

# PUBLIC PERCEPTIONS REGARDING SERVICES PROVIDED BY OPTOMETRISTS AUTHORS

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## ABSTRACT

**PURPOSE:** To determine the knowledge and opinion of common people regarding optometry and the quality of services provided by optometrists.

**METHODS:** This was the descriptive cross sectional study. A self- designed online questionnaire was distributed among general population and they were asked different questions regarding age, education, difference between optometrists and ophthalmologists and services provided by optometrists.

**RESULTS:** The size of obtained sample was 256. The majority of participants were 18 to 26 years old. 80% of the respondents have heard about optometry and 57% have done examination by optometrists. 62% participants knows the difference between optometrists and ophthalmologists and 67% agreed that optometrists have primary role in elimination of visual impairment and blindness. Response rate for prescribing glasses by optometrists is 72% and for contact lenses is 37%. About 82% of population agreed that visual functions examination is done by optometrists. 47% and 34.6% agreed that optometrists can perform retinoscopy and ophthalmoscopy respectively.

**CONCLUSION:** The participants in this survey have a fair knowledge of optometrists regarding their professional roles and responsibilities. But there is confusion in public regarding the services of optometrists and ophthalmologists as eye care providers. So, the awareness regarding optometry should be done at public level as majority of the respondents mentioned that scope of optometry should be clearly defined and expanded.

**KEYWORDS:** Optometry, Perception, Primary eye care.

## INTRODUCTION

Optometry is a primary health-care profession that is autonomous educated, and regulated.<sup>1</sup> Optometrists provide comprehensive eye and vision care. Their services include refraction and dispensing, detection and management of disease in the eye, and the rehabilitation of conditions of the visual system.<sup>2</sup>

Optometry has changed from just an art to a health profession in many countries.<sup>3</sup> Optometry is an independent health care profession that has contributed a lot to the comfort and welfare of mankind and has made important scientific contributions in the rehabilitation of visual

anomalies.<sup>4</sup> Optometry is the third largest health care profession after medicine and dentistry.<sup>4</sup> Its education is primary source of local eye care and a way to address the issue of visual impairment in developing countries.<sup>5</sup> The service of optometrists in pediatric visual evaluation must compliment the part of other eye care specialists at all levels of care.<sup>6</sup>

Primary eye care is presently provided by optometrists, general practitioners and ophthalmic medical practitioners. About 16 million sight tests and eye examinations are performed by optometrists and ophthalmic medical practitioners

in the UK annually. The role of optometrist is not popular among public. Different units of optometrist are providing eye care services with different levels of skill. Eye health system cannot provide both refractive and ocular disease detection at tertiary level of care as it becomes cost consuming.<sup>7</sup>

The optometrist assumes a significant part in delivering ophthalmic service to the masses.<sup>8</sup> Today, optometrists assume a corresponding part to ophthalmologists in the tertiary eye care setup.<sup>9</sup> They report history, perform clinical refraction, assess essential segments of binocular vision, do fitting of contact lens, the upgrade of odd vision through low vision aids for example telescopic lenses,<sup>10</sup> examine the anterior structures of the eye using the slit lamp bio microscope, and measure intraocular pressure utilizing applanation tonometer and finally advise the patients for dilatation.

Awareness of people regarding the difference between optometrists and ophthalmologists is an important factor for utilizing the eye care services. This study aimed at assessing public knowledge and perceptions regarding services and facilities provided by optometrists and to increase awareness through campaigns and social media about their duties and responsibilities.

### MATERIALS AND METHODS

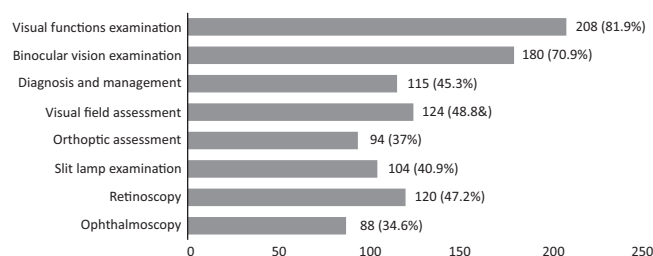
This was a descriptive cross sectional study. The size of obtained sample was 256. Study was conducted from September to December 2020. General population including graduates, undergraduates and people from different occupations were involved in this study. Due to prevalent conditions of social distancing owing to COVID-19, data was collected through online survey form which consists of a self-designed, pre-tested questionnaire to assess public knowledge regarding services provided by optometrists. The questionnaire included questions regarding demographics, occupation and their knowledge

about optometry. The research was approved by ethical board of College of Ophthalmology and Allied Vision Sciences.

### RESULTS

Data shows that 80% of the respondents had heard about optometry and 57% had done examination by optometrists. About 62% participants knew the difference between optometrists and ophthalmologists and 67% agreed that optometrists had primary role in elimination of visual impairment and blindness. 56.6% participants think that optometrists can assist a doctor while 68% responded that optometrists are primary eye care practitioners. Response rate for prescribing glasses by optometrists were 72% (Table 1) and for contact lenses were 37%, 16.8% of general population agreed that optometrists can perform eye examination (Table 2). About 82% of population agreed that visual functions examination is done by optometrists. 47% and 34.6% agreed that optometrists can perform retinoscopy and ophthalmoscopy respectively (Graph 1).

**Figure - 1: Public Knowledge Regarding Procedures Performed By Optometrists**



**Table - 1: Public perception about optometrists**

| QUESTION   | YES          | NO          | NOT SURE   |
|--|--------------|-------------|------------|
| Have you ever heard about optometry?   | 205 (80.1%)  | 51 (19.9%)  |            |
| Have you ever visited an optometrist?  | 146 (57.0%)  | 110 (43.0%) |            |
| Have you ever worn glasses?  | 127 (49.6%)  | 129 (50.4%) |            |
| Do you believe that optometrists can prescribe glasses?  | 185 (72.3%)  | 24 (9.4%)   | 47 (18.4%) |
| Are you aware of contact lenses which have both refractive correction and cosmetic properties?   | 137 (53.5%)  | 118 (46.1%) |            |
| Do you know difference between optometrist and ophthalmologist?                                  | 160 (62.5%)  | 95 (36.3%)  |            |
| Do you think an optometrist assists a doctor?  | 145 (56.6%)  | 59 (23.0%)  | 52 (20.3%) |
| Do you think optometrists are primary eye care practitioners?                                    | 174 (68.0%)  | 30 (11.7%)  | 52 (20.3%) |
| Do you think optometrist is trained in detection and recognition of eye diseases?                | 167 (65.20%) | 42 (16.4%)  | 47 (18.4%) |
| Do you think optometrists have a primary role in elimination of visual impairment and blindness? | 172 (67.2%)  | 41 (16.0%)  | 43 (16.8%) |

**Table - 2:**

|   | Optometrists | Ophthalmologists | Both        |
|---|--------------|------------------|-------------|
| Who conducts an eye examination?        | 43 (16.8%)   | 50 (19.5%)       | 163 (63.7%) |
| Who prepares contact lens prescription? | 95 (37.1%)   | 51 (19.9%)       | 110 (43.0%) |

**DISCUSSION**

The optometrists are primarily involved in the refractive error correction, detect eye diseases and refer them to the ophthalmologists.<sup>11</sup> There is the professional overlap between optometrists and ophthalmologists which has created misconceptions among people regarding their duties and roles in the health care system. This study is carried out to assess how much people are knowledgeable about optometry as a profession and what they think who are optometrists and what are their roles as an eye care provider.

A survey which was conducted online in the form of questionnaire was sent to general population having a sample size of 256. The demographic distribution of the survey respondents shows that majority are females (153) than males (103). The respondents consists of different age group between 17yrs and 50 yrs. The respondents were having different occupations but mainly were the undergraduates and graduates. The socio-demographic and clinical characteristics of the participants are very important as this shows their

knowledge towards optometry.<sup>12</sup>

It is analyzed from the received data that 80% of participants have heard about word optometry. Further, different questions were asked related to optometrists to actually assess the public perception. People were asked if they have ever visited an optometrist in case of any ocular problem and what was their satisfaction level. 146 respondents have visited an optometrist out of which only 63% were satisfied with their examination. Almost half of the participants (49%) have refractive errors and wear glasses. 185 (72.3%) participants think that optometrists are able to prescribe glasses, 24 (9.4%) think that optometrists cannot prescribe glasses and 47 (18.4%) are not sure about it.

Results obtained shows that 160 (62.5%) respondents know the difference between optometrists and ophthalmologists and 36% are not aware of the difference which is less as compared to the study conducted in Mozambique where 68% of the responders knew the difference between optometrists and ophthalmologists.<sup>13</sup> According to the study conducted in Saudi Arabia, 45.8% of the participants were not aware of the difference between the optometrists and ophthalmologists.<sup>14</sup>

In Australia, optometrists have vital role in providing primary eye care services and also have a secondary role of referring the patients to consultant optometrists, ophthalmologists, general practitioners and other health care professionals.<sup>15</sup> From the data it is assumed that 174 (68%) think that optometrists are eye care practitioners and 30 (11.7 %) do not agree with this while 167 (65.2%) are sure that optometrists can detect and recognize eye diseases and 42 (16.4%) responded against it.

According to WHO, visual impairment and blindness is increasing day by day which is estimated to be 80% but VI can be cured and optometrists plays an important role in elimination

of visual impairment and blindness. According to participant's assumptions 172(67%) agreed on this role of optometrists, 41(16%) said that optometrists are not involved in elimination of visual impairment and blindness and 43(16.8%) are not sure about this role of optometrists.

Ocular examination is primarily performed by optometrists, ophthalmologists, orthoptist or an optician. Ocular examination helps in the detection of different pathologies of eye<sup>16</sup> such as blinding eye diseases. From the data it is concluded that 43(16.8%) participants have knowledge that optometrists can conduct eye examination, 50(19.5%) think that ophthalmologists conduct eye examination while majority of the participants<sup>163</sup> (63.7%) agreed that both optometrists and ophthalmologists can perform eye examination.

The participants in this survey have fair knowledge of the roles and services provided by optometrists. Majority of the participants 81.9% agreed that optometrists perform visual functions examination which include visual acuity, color vision, contrast sensitivity etc. 70.9% agreed that optometrists can do binocular vision examination, 45.3 % think that optometrists can diagnose and manage diseases, 48.8% and 37% participants agreed that optometrists can do visual field assessment and Orthoptic assessment respectively. According to 40.9% participants, optometrists can perform slit lamp examination, 47.2% and 34.6% respondents think that optometrists can perform retinoscopy and ophthalmoscopy respectively. According to the study a snap shot of optometry, majority of the optometrists can perform direct ophthalmoscopy (100%), slit lamp bio microscopy (87.5%), tonometry (55.7%), prescribe contact lenses (10.2%) and provide low vision assessments (9.1%).<sup>15</sup>

Due to vast development in technology and treatment modalities, the scope of practice of optometrists is enhanced worldwide.<sup>17</sup> Majority of the participants about 90% felt that scope of

optometry should be clearly defined and public awareness programs should be carried out regarding roles and responsibilities of optometrists. Media and organizing different eye camps in the community can play an important role in this regard. Such information may be helpful in guiding people regarding eye care.<sup>18</sup>

## **CONCLUSION**

The conclusion drawn from this study is that participants in this survey have a fair knowledge about optometry and services provided by the optometrists but there is an essential demand to increase awareness through campaigns and social media regarding difference between optometrists and ophthalmologists to enable people about their roles and responsibilities as eye care providers.

## **RECOMMENDATION**

Further study is required to analyze other aspects related to study on public perception regarding services provided by optometrists. Information about course of optometry should be added to awareness care programs which will have a great impact on young generation. Awareness in public about vision loss and role of optometrist in community are highly recommended. Optometry graduates should set up their clinics in rural regions to promote the profession and improve level of awareness.

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