Patients enter the trial if they present at or before 32 weeks' gestation. Hypertension is diagnosed if blood pressure readings taken under strictly defined conditions of rest and posture equal or exceed 140/90 on two occasions. An attempt has been made to identify all hypertensive patients attending one maternity department.

Except when diuretics were used, antihypertensive therapy has not affected the final plasma urea measured before delivery. Four patients who received diuretic therapy have been excluded from the analysis.

In 120 women the urea levels at 28, 32, and 36 weeks' gestation have been examined in relation to the outcome of each pregnancy. The average urea at all gestations has been about 15 mg/100 ml and no individual level ever exceeded 45 mg/100 ml. The birthweight of the neonate is on average reduced, the higher the maternal urea. This trend appears at 28 weeks' gestation but is most striking at 32 weeks when a urea level above 20 mg/100 ml is associated with significantly smaller babies. At 36 weeks' gestation the same relation holds if the urea exceeds 25 mg/100 ml. The reduction in birthweight is in part explained by fetal growth retardation *in utero*: when maternal plasma urea is very low (≤ 10 mg/100 ml) there are fewer infants than expected whose birthweights are one standard deviation or more below the mean for gestation compared with a marked excess if the urea level exceeds 20 mg/100 ml.

No perinatal deaths occurred when maternal urea was below 15 mg/100 ml at 28 weeks and 20 mg/100 ml at 32 weeks. But the association between a maternal blood urea raised above these levels and perinatal death was highly significant ($P < 0.0001$).

Small variations in maternal blood urea are therefore a valuable indicator of the prognosis of a hypertensive pregnancy.

We gratefully acknowledge the assistance of Mr. J. R. P. O'Brien and his staff of the Department of Biochemistry, Radcliffe Infirmary.

Randomized Controlled Trial of the Treatment of Moderate Hypertension. M. W. ADLER (*Department of Social Medicine and Clinical Epidemiology, St. Thomas's Hospital Medical School*)

A study has been started in a group practice in Lambeth, London, with the following objectives:

- (a) to measure the effect of antihypertensive treatment on subsequent mortality and morbidity of subjects with moderate hypertension (diastolic blood pressure 90-114 mmHg inclusive);
- (b) to ascertain the number of subjects with hypertension previously unknown to the practice and the number of subjects with hypertension who are receiving treatment;
- (c) to see whether subjects with moderate hypertension are willing to start and continue therapy over a number of years;
- (d) to assess the feasibility of screening and treating for hypertension from a general practice;
- (e) to measure the cost of screening for moderate hypertension in general practice and entering suitable patients into the treatment trial.

The study is confined to men aged 35 to 64 years. Patients are randomly allocated to two groups—treatment and control. It is intended to follow up both groups for five years. The study is being conducted within the context of general practice because, should a reduction in morbidity and mortality eventually be shown, it will be the general practitioner who will be best suited to perform this task.

A Comparison of the Acceptability of a Self-administered Cervical Cytology Test with that of the Standard Service. JANET CARRUTHERS (*Department of Public Health, London School of Hygiene and Tropical Medicine*)

The primary aim of this study has been to compare the acceptability of the cytopipette as a self-administered screening test in the prevention of cervical carcinoma with that of the usual cervical smear test taken by a doctor. It is postulated that a self-administered test, received through the post, may overcome some of the known reluctance of women in high-risk groups to attend cytology clinics. A further consideration has been the possibility that this type of test might prove acceptable to women who are for any reason isolated, such as those living in rural areas.

The study was designed as a randomized controlled trial. The survey population numbered just under 20,000 women living in an urban and rural area of West Sussex. They were randomly allocated according to the area of residence to either the cytopipette group or the control group. The latter were offered appointments for conventional scrape examinations at a clinic run by the County Council or by their own general practitioner. The study was carried out in conjunction with the Health Department of West Sussex County Council using the Council's IBM 360 computer. All specimens were examined in the Department of Cytology at St. Stephen's Hospital, Chelsea.

A concurrent study was carried out by the Centre for Social Research at Sussex University, the main aim being to collect data on the attitudes of responders and non-responders in relation to cervical cytology.

Preliminary analysis of the data showed that the response rate for the pipette group was 52% and for the scrape group 38%. Further analysis showed the pipette to be most acceptable to young women and those living in rural districts. At the present stage of analysis it has not been possible to demonstrate that the pipette is more acceptable than the conventional scrape examination to the high-risk groups. It is suggested that the acceptability of the pipette might be improved by using a personal approach via the agencies of general practitioners, district nurses, or health visitors.

Sociological Factors Affecting Use of Cervical Screening Tests. N. D. RICHARDS and P. J. M. MCEWAN (*Department of Community Health, University of Nottingham, and Centre for Social Research, University of Sussex*)

Social research into cervical cancer prevention has hitherto concerned itself primarily with sociodemographic factors (such as age and social class) which identify