

67. Dr Philip Farrant

(1) Tell me about your background.

I was born in Bristol in 1925, and went to school locally, and then I went to a public school in Dorset in 1938. And I did classics at school, and clearly, I wasn't nearly as good a classicist as I thought I was. And so, I had always wanted to do - well, latterly - I had always wanted to do medicine, and so I changed courses, in mid-stream, if you like, towards the end of my school career. And I was able to get in - on School Cert, it was called, in those days - I was able to get in as a medical student in Bristol, and I went to Bristol in 1943. And I was in a reserved occupation, being a medical student, and I think I've had guilt feelings about that ever since. I'm told that's ridiculous, and, of course, I did do national service in the army later on, but I still have guilt feelings, which are not tremendously active now, but I think I still have them. And I ought to have done my bit, and either survived or not. So, anyway, here we are, then. I go to Bristol in 1943. And anyway, if one was worried about the army, one was partly in the army, in Bristol, because we had a senior training corps, which was quite tough training. I mean, every Sunday and one afternoon we would do drill, and all that sort of thing. Anyway, forget that. I'm now into anatomy... no, I'm not; I'm sorry. In 1943, I still have to do some biology, some physics - which I very much enjoyed - and so on, so that actually, it's 1944 when I begin my so-called pre-clinical studies in Bristol. And that's two years of anatomy, physiology... well, mainly that. And then, two years later, I actually become a clinical medical student; so, that will be in 1946, when the war is over.

(2) Can you remember your first encounters with people with diabetes?

I really can't, no. I mean, when you're a medical student, you are aware of what's going on, and you are, in a way - in a very small way - a member of a team. So that, I mean, one did see patients admitted with diabetic ketosis, and how they were treated, but I had no exposure to a diabetic clinic. I'm not even sure whether... I don't know that there was one, in those days. So, no; no special exposure to any particular disease, because we were just trained as... They always told us we would be general practitioners, and somehow, or other, I decided that I didn't actually necessarily want to be labelled as a future general practitioner. I jolly nearly was, as may come out later. So, that's how we were trained: to tackle most things, and, of course, that can no longer apply. We've got four medical student grandchildren, and I follow their careers with interest, and realise how very different they are from my own.

What are the main differences between your training and your grandchildren's training?

Well, one of the main differences is they don't do - and that's quite right, unless you want to be a surgeon - they don't do all that much anatomy. I mean, they do enough, but we took a whole term over the anatomy of the arm, and another whole term over the anatomy of the leg, including the pelvis, et cetera, et cetera. They are much earlier, now, exposed to scientific medicine; I mean, immunology,

and all that that goes with. And also, of course, they're exposed to patients much earlier than we were. They go - in the first year - they go and interview patients, and get to grips with taking a history from patients, which is, of course, what medicine is really all about. It's taking an adequate history, and it isn't always done. But, in that sense, they, you know, are... it's more like being a doctor from the word "go". And, of course, there are so many of them. There were thirty people, in our year - about half male, half female - and that was all. Well now, I mean, we've got one of our medical students is in Bristol, and they have something like two hundred and eighty. And the same can be said in Birmingham, where we've also got two medical students. They've got about three hundred, I think, in a year. How they cope with that, I don't know, but they do seem to be able to cope with it, because it works extremely well.

- (3) Can you remember what you were taught about diabetes, during your training?

Well, yes. Of course, in physiology, we knew all about insulin, we knew quite a lot about carbohydrate metabolism, and, thereby, we were told what happened when there was a deficiency of insulin, and so forth. In those days, I don't think the distinction was made between what is now called Type 1 and Type 2 diabetes. So, I would have seen, as a clerk - we called them clerks on the medical side, dressers on the surgical side - I would have seen patients with diabetes, and, as I say, the occasional one with ketoacidosis coming in, when one was on call with the rest of the firm. But certainly not much exposure to the ravages of diabetes - that is to say the complications, which will come out later. Not much of that, I think, because, of course, they were more or less untreatable, in those days, anyway. So, no, we got... I mean, we did six months, in all, as medical clerks on medical firms. I was on a firm... well, I was later on the medical professorial firm. And one just saw what came in the front door, which is, in those days, what general medicine was all about.

What did you do when you completed your training?

Well, there were clearly two six month house jobs to be done. I think you only had to do one, but I thought I would do two. And that meant deferring National Service in the army or air force or navy, which was a formality. So, my first house job was as a house surgeon to Professor Milnes Walker, who was professor of surgery. And he'd been a very effective, and well-known - and loved, I think - surgeon in Wolverhampton, and, as such, did everything, again, that came in through the front door. He could do neurosurgery or he could do orthopaedic surgery. But when he became professor of surgery in Bristol, he had a more limited type of case that he was dealing with. So, I was his house surgeon, and very valuable experience I found that to be. Then I went to a medical firm, where I was a house physician. And, again, we treated emergencies of all sorts. And I do remember one patient coming in with Addisonian Crisis. That's not really anything to do with diabetes, but I'm sure that we would have treated one or two other cases of diabetic ketoacidosis, which was always rather a fraught situation, and had quite a high mortality, in those days.

(4) What did you do after you'd completed your two house jobs?

Well, I went up to Sheffield - I went there again later - for about a year, as a very junior pathologist, which was a good training for general medicine. And so, I did that for a year, which was quite... which was rewarding. And then I went into the army, and in the army, I was, of course, a junior pathologist. And after the initial sort of square-bashing, and so on and so forth, down in Hampshire, I went to Singapore and Malaya, where I was what was called a junior graded pathologist, so I was working in a lab. And one was exposed, there - and in Malaya itself - to a lot of tropical medicine, which I found quite interesting, but, of course, not diabetes at all, because anybody who had diabetes would either not get into the army, or if they were discovered to have diabetes in the army, would be promptly repatriated home. So, of course, that was one condition that I did not see at all, at that time, but there was plenty of other things. So, having spent some time up-country in Malaya, where one thing I had to do was to try and investigate an outbreak of amoebic dysentery in a Scottish Battalion, in the middle of a jungle, which... that was quite interesting, and they were very, very nice to me. Then, I got back to Singapore, and I had, by this time, I had acquired a wife and a child. So, my wife - we had no special local overseas allowance, as one would have done had one been in a short-service commission - so my wife had to work teaching French and English, and perhaps a bit of Latin, in a convent in Singapore, so we were able to keep going. Anyway, I got myself back, in Singapore, to the lab at the Queen Alexandra Hospital. And there, one day, I got a phone call from the Department of Pathology at the university in Malaya, which was then in Singapore: would I go and help out teaching dental students pathology? So, that was rather fun, so I did that. And it did, actually, help me apply for a job when I left the army.

(5) What did you do after you left the army?

So, I got demobbed, and it was around 1953, and I went to work in the Department of Pathology in Bristol. And, of course, having had a minuscule academic responsibility in Singapore, it probably helped me get the job. I did too much pathology: it went on from 1953 to '55. And it's an excellent training for being a physician, but also, you have to get up a few rungs on the ladder, and so it was a separate ladder that I was climbing. And so, I had to do something about it, and the first thing to do was to get the MRCP exam - the membership exam - which I had considerable trouble with, taking it several times before I eventually got it. And I then, while that was going on, became a senior house officer on the medical professorial unit. And there, again, one would have seen people with diabetes, and, by this time, the complications thereof. But I had no responsibility for a diabetic clinic, as such. By 1956 to '58, I got a research post, which enabled me to complete an MD, which was on a haematological subject, and nothing whatever to do with diabetes. But, anyway, I got that. And this, and the membership, enabled me to apply for a senior registrar appointment, which, in those days, was split; the idea being that you went to a peripheral hospital to start with, and came up against the usual sort of problems, and then you went to

a teaching hospital, which in my case was Sheffield, and you there were able to do a bit of research, which I found. . . I found it quite difficult. A very nice boss; I worked with a very nice boss, who said “Philip, on Wednesday afternoons, you’re free to go and think”. Well, if someone tells you to go and think, in my case, it has a negative effect. And I did, eventually, get going on something, which was actually related to diabetes. It didn’t work out terribly well. The first thing I did was to team up with the Department of Physics in Sheffield, to try and look at insulin antibodies, which were just beginning to be talked about. And the way of doing that was to label insulin with radioiodine, and then do electrophoresis measurements on the serum of patients who looked as if they might have insulin antibodies. The trouble was, of course, the technique hadn’t properly been worked out, so it all came to nothing, because the radioiodine, which was quite. . . had a high activity, in fact denatured some of the insulin. So, reluctantly, we had to abandon that. And I did work with a bacteriologist looking at deposits of insulin binding, I suppose they were, in diabetic kidney. That, actually, did produce a paper, which I read to the British Diabetic Association in Cardiff, a year or two later. So, anyway, while I was a senior registrar, of course, I did do, in Sheffield, a diabetic clinic with my boss. That was one morning a week, so one was soon into all the things that people, who are interested in diabetes, talk about. And so, I got quite useful experience there.

- (6) So, in this diabetic clinic, after. . . in about 1962, for the first time, the Department of Chemical Pathology was able to do blood sugars, and we would be able to get the result while the clinic was going on. So, of course, it did mean that the patient would have to wait about thirty to forty minutes, while the blood was processed. But that helped, quite a bit, to know what the situation was with regard to control. Previously, of course, they did their own urine sugars - as will come out again later, I think - and they had blood taken, but you got the result of the blood the next day. Well, if it was very low, well too bad; someone - they would have presumably had hypoglycaemia - and somebody would have given them some oral glucose. If they were very high, then one would take some action. If it was extremely high, one would try and get them back. But, arising out of this immediate blood sugar - the availability of blood sugars - we had a local MP - I can’t remember his name, and I certainly wouldn’t give it - who was an established insulin-requiring diabetic. My boss was away, and this particular MP said to the house governor “when I go to the diabetic clinic, I want it to be exactly the same as everybody else”. Very laudable sentiments. So, he was treated exactly the same as everybody else, which, of course, in his case, meant waiting thirty to forty minutes to get the results of the blood sugar, during which time, he’d rung up the house governor and said how he’d had to wait an unduly long time. So, the house governor rang me, and I talked to the patient, and all was calm again. But he had the right motives in his mind. So, with regard to complications: of course, all we could really do - retinopathy, no special treatment - all we could really do was reinforce the idea that patients on

insulin, or even not, should try and control their diabetes as carefully as they could. I don't know that we particularly mentioned the idea that they should stop smoking. I really can't remember what we said about smoking. It was clearly very important in the development of peripheral vascular disease. I guess we did say "you mustn't smoke", but I don't imagine we stressed it as much as we perhaps should have done. So, with regard to the other complications, the peripheral neuropathy, which diabetics get, we could only say, well, one would have to manage one's diabetes as carefully as possible. And the same really went for the neurology. Sorry, I've already said that; I beg your pardon.

- (7) Can you give me a picture of your diabetes clinic in these years, 1960 to '63?

Yes, my boss would see the new patients, and they would return a week later, with a diagnosis made and blood sugars, and so forth. And I would see them from then on, and I would see the majority of the follow-up patients who were part of the clinic. I couldn't give you an idea exactly how many, but we would see, in the course of a morning, I suppose, about thirty patients, follow-up patients. If patients needed to be admitted, which was usually because they had to go onto insulin, there was no way in which we could treat them in their homes, as now happens. So, they would be admitted into one of our two wards. And the ward sisters would - and the dietitian - would manage their diabetes, and try and indoctrinate them with the diabetic life. We did, in fact - I shouldn't say this- but my boss was a very literary man. And we used to stop for coffee, in the middle of the clinic, and we would discuss all sorts of fascinating things about English literature, and also about painting and so forth, which I very much enjoyed. But I was also slightly guilty, that, you know, they saw two cups of coffee going into the consultant's room. And so I resolved, when I ever got a job, that, even if I did drink coffee in the morning, I would quite obviously not stop the clinic. And that might come out later, I don't know.

And can you tell me about the staff of the clinic?

Well, I don't think we would have used the word 'team', in those days. I mean, there was the consultant in charge, and there was me - the senior registrar - and there was also a registrar who alternated with me on some of the clinics. There was a dietitian. There wasn't - certainly the term podiatry had not been invented - I don't think there was a chiropodist, but we could get - when they were admitted to hospital, if necessary - we could get chiropody done. So, that was a team, as far as I can recall. It wasn't very extensive.

What about nursing?

Ah, well, the nursing: we would have, of course, the outpatient sister, who would be busy doing all sorts of things. And again, patients would be admitted, if they needed insulin, where they would be exposed to the very good advice from the two ward sisters; male and female. I can't recall how much a nurse would have

contributed to their diabetic management, in the clinic; I really can't remember that.

(8) Have you any other memories of this period, '60 to '63?

Yes, with another senior registrar at the Sheffield Infirmary, we both - he dealt with diabetes in the Infirmary, we dealt with it in the Royal Hospital - we both got a bit interested in the management of diabetic pregnancy, which was then at the Jessop Hospital for Women. And we tried to inculcate the idea of good control, as far as possible, with these ladies. And we didn't, sort of, write a paper, or anything. We just, sort of, tried to do our best, and co-operated a bit on views of how we should proceed, and so forth. I hope it helped, but, again, there was no evaluation of that, because he moved away, and then I moved away. I'm sure, then, we would have stressed the importance of not smoking, clearly; although, I don't recall that as being a specific item on our agenda.

And what were the outcomes for women with diabetes, in the early sixties?

The outcomes were, well, not good. I mean, still births - I can't give a figure - but still births were alarmingly common. We, of course, began... I mean, Peel and Oakley, in King's College Hospital, had published papers already, showing that the problem, of course, is the size of the baby. We knew all about that, and we knew all about trying to ensure that delivery, whatever method was used - usually by Caesarean section - was done at, say, thirty seven weeks. And they had shown, in King's College Hospital, that this altered the... reduced, markedly, the still birth rate. I can't give the figures; they're in the literature. So, of course, we would have done that. We did not have a combined clinic with obstetricians, which I'm sure we ought to have done. But, I suppose, our interest in diabetic pregnancy only spanned about a year, at the most, because he moved away, as I said, and so did I.

(9) So, before we move on to Dartford, where you spent most of your career, any more memories?

Yes, I do remember, when I was in Bristol, in the spring-summer of 1956, one's duties as an SHO were to help with the medical Finals. And, to that end, one consulted the 'black book', which consisted of a number of patients who would be willing to come up for examination. And one particular case, I do remember - and I knew this man quite well. He was a diabetic, he had severe retinopathy - and I said... And that was quite legitimate, I think, for a medical student to be able to look at the fundus, through an ophthalmoscope, and have a good shot at seeing what was then florid and sight-threatening retinopathy. So, I got this man in, and I said "look, the examiners want to go round looking at the cases at nine o'clock in the morning, so please, please, would you not be late?" So, he said no, he wouldn't be late, and he wasn't late. But because he hurried so much, he missed his breakfast. So, the next thing I knew was Professor Perry, who was professor of medicine, shouted from one end of the ward, he shouted "Farrant! This man's unconscious. Come and do something!" So, I realised that this man had become hypoglycaemic. So, I stopped what I

was doing, and injected him with glucose, and he was fine, and then the medical Finals went on. And I hoped they looked at his retinae; I've no idea whether they did or not. And the other thing, that's just occurred to me, is that when I was in Derby, which would have been between 1956 and '58 (in fact 1958-60), Bryan Matthews - who was a general physician with an interest in neurology, and a very clever, nice physician. I worked for him. He later became professor of neurology at Oxford - and he was doing estimations of nerve conduction time in all sorts of conditions, not least in patients with diabetic neuropathy. And I assimilated this technique - he let me use his apparatus - which is a standard technique, in those days, and may still be in neurology. And the idea I had was to try and estimate nerve transmission velocity in the leg, in patients who were admitted in diabetic ketosis, because I reckoned there must be some delay, which might have a bearing on whether or not, later on, they got neuropathy. But, like so many of my research ideas, that was a nice idea, and Dr Matthews went along with this, but, in fact, there was so much disturbance going on when you treat someone with diabetic ketoacidosis, that we were quite unable to get any recordings whatsoever. So, that was another piece of research which went down the drain. Sorry, I must just correct the dates. When I was in Derby, it was between 1958 and 1960, and not what I said before, which was earlier.

(10) And now tell me about moving to Dartford.

Well, that was in the Autumn of 1963, and we were all, then, appointed as general physicians, without a special interest being designated. And on my first day, which was a Monday, I met George Stratton, who was extremely helpful throughout my career - he's now dead, unfortunately - who, on that Monday morning, greeted me when I went to West Hill Hospital. And he said "Philip" - I think he probably did use my Christian name - he said "Philip, on Thursday, there's a diabetic clinic. I wonder if you could possibly do that". I said "yes, of course I could". And from that moment on, I became interested in - officially - in diabetes and endocrinology, and so forth. So, that's how it happened with me, and maybe with other people as well.

Would your title have included "with a special interest in diabetes"?

No, there would have been... there was no special title. I mean, I just sort of did the clinic. And throughout my time in Dartford, I think - although I established a thyroid clinic later, and so on and so forth - I was not sort of known, in print, as an endocrinologist. I mean, the surrounding general practitioners would know what my special interests were, such as diabetes and thyroid disease, and so on, but there was no official designation. When I got to Dartford, the dietary control of diabetes was done with a dietitian, who was very efficient. I think she was occasionally... she occasionally put patients off, by insisting too much on absolute adherence to her advice. I may be doing her wrong. I'm afraid I don't think she's alive now, so she can't answer the question. But she was invaluable. I mean, that was perhaps her only fault, was she was slightly too militaristic, at times.

- (11) Most of the patients - and the clinic was not very large: what, I suppose, a total of a hundred or a hundred and fifty, or something - they would be seen at perhaps three-monthly intervals. Most of the patients, of course, were on diet, or diet and tablets. The diet would be the old Lawrence Line diet, with ten gram portions of carbohydrate, which the dietitian would explain to them. If diet didn't work - and they were, of course, measuring their urine sugar. Not by the methods that are available now, but with something called Clinitest, which involved test-tubes, and the urine would be heated, and so forth, by the Clinitest tablet. Not all that easy, as compared with what it is now. But, if they seemed to be exhibiting poor control, as judged by the urine sugars, then we would go to a sulfonylurea, such as, in those days, Tolbutamide. And that, we hoped, would redress the situation, which it commonly did. And, of course, one would also ask about diet; try to tighten that up a bit. Then, if Tolbutamide didn't work, then there was something called Fenformin, which didn't work in the same way as the sulfonylureas, but that was, after a few years, found to be slightly hazardous on occasions, and was replaced by Metformin. Then other sulfonylureas came along, notably Chlorpropamide, which was traded under the name of Diabinese. So, most of our patients would then be on that. But those patients who arrived in the clinic with a new - particularly if they were young - with a new diagnosis of diabetes, would be admitted to my male or female ward, where the dietitian would follow them up. And the ward sisters, who were absolutely the linchpin of insulin management, would explain to them what insulin was, how it worked, how you injected it into an orange to start with, and all that. And then supervise their injections into themselves, and their urine testing, supported, of course, by blood sugar measurements; the result, of which, would come the following day. So, it was, by modern standards, I suppose it was primitive. We thought we were doing well; we were doing as well as we could, I suppose, in the present state of knowledge. And that's how the clinic was. I was very ably helped by a succession of GP - mainly GP - clinical assistants, who came in on the day in question, Thursday mornings. Actually, when I first went there, the clinic was in a very, very old building, which has now disappeared. And this building... the clinic was upstairs, and I had said - without really thinking it out, I suppose - I had said that I wanted the patients to be weighed each time they came. And there was one very efficient - very accurate, I should say - very accurate weighing machine, weighing, you know, a hundredweight and a half, I should think. And this was downstairs, in the waiting room, as such. And so, on that first clinic that I did, on that Thursday - I didn't know it at the time - but a rather fat lady was asked by the nurses if she would be weighed. And this, of course, was in front of everybody else. So, she made an official complaint against the clinic, and me, who hadn't even seen her, at that time. This caused considerable amusement among my colleagues, that this new physician from Sheffield and Bristol had had a complaint raised against him on the very first day that he did a clinic, or a diabetic clinic. Well, the usual



administrative rigmarole was gone through, and, of course, everything was settled. And I think, in a way, it might have helped, because I think a new, rather lighter-weight weighing machine was produced quite quickly, which enabled them to be weighed in privacy on the clinic. But that was one of my first introductions to the life of a physician in Dartford.

- (12) I ought to say a bit more about the clinical assistants. I would be quite unable to have run the clinic at all, without them. I say “them”; there was only one, at any one material time. One of them - Mrs Corley - was extremely interested in diabetes, and was very helpful, as they all were. But then, when she’d been with me for, I should think, a couple of years, Dr David Pike - who is now dead unfortunately, and was the diabetic expert at King’s College Hospital - rang me up. And he said “we want an extra clinical assistant for our diabetic clinic. You have Mrs Cawley”, you know, “what do you think?” So, I said “well, if you possibly can, get her”, which, of course, was not very good for me, because she actually left. And other very good people came along afterwards. She now lives in Gloucestershire, and she doesn’t have anything to do with diabetes, as far as I know, but we have Christmas cards every Christmas.

You mentioned those who were admitted to a ward. Do you know how long they were admitted for?

I suppose they would be admitted - they had to learn the whole gamut of diabetic advice, you see - I suppose certainly ten days to a fortnight. Sometimes it would be three weeks, while the dietitian and the ward sister would make sure that they knew how to make the jump from being in hospital, where we had facilities for blood sugar measurement, and there were doctors on hand, and so forth. I now realise - or maybe I realised a bit later in my career - what a huge jolt it must have been for anybody to suddenly realise that they’d been thirsty for say a few weeks, or a few days, sometimes, and suddenly they had a disease which they knew nothing whatever about. And they have to make the jump and think about their future career as housewives, or as workers of various sorts. And that’s where the ward sisters, I’m sure, would have been able to help them much more than I ever would be, because they sort of knew what these people were exposed to. So, I expect it sometimes would have taken three weeks, and, on occasions, of course, longer. Throughout my career, I began to realise what the effect of the diagnosis of diabetes would have on people. I was a bit slow, I think, in realising this. Maybe we all were; but that will come out a little bit later in my talk, I think.

- (13) Did you have any educational literature to give to patients?

Yes. When I got to Dartford, there was a booklet describing diabetes, and I, of course, read it. And I was quite appalled by one sentence in it, which was to do with genetics, I suppose. And it said “two diabetics should never marry”. I was absolutely appalled by this, and I got them to pulp all these booklets immediately, on about the second time I did a clinic. And then I wrote another

one, with the aid, I think, of the British Diabetic Association. And I think, in fact, initially - before I wrote this - I think we used the literature which the BDA - the British Diabetic Association - produced, which was extremely helpful for them all. So, they all got this literature, and they could, of course, join the BDA and get further advice, in this way. The insulin-requiring diabetic patients, of course, were... they were provided with syringes, which were glass syringes, which were kept in spirit-filled containers, and they would be sterilised at home. And, of course, they were shown how to do it in the ward by boiling. And, of course, there were some cases of sepsis at the injection site, which is inevitable when the... perhaps they didn't boil the syringes all that often, and in the dash and hurly-burly of life, they didn't actually always carry out what we said, and I can't blame them for one moment. But there were some instances of sepsis. Nowadays, of course, the delivery of insulin has been changed out of all recognition, by the development of the insulin pen, and by disposable syringes, and properly sharpened needles, thin needles, and even by other ways of administering insulin, by continuous insulin infusion. All of these were way beyond the horizon when we started.

We've talked about education and insulin and diet and tablets. Was there any emphasis on exercise?

I don't think we particularly suggested that regular exercise should be taken. In fact, I'm sure we did not. And clearly we ought to have done, but that didn't come in. I'm not sure that I mentioned chiropody, by the way. In the clinic, there was a chiropodist - or rather, she wasn't actually in the clinic, but we could refer patients to her. But it really was, I imagine, would be described as fairly primitive chiropody, and there was no... podiatry, as I mentioned before, was a word we hadn't even heard of.

(14) Any more memories from the 1960s?

Yes, well, there are. One particular item: the firm of Burroughs Wellcome had been in Dartford, I should think, eighty years, by this time, and they were one of the main - they and Boots - were the main manufacturers of bovine insulin, in those days. And the assay of insulin was governed by a procedure from the... outlined by the British Pharmacopoeia, which involved the use of animals, mainly mice. And, you know, there was no method - until the very early sixties, when it came out in America, and was taken up by the people at the Royal Free Hospital - there was no method for estimating insulin - human insulin - in blood; or even bovine insulin, for that matter. But Burroughs Wellcome had an interest in this, because, of course, if you could assay insulin by a quicker method, not using animals, it would be obviously advisable. So, I got on to this by about the mid-1960s; shall we say 1966. And I realised that they'd got... they had a viable insulin assay going. And I was, at that time, interested, of course, in diabetes, but also in obesity. And there were reports of high insulin levels in normal, non-diabetic obese people. So, we did, in fact, do a little bit of research, by measuring the response of insulin - that's to say human insulin, produced by the patient himself or herself - after a, what was called, an "oral glucose load".

That's to say, the patients drank fifty grams of glucose in water, and before they did this, they had a fasting insulin - and, of course, blood sugar - taken. And then the research was to see what happened to insulin levels in normal people - which we established a baseline for - and in obese patients, before they'd been put on a weight-reduction regime. And there were, in fact, very high insulin levels in such patients, after an oral glucose load. And the same patients were then examined - I think there were about eight in the experimental group - and we showed that, after weight reduction, the level of insulin after a glucose load was less - significantly less - than before treatment had started. We could not say, however, whether this was due to the effect of weight reduction itself, or due to the diet itself, or both. I read this paper, which I published with George Stewart at the Wellcome Foundation, at - I think in 1969 - I read the paper at a meeting, at King's College Hospital, of the medical section of the British Diabetic Association. And it was also published, that year, in *Diabetologia*, which was the *European Journal of Diabetes*.

- (15) Also, in the sixties, there was the idea, abroad, that there should be postgraduate medical education. Under the terms of the medical act, which brought in the Health Service in 1948, no money could be spent on anything other than patient care. But by the very early sixties, there was a conference at Christ Church, Oxford - I reckon it was in 1960 - when the importance of continuing education in medicine was stressed. And, as a result of that, a small amount of exchequer money was released to hospitals, which were interested in this sort of thing, to establish some form of postgraduate medical education. And I was fortunate to get in on that fairly early. And the university - whichever it was, wherever you were - the local university, in our case London, established clinical tutors in various hospitals, whose job it was to put on programmes of general interest to doctors - not just medicine: surgery, obstetrics, ophthalmology, anything - so that people could have some form of continuing education. We were granted an honorarium of - by the time I became a clinical tutor, it was 1964 - we had an honorarium of two hundred pounds in a year, which doesn't seem very much now, but we were glad to get it. But we were much more glad to do something about continuing education; for ourselves, if not for the rest of them. So, as a result of this, we established a small classroom in a disused building, where we held various lectures, and so forth. And general practitioners could come, and junior staff who were taking the membership, and junior surgical staff who were taking the fellowship, and all that sort of thing, all started in the mid-sixties. And it culminated, really - well, culminated is the wrong word - but it resulted in the opening, in 1972, of our postgraduate centre at Joyce Green Hospital, which was our main hospital. Joyce Green Hospital had been built, originally, as a smallpox hospital, in the days when smallpox in London was rife, and patients would be brought down by river to what were then called the river hospitals. And this - a huge building, series of buildings - they were all exactly the same. All these ward blocks replicated

each other; they were exactly the same. And we had too many - they were unused - so it wasn't difficult to persuade the authorities to adapt one of these wards - ward 12A - to be the postgraduate centre. And this, of course, meant money. So, the Health Service provided some money, the Wellcome Foundation provided some money, the King Edward VII Hospital Fund for London provided some money, local GPs, local notables, and some... a few wealthy people contributed money. We had to have a fund-raiser, because doctors are hopeless at trying to get money out of people. So, anyway, we got together thirty two thousand pounds, which, again, doesn't seem a great deal these days. We had a building, of course; it just had to be adapted. We had a very good architect, and we had the state of the art, of the time, projection facilities, and so forth. And so, it was opened in 1972, by Lord Rosenheim, who had been, until recently, the president of the Royal College of Physicians. And it was attended by, among other people, the Bishop of Rochester, who is - David Say - who is also now dead, who had helped with our fund-raising appeal. And other people had also helped with that. So, it was quite fun to do this, but it was fairly time-consuming. And the centre went on until the year 2000; it went on from 1972 to 2000, when the hospital was moved to a new hospital, called the Darent Valley Hospital, and, of course, I had, by this time, long since retired.

- (16) Well, while we're on the Darent Valley Hospital: just before it was commissioned, they had named all the wards after trees. There was Rowan Ward and Juniper Ward and Oak Ward, et cetera, and Chestnut Ward, and all that. And they appeared to have run out of trees, so somebody said, would I mind if my name, Philip Farrant, was given to the new education centre. So, I said no, I didn't mind at all, so long as they spelt Philip with one 'l', which commonly people don't. So, it is now - if you go to the Darent Valley Hospital, you'll see a sign - Philip Farrant Education Centre. So, somebody said, at the time, they said "well, you'll get immortality without actually dying", so I suppose I have, until they think of some other name, which they probably will.

Before we move on to the 1970s, any more memories from the 1960s?

Well, I think that dialysis - renal dialysis - was beginning to be available for renal failure; initially, of course, in non-diabetic patients, because it was considered that perhaps diabetes had a bad prognosis, and the limited availability of dialysis should be for patients who did not have another condition; they only had their renal failure. But certainly by, I think, the later sixties, I had one patient - a young girl of about twenty five, who had quite bad renal failure - and I was in touch with St Mary's, Paddington, who were about the only people who were doing this, at that time. And I have to say - it's really rather irrelevant, I suppose - she was a dyed blonde. Very pleasant girl, she had quite bad renal failure, and it was arranged that she should go for dialysis, or at least to be considered for dialysis, at St Mary's, Paddington. So, she said on the ward

round, she said “could I go home, for one day? I want to dye me roots”. And her roots, actually - you know, she’s been in hospital with us, I suppose, for about a month and a half, I should think; low protein diet, and all that - and her roots were beginning to revert to their normal sort of brown colour. So, she went home and dyed her roots, and went off to St Mary’s, Paddington. But I’m afraid I . . . she did have dialysis, but, of course, they followed her up after that, so I have no more information on her. The various other complications, we’ll probably deal with a little bit later, in the seventies.

- (17) So, in the seventies, the clinics began to get much bigger. And this was a problem, which I didn’t tackle immediately. But we did have, by this time, a new outpatient centre - a very good one - at West Hill Hospital, which had been originally designated as the site of the new hospital, which we all were. . . we were always told would be coming. In fact, it never did, because, one reason being, there was no car parking available in the centre of Dartford. Anyway, we had this new outpatient centre, and still the diabetic clinic continued on a Thursday, but by this time, of course, the clinic had got much, much larger, and this was beginning to be a problem. We had established, with Queen Mary’s Hospital, Sidcup, a community liaison sister, who was specially trained, or adopted special training in diabetes, so she would deal with all the new insulin-requiring diabetic patients. And she would show them how to do injections, and how to, by this time, estimate their own blood glucose by the finger-prick method, because Dextrostix was becoming available, by this time, but had to be bought - it wasn’t available to the patients themselves. But the result of all this was that we did not always have to admit patients, who needed insulin, to inpatient ward treatment. And this helped them quite a lot. It didn’t do much to reduce the number of patients, of course. But one thing that did begin to worry me, at that time, and we got it put right later on - a lot later on, much too late, I think - was that a number of young patients would queue up with all the other patients we had in that diabetic clinic. And they had been told that they had diabetes, and that they were perfectly normal in other respects. But then they looked along the line of patients waiting to see me, or the clinical assistant, and they saw patients who’d had amputations; they saw, occasionally, a patient who was blind, who had a guide dog; and they. . . Generally, I mean, some of the patients were well - most of them were - but some of them were obviously not. And this can’t have been a good thing. And we began to be conscious of this sort of thing, and later on, as I say, this was addressed. The other thing was - mindful of what I had in Sheffield, where I used to stop for coffee with my boss in the middle of the clinic - I certainly do like coffee in the middle of the morning, but I always arranged that my mug of coffee would be on my desk in front of the patients. And I hope they would realise that I, in fact, had sips, occasionally, while I was talking to them, and the clinic did not stop.

- (18) At that time, the idea of having patients... of having local general

practitioners taking responsibility for diabetes had not yet surfaced. That came, I think, in the eighties. But by the later seventies, treatment was becoming available for diabetic retinopathy, and this was a marvellous step forward. We had tried, always, to examine the retinae through dilated pupils at annual intervals, and I suppose we thought we were quite good at it. It was no good doing it through un-dilated pupils. One had to tell the patients that they shouldn't drive a car for two hours after the dilating drops had been put in their eyes. I'm sure they did, and I'm sure it didn't matter very much. And I've discussed the matter with ophthalmologists, who never ever tell patients that they shouldn't drive when they've had mydriatic drops in, so, probably, this was an unnecessary precaution. Anyway, so we tried to do that at annual intervals. And if the patient had diabetic retinopathy, they were referred, actually, to Queen Mary's, Sidcup, where laser treatment was beginning, and also, of course, retinal angiography was started. So that, eventually, became a far better method of delineating how much retinopathy there was. And so, all this came in in the early seventies.

When you talked about the community nurses, did they actually go into people's homes?

Yes, our diabetic community nurse certainly did. And she followed patients into their homes, and helped with their management of their diabetes, and their anxieties, I'm sure. They don't always tell the doctor what their anxieties are. In fact, they tell the doctor, more or less, only what the doctor wants to hear. And if their urine sugars or, later on, blood sugars were not good, they probably don't bother to tell him. But they would tell the diabetic community nurse, who became an essential linchpin in the whole thing. And I'm sure there are... we had one, but I'm sure there are more, now.

- (19) Now, I'm now going on to talk briefly about the British Diabetic Association, and its local branch. It all begins in 1976, when - I think I can mention him by name - a patient of mine, called Alan Partridge - who is still very much alive, I saw him only recently - he was diagnosed as diabetic in 1976, at the age of forty five. He was quite a senior person in a local cable factory at a place called Erith. And he obviously needed insulin from then on. I cannot remember whether we admitted him, or whether the diabetic community nurse took him under her wing. I ought to have asked him a few days ago when I saw him, but I'm afraid I didn't. Anyway, so his diabetes was fairly well controlled from that moment on. He was a big fellow: he's tall, and he had... he was quite heavy. And as his diabetes went on, he began to lose weight, and I got worried that... lest he might have thyrotoxicosis, and he got worried because I was worried that he might have thyrotoxicosis. He didn't have, and his weight on the diet stabilised. Anyway, that's by the way. So, one year after diagnosing him, I asked... I mentioned the fact that we did not have a local branch of the British Diabetic Association, and would he consider helping us found one. Well, I got the right man from

the word go, and he was absolutely wonderful at setting up this branch. He came along to the first meeting. He was elected the chairman. He was the chairman for many years, something like twenty two years after that. They collected funds for me; they helped patients; they established a little stall, which was outside the waiting room for the diabetic clinic, where they sold things that the BDA offered; they sold other things as fund-raising manoeuvres. Alan Partridge's wife, Dorothy, did all sorts of things. They could not have been more helpful in the way they served the diabetic population in Dartford, and also Gravesend.

- (20) And later on, Alan, himself - if he thought that somebody was in trouble, or wasn't understanding their diabetes - would go along and talk to them and help them. And he had immense knowledge, by this time, of diabetes. And I'm glad to say that he hardly has any complication, and I think he claims he's never had a hypoglycaemic attack. That might be wrong, but he wouldn't have had many. Anyway, this was good that they established the fund-raising side of their activities, because glucose meters came along, around about this time. We bought some glucose meters, so that patients could measure their blood glucose, and these were - I think we had about five or six - and these were fairly expensive. So, a lot of fund-raising went into their purchase, and I remember myself, with Marjorie Cawley, swimming at White Oak swimming bath in Swanley. We had to do a sponsored swim, and we had to swim as many lengths as we could in quarter of an hour. Well, I'm not a bad swimmer at breast-stroke, but I don't do the crawl, but I did breast-stroke more quickly than I'd ever done it before. And I managed sixteen lengths of a - probably - fifty metre bath, I should think, and came out sweating, which isn't usually the case when one comes out of a swimming pool. Anyway, we got the money, and Marjorie got... she also swam the same sort of number of lengths, and we got the money. And we lent these machines to patients who needed blood sugar measurements, over, perhaps, a fortnight. And later on, of course, they became more available, and they were cheaper. At the same time as this, the measurements of haemoglobin A1c became available; in other words, glycated haemoglobin. This is a... normally present in blood, if you do electrophoresis to find it, and the glucose molecule gets attached to the globin part of haemoglobin, and is thereby recognised on electrophoresis. And if blood sugar measurements have been high over the previous, shall we say, six weeks, then you get a high level of haemoglobin A1c. So, we were able to find out what sort of control patients were actually showing. And, of course, we had to get the equipment. And, once again, Alan Partridge and the British Diabetic Association came up with money to buy the machine, which was necessary in order to measure the haemoglobin A1c. And I'm sure it's now regularly done, but it wasn't all that regularly done at that time.

- (21) And how big were your diabetic clinics, during the 1970s?

Well, I couldn't give you a numerical figure, but I could say they were too big. And what this meant, sometimes, was that patients weren't seen quite as often as they would normally have been. It was three months intervals, and they might have been extended to six months or so, and that reduced the clinic, somewhat. I think one got oneself into a routine - which I quite enjoyed, of course, I enjoyed the job - but one didn't always see the problems presenting themselves until somewhat later, which I will outline a little bit later, what we did about the size of the clinic. I think one got blinkered a little bit by... I mean, we thought we were doing an adequate job, and I suppose, in some senses, we were. But patients were kept waiting in the clinic; I don't suppose more than an hour, but that's not really acceptable these days. And they didn't seem to complain to me - they may well have complained to their GP, and their wives or husbands - but, as I said before, they don't like to upset the doctor!

Why were the clinics getting bigger and bigger?

Well, I suppose one got known as somebody who was interested in diabetes. And also, at around about that time, we began - the hospital itself, not me personally - began to have responsibility for Gravesend Hospital. And so, a number of patients would come from Gravesend, which is about six miles away. So that, and the fact that one got known, I suppose - and maybe the diagnosis of diabetes was being made clearer by postgraduate education, and the like - so that's why we got more patients coming in.

(22) What happened during the 1980s?

Well, around the early 1980s, with the help of the BDA local branch, and others, we established a diabetic day centre. This was housed in an old operating theatre in West Hill Hospital, in the middle of the town. And the point about it being in the middle of the town is important, because patients, who were shopping or working in the town of Dartford, or near, could easily pop into the diabetic day centre, which was open for most of the working day, five days a week. And it was staffed with volunteers from the BDA, and also it became the headquarters of the diabetic community liaison sister, and other visiting liaison sisters from other areas, like Sidcup, and so forth. So, this operating theatre became available, and I had to... there were eight contenders for the use of this theatre, because space in West Hill Hospital was severely limited. And, anyway, my contentions were okay, and the hospital secretary said "well, yes, I think you'd better have it". So, we had it. And the BDA provided the curtains, and provided... oh, a television set, I think, and chairs and tables, and probably the daily paper, and that sort of thing. So, this centre became available for people to come and, we hope, have their questions answered. And they would be reassured, if they could be reassured, that they were doing the right sort of thing. Well, of course, the diabetic day centre had to be opened. And I was not responsible for this, but somebody - I know not who - got hold of a fairly local personality to open it. It was opened by a man called Gary Mabbutt. I can mention his name, because I talked to him at the time, and he was well-known, even then, to have insulin-requiring diabetes. He was, at this time, captain of Tottenham Hotspurs



- we'll call them Spurs - football club. And he was telling me how he - and he went on the radio, as well, I heard him on the radio - how he used to do a blood sugar at half-time, just to make sure that he wasn't going hypoglycaemic. But he never did, and his diabetic control was obviously excellent. And when he was interviewed by the BBC lady - who... why should she know anything about diabetes? Well, she shouldn't - but Gary Mabbutt was able, in a few well-chosen sentences, to tell her exactly what it meant to be a diabetic, and how one had to live a disciplined life, and so on. It was very impressive. Anyway, he came along with a lot of - and we had... patients were attending the opening of the day centre, and they were... you know, we said "would you like to bring your children?", who weren't, of course, diabetic, and "would they like to talk to Gary Mabbutt?", which some of them did. He brought along Spurs' football shirts, and signed autographs, and made a little speech about the diabetic day centre. And I felt that we'd really got off to a good start with it, and he was really excellent, and I wrote to him, and thanked him very much for coming.

- (23) So, at about the same time as the diabetic day centre - with help from Novo Nordisk, who made insulin from pigs, and now make human insulin - they had suggested that we establish a diabetic youth group. And, as I said earlier, we worried that the young patients were being exposed to what they saw as the ravages of diabetes. So, we established, first of all, the youth group. And the upper age limit, probably, in those days, I think, was about twenty one or two, or something. We didn't actually... I never did paediatric diabetes. That was always done by the paediatrician, the cut-off point being probably eleven, or something like that. So, from eleven onwards, I would do it, but before that, it was definitely the province of the paediatrician. Anyway, so we... I remember asking a bright girl, whose diabetes had developed in 1980, when she was fourteen. I think I can mention her name, because I have talked to her recently on the telephone: Fiona Hanrahan. She later became a nurse, and is now married with two very beautiful children. Anyway, so she'd had diabetes for four years, and she wasn't all that well controlled with her diabetes. And we had... well, the diabetic community nurse had a few, sort of, light-hearted tussles with her, I suppose. Anyway, she settled down quite nicely, and was very responsible. And I asked her whether she would be at all interested in joining what we hoped would be a diabetic youth group.
- (24) Now, I didn't know at the time, and I only read what she wrote, a few years later, in *Balance*. She was quite appalled by my letter, asking that she should become a member of the diabetic youth group. She'd been told time and again that she had diabetes, and this was a disorder which could be coped with, and you were just the same as anybody else, except that you had to abide by certain rules. She'd had that drummed into her, and here was I, the diabetic consultant, writing to her, saying could she join something called a "diabetic youth group". Why was she being singled out? She even thought she might be about the only person in that part of England with diabetes. Had it happened that that were so, it would be nice.

Anyway, she said, firmly, “no”. And then, on the day in question, she came to the clinic - it was obviously a Thursday, we were having the opening meeting - and I said “look, Fiona, are you sure?”, because she’d said “no”, but in a very restrained way. Helping the doctor out of his problem, she said “well, maybe I’ll come along”. So, she did come along. And another lady was elected to be the chairman, and Fiona was the secretary, and an excellent secretary she was. And they had all sorts of activities. They had monthly meetings in a local surgery, which had a sort of community room. They had all sorts of social events. They asked me to go to them, and some I went to. They asked me whether I’d go to the beachwear disco, which I actually did decline: didn’t have quite the courage to go to a beachwear disco; I didn’t know what I was to wear! Anyway, they had all that sort of thing. We did walks in the countryside, in the Darent Valley. And just to show you how little I knew about diabetes: on the first such walk, which was, I suppose, about ten kilometres, in rather beautiful country, I packed a haversack with several syringes, some dextrose solution, a blood glucose monitor. And there were about twenty of us, I think, including my registrar - my medical registrar came. And, you know, I had thought “oh well, I’ll have to worry about people going hypoglycaemic”. Of course, they were much too wise for that sort of thing. They knew perfectly well what they could do and what they couldn’t do, and how far they could walk, and when they would need a little extra food, and so forth. And I never did that again. I needn’t have worried at all, but it just showed how out of touch I was with how people manage their diabetes. The nurses knew perfectly well how to manage it, of course; it was just me, with this haversack of glucose. And actually, half way round this particular first walk, Alan Partridge and Dorothy, who I’ve mentioned before, came with their camper van, and they provided, oh, I think sausages and burgers, and so forth, which was probably not the right sort of diet for diabetics to go on all the time, but these were snapped up, I may say. Anyway, everybody got through the walk without going hypoglycaemic, and they did many other walks, and I went on several with them, and my wife came on some occasions. So, anyway, the diabetic youth group managed, a little later in the eighties, to have their own clinic - their own part of the clinic - on a Thursday morning, once a month, so that they were no longer exposed to the results of the complications of diabetes, and I think that may have helped.

- (25) Why was it that, as you say, that the nurses knew, perhaps, what it was like to have diabetes, and you didn’t know what it was like to have diabetes?

Well, it’s an important question, and I have to say that the sheer ignorance of not thinking the question out properly. Other people, who looked after diabetes, were probably much better at that than I was. I suppose it might have been engendered by the way we, as house physicians - well, medical students, house physicians, registrars - were part of a big apprenticeship system. We did what we saw our elders and betters doing, and they may not have realised the

implications, and so maybe we never, or I didn't get into the way of thinking about the implications of this disease. My wife, I may say, did. And I'm most grateful to her for all sorts of comments. On a totally different subject: I once encountered a fascinating endocrine cause of high blood pressure, which, you know, which I was very interested in. On the day, I came home to supper - my wife is totally non-medical - and I happened to say that I had these suspicions that this condition applied in this particular case, which meant that the high blood pressure could be treatable, which it isn't usually; not by a curative operation, anyway. So, I mentioned how excited I was about this, because it gives you intellectual satisfaction to have thought of something, and then find that your suspicions are, in fact, borne out in fact. So, my wife said "well, how many children has she?" I said "I really have no idea". So, this is just an example of how blinkered I, certainly - and other people may not have been - but I, certainly, was, in this respect. And later on - it may come out - that the youth group helped me with this an enormous amount.

- (26) I'm going to talk again, briefly, about the diabetic youth group, who were, in the main, really very well controlled. I also mentioned that we had this test, called haemoglobin A1c. And it occurred to me that if I were to measure - well, they got it measured anyway, when they came to the clinic - if I were to extract the results of the levels of haemoglobin A1c in the youth group, and compare it with a roughly similar age group, in patients who were not... who were attending my clinic, but they were not in the youth group, and compare the levels of haemoglobin A1c, something interesting might come out of it. Well, it did and it didn't. It interested me, because we showed - and I did read this at one of the physicians' meetings around the region - we showed that the levels were, in fact, lower in the diabetic youth group than in the comparable age group who were not in the youth group. And, of course, the numbers were insufficient for it to reach statistical significance. There again, of course, I might mention I was helped by Burroughs Wellcome. And I just had to go up to their statistician, who had a thing called a computer - which there weren't many of, in those days - and he was able to work out for me immediately that it wasn't quite significant. But it showed that maybe we were on the right track. And had there been greater numbers, we might have been able to show that it was of statistical significance. So, going on with the mid-eighties, I mentioned how busy the clinic had been. Well, by the early eighties, we began to interest local general practitioners in running their own clinics. Not all of them were interested. They were very busy; they didn't want - particularly some of them - to take on an extra responsibility. But some of them did, and particularly in West Kingsdown. I won't mention names, but in West Kingsdown there was a surgery where they were very interested in doing this. West Kingsdown is a village out of Dartford. And the one doctor from the clinic used to sit in, not every clinic day that I had, because he had his job to do as well. But gradually, we managed to - I was going to use the work offload, but I don't really

like that - we managed to transfer patients from our clinic, where they were seen, say, once a year, to the local general practitioner diabetic clinic, where they would manage - with the aid of the diabetic community nurse, and also their own nurses trained, by this time, in diabetes - they would manage the control of these patients; both insulin-requiring and Type 2, non-insulin-requiring diabetes. And this idea took shape. And so, by the time I retired in 1988, we had a number of surgeries - a number of GPs' surgeries - who had an interest in caring for diabetes, and this meant that one could concentrate more on patients who had real problems, in the clinic. And it solved, over the years, the problem of enormous clinics. They were described by somebody - I think he came from Aylesbury - the clinics that we had been used to running, they were described, by him, as a diabetic dinosaur; ie huge and ponderous, and, dare one say it, not as effective as they might have been. So, anyway, that was how we solved that one in the... from the early eighties onwards.

(27) Were there any other developments in the 1980s?

Yes, there were. We were beginning to manage, from the early eighties onwards, patients on two or three injections daily, with the use of the insulin pen, which had come in. This was, as is well-known now, a device for injecting a graduated amount of insulin. Quite simply, instead of having to get out a syringe and needle, and so forth, you could just use the pen to inject, subcutaneously, the insulin. And this helped the control of diabetes. And at this time, also, glucose testing strips - glucose Dextrostix, and others - were available, which, of course, initially had to be bought. And that's where the local diabetic group came in, by helping to fund the purchase of these glucose testing strips. Then, in the mid-eighties, I think, these - after an argument with the Department of Health from the British Diabetic Association - they began to be... they were prescribable. And so, patients could then have these strips prescribed, and they could do their own blood sugar measurements, and help with their own control. I'm going to mention, now, diabetes in pregnancy. I mentioned, earlier, that when I was in Sheffield as a senior registrar, I was interested in the end results, and the management of diabetes in pregnancy, and this went on throughout my career. And one realised that what we ought to have was a combined clinic. In King's College Hospital, they had said, initially, there should be a weekly clinic, attended by the diabetic specialist and also by the obstetrician, who was vital to help decide what form of labour, or Caesarean... when Caesarean sections should be done, and so on. Unfortunately, all three obstetricians were very busy people - and I can recognise that - and there literally was no time - we still did our clinic on Thursday mornings only - there was no time when one could actually have a combined clinic, where we would both see the patient at the same time. We did fairly well, I think, by interesting one - Alan Chester, who was one of the obstetricians - who was interested in this. And so, we used to talk over lunch, and that sort of thing, about individual patients. So, although we didn't have an actual clinic, the nurses involved in the obstetric department got interested in it too. And I think they read a paper to their organisation about

the management of our diabetic pregnancies, because we worried a lot about still births, because they used to come out of the blue, at say thirty six or thirty seven weeks, when you thought you'd got good control, and bang, there would be a still birth. And this, of course, is... I think rates were originally around 30%, or something awful. And I believe, now, it is now down to something like 7%. Still pretty awful - well, awful for the woman concerned, and the husband - but much, much better. So, our obstetric nurses read this paper, involving, I think, haemoglobin A1c and general control, and when labour should be terminated, because that was thirty six weeks. And as diabetic control improved, it went up to about thirty seven and a half weeks. And I don't know what it is now, but I guess it's still a little bit earlier than full term.

(28) And any more memories from the 1980s?

Yes, I suppose, in the 1980s, we began to be more interested in the treatment of hypertension, in people with diabetes. This has advanced, of course, an awful lot from the 1980s, and is now much more understood, and much more... and many more interesting drugs are available than were then. But we realised that in order to reduce the incidence of renal failure, which was all too common, that we had to concentrate on the management of high blood pressure in pregnancy, and our levels of acceptable blood pressures were much lower than they had formerly been. So, this was another aspect of treatment, in the 1980s, which we hope - and I'm sure it did - manage to reduce the incidence of renal failure, or the time at which it came on.

Did your approach to diet change, at all, in the 1980s?

I'm sure our approach to diet did change in the 1980s. We had, by this time, a marvellous new dietitian - she'd been there a number of years. And she began to introduce the idea of a high-fibre diet - which, I may say, she introduced to myself and my wife at the same time, without realising it - but high-fibre diet. And the reduced insistence on ten gram carbohydrate portions was all coming in at the time. I very much left the dietary management of all these patients with diabetes to her, and I think she's still there at the hospital. And I can't be more specific than that, except that it was a great relief for everybody that they didn't have to weigh ten gram portions of this, that and the other, which had been necessary. I suspect she started before the 1980s; in the latter seventies, actually. But she was joined by another dietitian, so that there were two, which we'd never had before. And we realised - or the authorities realised - how important it was to get proper dietary advice. So, these two, I think, to an extent, revolutionised the management of diabetes, from late seventies, right through the eighties.

(29) So, now we come to your retirement, in 1988. What are your memories of that?

Well, my memories are that I was due to give a talk - I think it was the day before I actually retired - to Queen Mary's Hospital, which is not far from where I live. And I gave an outline of my experience in diabetes, throughout, you know,

well, twenty five years in Dartford, and, of course, a bit before that as registrar, and so on. And one of the points I made, in the course of this talk, was that we ought not to talk about diabetics. We ought to talk about people with diabetes, in the same way as I had got used to talking about... not epileptics - that's got nothing to do with diabetes, of course - not talk about epileptics, but talk about people with epilepsy. So, in the same context, we should talk about people with diabetes. I think this, at the time... in a very good-natured way, some people said "well, why bother? We talked about them as diabetics; we always have been". I have a feeling that perhaps this has gained ground, a bit, and we tend to talk about people with diabetes a little bit more, and I think that's probably helpful. Anyway, so I outlined my experience with diabetes, which I have now talked about. But I ended up by saying that there were some patients, who I had - and I'm really talking now about insulin-requiring Type 1 diabetes - some patients, who, despite apparent pretty appalling diabetic control, did not suffer any complications. There were, of course, others who, despite long-standing good control, still exhibited these complications. And I don't think - I don't follow the literature like I once did - but I don't think the first group - that is those who had appalling diabetic control, and no complications over a period of years - I don't think, even now, the explanation for the first group has been totally elucidated. It may have something to do with genetics, I don't know, but maybe somebody does know, and it will be interesting to know whether this comes out. But, of course, I may say that diabetic control now, in the years since I retired, has been enormously transformed. There have been targets, which have been established internationally, for the good control of diabetes, which we never had before. And this means that patients, themselves, know what sort of control and what sort of treatment they should have. And there's no doubt at all that this has resulted in a better life for these patients. And, I mean, there is, round the corner, islet cell transplantations, which, in fact, may not be round the corner; it is, in fact, happening now, so that a number of patients have no longer to have either any injections, or quite so many. There's continuous insulin infusion, which a lady in the locality, who runs the diabetic group in and around Sidcup, who has it herself, and that's revolutionised her life. And so, there's no doubt whatever, that advances are being made at great speed, and maybe that this disease may eventually not be nearly as common as it is now.

- (30) One other memory I have, round about that day that I retired in September 1988, was when the members of the diabetic youth group, with the chairman and Fiona Hanrahan as secretary, invited my wife and I to supper in a pub in Erith. I can't remember exactly what we ate - it was a good meal. But what I realised was that just before the main course, they would get out their insulin pens or their insulin syringes, and they would give themselves an injection, sometimes actually through their trousers, which I've never advised, but I'm sure it doesn't matter. And there were sort of insulin syringes rolling about the table. And nobody thought anything of it, because that's how they lived, you see. And I realised, then, how little I really knew, even then, about what it was like to be an insulin-requiring

diabetic, or even Type 2 diabetes, for that matter. And so, I realised that they had taught me, throughout the years that we did these various social events, and so on - and country walks, and all that sort of thing - how much I learnt from them about diabetes, and how valuable that was. They also, as a leaving present, gave me a miniature rose - which is in the garden, twenty five yards from where I am now - called Darling Flame. It's a miniature rose, which is now in flower, and I've kept it going. It tends to be swamped a bit by other roses around. And I talked to Fiona Hanrahan, when I sent her her Christmas card, about Darling Flame, and I'm sure she can't be bothered at all about what's happened to Darling Flame, but it's still going very well. So, my message, which I gave to the group at the hospital up here, was how much I had learned from looking after diabetes. And my message, really, to them - and to anybody else, for that matter - was: learn from your patients, as well as treating them.