Title: Hindering Factors For Secondary Prophalaxis Among Rural Community in Sindh, Pakistan: A Cross-Sectional Study

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Background & Aims: Rheumatic heart disease (RHD) and rheumatic diseases pose significant health challenges, particularly in rural communities of Sindh, Pakistan. The primary focus of this study is to determine the level of community-based awareness and hindering factors related to secondary awareness of RHD or rheumatic disease in the rural community of Sindh, Pakistan.

Methods: Method: Data was collected from individuals residing in rural areas of Sindh, Pakistan from MAY 2022 to July 2022. The study participants' demographic information, including age, sex, personal education, family education, income, family members, distance from civil hospital, and other relevant variables, were recorded. Factors such as cost, advised treatment, pain, abscess, hypersensitivity, support, refusal from local hospital, presence of prosthetic valve, presence of sick family members, aspirin usage, INR level, signs of thrombosis, metallic valve type, presence of atrial fibrillation, presence of sinus rhythm, and presence of bioprosthetic valve were also documented.

Results: Data regarding the participants' education level showed that 20% had completed college or university education, while 10% were illiterate. All participants had a monthly income of less than 30,000 PKR.

In terms of valvular replacement, a total of 16 patients had undergone the procedure. Among them, 11 patients had mitral valve replacement, 3 had aortic valve replacement, 1 had both mitral and aortic valve replacement, and 1 had a bioprosthetic valve replacement.

During the study, it was observed that 7 participants had refused treatment at the local hospital due to Side of effect of drug.

The mean distance from the hospital for the study participants was found to be 10.5 units. Additionally, the average INR (International Normalized Ratio) value was calculated to be 2.025. The study also revealed that 70% of participants had atrial fibrillation (AFIB), while 30% had a sinus rhythm.

Most patient was not advised for secondary prophalaxis, Distance from the civil hospital and refusal from local hospitals were identified as potential hindering factors in accessing healthcare services. The presence of prosthetic valves, sick family members, and certain variables related to education and income were found to influence the level of secondary awareness.

Conclusions: The study highlights the need to improve community-based awareness of RHD and rheumatic disease in rural areas of Sindh, Pakistan. Hindering factors such as limited education, lack of access to healthcare facilities, and low awareness among community members should be addressed to enhance secondary awareness and promote early diagnosis and management of these conditions. Public health interventions and educational campaigns tailored to the specific needs of the rural population can play a crucial role in improving community awareness and reducing the burden of RHD and rheumatic diseases.