## Interface of Heart Disease and Reproductive Health: An Explanatory Study of Gender Dimensions

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## EXECUTIVE SUMMARY

Acute rheumatic fever (RF) and chronic rheumatic heart disease (RHD) still remain important public health problems in developing countries like India. Scientific progress has led to effective control strategies through public health programmes of primary prophylaxis of streptococcal sore throat, and secondary prevention of recurrence of rheumatic fever. Although school-based surveys suggest that the male-female ratio of RF is almost equal, there is little literature on the male-female differences in the incidence and prevalence of RF/RHD in the community. Women tend to report late with RHD for definitive treatment as compared to men.

Rheumatic heart disease is still one of the major indirect causes of maternal mortality in developing nations. The social role of reproduction has a negative impact on women with RHD as the physiological changes of the cardiovascular system during pregnancy may decompensate the heart. Specialised care of pregnant mothers with RHD is warranted and decisions related to pregnancy, childbirth, and contraception have to consider the woman's medical condition.

In this context, the activities, the social environment as influenced by gender norms and values in society, women's access to resources, and their negotiating potential within the household and community influence their perception of illness and their experience of reproductive events. There is scant literature on the influence of the social reproductive role of women on the progression of RHD.

This is a cross-sectional descriptive study. Medical records were quantitatively analysed to determine whether there were any differences in the manifestation of heart disease between men and women attending a tertiary care hospital. The in-depth interviews aimed at exploring the perceptions of heart disease, its consequences, the interplay of gender and other socioeconomic factors in the perception of illness, treatment-seeking behaviour, and reproductive health of women with RHD.

The study was conducted in a leading tertiary care hospital in the year May 2003-May 2004. The secondary data from the medical records of patients registered between January 1, 2002, and December 31, 2002 were also analysed. Information related to social aspects of the patients' history was scarce. Information on the reproductive events of women patients was also minimal as pregnant women were usually referred to the obstetrician and physician of the hospital where childbirth would take place.

The proportion of people with a clinical and echo-cardiographic diagnosis of mitral stenosis was about 65 per cent. Pulmonary hypertension was diagnosed in 57 per cent of all patients and congestive cardiac failure in 38 per cent. There was no statistically significant difference in the mean age of both sexes. A majority of the patients (55 per cent) was women. Most of the patients belonged to the lower economic category, though no association was discerned between gender and economic category. Housewives (34 per cent) were the single most important category of patients.

The most commonly reported problem was dyspnoea (DOE FC II) (83 per cent) on ordinary physical activity (like climbing stairs). Mitral stenosis was four times more common among women than men RHD patients. Pulmonary hypertension, a sign of impending cardiac failure, was two

times more common among women, but there was no association between sex and cardiac failure. Women were twice as likely to get admitted to the hospital as men and five times more likely for reasons of surgery.

Analysis of the in-depth interviews corroborated the findings of the quantitative analysis. Women frequently described dyspnoea and paroxysmal nocturnal dyspnoea as indicators to suspect illness and seek care. The experiential understanding of the illness was influenced by childhood experiences of rheumatic fever or RF-like illnesses and the support received from the family. When RHD occurred after marriage, especially after childbirth, the experience of illness and perception of consequences was unsatisfactory.

Access to monetary resources was the most limited in joint families and where husbands were labourers. Compliance with treatment protocols depended on the financial resources at home. Women employed such coping mechanisms as ignoring the severity of the illness or altering the medication. Opinion was guarded on the benefits of surgery as women realised they had to be more careful in their activities in the household to maintain well-being.

Reproductive events of pregnancy, childbirth, and childcare adversely affected the progression of the disease. The provider's perceptions of the social roles of women influenced the decisions a woman with RHD had to take regarding marriage, pregnancy, and contraception. Gendered construction of women's activities in a household environment that do not favour access to monetary resources or supportive structures invariably led to a delay in seeking health care and, hence, worsening of the heart condition.

The impairment due to the heart disease contributed to chronic physical and emotional disability. Reproductive events in the life span of women contributed to the disabling process and gender roles and responsibilities of women modified their coping strategies.