SHORT REPORTS

St. Lukes’ Survey on vaccination coverage

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St. Lukes hospital, a PHAM unit in Zomba district, had an estimated vaccination coverage of 44% in 1990. To confirm this very low coverage, a survey was done in the 5 km catchment area around the hospital. 611 children, being 104% of the estimated number, born between 1st June 1989 and 31st May 1990 were checked for vaccination status and the type of unit where they received the vaccinations. 593 (97.1%) appeared to be fully immunised; 13 (2.1%) had lost their card; 3 (0.5%) had partial immunisation and 2 (0.3%) had not received any vaccination. 54.2% of all vaccinations were given through outreach clinics; 33.7% in the hospital; 11.8% in health centres and 0.3% in private units. This survey shows in the first place that an estimated vaccination coverage can give a very poor picture of the real situation. In the second place it shows the importance of outreach clinics as a means of improving immunisation activities.

Introduction

St Lukes hospital is a 40 bed mission hospital in the Southern Region of Malawi and participates in all government health programs, including Expanded Program of Immunisation. Immunisations are done daily in the hospital and in the Out Patients Department, during the weekly Under Five Clinic, and on the weekly outreach clinics in the area. We share these activities with other health units in the area (Machinga Health Centre, Domasi Rural Hospital, and outreach clinics from Liwonde Rural Hospital).

During the compilation of the annual report of St. Lukes hospital it was found that the already low estimated vaccine coverage of 57% for 1989, had diminished further during 1990 to 44%. Although some of the vaccines had been out of stock for a period during 1990, we felt it necessary to investigate the apparent low vaccine coverage further.

Methods

Because of limited staff the survey was limited to the area within 5 km of the hospital. An estimated 30% of the population served by the hospital, live within this area. This area is also near the road which is an important potential bias as people who live nearby are expected to come more readily to the hospital for vaccination than those living further away. With data from the National Statistics Office in Zomba and maps of the enumeration areas used in 1987, we aimed to established the population in this 5 km area, and listed all the villages. Our aim was to find all children born between 1st June 1989 and 31st May 1990. These children would be expected to have finished their immunisation by the beginning of March 1991. Permission to undertake the survey was sought from the District Commissioners in Zomba and Machinga district, and the chiefs of the villages were also approached. The hospital Community Health Nurse together with students from St. Lukes School of Nursing went out into the listed villages in groups of two or three and asked for all the children within the set age group. Then they checked the children’s Under Five Card for their immunisation status. A villager would guide them to the next village so they would not miss any households.

Details recorded were birth date, date of vaccination or history of vaccination, as well as the unit where it was received.

Results

The population for 1990 within the 5 km radius was estimated to be 13,028. The crude birth rate for the district is estimated to be 52 per 1000, so an expected 677 children were born in 1990. Using the figure of 130 per 1000 live births for the present Infant Mortality rate for Malawi, we calculated that 88 of these children would not have reached their first birthday. We thus expected to locate approximately 589 children.

The actual number of children found was 611. 593 were fully immunised (97.1%). Partly immunised were 3 children (0.5%) and only 2 children...
were found who had not received any vaccination (0.3%). 13 children had a lost Under Five Card (2.1%) but all of these were fully immunised according to the mother. Of the three partially vaccinated children two missed only the measles vaccination and the other child had only BCG.

In total 4,759 vaccinations had been given; 2,579 (54.2%) at outreach clinics, 1,604 (33.7%) in hospitals, 562 (11.8%) in health centres and 14 (0.3%) through private clinics. Often we noticed that children started their vaccinations in the hospital but continued through outreach clinics.

Discussion

The limitations of this survey are clear. The hospital is quite accessible to those who live nearest i.e. within 5 km radius. They are therefore expected to have a higher vaccination coverage than those who live further away. However we do not know how many people rely on St. Lukes hospital for their health care, as even within the 5 km radius many people go to other health units. St Lukes does not maintain any health centres within 5 km from the hospital, whereas almost twelve percent of the vaccinations was given in a health centre.

This survey has demonstrated that the majority of vaccinations were given through the outreach clinics. The outreach clinics on average take place at a distance of about 5 km from the hospital, so just within or just outside the examined area. The popularity of the outreach clinics as a source for immunisation activities is important - not only for the EPI program but also for implementation of many other activities as Antenatal Clinics and health education.

The survey did not provide accurate data on which vaccinations were done by St. Lukes hospital and which were done by other units. Although this information may be useful for planning it is less important in practice - what is important is that the vaccinations are done. As far as vaccination coverage is concerned, the percentage is more than satisfactory and indeed above expectations.

References

1. Annual Report 1990, Medical Department of Southern Malawi.