Tele-opthalmology in Tripura

NRHM, Tripura

PROBLEM STATEMENT:

Dearth of infra structure and trained human resources in primary health care setting forophthalmic services is a huge challenge for Tripura. Most ophthalmic specialists and assistants reside and function in urban settings.Consequently, urban health settings such as the Medical College and State Hospital were grossly over burdened, despite being mandated to provide only tertiary care. In addition rural people were spending too much time and money to avail eye care services.

To reduce the increase in patient out of pocket expenditure and case load at the secondary and tertiary levels, the government of Tripura initiated the Vision center program with an objective to provide primary & preventive eye care to the rural population of Tripura using advanced information & communication technology
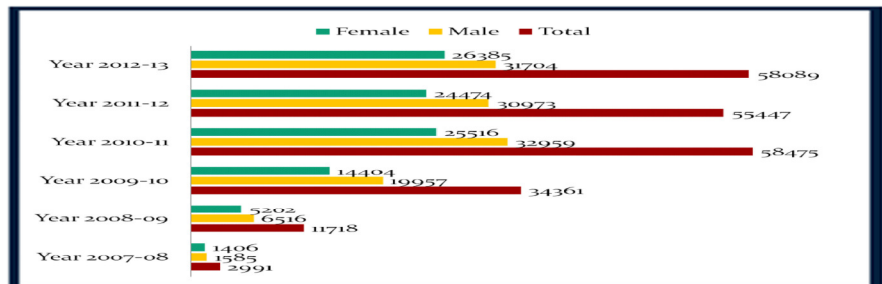
PROGRAMME DESCRIPTION:

There are 40 Vision Centers (VCs) established in each block of the State which are connected to the secondary care center at IGM Hospital, Agartala through intranet (TSWAN) & internet (Tulip). Each Vision center is managed by Ophthalmic Assistant who examines the patient and also responsible for managing computer & network, data entry, & Tele-consultation with Specialist and counseling patient. After conducting the eye examinations the Ophthal-mic Assistant enters the patient details in the software application with a picture of the affected eye. Patient specific data is then reviewed at the IGM Hospital by the Ophthalmologist, who diagnoses the case and decides on treatment modalities.

Vision centers work on the principles of low-cost technology and resource sharing. Each vision center uses very simple imaging instruments and simple digital camera for initial screening of the patient. The specialist while sitting in a distant hospital can see the patient details and advice the patient for the treatment.Two different software applications are used in the vision center- for patient-wise data transmission software from Arvind Eye Care is used and for Audio-Video chat Argusoft Communicate @Work software is used. Management of the project and annual maintenance is out-sourced to the private provider.
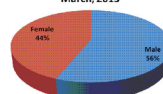
IMPACT OF THE PROGRAMME:

The project has computerized screening & outreach component of the Blindness Control Program, which has helped in identification of cases with preventable blindness. The project has also been successful in providing primary & preventive eye care at the door steps of people. Availability of Vision Centers at the block level has improved service utilization by women and children and has also improved timely referral of complicated cases. From 2007-08 to 2012-13 (Upto March, 2013) the project has screened around 2, 21,081 patients. Out ofthis, Total number of glasses prescribed to total 68654 patients. Out of total patient screened, 6% were referred to the IGM Hospital, Agartala for further treatment and about 15% of the patients visited Vision centers for review and follow-up. With the availability of eye care services at peripheral centers case load at higher institutions has reduced significantly. Simple refractive errors and minor ailments are treated locally with the help of vision center.

Most of the patients are now being referred to the Vision Centers from Health Sub Centers and PHCs for primary screening. Even the Self Help Groups and NGOs refer patients to the Vision Centers for screening and primary care. The Vision center has referred around 9145 cases of cataract to the IGM hospital for surgery and total number of 5648 cases surgery performed till March, 2013. In addition the centers have also managed to identify 271 odd cases of Glaucoma (220 patients treated) & 259 Diabetic Retinopathy (195 patients treated).

SCALABILITY:

Project is focused on specific need of the community and this is the reason it has achieved its objectives. This project has the potential to be scaled in the other parts of the country to prevent preventable blindness and counter problems of specialist availability in rural areas.

CONCLUSION:

The Tele-ophthalmology Project of Tripura is a State of the Art innovation, which may be replicated in other states, subject to local context.

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