

Postemergency health services for refugee and host populations in Uganda, 1999–2002

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Since 1990, Uganda has hosted an estimated 200 000 refugees in postemergency settlements interspersed within host communities. We investigated the extent to which obstetric needs were met in the refugee and host populations during 1999–2002. Between September and December, 2000, we retrospectively collected data from 1999 and 2000 on major obstetric interventions for absolute maternal indications from all five hospitals in Arua, Adjumani, and Moyo districts, Uganda. The same data were collected prospectively for 2001. We did community-based maternal mortality surveys on refugee and host populations in Adjumani district in 2002. Rates of major obstetric interventions were significantly higher for refugees than for the host population who live in the same rural areas as refugees (1·01% [95% CI 0·77–1·25] vs 0·45% [0·38–0·52]; $p<0\cdot0001$). Rates of major obstetric interventions were also significantly higher for refugees than for the host population who live in rural areas without refugees (1·01% [0·77–1·25] vs 0·40% [0·36–0·44]; $p<0\cdot0001$). Maternal mortality was 2·5 times higher in the host population than in refugees in the Adjumani district (322 per 100 000 births [247–396] vs 130 [81–179]). Refugees had better access to health services than did the rural host population in the northern Ugandan communities that we surveyed.

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During the initial phase of displacement, refugees often obtain health services from host health facilities. However when encamped, specific health facilities are usually established by the UN High Commissioner for Refugees (UNHCR) and non-governmental organisations (NGOs) to address refugee health needs. Once the emergency phase, defined by a crude mortality rate of one or more deaths per 10 000 people per day,¹ has ended, relief organisations continue to provide long-term assistance to the encamped refugees.

Since 1990, Uganda has hosted an estimated 200 000 refugees. Most come from south Sudan and have lived in postemergency phase settlements since 1986 in the West Nile districts of Arua, Adjumani, and Moyo. Although Ugandan government policy allows refugees to stay freely in settlements interspersed within rural host communities, in most districts refugee health services run in parallel with those for the host community.² In 1999, UNHCR and the Ugandan government initiated a self-reliance strategy to integrate health and social services for refugees and host communities. Pilot integration of health services started in one district—Arua—in 2000, and merging of services is expected to continue in other refugee-hosting districts. Results of several studies have shown differing effects of refugee assistance programmes on the health services of host communities. Studies in the Democratic Republic of Congo (formerly Zaire) have suggested that the parallel refugee assistance programme might have a negative effect on the quality of health services offered to host populations,³ while an integrated refugee assistance programme, as in Guinea, has been shown to benefit the host population through improved health care and social services.⁴ We did a baseline comparative study of major obstetric interventions and maternal mortality to assess the extent to which the obstetric needs of refugee and host populations are addressed.

We collected data on major obstetric interventions for absolute maternal indications in refugee and the host population over a 3-year period, 1999–2001. Retrospective data for major obstetric interventions in 1999 and 2000 from the five existing hospitals in Arua, Adjumani, and Moyo districts were recorded during a 4-month period from September to December, 2000, and we gathered the same data prospectively in 2001. We recorded information for refugees who live in settlements and host populations in rural and urban settings. We estimated the expected number of births for the host population based on age-specific fertility rates, and used birth records for refugees. We did community-based maternal mortality surveys using the sisterhood method in November, 2002, on a sample of 3027 refugees and 3089 people in the host population in Adjumani district only to calculate the maternal mortality rate.

We analysed 1968 major obstetric interventions for absolute maternal indications in refugee and women from host communities. 1815 interventions (92·2%) were in host women, and 153 (7·8%) in refugees. However, the rate of major obstetric interventions for refugees was significantly higher than for hosts who live in rural areas close to refugee settlements (1·01% [95% CI 0·77–1·25] vs 0·45% [0·38–0·52]; $p<0\cdot0001$) (figure). Rates of major obstetric interventions were also significantly higher for refugees than for the hosts who stay in rural areas without refugees (1·01% [0·77–1·25] vs 0·40% [0·37–0·44]; $p<0\cdot0001$). Intervention rates did not differ between rural hosts living in areas close to refugee settlements and host women living in areas not affected by refugees (0·45% [0·38–0·52] vs 0·40% [0·36–0·44]; $p=0\cdot668$). Rates of major obstetric interventions for refugees were much the same as those for the urban host population (1·01% [0·77–1·25] vs 1·03% [0·91–1·15]). In Adjumani district (table), rates

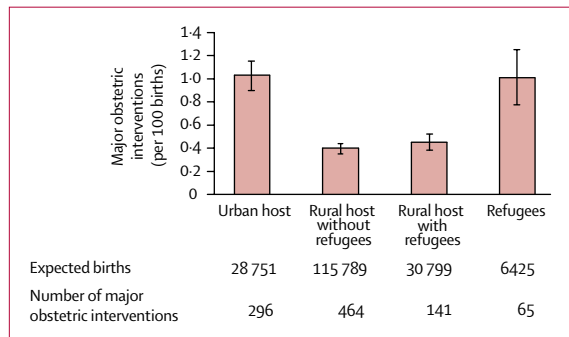


Figure: Rate of major obstetric interventions for absolute maternal indication in West Nile region, northern Uganda, 1999–2001. Vertical bars show 95% CI.

of major obstetric intervention were significantly higher for refugees than for hosts (1.22% [0.92–1.59] vs 0.64% [0.54–0.74]; $p < 0.0001$), and the maternal mortality rate was 2.5 times higher in host populations than in refugees (322 per 100 000 births [247–396] vs 130 [81–179]).

Our results show that rates of major obstetric interventions were significantly higher for refugees than for the host population who live in rural (refugee and non-refugee affected) settings in north Uganda, and maternal mortality was 2.5 fold higher in the host community than in the refugee population in Adjumani district. Our findings lend support to other evidence that in some settings refugees have better access to basic and comprehensive essential obstetric care than do the host population. The differences in access to health services may be due to geographic, temporal, or financial factors. In northern Uganda, the refugee health system is better funded with a higher ratio of health facilities to refugee population, more trained personnel per facility, and better transport, logistical, and communication facilities than that for the host community.² Furthermore, the costs incurred by refugees for health care are paid by the UNHCR or NGOs. In Adjumani district for example, where about a third (32.5%) of the total population are refugees, two-thirds of the health facilities 65% (22 of 34) are for refugees, with the remaining 35% (12 of 34) for the host population. Overall, most of the rural host population in the region has poor access to first line and referral health services.³

Although our findings give credit to humanitarian organisations that provide health services to refugees, they also reveal wide disparities with respect to access to health care between refugee and host communities living in the same regions. The disparities raise important concerns about equity, as has been noted by others.⁵ In the developing countries, which host most of the world's refugees, living conditions are precarious and maternal health remains poor. Several factors related to poor socioeconomic conditions, including inadequate access to reproductive health services,

	Refugees	Hosts
Maternal mortality		
Maternal deaths (number)*	27	71
Maternal deaths per 100 000 births† (95% CI)	130 (81–179)	322 (247–396)
Major obstetric intervention		
Expected births	4424	24 670
Number of major obstetric interventions	54	157
Rate (%) of major obstetric interventions (95% CI)	1.22 (0.92–1.59)	0.64 (0.54–0.74)

*In the 15–49 year age-group. †Maternal mortality ratio relates to a period 10–12 years before the survey.

Table: Maternal health indices in Adjumani district

contribute to weakness of host health services. In such settings, therefore, humanitarian organisations should not neglect host communities that are also disadvantaged and which reside in refugee-affected areas. Rather, they should support and strengthen the capacity of local health services.² An integrated health system designed to cater for refugee and host populations should be considered to enhance equity and promote harmonious coexistence between refugees and the host population.

Contributors

C Garimoi Orach designed the study; coordinated, collected, and analysed data; and wrote the paper. V De Brouwere participated in study design, data analysis, and writing of the paper.

Conflict of interest statement

C Garimoi Orach received a financial grant from the Reproductive Health for Refugee Consortium (RHRC) for this study.

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