year, and were concentrated in certain general practitioners' lists.

There was a yield of 1·2 conditions per person screened; 47% of the conditions were previously known to the medical service. Of all conditions found, 56% were classified as minor and only 10% as major or life threatening.

These results show that only a small proportion of conditions found were considered to be life threatening. The majority of these major conditions were already known to the medical service; 15% of those previously unknown required observations, drugs or operation. In contrast, one-half of the minor conditions were previously unknown and 10% required management.

Evaluation of Screening Tests for Unreported Disability in the Elderly. JOCELYN CHAMBERLAIN (*London School of Hygiene and Tropical Medicine*).

Many studies of elderly people have shown a large prevalence of medical and social disability much of which, although it can probably be alleviated, is not known to the health and social services. Screening as a means of bringing this unreported need to light is frequently recommended, but so far there has been little evaluation of practical methods of testing for these disorders.

This paper described a study which aims to measure the error rates and repeatability of screening questions and tests used by nurses to screen elderly people at home for four common disabilities—impairments of vision, of hearing, and of mobility, and financial need. To determine the validity of screening in this way, it is necessary for each subject to be seen three times, being screened twice and examined definitively once.

People over the age of 70 on the list of a group practice are being screened in a domiciliary interview conducted by a nurse. A few days later each subject is visited again and the screening procedure is repeated; by comparison of the results from the two interviews, the repeatability of the screening questions and tests can be calculated. Subsequently each person is given a specialist definitive examination at a clinic of each of the systems being studied. By comparing the findings of this with the findings of screening, the false negative rate, false positive rate, and predictive value of each screening test can be worked out.

Results from the pilot survey indicate that screening is satisfactory for visual, auditory, and foot disabilities, and improvements have been made in screening for general impairment of mobility and for financial need. It is hoped that when the main survey is completed a reasonably valid instrument for screening elderly people for all these disabilities will have been developed.

THIRD SESSION (*Chairman:* M. D. WARREN)

The Distribution of General Practitioners in England. J. R. BUTLER, J. M. BEVAN and R. C. TAYLOR (*University of Kent at Canterbury*).

The study investigated patterns of mobility and settlement among general practitioners in England and examined the effect of the Designated Areas Allowance, first introduced in 1966, on the distribution of family doctors. The data are drawn mainly from a postal survey conducted in 1969/70 among a 1 in 8 sample of all principals in designated areas and a 1 in 10 sample of principals in non-designated areas. The response rate was 85%; the total number in the survey was 1,721.

The majority of respondents had changed practices at least once during their careers as GPs, often moving across county and regional boundaries in the process. Only 40% had remained in the same practice up to the time of the survey, and as many as one-third had moved at least once across standard regional boundaries. The influence of birthplace, family home area, and medical school was examined, and it was shown not only that a doctor's chances of returning to an area increase with the number of ties he has, but also that the influence of each was interdependent with the others.

The assumption that the designated areas are professionally deprived and socially depressed was found wanting. A series of questions about various social and professional aspects of life in each type of area yielded no substantial distinguishing features: in some cases the designated doctors enjoyed superior facilities, in other cases it was doctors in non-designated areas who recorded higher scores of satisfaction. It is estimated that the Designated Areas Allowance was paid to about 800 principals in England in 1968 with personal lists below 2,500, and automatically withheld from about 5,000 principals with lists above this size who were in non-designated areas.

The Role and Function of the Practice Nurse from the Patient's Point of View. DIANE J. CUNNINGHAM, J. M. BEVAN and G. B. FLOYD (*University of Kent at Canterbury*).

This paper reported on the one aspect of a study designed to evaluate a number of innovations in a group practice in a London borough, viz., the assessment of patients' attitudes to the role of the nurse in general practice. It was hypothesized that a number of variables might influence the attitudes of patients to the practice nurse; these were sex, age, marital status, social class, education, frequency of interaction with the doctor, the nature of the doctor-patient relationship, and previous contact with the nurse. Information was obtained from two sources—a postal survey of a 1 in 8 random sample of the entire practice population in the age range 18–64, complemented by an interview inquiry of a separate 1 in 6 random sample from one of the practice doctor's list. Both surveys produced a high response rate (postal survey 73%; interview inquiry 81%). The results from the two surveys were similar.

Over three-quarters of all the respondents felt that the nurse was an important aid to the doctor, whereas only half felt that the nurse was an advantage to the patient. Respondents who had experienced the nurse assisting the doctor reacted more favourably towards the practice nurse than those who had not, independently of sex, age, marital status, education, or frequency of visits to the doctor. Broadly speaking the manual classes expressed the most consistently favourable opinions towards the

nurse, while the non-manual classes tended to be more cautious. It appeared that the great majority of the respondents were in favour of the nurse performing traditional tasks such as giving injections or minor medical treatment; they were fairly evenly divided for and against the nurse undertaking more responsible activities such as home visiting or being the patients' initial contact with the medical team. Hence the respondents had fairly limited expectations of the capabilities and role of the nurse in general practice.

General Practitioners and Birth Control Advice in 1970/71. MARJORIE WAITE and ANN CARTWRIGHT (*Institute for Social Studies in Medical Care, London*).

As part of a national study of birth control services in 52 areas of England and Wales, 900 randomly selected general practitioners in the areas were sent postal questionnaires in late 1970. Sixty-eight per cent responded, answering questions about birth control, including sterilization and abortion.

Twelve per cent of the respondents expressed a conscientious objection to abortion. Three per cent could think of *no* circumstances in which they would recommend it. The doctors on the whole were more liberal in their attitude to abortion than were doctors surveyed in 1967/68,* yet there persists a greater reluctance to recommend abortion in cases of 'social' need than in cases of medical need. A substantial minority of the general practitioners (35%) were in favour of 'abortion on request'.

The mean number of estimated referrals for National Health abortion in the last 12 months was 5·0, yet there was a wide variation in individual practice: 25% of the doctors were responsible for 60% of the referrals. One-third of their N.H.S. referrals were, by their estimates, turned down. Half of the doctors faced with this situation did nothing further towards arranging an abortion, almost one-third referred these patients privately, and one in ten referred them to another N.H.S. consultant. A quarter of the doctors sampled said they had on some occasions been deterred at the outset by the difficulties they foresaw from referring a patient they considered suitable.

Compared with the 1967 sample of doctors, the recent sample was more active in discussing birth control, while their advice was more narrowly limited to the pill.

Their knowledge about the pill was variable. Virtually all (98%) of those who prescribed the pill were aware that recent pulmonary embolism is a strong contraindication; 4 in 10 did not identify congenital liver dysfunction as such. At least one-fifth of the doctors underestimated the importance of each of three possible side effects (depression, chest pains, leg pains), and one half of them overestimated the need to set arbitrary limits on the period of pill-taking.

*Cartwright, Ann (1970) *Parents and Family Planning Services*. London, Routledge and Kegan Paul.

Effects of Prescription Charges on Medical Care. IAN LECK (*Department of Social and Preventive Medicine, University of Manchester*).

When prescription charges were reintroduced in Great Britain in June 1968 the number of prescriptions dispensed annually fell by one-tenth. This decline was studied among nearly 30,000 patients by comparing their contacts with general practitioners during two months, one in early 1968 and the other a year later. The restoration of charges seems not to have affected the frequency of contacts but may have reduced the proportion of contacts at which prescriptions were issued.

The prescriptions issued to some of the patients during the second survey month were compared with those dispensed. The proportion of prescriptions not dispensed was relatively high among the patients who were not exempt from prescription charges, especially those who lived in relatively poor areas or were seriously ill. It is therefore, suggested that a fall in the proportion of prescriptions dispensed, as well as in the frequency of prescribing, may have contributed to the decline in dispensing when charges were restored.

FOURTH SESSION (*Chairman:* H. CAMPBELL)

Sequel to a Famine: Intellectual Performance in Survivors. M. SUSSER and ZENA STAIN (*School of Public Health and Administrative Medicine, Columbia University, New York*).

From September 1944 until May 1945, the cities of Western Netherlands were affected by a severe famine which touched all strata of the population. The remaining parts of the Netherlands were unaffected by the famine. This historical occurrence made it possible to compare the experiences of individuals born during the famine or shortly thereafter with those of controls born outside the famine area during the same time intervals. It also made it possible to study the effect of famine for varying durations of exposure, and to discriminate between exposure early or late in pregnancy and in early infancy, depending upon the time of conception in relation to the famine period.

Data based on men appearing for military induction and born during the years 1944–46, were presented. In this population, which is virtually complete in terms of 18-year-old survivors, the prevalence of severe and mild retardation is not raised for the famine-exposed cohorts.

The occupational class of the fathers of inducted men was recorded. Scores of an intelligence test provided a continuous variable, available on about 95% of the population. Mean intelligence test scores were compared for sons of fathers in non-manual and in manual occupations, and according to famine exposure. Sons of non-manual workers scored consistently higher than sons of manual workers, and no influence was shown of famine exposure in either class, or in the differences between them.

The social classes differed somewhat in fertility during the famine period. The effects of these differences on I.Q. were marked.

These results on the effects of maternal starvation during gestation on later mental performance point to three conclusions: (1) the power of social determinants in mental performance; (2) the absence of a detectable nutritional component among these social determinants