

## APPENDIX C:

# DEMOGRAPHIC AND FISTULA CHARACTERISTICS

Table C.1 lists some demographic data from our three main hospitals in Uganda (Kitovu, Kamuli and Lira) and the Bahr Dar Fistula Centre in northern Ethiopia. The outstanding difference between the two countries is the frequency of caesarean sections in Uganda—indicating that many people can get to hospital, but arrive too late. In Ethiopia, few people have access to a hospital.

Table C.2 compares primipara with multipara. By all three criteria for a bad fistula—i.e. urethral involvement, circumferential detachment and presence of a recto-vaginal fistula (RVF)—primiparous patients score higher than multiparous patients. This is so for both countries.

Table C.3 compares vaginal delivery with caesarean delivery. Again, by all three criteria, the patients delivering vaginally have significantly more serious injuries than those having their labour relieved by caesarean section. This applies to both countries.

In making comparisons between the two countries, the most striking difference occurred in the primipara (Table C.4), where there was a higher incidence of urethral and circumferential involvement and of recto-vaginal fistula in the Ethiopian patients ( $p = 0.001$ ). Although the difference in urethral and circumferential involvement could be explained partly by inter-observer variation, a recto-vaginal fistula is always a marker of a severe injury, so it is probable that injuries are more severe in Ethiopia compared with Ugandan patients, at least among the primipara. Note that these series were collected and analysed in the 2000s and although the pattern of access to health facilities has now changed and more when get to caesarean, but often too late, it is still interesting and valuable to learn of the differences in patient presentation across geographical areas.

**Table C.1** Demographic data

|                                     | Uganda        | Ethiopia       |
|-------------------------------------|---------------|----------------|
| Series                              | 790           | 606            |
| Not done: considered inoperable (%) | 2.4 (19/790)  | 1.5 (estimate) |
| For analysis                        | 771           | 606            |
| Mean age (years)                    | 27            | 28.8           |
| Mean duration (months)              | 59            | 48             |
| Mean time in labour (days)          | Not available | 3              |
| No. of deliveries per patient       | 2.9           | 2.8            |
| Primipara (%)                       | 60            | 50             |
| Vaginal delivery (%)                | 34.7          | 84.5           |
| Caesarean section (%)               | 65.3          | 15.5           |
| RVF + VVF (%)                       | 3.3           | 8.4            |

**Table C.2** Primipara compared with multipara

|   | Uganda | Ethiopia |
|---|--------|----------|
| Primipara                                 |        |          |
| Number                                    | 342    | 279      |
| Urethral involvement (%)                  | 70     | 82       |
| (<3.5 cm from external urethral ori-fice) |        |          |
| Circumferential (%)                       | 15     | 41       |
| RVF + VVF (%)                             | 5.3    | 13.6     |
| Multipara                                 |        |          |
| Number                                    | 417    | 320      |
| Urethral involvement (%)                  | 51     | 44       |
| Circumferential (%)                       | 7.7    | 20       |
| RVF + VVF (%)                             | 1.9    | 4.3      |

**Table C.3** Vaginal compared with caesarean delivery

|                          | Uganda | Ethiopia |
|--------------------------|--------|----------|
| Vaginal deliveries       |        |          |
| Number                   | 265    | 471      |
| Primipara (%)            | 59.3   | 50.7     |
| Urethral involvement (%) | 77.3   | 67.8     |
| Circumferential (%)      | 18.6   | 32       |
| RVF + VVF (%)            | 5.2    | 9.3      |
| Caesarean deliveries     |        |          |
| Number                   | 503    | 92       |
| Primipara (%)            | 34     | 19.5     |
| Urethral involvement (%) | 45     | 30       |
| RVF + VVF (%)            | 2.4    | 1        |

**Table C.4** Primipara

|                          | Uganda | Ethiopia | p value |
|--------------------------|--------|----------|---------|
| Urethral involvement (%) | 70.1   | 81.7     | 0.009   |
| Circumferential (%)      | 15.2   | 40.9     | <0.001  |
| RVF + VVF (%)            | 5.3    | 13.6     | 0.001   |