

# Infant Mortality in the Gwembe Valley

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## BACKGROUND

The Gwembe Valley lies in the Southern Province of Zambia and has been the subject of intense sociological and anthropological study (Colson 1967, Scudder 1968). The site of this survey was the upper Gwembe Valley, a relatively infertile area with low rainfall. The area lies between 1500 feet and 2000 feet and the main food crop is millet. Malaria is endemic.

In January, 1973, this hospital began four new Mobile Health Clinics in the Valley. The clinics were held near primary schools at Jamba, Siamwinga, Moonga and Sinadambwe. Previously no medical personnel had visited these areas except for periodic visits to schools by Government vaccination teams. No care at all had been given to Under Fives except at Jamba which had been visited once in 1972 by a team from Lusitu Rural Health Clinic. A few of the children at Jamba thus had Under Fives cards when we first visited.

The mobile health teams consisted of one doctor, one Zambian Enrolled Midwife, two Zambian Enrolled Nurses and one trainee Zambian Enrolled Nurse.

Under Fives Clinics had been carried out at Rural Health Centres at Caanga and Sianyolo previous to 1973, but these new clinics chosen were at too great a distance from these centres to expect people to come to them (King, M. 1966).

The areas visited then, all had in common the fact that they had had virtually no local medical care prior to 1973 and in particular no ante natal or Under Fives Clinics.

The clinics were visited monthly.

## OBJECT

It was decided that it would be useful to know infant mortality in these areas. As well as mortality, it was also felt useful to know causes of death and age of death of children, so that greatest medical effort could be directed toward treating illnesses causing highest mortality.

## METHOD

The clinics were visited monthly. For the first four months of clinics at each school, mothers attend-

ing for the first time were asked numbers of children alive and numbers who had died. It was found necessary to question closely as to numbers who had died, as mothers showed reluctance in revealing this on some occasions.

Early in the study the questioning about age at which children had died was abandoned as it became obvious that most mothers either did not know, had forgotten, or were guessing.

## RESULTS

When discussing cause of death, mothers were questioned carefully about symptoms and in most cases a diagnosis could be formed. Where it was not possible to be sure of the illness described or where the mother could not remember, the illness has been included below under "Other Diseases". A separate column has been included for children who died within 48 hours of birth, as invariably the mothers said they died of body pains (mubili in Citenga), and also they could remember that they died very soon after birth. It was sometimes hard to distinguish between pneumonia and whooping cough but most mothers remembered whether the child "whooped", or vomited after prolonged coughing. If they did not remember either, it was classified under pneumonia.

Children were thought to have died of malaria if the mother said the child had body hotness (mubili ulapya) and admitted to no other symptoms.

## CONCLUSION

In general it is obvious from the figures that diarrhoea (29%) and malaria (16%) are easily the most important causes of death.

In particular the high percentage of deaths from diarrhoea (41%) at Sinadambwe can be related to the lack of any well in the area, compared to Jamba area (3 wells) and Moonga (3 wells).

The high incidence at Siamwinga of tetanus (17%) has prompted emphasis on ante natal care, issuing cord packs (King, M. 1966) and persuading the mothers to come to the hospital for delivery. We were surprised that there was no tetanus at all at Moonga until we discovered that almost all babies were delivered by an intelligent old woman who had had some nursing training.