

Missed opportunities for immunisation at Kasungu

D Hipgrave

Introduction

The Expanded Programme of Immunisation (EPI) is regarded as a success story in Malawi, with Polio almost eradicated and Neonatal Tetanus and Measles cases diminishing. However, coverage remains low in some areas.

The new Tetanus Toxoid Vaccine (TTV) schedule (five spaced doses to all females aged 15 - 45 years) is being instituted. However some problems are being encountered. In Kasungu district there have been instances of community suspicion about the reasons for vaccinating non-pregnant adult women, because of the old policy's emphasis on women in pregnancy. In addition there are the problems of orientating health staff and communities to the new policy, provision of adequate materials, and lack of time to perform the extra work. Some outreach and static clinics still concentrate their EPI activities on infants and children and largely ignore the mothers who accompany them.

Health workers need to be reminded and encouraged to expand their EPI activities. In particular, they must regard every contact with children and women of child-bearing age (i.e. both patients and those accompanying them) as an opportunity for vaccination.

In this study we aimed to quantify the frequency with which women of child-bearing age and children of less than 23 months have "missed opportunities" i.e. have an incomplete immunisation schedule, are seen by a health worker at a facility where vaccination is available, and yet leave without being immunised.

Method

The project was based closely on a WHO document¹. All participants were briefed on the principals of EPI and aims of the survey. In addition all survey teams were at least initially, and in most cases throughout, supervised by one of the district's health staff trained in EPI.

Twelve Health Centres/Rural Hospitals in Kasungu District, plus the wards and clinics at Kasungu District Hospital (KDH) were surveyed. Six Health Centres were surveyed for a total of 4 hours each, and 6 others for approximately 2.5 hours. The OPD and Under 5 clinics at KDH were surveyed for 8 hours each in total. Antenatal clinic, children's ward, female ward and maternity wards at KDH were also surveyed once.

Questionnaires were provided by the UNICEF-EPI Unit and were taken directly from the WHO protocol. Data were sought on a short list of parameters enabling classification of the person questioned as a missed opportunity or not. These included age, a brief immunisation history or perusal of the TTV or Under 5 card, the existence of a contraindication to vaccination, previous reaction to vaccination and the acceptability of immunisation to the patient.

Health workers at the facilities surveyed were not told of the nature of the survey. A trained Community Nurse excluded hospitalised patients whose condition precluded vaccination, according to EPI guidelines.

Patients were approached for questioning as they left the Unit. Women uncertain of their age were determined to be eligible if still having menstrual periods; those outside the age range or menopausal were excluded.

At all the centres surveyed, immunisation is able to be offered daily, staff have had training in EPI activities and a functioning cold chain operates.

Results

Data are presented in TABLES 1 and 2.

Table 1 Missed Opportunities for Immunisation of EPI Target Groups at 12 Health Centres in Kasungu.

	Children <23 mo. (n=243)		Women 15 - 45 yrs (n=383)	
	No.	%	No.	%
Possess vaccination card	235	97%	333	87%
Brought card to clinic	216	89%	268	70%
Up to date or fully imm.d	137	56%	278	73%
Partially imm.d but contraind.	1	.4%	15	4%
Missed opportunities	106	43%	90	27%
Acceptability of immunisation	100/103	97%	81/90	90%

Kasungu District Hospital

DB Hipgrave

Correspondence to:
Dr. David B. Hipgrave
Kasungu District Hospital
Kasungu
Malawi

Table 2 Missed Opportunities for Immunisation of EPI Target Groups at Kasungu District Hospital

	Children <23 mo. (n=130)		Women 15 - 45 yrs (n=206)	
	No.	%	No.	%
Possess vaccination card	123	95%	166	81%
Brought card to clinic	108	83%	111	54%
Up to date or fully imm.d	95	73%	142	69%
Partially imm. but contraind.	0	0%	2	1%
Missed opportunities	35	27%	62	31%
Acceptability of immunisation	35/35	97%	60/64	94%

There were 39 children aged more than 23 months and only one had an incomplete immunisation schedule.

Discussion

Data collected on a further 312 women could not be included in the results because there was a failure to ascertain the actual date of the most recent TTV, rendering it impossible to determine if the interviewee should have received the vaccine on that day.

Cards were not given out to TTV recipients under the old TTV policy (3 doses in pregnancy with boosters thereafter). This policy was discarded over 12 months ago, so that even if a woman had 3 doses in pregnancy before, she would be at least eligible for TTV 4 under the new policy. (The only exceptions might be multigravidae who had received up to 5 TTVs with the appropriate intervals simply by virtue of the number of pregnancies, and therefore TTVs received at antenatal clinics). For women without cards, the most recent TTV, if any, would have been during the last pregnancy, under the old policy. It can thus be argued that many women of child bearing age not in possession of a TTV card are likely to be eligible for at least one and probably more than one TTV.

With this in mind it was found that of all 900 women surveyed, 14% (57) at KDH and 12% (59) at Health Centres had never been given a TTV card, and thus had not yet had a dose of TTV under the new policy. With the above exceptions, all were missed opportunities. As about half of the women were not included in the results, the missed opportunities for TTV were even higher than the figures above suggest.

Also particularly worrying is that 43% of children attending health centres were missed opportunities for immunisation. However the fact that only 1 of 39 children over 23 months had an incomplete schedule, suggests that most children finish their schedule eventually. Alternatively it could be suggested that there has been a recent deterioration in immunisation coverage. Clearly health workers need to review every child's vaccination status,

whether the child is a patient attending a weighing session or simply riding on the back of his or her mother as she attends the health unit for another reason.

It was encouraging to note that the new TTV policy is in fact being implemented, with over 87% of all women surveyed having been given a TTV card.

Based on this survey the following recommendations are made:

1. All health units should offer immunisations daily to all eligible women and children. (This has been Ministry of Health policy since 1987 but it is well known to be considered difficult at many health facilities).
2. Health workers should make checking vaccination status of all children plus their guardians, and all women, routine during any contact. This should include not just at OPD and under 5 clinics, but also all the ancillary clinics and services offered by health facilities at every level. Paying facilities are in a particularly good position to do this as patients usually register with a receptionist or clerk of some kind.
3. Hospital staff should also be encouraged to check the immunisation status of patients as a routine part of the admission and discharge procedure. Possibly an addendum should be made to the discharge forms to this effect.
4. The under 5 and TTV cards should be altered to include a prominent space for health staff to give an "immunisation appointment date" to all those vaccinated. This might help to reduce missed opportunities. Cards should also be printed in vernacular languages.
5. Those contemplating doing this survey in future should explore interviewees TTV status more carefully to avoid large loss of data. In addition, one could omit the question about reactions to TTV, as it is highly unlikely that such reactions occur, and confusion causes loss of data.

Acknowledgements

The author wishes to thank the staff and students of Leeds Girls High School and Kamuzu Academy and the staff of Kasungu District Hospital and affiliated Health Centres for their interest in and enthusiasm for this project. In addition, thanks to UNICEF-EPI, Malawi for their financial and material support, and Ms. Lucinda Willshire for proof reading and valued comments and suggestions.

Reference

1. Sato P. Protocol for the assessment of missed opportunities for immunisation. WHO/EPI/GEN/88.6