Information boosting Primary Health Care

Last week I talked about the use of routine data at primary health centres (see under old items). Some may question, how is that possible? Although the subject being too close to my hart, has been discussed in many places on my website, I thought it best to make it more explicit again this week.

Child bearing age women and children together constitute more than 65% of any population. Health service utilisation rates are even greater resulting in consuming major share of national health expenditure. Hence, maternal and child health is the starting point for cost effective and efficient health service delivery. Reproductive, Maternal, Newborn, Child and Adolescent Health (RMNCAH) services through PHC must be prioritised to ensure improvements in health indicators and hence the health status of a population.[1] Needless to say that assessment and achievements are only realised if age-sex register for the whole population served by primary health centre is available.

Births and deaths: When we were implementing the Public Health Action Plan in Nam Theun 2 Project in Laos, we asked each HC to have a chart on the wall showing births and deaths by each village and update it monthly (See chart shown in figures below). The information obviously came from the monthly MCH clinics and confirmed that the age-sex register was being kept updated, at least at monthly intervals. The difference in total births and death, small number of deaths as opposed to larger number of births, clearly demonstrated to the HC staff that population will keep on increasing if this difference went out of proportion. This led to easy appreciation for the needs for family planning.

Next step was to review these deaths and births from computerised data at the HCs. Any abnormal death or birth was discussed at the monthly meetings. Any referrals for child birth with complications and the outcome reviewed and linked to antenatal care, supervised delivery and postnatal care. Since there were only a few deaths from each village every month, it was not difficult to discuss them at the monthly meetings. Any still births, neonatal deaths and infant deaths, and failure to deal adequately with any complication of pregnancy leading to life-threatening situation or maternal death, was an important reason for critical review. Possible causes linked to other preventive and curative interventions were also discussed, providing an ideal opportunity for staff training, leading to greater possibilities for improvements in future work. The process also brought in some accountability of the actions taken or not taken by HC staff.

Growth Monitoring: Routine monthly visits to each village for GM service is absolutely essential for reducing the scourge of underweight and stunting. This allows *all children under the age of five* being monitored for normal growth and development. Children making poor progress or with thriving difficulties are brought to the attention of senior health workers for appropriate action. Group health education is a routine for this service, and the need for individual mothers with difficulties for counselling, especially for feeding problems. Promotion of exclusive breast feeding for first six months and adequate nutrition education, emphasising quality of food, amount at each feed and daily frequency of feeds helps in reduction of under nutrition problems in the community. WHO Anthro, an ideal software, for individual and group stats and monitoring over time is available free of cost (see system produced results below).

GM clinic also serve as an ideal site for **routine immunisations** and to screen children and mothers for anaemia, possible intestinal parasites and mass worm treatment, common health problems in LMICs. Laos project, where the baseline survey found very high levels of parasitic infestation, mass treatment of all children brought down the infection rate to a very low level, further preserving nutrients for the child rather than for the parasite, leading to improved nutritional status (see graph

below).

Obstetric Register: Live and healthy child birth is the end result of a successful pregnancy. A number of services are provided to the community through primary health centres to ensure this end result. These services start with family planning to ensure pregnancies are wanted and are not a risk to the would-be mother. Once pregnant, women are encouraged to undergo regular antenatal checks and advised for supervised delivery in safe environment. After birth post natal care, most critical period for both mother and the newborn, is vital.

All births conducted in any health facility are registered formally in a birth register. Apart from the valuable information coming out of this register, it also serves as a legal documentation of birth. It makes sense to monitor this valuable information regularly for auditing, training and evaluations purposes. Examples of what can be extracted from these registers comes from some of the work we did in Papua New Guinea (PNG) and Laos. (see pictures and the results below).

Obstetric Complications: One of the sure ways of reducing maternal and newborn mortality due to obstetric complications is to ascertain any risk to the mother and the foetus on arrival in labour and after stabilising without delay, refer the pregnant women to appropriate centre. In PNG and Laos, health centre staff were trained for emergency obstetric care to follow simple protocols hooked to the delivery beds for easy access. Detailed case study under Maternal and Child Health > Maternal Health.

Adolescent Health: Health centres have a responsibility to follow up school children and adolescents for continued growth monitoring and health education. Adolescents in particular, need to be educated for the prevention of sexually transmitted infections (STIs) and dangers of teen pregnancy. School teachers along with village health committees and village health workers can organise this for sustainability. WHO Anthro Plus is available for individual and group stats and monitoring over time.

Adult Health: Low and middle income countries are not spared of non-communicable diseases. Outpatients in both rural and urban areas regularly treat patients with diabetes, hypertension and related conditions. Opportunity to measure blood pressure and height and weight exists for adults. Assessment of BMI and advice on dietary intake and exercise to patients attending HCs and district hospitals and advice to women for regular cervical screening in addition to family planning advice to avoid any unwanted pregnancy will be of great help.

Nothing original is discussed here. However, in the general absence of these services at primary health care and in view of what is required and is feasible today through available and affordable technology, it is imperative that these measures are incorporated into the delivery of PHC through health centres and district hospitals. Plenty of evidence to support this approach exists. These services may require a bit of an extra resource and governments should not hesitate to shift resources from illness care to primary health care where rewards in improved health would bring much greater economic benefits.

Reference:

[1] Kerber et al. Continuum of care for maternal, newborn, and child health: from slogan to service delivery. Lancet 2007; 370: 1358–69