Glaucoma Awareness: A Call to Action for Public Health Dr. Fatima Syed¹, Dr. Arooj Fatima Nagvi²

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Glaucoma is a leading cause of irreversible blindness worldwide, and Pakistan is no exception. The disease, often referred to as the "silent thief of sight," progresses without obvious symptoms, leaving many unaware until significant damage is done. Despite its prevalence, early detection and treatment can prevent blindness, making awareness campaigns and public health interventions crucial. This editorial reflects on a recent policy dialogue hosted by the Institute of Public Health (IPH) in Lahore, where experts from various fields gathered to discuss strategies for increasing glaucoma awareness and improving prevention and treatment measures in Pakistan.

On January 24th, 2025, the Institute of Public Health (IPH) organized a policy dialogue focused on tackling glaucoma awareness, prevention, and treatment. The event brought together eminent ophthalmologists and public health experts, including Dr. Zahid Kamal from King Edward Medical University and Dr. Zahid Latif from Azra Naheed Medical College, to address the growing concern of glaucoma-induced blindness in Pakistan. The dialogue explored the urgent need for early detection, affordable treatment options, and targeted public health education to mitigate the impact of glaucoma on the population.

Dr. Zahid Latif emphasized the two main strategies for combating glaucoma: primary prevention (health education) and secondary prevention (early diagnosis and treatment). He recommended several actions to prevent blindness caused by glaucoma, including conducting mass-level screening in schools and workplaces using accessible tools like the Snellen Chart and intraocular pressure (IOP) testing devices. He also highlighted the role of

nutrition, pointing out the link between poor diets and vision health, and suggested that diets rich in essential nutrients could play a significant role in reducing the risk of glaucoma. Additionally, Dr. Latif emphasized the importance of genetic counseling, particularly for families with a history of consanguineous marriages, to help prevent congenital glaucoma. Furthermore, he shared a success story from the Alkhidmat Foundation, which provided 2,000 free glasses to children in need. This initiative highlighted the power of public-private partnerships in raising awareness and promoting early detection.

Dr. Zahid Kamal discussed the global and local burden of glaucoma. With 80 million people worldwide affected, glaucoma is a significant public health issue. Dr. Kamal stressed the importance of screening high-risk groups, including individuals with diabetes, hypertension, high myopia, a family history of glaucoma, and those aged 35 and above. He also reviewed various treatment options, including medications like acetazolamide, dorzolamide, and pilocarpine. While pilocarpine is effective and affordable, it is currently unavailable in Pakistan. Dr. Kamal also discussed beta-blockers, which are affordable but unsuitable for asthma patients, and prostaglandin analogues, which are preferred for their once-daily dosage, although they may cause side effects like trichomegaly. Furthermore, Dr. Kamal introduced the potential for Micro-Invasive Glaucoma Surgery (MIGS), recommending that such advanced surgeries be made more affordable and accessible to patients in Pakistan.

The dialogue culminated in several key recommendations to enhance glaucoma care in Pakistan. These include supporting the local production of affordable glaucoma medications like pilocarpine to ensure greater accessibility for

patients. Nationwide campaigns should be launched to educate the public about glaucoma, focusing on high-risk populations and emphasizing the importance of early detection and regular eye check-ups. Routine glaucoma screenings for individuals aged 35 and above should be implemented across the country, with particular focus on vulnerable groups in schools, workplaces, and community health clinics. Additionally, the government should subsidize the cost of glaucoma medications and advanced surgical procedures for low-income patients, ensuring that financial barriers do not prevent access to treatment. Eye health education should also be incorporated into school and university curricula to encourage early preventive measures among young people. The development of affordable, user-friendly screening devices should be prioritized, along with short educational videos to raise awareness about glaucoma prevention. Public health campaigns should advocate for diets rich in Vitamin A and other nutrients essential for eye health to prevent vision-related issues.

The policy dialogue on glaucoma awareness underscored the urgent need for a multi-faceted approach to address the rising threat of glaucoma in Pakistan. Early detection, public education, equitable access to healthcare, and strategic collaborations are vital to combating this preventable cause of blindness. The event not only highlighted the critical role of healthcare professionals and experts but also demonstrated the importance of integrating public health interventions with targeted awareness campaigns. By acting on these recommendations, Pakistan can significantly reduce the burden of glaucoma and prevent avoidable blindness for millions of people.

The challenge now lies in translating these insights into actionable policies that ensure all citizens, particularly those in underserved areas, have access to timely diagnosis, affordable treatments, and education on glaucoma prevention.