

expert examination of every newborn baby. It is a skilled and difficult job, and I think we should go a little further than just picking up the baby and saying to the mother, "This is a bony child", and "good morning". These babies require very careful examination, because not all congenital defects are obvious. There is the obvious group of hare-lips, syndactylies and things of that kind, and there is the group that needs looking for, including cleft palate and congenital heart disease. Then there is the group of congenital defects that appear when body function is put to the test. The best examples of those, of course, are alimentary obstructions. Until the baby feeds, you will not discover a duodenal obstruction. There is the much more difficult kind of abnormality, which does not reveal itself for some time and thus creates a problem because of its effect on statistical analysis. I am thinking, for instance, of the child who presents at the age of three or four with recurrent urinary infection, and on examination is found to have a congenital defect of the renal tract. A fortunately less common variety is the abnormal structure which may become malignant. We do not finish with congenital abnormalities at birth, but unless we look for them carefully, we are not going to be able to advise parents correctly. We are not going to be able to help the College of General Practitioners in surveys unless we make a complete examination so that we can report these abnormalities, and we are not going to help the geneticist either. Until we have collected the cases and acquired an understanding of the aetiology we cannot start working on prevention. I would like to finish by thanking our speakers this morning very sincerely for their excellent contributions, which I know we have all enjoyed extremely.

AFTERNOON SESSION

CHAIRMAN'S ADDRESS

Professor Duncan (*Professor of Obstetrics and Gynaecology in the Welsh National School of Medicine*): I agree with Professor Watkins that this subject is a most appropriate choice for the Faculty of the College of General Practitioners. It is, after all, the practitioner who see the pregnant patient for the first time, and who sees the patient even before she has conceived. His work is obviously going to play an increasingly important part in the search for the aetiology of congenital malformations. The general practitioner prescribes

drugs and treats minor illnesses which are not seen by the consultant, and these are also going to play an important part in our studies. Perhaps even more important is the privilege that family doctors have in the British system of medicine of looking after a group of people through their whole life, from before conception to the terminal stages. This knowledge is being utilized in a very forceful way in the research which we are hearing about today.

THE EFFECT OF ENVIRONMENTAL FACTORS ON THE FOETUS

D. H. M. Woollam, M.D., Sc.D., M.R.C.P. (*Department of Anatomy, Cambridge*)

Each year in England and Wales we lose by abortion a number of potential citizens at least equal to the population of Swansea. Dismay at this wastage is, however, considerably mitigated by the realization that a large proportion, perhaps one-third, of these embryos expelled at abortion are deformed, so that each year the occurrence of abortion spares us the birth of malformed babies sufficient in numbers to repopulate both Neath and Llanelly. The number of deformed children born each year is, in fact, at least equal to the population of Bridgend, so that were all the deformed to survive to the full three score years and ten, in England and Wales there would be about 1,000,000 persons suffering from a congenital malformation of one kind or another.

During the past two years we have had very much in our minds one particular major environmental factor in the causation of malformations, thalidomide, yet British women who took thalidomide during pregnancy between 1960 and 1962 gave birth to only 329 deformed children, and we mutilate that number of human beings on our roads every 24 hours. Thalidomide accounted, therefore, for only one per cent of the malformations which occurred in this country during the years 1960, 1961 and 1962. Nevertheless, for reasons that it would not be appropriate for me to go into in detail at the present time, the occurrence of the thalidomide disaster has had a profound influence on the attitude of all of us, medical and laymen alike, towards human pregnancy, and in particular towards the occurrence of congenital malformations. In the long run perhaps