

**A STUDY ON OPHTHALMIC HEALTHCARE SERVICES CAMPS ORGANIZED IN  
RURAL AREAS IN RAJASTHAN**

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**Ayushman Shukla, Research Scholar  
Department of Optometry, Sunrise University, Alwar (Raj.) India**

**Dr. Ankit Sanjay Varshney, Assistant Professor  
Department of Optometry, Sunrise University, Alwar (Raj.) India**

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**ABSTRACT**

The goal of outreach initiatives for eye care should be to reach the unreached. Numerous healthcare facilities host community outreach programs to raise awareness, impart health knowledge, and offer potential medical assistance. To serve the great majority of the people, health care facilities must be extended to rural areas. In India, the distribution of health care services is such that 80% are found in urban areas and 20% are found in rural areas; in contrast, the population distribution is roughly 20% urban and 80% rural. Using a base hospital approach and planning outreach programs in rural areas are excellent ways to reach the underserved. The population will become more informed and receptive if the quality of care reaches a high level, which will greatly simplify the work of eye care professionals. The condition of the eyes must be considered in larger frameworks for communicable and non-communicable diseases. It can also make a major contribution to international programs that target vulnerable, elderly, and marginalized populations. Infectious and chronic diseases are double the load for nations like China and India. The lack of qualified personnel, subpar medical facilities, and a lack of funding for the health system's infrastructure further exacerbate the effects of disease, shifting demography, and economic growth. The examples we discussed could be crucial for the future of health care delivery in underdeveloped nations, especially considering these capabilities. In addition to incorporating these businesses' lessons learned, health care systems should look to incorporate high-performance metrics (quality, access, efficiency, and innovation and improvement capability) from other high-performing health systems.

**KEY WORDS:** Ophthalmic, Eye Care, Healthcare, Services, Rajasthan, Health Organisation.

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## INTRODUCTION

The majority of blindness cases can be avoided or controlled in many parts of the world with surgery and/or refractive error repairs; yet, the demand for eye care is greater than the resources that are available. This is because eye care practitioners are typically concentrated in urban areas, or because there is a shortage of trained professionals in many nations, making eye care services difficult to access.

Visual impairment is frequently caused by refractive errors and eye illnesses such as glaucoma, cataract, and diabetic retinopathy. These conditions are widespread across borders. The World Health Organization estimates that 285 million people worldwide are visually impaired and 39 million individuals are blind. More than 90% of visually impaired people worldwide reside in low-income environments. It's estimated that 80% of blindness can be prevented, meaning that 8 out of 10 people may have a curable or preventable cause of blindness. Eighty percent of them reside in less developed nations where the burden of declining vision exacerbates long-term economic hardship.

Enhancing a health care delivery system's structures, procedures, and results in order to better meet the requirements of patients is known as quality improvement. Rapid advancements in technology and medicine have made it impossible for the eye health care delivery system to offer top-notch care to all societal strata. Compared to other sectors, the eye health care industry has been significantly slower to embrace quality standards that are correlated with real outcomes, integrate quality improvement into the fundamental clinical care process, and track the quality of care against these expectations. This is especially true in rural areas of India.

Comparisons based on recognized, reliable clinical quality metrics have not historically been common in the healthcare industry. The majority of doctors continue to hold the view that their own clinical judgment is on par with, if not superior to, that which is derived from aggregated data on doctors and patients. They believe that because medical care is so customized and intricate, it is essentially invalid and possibly deceptive to compare practice patterns and outcomes between different medical communities and healthcare settings.

## EYE CARE IN THE GLOBAL CONTEXT

According to the World Health Organization's most recent estimates, 280 percent of the causes of vision impairment can be prevented or treated, presenting a huge potential to improve the lives of millions of people. According to estimates from the World Health Organization, 39 million of the 285 million individuals who were visually impaired in 2010 were blind. By giving refractive therapy and cataract surgery to the underprivileged, two thirds of the visually impaired could regain decent vision if only the two primary causes of visual impairment were prioritized and control measures were regularly implemented globally. Effective and easily available eye care services are crucial for the effective management of visual impairment, including blindness. Rather than offering eye care services through a vertical program model, the focus is on improving them by integrating them into the health system. There is a wealth of research indicating that the development of primary health care and health systems must include comprehensive eye care services. It is vital for managing and preventing nearly all preventable causes of visual impairment, even though it is especially important for preventing visual impairment from diabetes and preterm delivery. The evolution of health systems and the advantages of integrating health sector skills and specializations have been the subject of increased international health sector effort in recent years.

It is possible to justify health promotion for eye care in addition to general health promotion programs. A sector-wide approach to health has been shown to treat some of the key causes of blindness that are backed by evidence, such as diabetes mellitus, smoking, premature delivery, rubella, and vitamin A insufficiency. Including the prevention of visual impairment and rehabilitation in more comprehensive health policies and strategies, such as international action following the Millennium Development Goals, will be a significant opportunity. Multisectorial activity is also essential to prevent many chronic eye diseases. This becomes more important because the primary cause of visual impairment is chronic eye illnesses, whose incidence rises with age. It is also anticipated that these diseases will become more significant in the future due to the worldwide aging of the population. The global action plan for eye health adopted by the Sixty-sixth World Health Assembly presents Member States with a fresh chance to advance their initiatives to prevent visual impairment and improve blind people's rehabilitation. The global action plan for eye health envisions a world where no one is needlessly blinded, where people

who inevitably lose their vision can reach their full potential, and where everyone has access to high-quality eye care services. All stakeholders are urged to join this renewed effort to translate this vision.

## **RESEARCH METHODOLOGY**

The current study's methodology is predicated on an appropriate and effective research design, which is mostly composed of the compilation of primary data, followed by data processing, statistical analysis, and report writing. Surveys have been the main method of gathering data for the study. A series of structured questionnaires specifically designed for the purpose were used.

### **Research purpose**

The main goal of the current study was to thoroughly identify and investigate a number of factors that affect the efficacy of eye care camps held in rural Rajasthan, India.

### **Research Design**

A research design is just the basic plan or framework that directs the researcher during data collection and analysis. The crucial first stage in collecting and analyzing the necessary data is research design, which also helps determine the study's location, sample size, population, and other factors. The current study was a cross-sectional, observational, community-based investigation designed to identify the variables influencing the success of eye care camps.

### **Research Population**

Participants in the camp from all age groups living in rural areas made up the study population.

### **Sample Size**

A total of 250 patients who were discovered through the eye health camp were chosen as a sample size from the list of patients in rural Rajasthan. The participants were chosen through the use of random sampling.

### **Inclusion Criteria:**

- All the participants in all age group attending the camp.

**Exclusion Criteria:**

- Those not willing to participate in the study.

**DATA ANALYSIS STRATEGY**

SPSS 21.0 is used to thoroughly outline and investigate the data that was obtained from the polls. It enables accuracy and consistency in information and presents data in a way that supports these qualities, making it very easy to interpret the information that has been obtained. The measures from the ensuing inquiry were imported into SPSS for additional analysis. The information was described using descriptive statistics, and the relationship between the usage of eye care services and public awareness of eye illnesses was determined using the Pearson's chi-squared test in SPSS. In a well-structured questionnaire, descriptive statistics were employed to provide a clear image of background characteristics such as age, sex, and other variables. Both the independent and dependent variables' frequency distributions were employed. Pearson's chi square was used to measure and test the relationship between the variables. In every instance, a p-value less than 0.05 was deemed statistically significant. The study variables, which included frequency, percentage, standard deviation, mean, and confidence interval, were utilized to summarize and present the data.

**RESULTS AND DISCUSSION**

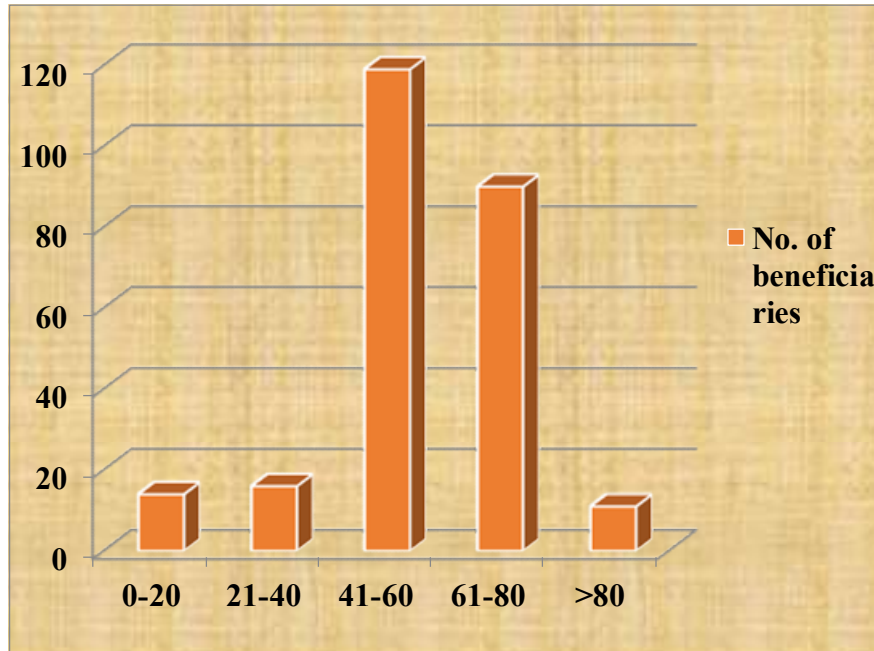
The extent of the blindness epidemic in emerging nations is astounding. There is currently a significant backlog of blind citizens facing the majority of developing nations. India may have the world's largest population of blind or potentially blind people. Blindness is more common (1.62%) in rural India than in metropolitan regions (1.03%), where health care facilities are either nonexistent or very basic. These people continue to be needlessly blind due to their poverty and ignorance. The social and economic costs associated with blindness have a serious negative impact on people, families, and the country as a whole. The goal of outreach initiatives for eye care should be to reach the unreached. Numerous healthcare facilities host community outreach programs to raise awareness, impart health knowledge, and offer potential medical assistance. The idea of "eye camps" is a very popular and well-received method of offering eye

health treatments to those living in rural and underdeveloped parts of developing nations. Comprehensive eye care camps focus on primary eye care strategies that offer a range of services for various ocular or systemic disorders that, if left untreated, might result in blindness or visual impairment. Non-governmental organizations host the majority of eye camps. They play a significant part in setting up and running eye camps. The team head of the institutional ophthalmic team is the eye surgeon, who provides technical insights. Monitoring activities, identifying limits, and assessing effectiveness are crucial feedback mechanisms for improving camp services. Therefore, the purpose of this study is to identify the critical variables that influence the efficacy of eye care camps in Rajasthan.

#### **AGE CATEGORY WISE DISTRIBUTION OF RESPONDENTS**

**TABLE-1: DISTRIBUTION ACCORDING TO AGE**

<b>Age group</b>	<b>No. of beneficiaries</b>	<b>Percentage</b>
0-20	14	05.60%
21-40	16	06.40%
41-60	119	47.60%
61-80	90	36.20%
>80	11	04.20%
Total	250	100.00%



**FIGURE-1: DISTRIBUTION ACCORDING TO AGE**

**Interpretation:** One of the most crucial factors in determining the respondents' opinions regarding the current research issue is their age. In general, age is a good indicator of an individual's level of maturity, hence research on an individual's age becomes more important. The researcher divided the sample respondents into several age groups in order to collect data for the current study. This was done so that respondents from each age group category could be considered. The age group of 41–60 years old accounted for 47.60% of the beneficiaries, followed by 61–80 years old (36.20%). Approximately 14 (5.60%) of the beneficiaries in the 0–20 year age group were also monitored.

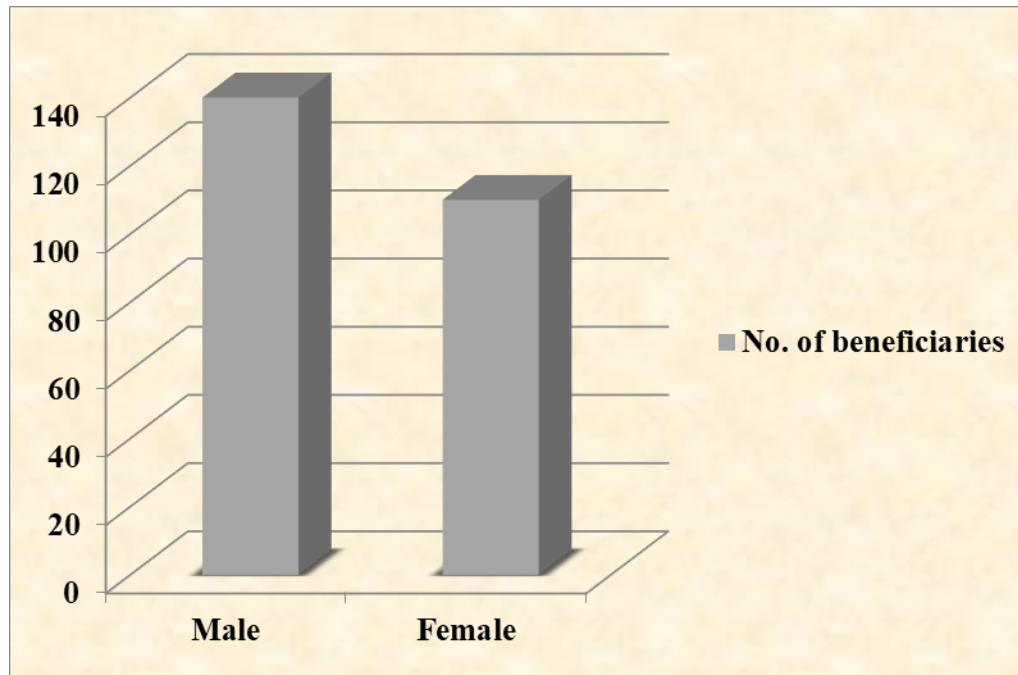
**GENDER WISE DISTRIBUTION OF RESPONDENTS:**

Following table presents gender wise distribution of respondents.

**TABLE-2: DISTRIBUTION ACCORDING TO SEX**

Sex	No. of beneficiaries	Percentage
Male	140	55.80%
Female	110	44.20%

<b>Total</b>	250	100.00%
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**FIGURE-2: DISTRIBUTION ACCORDING TO SEX**

**Interpretation:** Any social or economic factor can have a varying impact on gender, making it a significant variable in any particular Indian socioeconomic context. Male beneficiaries made up 55.80% of the total, while female beneficiaries made up 110 (44.20%).

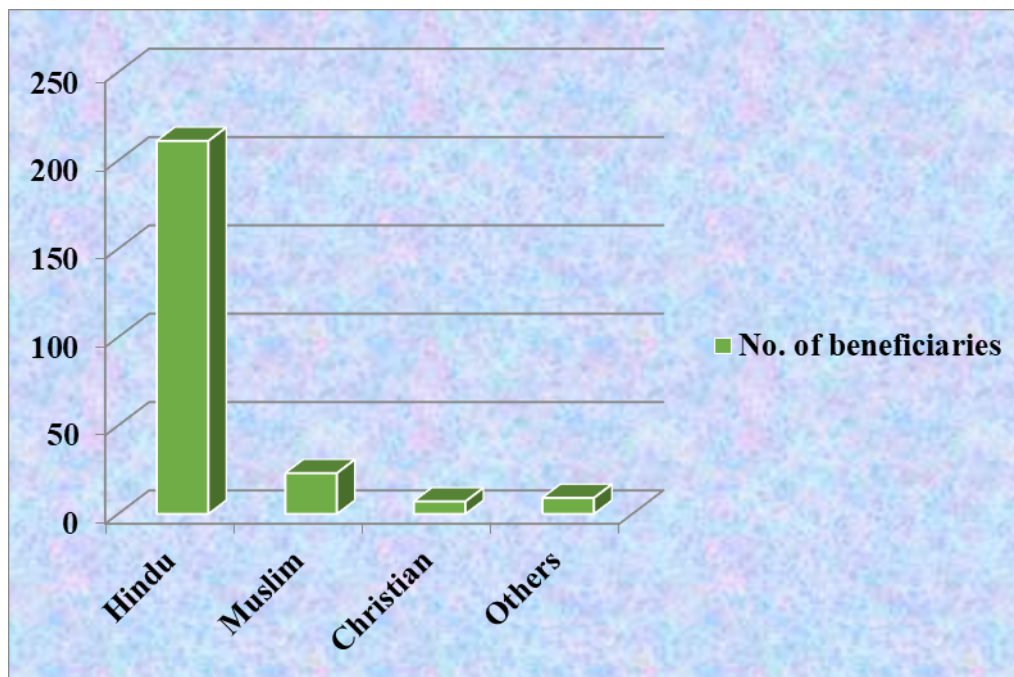
#### **RELIGION WISE DISTRIBUTION OF RESPONDENTS**

Following table presents religion wise distribution of respondents.



**TABLE-3: DISTRIBUTION ACCORDING TO RELIGION**

Religion	No. of beneficiaries	Percentage
Hindu	211	84.60%
Muslim	23	9.20%
Christian	07	2.60%
Others	09	3.60%
Total	250	100.00%

**FIGURE-3: DISTRIBUTION ACCORDING TO RELIGION**

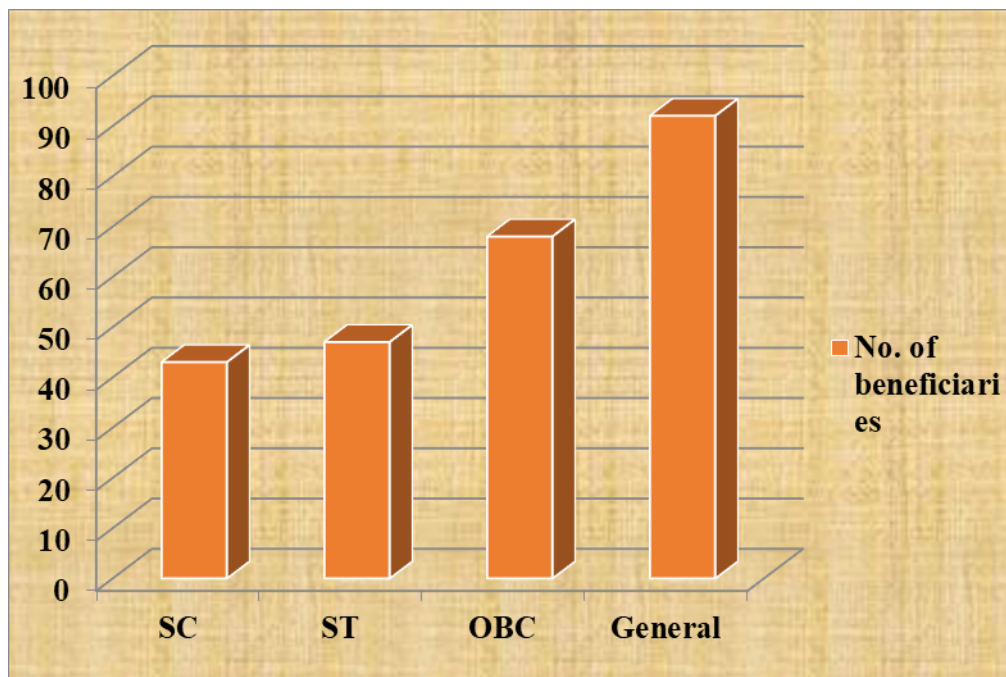
Interpretation: One significant socioeconomic component is religion. Recognizing the religions of the respondents in the chosen sample enables researchers to better connect with the intended audience and prevents the exclusion of respondents who might not observe the same replies. The majority of respondents (84.60%) identified as Hindu, with Muslims (9.2%) and Christians (2.6%) following closely behind.

### CASTE WISE DISTRIBUTION OF RESPONDENTS

Following table presents caste wise distribution of the respondents.

**TABLE-4: DISTRIBUTION ACCORDING TO CASTE**

Caste	No. of beneficiaries	Percentage
SC	43	17.20%
ST	47	18.60%
OBC	68	27.20%
General	92	37.00%
<b>Total</b>	<b>250</b>	<b>100.00%</b>



**FIGURE-4: DISTRIBUTION ACCORDING TO CASTE**

**Interpretation:** According to Dirks (1989), the caste system establishes a hierarchy of social functions with ingrained qualities that, more significantly, endure throughout life. The caste system in India is a complicated social structure, and people from various caste groups behave to

each other differently. Caste-specific individuals have their own worldviews and belief systems that connect mankind to spirituality and moral principles. The benefits are distributed based on caste in the preceding table. The majority of the beneficiaries (37%) were found to be from the General caste, followed by OBC (27.20%), ST (18.60%), and ST (17.20%).

### OCCUPATION WISE DISTRIBUTION OF RESPONDENTS

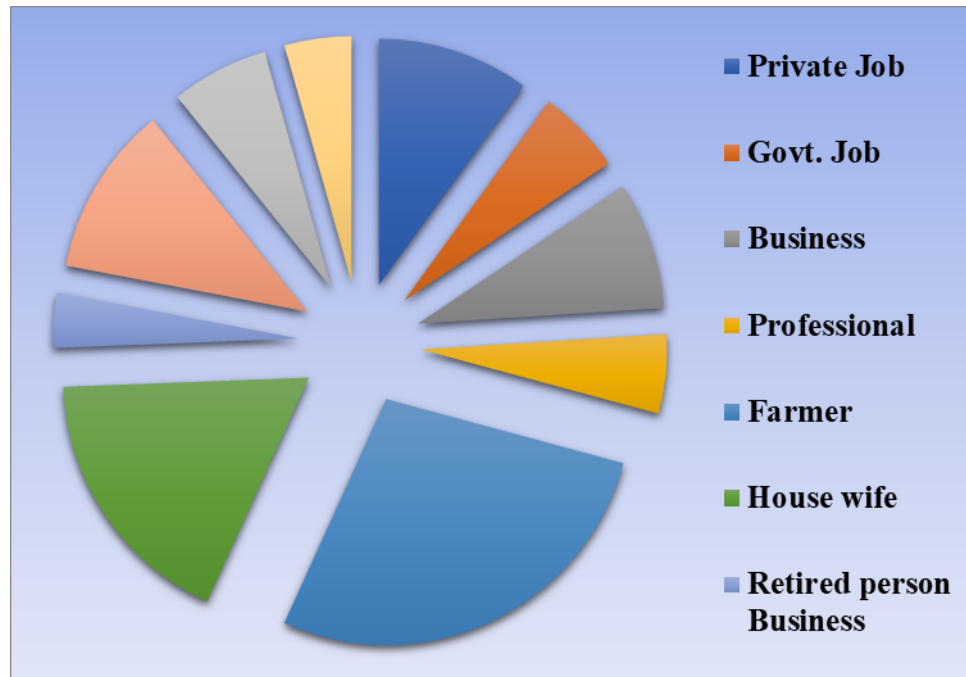
Following table presents occupation wise distribution of respondents.

**TABLE-5: DISTRIBUTION ACCORDING TO OCCUPATION**

Occupation	No. of beneficiaries	Percentage
Private Job	25	10.20%
Govt. Job	14	05.40%
Business	21	08.60%
Professional	13	05.00%
Farmer	69	27.80%
House wife	44	17.40%
Retired person Business	09	03.60%
Employee	28	11.20%
Student	16	06.60%
Unemployed	11	04.20%
Total	250	100.00%

**Interpretation:** A person's profession undoubtedly has a significant influence on both his and her personality and approach to a challenge. In addition, a person's profession and the money they make from it have an impact on the quality of their life. An individual's occupation also mingles them in a fastidious manner, which in turn displays the behaviors that they model and their level of perceptiveness about meticulously observed facts. Put another way, a person's response to an issue may depend on the kind of work he is engaged to, which is why the study looked into varied occupations. The distribution of recipients by occupation is displayed in the above table. It was noted that the bulk of the recipients—27.8%—were employed as farmers. 11 (4.2%) recipients were unemployed, while the remaining beneficiaries worked in businesses

(8.6%), the government (5.4%) and the private sector (10.2%). Of the recipients, 17.4% were housewives.



**FIGURE-5: DISTRIBUTION ACCORDING TO OCCUPATION**

## CONCLUSION

It has been disturbing to see how much the benefits of eye therapy are being utilised in rural India. According to Fletcher et al.'s research, 10 people have not been able to receive favorable access to eye care services. 48 towns were included in the analysis, with 94% of the towns' residents being Hindu. The lack of transportation, sexual orientation, and social class seemed to be predictive factors of the poor use of eye care services. Refraction errors were shown to differ in rates depending on an individual's living situation (rural vs. urban), with females residing in rural areas generally not receiving treatment for their errors

The care provided by rural eye hospitals is highly respected by the villagers. It is well acknowledged that a remarkable number of villagers have chosen to receive tertiary rural eye care. This demonstrates how important rural eye hospitals are seen by the locals. It is also acknowledged that, occasionally, locals received their primary medical care in medical camps within rural eye hospitals, choosing instead to receive advanced care in nearby rural eye care

institutions. It is common knowledge that every rural eye care institution has done a good job of highlighting the function and significance of their medical camps. The medical camps are widely known to the villagers thanks to non-governmental organizations, social club initiatives, and publications. Beyond the strictly medical needs, rural eye hospitals have been able to sustain partnerships with all communities. Over 90% of the villagers believe that a strong social tie has now been formed and that all rural eye hospitals firmly believe in social associations with the village population.

Population growth is driving up demand for more affordable and high-quality health care in developing nations. However, the clients who receive these services have high expectations for the facilities. Providers of eye care attempt to meet their clients' needs on both a qualitative and quantitative level. The health care services have changed rapidly in the last ten years, particularly in the corporate level health care service providers, as a result of improved access to information and services, worries about affordability, and evolving proactive marketing practices for eye health care services. The goal of outreach initiatives for eye care should be to reach the unreached. Numerous healthcare facilities host community outreach programs to raise awareness, impart health knowledge, and offer potential medical assistance. To serve the great majority of the people, health care facilities must be extended to rural areas. Using a base hospital approach and planning outreach programs in rural areas are excellent ways to reach the underserved. The population will become more informed and receptive if the quality of care reaches a high level, which will greatly simplify the work of eye care professionals.

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