

## IS FEMALE GENITAL FISTULA A SOCIO-MEDICAL PROBLEM IN INDIA: AN ANALYSIS OF POPULATION BASED DATA

### Hypothesis / aims of study

Female genital fistula is a near miss maternal mortality in developing countries. Poor intrapartum care is the main contributor for fistula development. This report aimed at comparing the socio-economic and reproductive health indicators of women in states with high and low fistula burden.

### Study design, materials and methods

Retrospective data on burden of female genital fistula was collected from medical records of tertiary care hospitals in India during the period of 2000-2006 [1]. This was compared with the socio-economic and reproductive health status indicators available from National Family Health Survey (NFHS -3) [2] and District Level Household Survey (DLHS-2) [3] of states with high fistula burden (Group I) and low fistula burden (Group II). The reference period of NFHS-3 and DLHS-2 were 2005-06 and 2002-04 respectively. Economic status indicators compared were proportion of households in lowest wealth quintile and low standard of living. Socio-cultural indicators included illiteracy among women; women's autonomy and their decision making power. The four specific questions on which women's decision making power was assessed included decision regarding own health care, making major household purchases, making purchases for daily household needs and visits to her family or relatives. Men's perspective on women's participation in household decision making were also compared between the two groups.

Reproductive health status indicators included women who did not receive any antenatal care; women who had safe a delivery, either in an institution or attended by a skilled birth attendant and couples with unmet need for family planning. Women who received information about specific pregnancy complications and where to seek help in the event of complications and fathers who received information on the importance of delivery in a health care facility were taken as indicators of health education and programmes aimed at increasing male participation in reproductive health care.

### Results

A total of 717 cases of female genital fistula were treated in the tertiary care facilities of 12 states of India [1]. Northern states of India including Uttar Pradesh, Bihar, Rajasthan and Jammu & Kashmir recorded 52% (371) cases indicating a high fistula burden (Group I) whereas southern states of Tamil Nadu, Kerala, Maharashtra and Karnataka had a low fistula burden of 13.2% (95) cases (Group II). Other states contributed 33.6% (241) cases. Tamil Nadu has a referral hospital for fistula management. This could have contributed to the higher fistula incidence as compared to the other three states in Group II.

### *Comparison of fistula burden with population based data:*

A large proportion of families in Group I except for state of Jammu & Kashmir (24.2 -28.2%) belonged to the lowest wealth quintile as compared to Group II (1.0-10.9%) as also % households with low standard of living. A larger proportion of currently married women were illiterate in Group I (60.2-68.4%) than in Group II (4.7-45.7%). Results from our study also indicated that more than half (53.4%) of fistula sufferers and one third (32%) of their spouses were illiterate.

Participation of women either alone or jointly in her own health care decisions was marginally higher in Group II (53.3 - 75.2%) than in Group I (43.5 – 64.2%) but percentage women who do not take part in any decision making were higher in Group I (22.0-37.2%) than in Group II (8.2-26.9%). Men who said that wives should have the final say alone or jointly with husband varied between 37.4 – 55.6% without much difference between the two groups. However, the percentage of men who said that the wives should not have any role in decisions was highest (8%) in Bihar (Group I) followed by Maharashtra in Group II (6%).

Nearly 14.7- 65.7% women in Group I and 0.1-9.4% women in Group II did not receive any antenatal care. Safe delivery was accessed by about 25-43% women in Group I in contrast to 62-98% women in Group II. Unmet need for family planning was higher (38.3-22.1%) for couples in Group I than in Group II (12.6-18.1%). In our study, nearly 44% women with fistula had delivered at home without any skilled attendance.

Fewer women in Group I (14.2-31.0%) received information about specific pregnancy complications including prolonged labour and where to seek help, than women (46.2-84.4%) in Group II. Information given to fathers on importance of institutional delivery indicating male participation in reproductive health care was also lesser in Group I (21.8-39.6%) than in Group II (57.4-70.1%).

### Interpretation of results

Overall, women in states with high burden of fistula (Group I) had poor reproductive health indicators, higher female illiteracy, diminished autonomy of women in decision making, low standard of living and poor economic status when compared to Group II states where fistula burden was lower.

### Concluding message

Determinants of female genital fistula burden in India is a complex interplay of socio-cultural and economic factors along with reproductive health status of women. However, it is evident that states with a high fistula burden have higher female illiteracy, low autonomy and a larger proportion with lowest wealth quintile. Women and their spouses are ill-informed about pregnancy complications and where to seek help in such an event and also show poor utilization of health services. Measures aimed at prevention of fistula should consider influence of socio-cultural and economic status on the occurrence of fistula.

### References

1. Singh S, Chandhiok N, Dhillon BS. Obstetric fistula in India: current scenario. Int Urogynecol J 2009; 20:1403-05.
2. International Institute for Population Sciences (IIPS) and Macro International. 2007. National Family Health Survey (NFHS-3), 2005-06: India: Volume I. Mumbai: IIPS.
3. International Institute for Population Sciences (IIPS). 2006. District level household survey (DLHS-2) 2002-04: India. Mumbai: IIPS.

<b><i>Specify source of funding or grant</i></b>	<b>Indian Council of Medical Research</b>
<b><i>Is this a clinical trial?</i></b>	<b>No</b>
<b><i>What were the subjects in the study?</i></b>	<b>NONE</b>