



## Original Article

# Knowledge, Attitude, Practice (KAP) study regarding optometric services among general practitioners in Lahore.

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**Objective:** The main objective of this study was to assess the knowledge, attitude and practice regarding optometric services among general practitioners practicing in Lahore.

**Methods:** A descriptive cross-sectional study was conducted in 95 general practitioners. They were asked to fill a questionnaire for evaluation of their Knowledge, assessment of their Attitudes and Practices regarding Optometric services.

**Results:** The results showed that among the 95 respondents 65(68.4%) were male and 30(31.6%) were females. Their practice duration was 6 to 15 years and most of them (67.4%) were private practitioners. Knowledge assessment showed that they had moderately fair level of knowledge regarding optometric services judged by their responses whereas their Attitudes were adequately positive but they did not utilize their knowledge in their General Practice very often.

**Conclusion:** General practitioners are the primary level of contact with the community and their proper training equips them to manage and diagnose eye ailments, identify some diseases and refractive errors. It was concluded by this research that the general practitioners had fairly good level of knowledge regarding optometric services and attitudes were mostly positive whereas they lacked in their practice of applying their knowledge of eye care and optometric services in daily routine. So KAP survey gave us a glimpse of Knowledge, Attitude and Practices of general practitioners and highlights the need of basic optometric training for General Practitioners.

**Keywords:** Knowledge, Attitude, Practice, General Practitioner, Optometric services



## Introduction

According to the definition of World Council of Optometry (WCO), "Optometry is a healthcare profession that is autonomous, educated, and regulated (licensed/registered), and optometrists are the primary healthcare practitioners of the eye and visual system who provide comprehensive eye and vision care, which includes refraction and dispensing, detection/diagnosis and management of disease in the eye, and the rehabilitation of conditions of the visual system".<sup>1</sup>

Primary eye-care services are offered by optometrists, which includes contact lens fitting, pediatric vision, refractive error correction, binocular vision anomaly management and visual rehabilitation resulting from non-treated visual impairment and ocular disease diagnosis along with management. Optometrists are considered as being major providers of primary eye care and also provide eye-care secondary to referrals from other optometrists, ophthalmologists, general practitioners and other health and educational providers respectively. Optometric services are a diverse range of services provided by fully trained optometrists.<sup>1,2</sup> The essential components of primary eye care are promotion, prevention, cure and rehabilitation.<sup>3</sup>

KAP study or survey regarding optometric services and optometry imply: K - The awareness of community about optometric services and optometry, A - The way a community thinks about optometric services and P - The community's active involvement to prevent ocular pathologies.

A focused evaluation or assessment of a certain fixed or chosen population that accounts or measures for certain qualities regarding any particular topic or specific intervention are known as a KAP (Knowledge, Attitude and Practice) study.<sup>4</sup>

A licensed medical graduate who gives primary, personal and continuing care to a practice population, families and individuals irrespective of gender, age and disease is someone named as a General Practitioner / Physician. The general physician takes care of individuals in a society, irrespective of the patient's pathology or other social and personal characteristics, and organizes the resources available in the health-care system to the best advantage of the patients.<sup>5</sup>

In 1984, the World Health Organization (WHO) suggested a primary health care (PHC) model to address concerns of access to ocular care. Promotion and prevention of ocular health are considered important parts of primary care. Poor skills and knowledge are attributed broadly to inappropriate or inadequate training, lack of supervision, or not enough support to implement the ocular health skills.<sup>6</sup>

Primary Eye Care (PEC) includes the identification, treatment or referral of individuals with curable causes of blindness; and the treatment and diagnosis of common eye

pathologies. This is an important activity of primary eye care (PEC), as the incorrect diagnosis can lead to delay in providing the appropriate treatment, which may have adverse long-term consequences. Primary Eye Care is the delivery of, affordable, accessible, and appropriate care that meets patient's eye care needs in a competent and comprehensive manner.<sup>7</sup>

Traditionally the first point of contact for patients accessing health care through the public sector is General medical practitioner, with referral to higher levels of care for specialized services. According to the recommendations of American Optometric Association every individual should have a first eye examination at six months and then at three years and after every two years thereafter between the age of six and 18 years.<sup>8</sup> In developing countries, many people do not follow these recommendations for a variety of reasons, such as poor knowledge about the non-availability, non-accessibility and non-affordability of eye care services and importance of eye examinations.<sup>9</sup>

Early detection enables treatment options to be explored and may contain medical treatment in the early stages that prescribed by a General medical practitioner or an optometrist, to surgery by an ophthalmologist once the condition has become untreatable with medication. Early treatment by General medical practitioners is essential to prevent the onset of blindness in the absence of extensive eye-care professionals.<sup>10</sup>

It is believed that the knowledge, attitude and practices in any organization accomplishes all phases of the shared order, and all the three support each other to make the vibrant scheme of life itself.<sup>11</sup>

To measure the levels of various aspects of Knowledge, Attitude and Practice (KAP), the questionnaire was divided into three distinct portions. In each section, relevant questions were asked from the respondents such as in Knowledge section the emphasis was given to assess the level of knowledge of respondents for Optometric services. Similarly, Attitude and Practices were also assessed accordingly with the help of questions.<sup>12</sup>

## Materials and Methods

A descriptive cross-sectional study with the help of probability random sampling was conducted in 95 randomly selected general practitioners who were practicing in Lahore. The study consisted of both male and female General Practitioners of different age groups and having different duration of practice and they were asked to fill a questionnaire to evaluate their Knowledge, assess their Attitudes and Practices regarding Optometric services. Qualified general medical practitioners who consented to take part in the study were included and exclusion criteria included specialists, traditional healers and Hakeems along with those general

practitioners who were no longer in practice.

## Results

The results showed that among the 95 respondents 65(68.4%) were male and 30(31.6%) were females. Their practice of duration was 6 to 15 years and most of them (67.4%) were private practitioners. Knowledge assessment showed that they had moderately fair level of knowledge regarding optometric services judged by their responses as a result of questions asked from them as depicted by Table No.1. Most of the responses showed that they somehow had knowledge of basic optometric services. Their Attitudes were adequately positive but they did not utilize their knowledge in their General Practice very often as shown by the responses in Table 2 and Table 3 respectively.

**Table 1**  
**Knowledge assessment of General Practitioners**

Variables	Agree	Disagree
Eye exam of patient with refractive error	95 (100%)	0 (0%)
Diabetics needs eye exam once a year	86 (90.5%)	9 (9.5%)
Need of Optometrist skill enhancement	82 (86.3%)	13 (13.7%)
Low vision services bringing positive changes	61 (64.2%)	34 (35.8%)
Children spectacle use effectively	47 (49.5%)	48 (50.5%)
Need of Adequate eye care training GP's	60 (63.2%)	35 (36.8%)
Good immediate care reduces burden of eye disorders	84 (88.4%)	11 (11.6%)
Early eye exam in children helpful in early detection	83 (87.4%)	12 (12.6%)

**Table 2**  
**Attitudes regarding Optometric Services**

Variables	Know	Don't know
Optometric services	78%	22%
Refractive error correction methods	80%	20%
Correct Normal Visual Acuity	90%	10%
Where to Refer patients	82%	18%
Systemic associations	75%	25%
Ocular disorders	90%	10%
Methods of Visual Acuity recording	70%	30%
Leading cause of Blindness	37%	63%
Best corrected Low - vision visual acuity	47%	53%
Best method of refraction	34%	66%

**Table 3**  
**Practices regarding Optometric Services**

Variables	Yes	No
Encountered patients with refractive errors	83 (12.0%)	12 (12.6%)
Refer patients to optometrists	61 (64.2%)	34 (35.8%)
Ophthalmic instruments in practice	45 (47.4%)	50 (52.0%)
Optometric services vital part of health care system	36 (37.9%)	59 (62.1%)
Perform eye tests	65 (68.4%)	30 (31.6%)
Counsel patients to visit optometrist	10 (10.0%)	85 (90.0%)
Worked with optometrists	10 (10.0%)	85 (90.0%)
Ever used ophthalmic instruments	45 (47.4%)	50 (52.0%)
Utilize your knowledge in your practice	66 (69.5%)	29 (30.5%)
Need of basic optometric training for GP's	86 (90.5%)	9 (9.50%)

## Discussion

A KAP survey among the general physicians regarding the optometric services gave us a glimpse of how much they were aware of the eye care services and at what level of knowledge were they. It also guided us by means of questionnaire that how many of them were following the proper referral system to the optometrists. It was necessary to undergo a survey like this so that we can assess at what level they were lacking either in their training at undergraduate level or in their general practice so that proper awareness programs are to be launched for their knowledge enhancement and promotion of optometry as a popular eye care profession. Main purpose of this study was to explore changes in Knowledge, Attitude and Practice of medical practitioners on Optometry and Optometric services and it provided.

There was lack of literature regarding Knowledge, Attitude and Practice regarding optometry but there were many studies which supported my research and some of them contradicted. The General Practitioners appeared to lack sufficient knowledge for management of primary health eye-care problems, most probably due to a lack of adequate training in the respective field. Clinical skills enhancement courses are the dire need of the day to improve core knowledge in ophthalmology.

Attitudes of general practitioners were assessed with the help of almost 10 questions which were asked in the questionnaire with the option to either agree or disagree with the given responses and it is evident from the above results that majority agreed with the responses. For instance, 100% of them agreed with the fact that eye exam should be done in all patients with refractive errors and every diabetic patient must have an eye exam at least once a year because diabetes can be a cause of dimness of vision. Similarly, in their opinion optometrists should need to enhance their skills with adequate training along with their own training as they do not have sufficient training in eye care and its management and referral system. Children should be examined properly as GP's are primary level of contact and their referral plays a vital role and it will help in early detection of childhood disorders. It can reduce the burden of eye care professionals to some extent if proper counseling and assessment is done at primary level. So, I can conclude that most of the people had positive attitudes although they had a lacking in their knowledge regarding optometry and the services delivered by optometrists.

Practice is something we do as a result of having appropriate knowledge about some topic of regard. In this study as it is evident from the above results, although the knowledge level was fairly good in the general practitioners but they lacked in their mode of practice as they did not utilize



their knowledge regarding optometry and eye care services in their daily routine for managing and treating patients. From the above results it is clear that almost 10 questions were asked about the daily practice and the responses showed that patients with refractive errors are encountered by them very often and almost only 60% of them properly referred and only 10 % of them counseled patients to visit some eye specialists or optometrists whereas other 40% did not feel a need to refer. Almost 45% of them had used ophthalmic instruments and 60% of them performed common eye tests used for ocular disorders detection in their practice. Only 10% of the general practitioners had a chance to work with optometrists and others just heard of them.

I concluded in light of above results and discussion that general practitioners had adequate level of knowledge regarding optometric services, yet they did not use their knowledge in their general practices significantly and they had positive attitudes.

### Conclusion:

General practitioners are the primary level of contact with the community and their proper training equips them to manage and diagnose eye ailments, identify some diseases and refractive errors. It was concluded by this research that the general practitioners had fairly good level of knowledge regarding optometric services and attitudes were mostly positive whereas they lacked in their practice of applying their knowledge of eye care and optometric services in daily routine.

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