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Completion Report of "Low Vision Rehabilitation"

Hands On Workshop on
"LOW VISION REHABILITATION"
ENHANCING LOW VISION

Organised by
Department Of Optometry
Swami Vivekananda University

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Program Commences On
15TH MARCH'24 AT 11:00 AM

Organized by: Department of Optometry

Date: 15th March 2024

Venue: Swami Vivekananda University

Workup Report: "Low Vision Rehabilitation"

Date: 15th March 2024

Event: Workshop on "Low Vision Rehabilitation"

Speaker: Dr. Rituparna Ghosal

Location: Swami Vivekananda University

Organized by: Department of Optometry

Introduction:

On 15th March 2024, a highly informative and interactive workshop on "Low Vision Rehabilitation" was conducted by Dr. Rituparna Ghosal, a renowned expert in the field of low vision care and rehabilitation. The workshop focused on the rehabilitation techniques used to enhance the quality of life for individuals with low vision. Dr. Ghosal also emphasized the importance of low vision aids and introduced the latest innovations in the field to help students understand how to improve vision for patients with compromised sight.

In addition to the theoretical content, participants were given hands-on training with various low vision aids and had the opportunity to experience the use of cutting-edge devices that can greatly assist in vision rehabilitation. The workshop was designed to equip students with the knowledge and skills needed to provide comprehensive low vision rehabilitation care to patients.

Workshop Overview:

The workshop was divided into two main parts: a theoretical session and a practical hands-on session. Dr. Ghosal began by discussing the principles and goals of low vision rehabilitation, followed by a comprehensive explanation of the various types of low vision aids available today. In the second part of the workshop, students were given practical, hands-on training with a variety of low vision devices, including the latest innovations in low vision aids, such as smart glasses, digital magnifiers, and electronic reading devices.



Key Highlights of the Workshop:

1. Introduction to Low Vision and Rehabilitation:

Dr. Ghosal began the session by defining low vision as a condition where a person's visual acuity cannot be corrected to normal levels with conventional glasses, contact lenses, or surgery. She explained that low vision can be caused by a variety of conditions such as macular degeneration, glaucoma, diabetic retinopathy, and retinitis pigmentosa.

The primary goal of low vision rehabilitation is to enhance the patient's remaining vision and help them maintain independence by using appropriate aids and techniques.

Dr. Ghosal emphasized the importance of a multidisciplinary approach involving optometrists, ophthalmologists, occupational therapists, and low vision specialists to provide effective rehabilitation services.

2. Low Vision Aids: Types and Importance:

Dr. Ghosal provided an overview of the various low vision aids available, explaining how they can assist patients with daily tasks, such as reading, cooking, and moving around independently.

The different types of low vision aids include:

Optical aids such as magnifiers, telescopic lenses, and high-powered reading glasses.

Non-optical aids like large-print books, audio books, and Braille.

Electronic aids, including digital magnifiers, text-to-speech devices, and smartphones with accessibility features.

She discussed how these aids are tailored to meet the needs of individual patients, depending on their level of vision impairment and specific requirements.

3. Hands-on Training with Low Vision Aids:

The practical session was one of the most highly anticipated segments of the workshop. Dr. Ghosal provided students with the opportunity to experience and work with a range of low vision aids, helping them understand how these devices can be used to improve visual tasks.

The aids included both traditional devices (such as magnifiers) and advanced technologies that incorporate the latest innovations:

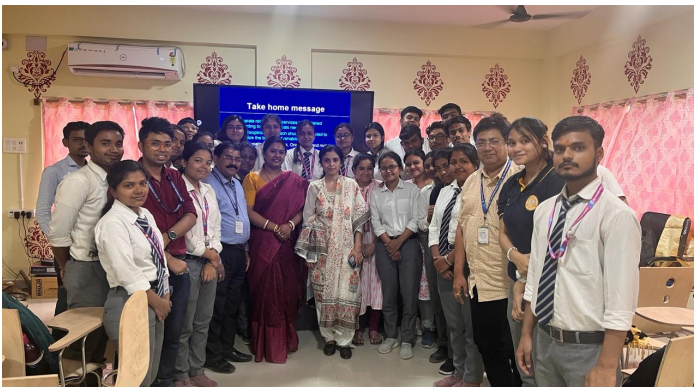
Digital Magnifiers: These handheld or desktop devices allow users to magnify text and images, often with the added benefit of changing the contrast and color for easier viewing.

Smart Glasses: Dr. Ghosal introduced the latest smart glasses that incorporate features like text-to-speech, real-time magnification, and image enhancement. These glasses can help patients with low vision read text, recognize faces, and navigate unfamiliar environments.

Electronic Reading Devices: The latest electronic readers with adjustable magnification, contrast settings, and audio capabilities were demonstrated to assist with reading.

Video Magnifiers: Students had the chance to experiment with high-tech video magnifiers that offer high-definition magnification and customizable contrast options to enhance text and images for users.

Wearable Magnification Systems: These devices are designed for mobility and allow individuals with low vision to view distant objects, making them ideal for activities like shopping or outdoor navigation.



4. Latest Innovations in Low Vision:

Dr. Ghosal discussed the cutting-edge advancements in low vision technology, which have greatly improved the quality of life for patients with visual impairments. These innovations include:

Artificial Intelligence (AI) and Augmented Reality (AR): AI-powered devices that automatically adjust the magnification and contrast based on the environment and reading material were showcased. AR technology is also being used in glasses to overlay digital information over real-world objects, helping patients with tasks like recognizing faces and reading street signs.

Voice-Assisted Technology: With the advent of voice-activated devices and screen readers, patients with low vision can interact with smartphones, computers, and other devices without the need for visual input. Dr. Ghosal demonstrated some of these voice-controlled technologies that allow individuals to browse the internet, read emails, and even make phone calls.

Smartphones with Accessibility Features: Dr. Ghosal showed how smartphones equipped with advanced accessibility features like voice dictation, screen readers, and magnification apps are becoming powerful tools for people with low vision.

Low Vision Rehabilitation Apps: She also discussed the role of various mobile apps designed specifically for people with low vision, offering features like object recognition, text-to-speech, and image magnification.

5. Assessing the Best Aid for Each Patient:

Dr. Ghosal explained the individualized approach required in low vision rehabilitation, emphasizing the importance of conducting a thorough assessment to determine which low vision aids would be most suitable for each patient.

The assessment involves considering the patient's visual acuity, functional vision, lifestyle, and the tasks

they wish to perform with the aid. Dr. Ghosal provided guidance on how to evaluate patients and match them with the appropriate devices.

Students were trained in conducting these assessments using real-life case scenarios to help them understand the diverse needs of low vision patients and how to effectively recommend and fit aids.



6. Q&A Session and Discussion:

The workshop concluded with an engaging Q&A session where students had the opportunity to ask Dr. Ghosal questions about the challenges in low vision rehabilitation, especially regarding the integration of new technologies into clinical practice.

Topics such as patient compliance, the cost of advanced low vision aids, and the accessibility of services were discussed in depth.

Conclusion:

The “Low Vision Rehabilitation” workshop conducted by Dr. Rituparna Ghosal on 15th March 2024 provided participants with an in-depth understanding of low vision rehabilitation and the latest innovations in low vision aids. The hands-on training allowed students to experience and interact with cutting-edge devices, offering them a comprehensive view of the tools available to enhance the quality of life for patients with low vision.

Dr. Ghosal’s expertise and interactive teaching approach enabled students to gain valuable insights into the practical applications of low vision aids and understand how to customize rehabilitation strategies for different patient needs. The workshop successfully bridged the gap between theory and practice, equipping students with the skills and knowledge needed to make a significant impact in the field of low vision care.

Acknowledgments: We would like to extend our gratitude to Dr. Rituparna Ghosal for her insightful session and hands-on training. We also thank all the participants for their active involvement and enthusiasm in learning about low vision rehabilitation.

Report Compiled by: Anusuya Das