the study, check the time required for information collection, and check the instrument words understanding by the sample and able to gathering information. Internal consistency of the questionnaire done by Cronbach's alpha

Variables		Frequency	Percent
Age	60-65	120	60.0
	66-70	60	30.0
	71-75	20	10.0
	Total	200	100.0
Gender	Male	129	64.5
	Female	71	35.5
	Total	200	100.0
Education	Primary education	31	15.5
	Secondary school	59	29.5
	Institute	58	29.0
	College	52	26.0
	Total	200	100.0
Occupation	Retired	60	30.0
	Not employee	69	34.5
	Housewives	71	35.5
	Total	200	100.0

TABLE 1: Distribution the Demographic Characteristics of Older Adults

coefficient. There is acceptable level of Cronbach's alpha coefficient for the knowledge (0.82) and attitudes (0.78).

ETHICAL CONSIDERATION

The researcher explains the study and the objectives to the sample and ask them to participate in the study. After take the sample agreement, the investigator collect the data through use of interview method.

DATA ANALYSIS

The statistical data analysis done by (SPSS) version 22 through use of descriptive and inferential statistical data analysis.

III. RESULTS

The finding in Table 1 shows that 120(60%) of older adults at age (60-65) years, 129(64.5%) are males, 59(29.5%) of them have secondary school graduated followed by 58(29%) institute graduated, 71(35.5%) are housewives followed by 69(34.5%) not employee.

The results in Table 2 showed that older persons are well-informed about cataract, 56% of people have heard about cataracts. 63.5% are aware that cataract risk increases with age. 62% understand trauma as a cataract risk factor. 83.5% are aware that risk factor prevention is a possibility, and 73.5% are aware of at least one preventative strategy. 60.5% are aware of the signs of cataracts. 51.5% are aware that cataract treatment will have the worst effects. 60.5% are aware that surgery is the best course of action, 47.5% are aware that eyesight can change following therapy, 54% of government hospitals provide cataract therapy. 43.5% are aware that cataract surgery requires the implantation of a lens, 51% are aware that cataract surgery is free of charge. The grand mean and standard deviation are (1.55±0.22)

The finding revealed that older adults have neutral attitude about cataract in all items except the items (Concerned about the price tag for cataract surgery) it is in positive assessment of attitude. The grand mean and standard deviation are (2.06±0.46), Table 3.

This Table 4 shows that there is significant deference between the mean score of older adults' knowledge with age and education at p-value (0.000 & 0.03) respectively. Also, there is significant deference between the mean score of older adults' attitude with age at p-value (0.000).

IV. DISCUSSION

The study finding in Table 2 indicated that older adults have moderate level of knowledge about cataract at mean (1.55). Akowuah *et al.* [14] found that over 70% of participants had low knowledge of cataract. Pankasikorn and Kitsripisarn [15] found that Most participants had knowledge points at low level (mean = 11.88, SD = 5.602). [16] found that there is large gap in public's knowledge and understanding of cataract blindness. These findings inconsisted with our finding.

Alimaw *et al.* [12] found that participants had good knowledge about cataract. Fikrie *et al.* [1] found that more than three-quarter, 506 (86.3%) of the participants had heard of cataract. The mean (±SD) knowledge score point was 6.65 ± 3.58 points. More than three-in-five of the participants mentioned at least one symptoms of cataract 323 (63.8). More than three fourth, 272 (76.4%) of the study participants main source of information was health professionals followed by family, 45 (12.6%), 392 (77.5%) of the participants mentioned older age as one of the cataract risk factors. On the other hand, 2/3, or 335 (66.2%) of the participants, correctly answered the question concerning whether cataract risk factors could be prevented. Among the 506 individuals (86.3%), 463 (91.5%) and 377 (74.5%) suggested vitamin supplementation and stopping smoking as preventative measures for cataract risk factors, respectively. Of the 260 participants, 260 (51.4%) were aware that cataract therapy is available in government hospitals. The fact that cataract surgery is provided without charge was only known by less than half of the participants (41.9%). 299 participants, or just over 60%, were aware that vision loss following cataract surgery is a possibility. Samuel *et al.* [4] found that About 551 (88.4%) of the participants gave the right definition of cataract in basic terms. Reduced vision was cited by 438 respondents, or more than half of them (70.3%), as a cataract symptom. Regarding the risk variables, 362 individuals (58.1%) and 350 participants (56.2%) identified trauma and older age as risk factors for cataract, respectively. The majority of 552 respondents (88.6%) stated that reduced vision and blindness were the worst consequences of cataracts. More over half of the respondents, 465 (74.6%), said that surgery was the best course of action for cataracts, while 40 (6.4%) said that using sunglasses may prevent cataracts. Overall, 342 (54.9%) of the individuals had solid cataract knowledge. These findings are consistent with those of our investigation.

Items	Yes		No		Mean	Eva
	f	%	f	%		
Have you ever heard about cataract	112	56.0	88	44.0	1.56	M
Older age risk factor of cataract	127	63.5	73	36.5	1.64	M
Trauma risk factor of cataract	124	62.0	76	38.0	1.62	M
Prevention of risk factors is possible	167	83.5	33	16.5	1.84	H
Mechanism of prevention mentioned at least one	147	73.5	53	26.5	1.74	H
Symptoms of cataract	121	60.5	79	39.5	1.61	M
The worst consequence won't happen unless cataract is cured.	103	51.5	97	48.5	1.52	M
The best course of therapy is surgery.	121	60.5	79	39.5	1.61	M
After therapy, visual loss may be reversible.	95	47.5	105	52.5	1.48	M
Treatment for cataracts is available at public hospitals.	108	54.0	92	46.0	1.54	M
In cataract surgery, a lens must be implanted.	87	43.5	113	56.5	1.44	M
Cataract surgery be done free of charge	102	51.0	98	49.0	1.51	M
Grand mean and standard deviation= 1.55±0.22						

L=(1-1.33) low level, M=(1.34-1.67) moderate level, and H=(1.68-2) high level

TABLE 2: Distribution of Older Adults' Knowledge about Cataract (n=200)

Items	Agree		Neutral		Disagree		Mean	Eva
	f	%	f	%	f	%		
apprehensive about having cataract surgery	49	24.5	129	64.5	22	11.0	2.14	N
Concerned about the price tag for cataract surgery	90	45.0	91	45.5	19	9.5	2.36	+ve
Fearing that the procedure would cause me to lose my vision	49	24.5	126	63.0	25	12.5	2.12	N
Thought I could do my work with one eye, but I'm afraid a procedure will keep me from doing my regular employment for a long time.	51	25.5	128	64.0	21	10.5	2.15	N
believe that having bad vision is a normal process and that treatment is unnecessary	49	24.5	126	63.0	25	12.5	2.12	N
Worried that having eye surgery may cause their partner, children, or relatives to suffer	33	16.5	98	49.0	69	34.5	1.82	N
Fearing that they would have to spend a lot of time waiting to get the procedure done	42	21.0	112	56.0	46	23.0	1.98	N
They thought they were too elderly to get eye surgery.	52	26.0	126	63.0	22	11.0	2.15	N
	29	14.5	82	41.0	89	44.5	1.7	N
Grand mean and standard deviation= 2.06±0.46								

-ve=(1.1.66) negative attitude, N=(1.67-2.33) neutral attitude, and +ve=(2.34-3) positive attitude

TABLE 3: Distribution of Older Adults' Attitudes about Cataract (n=200)

The study finding in Table 3 indicated that older adults have neutral attitude about cataract at mean (2.06). Pankasikorn and Kitsripisarn [15] found that 100 percent of the participants had attitude points at high level (mean = 17.2, SD = 1.506). Samuel et al. [4] revealed that 248 (39.8%) of respondents agreed on obtaining cataract treatment, and 218 respondents (35%) agreed that a person with a cataract needed to be examined. More over one third of participants, 221 (35.5%), agreed that cataract is a major health issue, and 251 (40.3%) agreed that patients with cataract may receive the necessary care in a medical facility. In general, 236 (37.3%) of the participants had a favorable opinion on cataract. [1] found that regarding the participant's attitude, 207 (35.3%) had positive attitude towards cataract. This

result supported the present study findings.

The study result in Table 4 shows that there is significant deference between the mean score of older adults' knowledge with age and education at p-value (0.000 & 0.03) respectively. Also, there is significant deference between the mean score of older adults' attitude with age at p-value (0.000). Alimaw et al. [12] found that knowledge about cataract was positively associated with higher level of education. Samuel et al. [4] found that there is significant association between knowledge and level of education at p value 0.0001. [1] found that is significant association between knowledge and level of education. These results agree with the present study results.

Scale	Gender	N	Average	SD	t	p
Knowledge	Male	129	1.543	.2272	0.86	0.39
	Female	71	1.570	.2056		
Attitude	Male	129	2.063	.5046	0.17	0.87
	Female	71	2.052	.3708		
Scale	Age	N	Average	SD	F	p
Knowledge	60-65	120	1.650	.1689	67.9	0.000
	66-70	60	1.473	.1913		
	71-75	20	1.206	.0839		
Attitude	60-65	120	2.062	.4586	13.6	0.000
	66-70	60	2.200	.4121		
	71-75	20	1.617	.3294		
Scale	Education	N	Average	SD	F	p
Knowledge	Primary education	31	1.613	.1778	3.05	0.03
	Secondary school	59	1.496	.2344		
	Institute	58	1.537	.2353		
	College	52	1.599	.1923		
Attitude	Primary education	31	1.971	.4426	0.55	0.65
	Secondary school	59	2.102	.4975		
	Institute	58	2.056	.4891		
	College	52	2.066	.3962		
Scale	Occupation	N	Average	SD	F	p
Knowledge	Retired	60	1.563	.2039	0.82	0.44
	Not employee	69	1.525	.2459		
	Housewives	71	1.570	.2056		
Attitude	Retired	60	1.967	.4599	2.5	0.085
	Not employee	69	2.147	.5296		
	Housewives	71	2.052	.3708		

TABLE 4: Distribution of Older Adults Score Obtained from Knowledge and Attitude

V. CONCLUSION

The study finding concluded that older adults have moderate level of knowledge about cataract. Also, they have neutral attitude about cataract. There is significant difference between the mean of knowledge with age and education level and significant difference between the mean of attitude with age.

VI. RECOMMENDATION

It is important to check up the vision health status of old age people. Enhance people awareness about cataract risk factors, prevention and treatment through educational sessions and posters. Encourage old age people to visit the primary health care centers in regular time to check up their health status.

FUNDING STATEMENT

This research paper received no external funding.

CONFLICT OF INTERESTS

The authors declare no conflicts of interest.

AUTHORS' CONTRIBUTIONS

All authors contributed equally to this paper. They have all read and approved the final version.

CONSENT

Informed consent was obtained from all participants in the study as needed.

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