



Original Article

Assessment of Paediatric Eye Care Facilities in Different Teaching Hospitals of Lahore Division

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Background: There are an estimated 1.5 million blind children worldwide 181 with an additional 5 million visually disabled. Among those, 90% live in the developing countries with some 1.3 million living in Asia and Africa and about 72,000 in Europe, the USA and Japan 78. Approximately one child goes blind every minute in the world, making a total of 500,000 children who go blind each year in the world, of whom 60-80% die in the subsequent 1-2 years from the disease that contributed to their blindness, or from neglect.

Methodology: A pre research planning was necessary to initiate research where all aspects were designed. It included selection of research site, target population, sample size, design of survey proforma, sampling method, research methodology, organizational issue, pilot study and work plan. The study was conducted in several months as August, September and October 2013.

Results: In my research, the comparative study results were obtained from eight teaching hospitals of Lahore division. On data analysis, it was found that 37% optometrists are available in three where majority have least number of professionals to attend patient complain. Majority of hospitals have only two trained ophthalmologist which increases waiting time about 50% for patients for more than hour. In such a diverse population there should be more than 5 trained pediatric ophthalmologists which will minimize patient waiting time. However, the evaluation of crossing of eyes is neglected due to least number of orthoptists. Besides these, visual functions assessment tests are available in few Hospitals and advance eye disease such as Retinal detachment surgery is being performed on only 37.50%.

Conclusion: There are proper eye cares professionals at most of teaching hospital, well-equipped setup, and supervisor for internees in primary. Prolong waiting time for patients and attendants at some hospitals can be major cause of health decline. Hospitals should be equipped with trained professionals and technology to give utmost protocol in accordance with health care quality being provided internationally.



Introduction:

Health care groups of professionals generally working together in hospital or clinic is termed as teams. Primary eye care is main part of eye care which not only renders services to ocular mortality but is also managing blindness and visual impairment. Ophthalmologists can coexist with the professional bodies to assess visual function that includes Visual acuity, Visual field, and Contrast sensitivity, retinal examination to diagnosis and treat the cause. However, the role of optometrist to assess individual optically by prescribing lenses or reading glasses and Orthoptists that rules out the crossing of eye, must be considered. The best way to manage patient complaint and burden is to increase number of professionals instead of considering a patient roaster, but this is not the solution of widely populated area. The physician should also aim to have treatable resources and must build a strong relation with patient having multiple symptoms on the basis of guidance. As a research has shown that taking 7.4 hrs per the panel have to assure care of 2,500 patients that is same as United States panel care which is 2,300 and 10.6 hrs.

Basically the eye care team consists of Ophthalmologists, Optometrists, Orthoptists and Ophthalmic Nursing and if it is concerned especially with children then it is called Pediatric Ophthalmology.³

Pediatric vision care is important to the benefit of every child but in particular for infants and younger children. Measurement of visual function greatly counts on the observational skills in having appropriate knowledge and normal development. The University of California, San Francisco Medical Center is famous all through world for contemporary patient maintenance, advanced equipment and revolutionary research. Ophthalmologists provide evaluation, consultation, and treatment of Ocular diseases and disorders. Other fields of expertise at UCSF are glaucoma diagnosis and treatment, ocular oncology, ocular inflammatory disease, and diagnosis and treatment of retinal degeneration. Like this, the Optometry Clinic also offers a complete and inclusive vision examination to determine eye health and visual needs.⁶

The Pediatric Ophthalmology and Strabismus Clinic University of Iowa Children's Hospital provided majority of services for all age group of children. The vision testing method in children including premature babies and stubborn health situation the aim treatment for ROP, pediatric glaucoma, congenital cataract, amblyopia, and tear duct disorders, evaluation and treatment for strabismus. Surgery for all types of eye misalignment in children, Diagnosis and treatment of visual conditions caused by diseases such as cancer, diabetes, juvenile rheumatoid arthritis, and other medical and neurological diseases.⁵

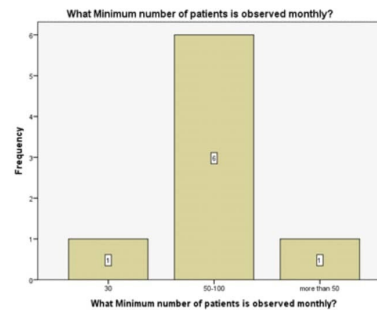
Research Methodology and Study Design:

A list of institutions providing eye care was compiled from various sources, including government officials, professional bodies of ophthalmologists, optometrists or Orthoptists working in the field of eye care in different primary secondary and tertiary teaching hospitals of Lahore division. A questionnaire on eye care services was sent to all known eye care institution in major cities of Lahore division including Shiekhupura and Kasur. Validity of data was censured by observational visit to 10% of the institutions who responded. Non-probability convenient sample method was used.

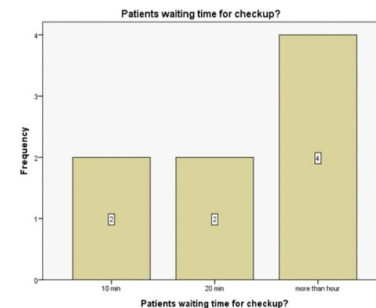
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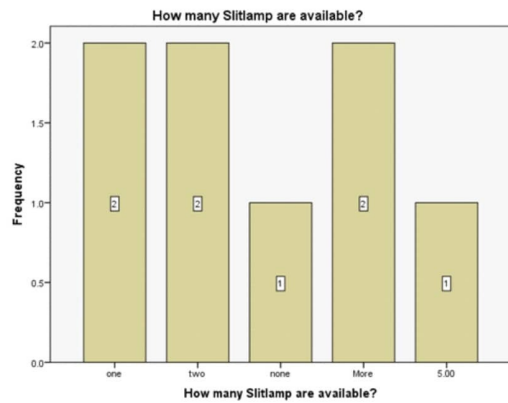
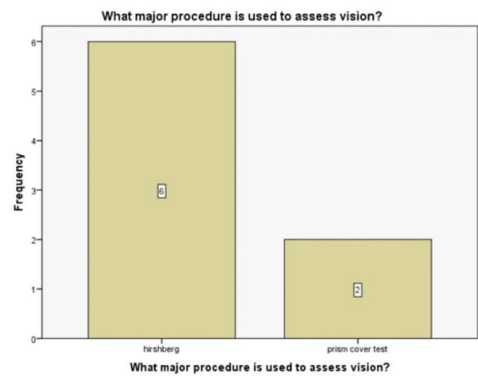
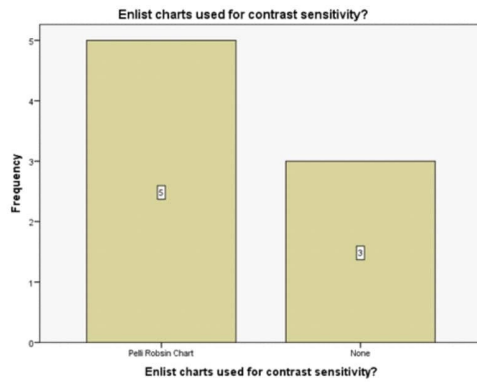
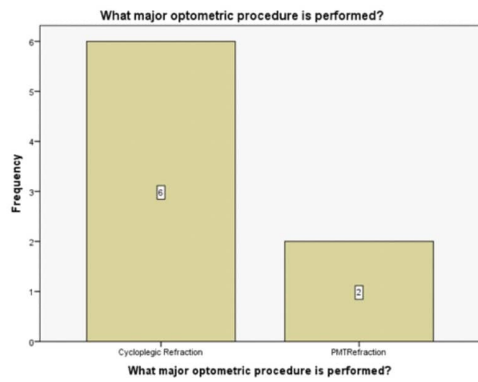
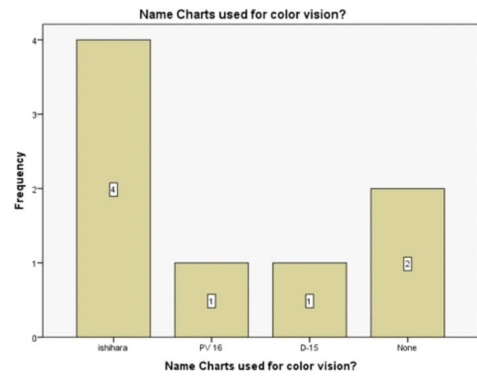
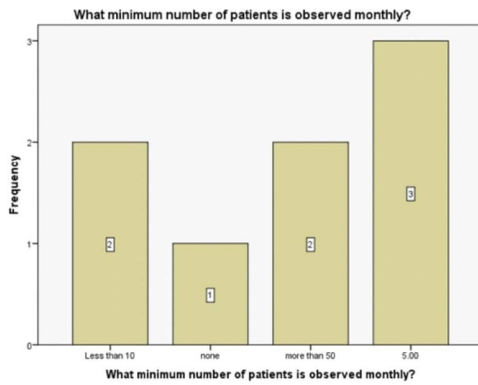
How many Optometrists are available in Hospital?

	Frequency	Percent
one	2	25.0
Two	3	37.5
more	3	37.5
Total	8	100.0



Explanation: The assessment of minimum number of patient that observed monthly was 75% of 50-100 patients monthly or some hospitals more out of 100%. Six hospitals out of eight have this range of assessment.







Discussion:

The Pediatric eye practitioner serves at patient point of entry of health care system. The platform includes Optometrist, Orthoptists, and Ophthalmologists. These major pillars, specifically trained to give quality visual requirement in children to certain eye abnormalities. The prevalence of different eye disease is exaggerating rampantly in different area. So Pediatric is categorized to reduce the prevalence of blindness in children that can be congenital or acquired.

In health evaluation programs and research projects among children Eye care professional have massive role. They are the main column of a well-established community. Apart of Hospital setup, there was need to evaluate Pediatric hospitals and services in a given population in order to assess the deficiencies and insufficiencies in their working setup and to find out that what type of improvements are required to be made that could not only pretension their efficiency but also add quality of health promotion.

In different Hospitals worldwide there are main investigative equipment as Retinoscope, tonometer, perimeter, A-scan, B-scan and pechymeter and skill full Ophthalmologist, Optometrists, Orthoptists, Technicians and other health concern bodies are always trying their best to diagnose the disease and treat it in an appropriate and healthy way to safe and sound the vision primarily.

This research work was on the pediatrics services in different teaching hospitals of Lahore division. During last 3 months, I visited different teaching hospitals of Lahore division and collect data about the number of eye care professionals, equipment, different tests, number of surgeries, and number of eye patients visiting different hospitals. On data analysis, it was seen that in eight different teaching hospitals of Lahore division there one optometrist in each hospital but at some hospital like Mayo Hospital there are more optometrists having proper setup with modern equipment like Auto Refractometer, Slit lamp, etc. In most of hospital, 2-3 numbers of ophthalmologists, two trained ophthalmologists, and pediatric eye care specialists do their

services. They are performing cataract surgery more than 20 patients daily. However, there are few number of orthoptist in some hospital and no orthoptist in majority of hospitals. Besides these for color vision and contrast sensitivity, Ishihara and Pelli Robsin tests are performed respectively. More than 100 patients are accessing almost all hospitals so that they have more waiting time.

This study demonstrated that there are proper eye cares professionals at most of teaching hospital, well-equipped setup, and supervisor for interneers. Waiting time for patients and attendants at some hospitals is one of the major causes of health decline. We can say that hospitals in Lahore are comparatively well equipped but not enough to match international standards.

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