Symptoms, and prevention and control of hypertension would be targeted at various groups in the community and carried out through public campaigns and the mass media. Screening for hypertension, based on WHO criteria (i.e., above 160/95 mmHg), should include specific groups like females (pregnant and postnatal, contraceptive users, and postmenopausal), men in the armed forces, displaced persons living in camps, and drivers prior to receiving their driver's licence. Such screening could be carried out by nurses, community health officers, pharmacists, doctors and others. Hypertensive subjects are then referred to family practitioners and district medical officers or specialists for advice and treatment.

The non-pharmacological approach to treatment includes avoiding smoking, reducing salt and saturated fats in the diet as well as alcohol, doing exercise and reducing weight. The use of drugs (starting with diuretics) will be determined by their availability and price. Follow-up of these patients is necessary, to check their blood pressures and treatment compliance.

With regard to prevention and control, there should be access to screening facilities for all health institutions at all levels, and integration of hypertension control and rehabilitation within the primary health care system. Health education in schools and through the mass media, including radio and television, must be promoted. Above all, only firm political commitment will ensure success in sensitizing the public about hypertension and in preventing and controlling the disease.

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Linkage of health workers' records: example of estimating perinatal mortality rates

Sir—Much of the valuable information collected by health workers and paramedical workers in India is not fully utilized because their registers of village health records are treated individually, with no system of linkage. A computerized health record system could link these registers by transferring the data between different files. For example, the name of a woman who gets pregnant is transferred from the family file to the antenatal list; after delivery, her name is transferred to the postnatal list and the baby’s name is added to the infant list, the immunization file, and the birth record. Some trials at district level of such computerization of health data have been started in many places in India. We describe below an attempt to calculate the perinatal mortality rate through record linkage of data collected by paramedical workers. The approach is shown in the flow diagram (see figure).

First, the antenatal register of a particular village is examined to check the completeness of follow-up details of all cases registered at the centre during a 12-month reference period. Names of incomplete entries, outcome of the pregnancy (as recorded on the register), and cases where the outcome is not mentioned are noted. Next, the name of the delivered woman is traced in the postnatal register and the baby’s name in the immunization register; names that are not traceable are also noted. The birth and death registers are checked to verify the outcome of the pregnancy.

Whenever the outcome of the pregnancy is not clear and the name is not traceable in the subsequent registers, an enquiry is made with the paramedical workers. If it is still not clear, home visits are made to ascertain the outcome of the pregnancy. In this way, the pregnancy-related indices are calculated on the basis of analysis of the records, selective enquiry and home visits.
In our study, the registers maintained by health workers and *anganwadis* (village-based health workers who look after children aged 0–6 years and women aged 15–45 years) were checked and compared in 45 selected villages (total population: approximately 45,000) in north India. These villages were part of a field practice area of our department and it took, on average, 1–2 hours to examine the records of one village.

The perinatal mortality rates estimated from the health workers’ and *anganwadis’* records were 26.95 and 49.77 per 1000 births, respectively. The *anganwadis’* records were more accurate and up to date, because each one of them looked after only one village and a population of 1000, while each health worker took care of 1 to 8 villages and a population of 5000. The study revealed the following:

- 97.3% of the pregnancies leading to live births were recorded in the registers;
- 67% of abortions were noted on the antenatal register, while 27% could be confirmed on enquiry and 6% through home visits;
- 79% of stillbirths were recorded in the antenatal register, 14% were ascertained on enquiry and 7% by home visits;
- only 27% of early neonatal deaths (i.e., within 7 days of birth) were recorded in the register, while 38% were revealed on enquiry and 35% by home visits.

We know that community-based surveys for estimation of perinatal/maternal mortality are costly and time-consuming, and that hospital-based surveys are not representative of the catchment population. Our approach which combines record analysis with specific field work (home visits) has many advantages. With minimum effort it provides direct feedback to the medical officers and health workers who carry out the analyses locally. The various components of care provided by them are linked together in the total package of maternal and child health care. Any “missing” antenatal and postnatal cases are easily identified and can be helped by the available health services.

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