

64. Dr Margaret McKiddie

(1) Tell me about your background.

Well, I was born in the town of Kirriemuir, which is where JM Barrie, of Peter Pan fame, came from. My father was a pharmacist and an optician. He would have liked to be a doctor, but there was no money for him to do that, and perhaps he guided me in that direction. Although, I initially wanted to be a vet, but he said I was too small and I'd only get to do small animal stuff, and I'd be better as a doctor. And I think that was right, because when I got patients who could never tell me what was wrong with them, I thought "if I was vet, this would be all the time, guessing"! So, no regrets about doing medicine instead of being a vet.

What sort of school did you go to?

Well, in the small town there was one school, and everybody went to the same school. And then, from primary, we went on to secondary school in the same town, where there was streaming, according to what you were doing - academic subjects or not. But the whole population of the town went to the same school. That was in Kirriemuir. And then, when I was fourteen, we moved out to the country, Glamis. And I then went to school at Forfar, which was slightly bigger, but again, it was the only school in the town, and everybody... Private education, in Scotland, is very much less common than in England, and everybody went to the same school. So, you met with people of all backgrounds.

And was it difficult to get in to read medicine?

No, it wasn't. I applied to Dun... well, it was, at that time, St Andrew's University, although Queen's College, Dundee, I went to, was part of St Andrew's University. And I applied; it was the nearest university; I got in and I started there. In fact, I was only just seventeen when I started, so I could have gone back to school for another year, but my father was keen that if I was doing six years at university, the sooner I was qualified and self financing, the better. And so, I went to university when I was just seventeen. But because I lived, at that time, in Glamis, which was only twelve miles from Dundee, I actually lived at home the whole time I was a student, which, in some ways, I suppose I missed out on the broadening experience of being a student, but I enjoyed it, and didn't have any problems at university.

Tell me about your training.

Well, I was lucky, as a student. There is happenstance in what we all do. There were four medical firms, and all students rotated through the four medical firms. But in final year, it was chance which of the four you went to, and the firm that I was allocated to happened to be the firm that had most of the diabetes. And the firm that you're on as a final medical student is probably the one you've got most chance of getting a job in. And I applied to be the house officer there, and went there, and so that carried on my interest in diabetes. If I'd been allocated

to a different firm in final year, my career might have developed completely differently.

What do you remember that you learnt about diabetes, as a student?

Well, in the conventional sense, I don't really remember anything, in detail. But I do remember we had a talk at our medical society from Philip Randle, Professor Philip Randle. And he talked about, not the straightforward stuff of diabetes that we were taught as medical students, but about the fatty acids. And he was really quite interested in fatty acids, how they were relevant to the cause of diabetes. And I, with the great enthusiasm of youth, thought "I will specialise in diabetes, and I will solve these riddles"! And that kindled my real interest in it, I think.

(2) Tell me about your first job.

Well, I qualified in June 1962, and I started off my first house job in the medical firm in Maryfield, which was a general medical firm, but they were the ones that run the diabetic clinic. And we had... some diabetic patients, obviously, came through the ward, but as a houseman I wasn't involved in the clinic, so I can't really say that I've had a great experience of diabetes there. I don't remember any particular incidents. Then I did my surgical job, also in Dundee, but in the other hospital in Dundee. Then I did a paediatric job down in Manchester; that was in 1963, because, at that time, for a female to become a general physician was quite difficult, and I did think that I might do paediatrics. And I thoroughly enjoyed the paediatrics that I did. Diabetes was not the firm I was on; in fact it was... children with leukaemia, was the special interest. And we were involved in research on treatments, which at that time didn't work, but which now give modern children a good chance of complete remission from leukaemia, so their suffering was worth it for future children. I did, then, six months obstetrics, principally because I'd won a scholarship to do obstetrics. But I... in hindsight, it was a very useful thing to have done, because one of the things I enjoyed most about my life as a diabetic consultant was looking after pregnant diabetics, because it was just a nice finite thing, with a nice prize at the end, if everything went well. I then decided... I was still thinking about paediatrics, and in 1964 thought "I must do some more general medicine first, and get my membership", because without membership, there was no way I was going to progress up my career. And I applied for a senior house officer job, first of all, in Edinburgh. Didn't get that, and if I had, that would have not been diabetes. The next one I applied for was an SHO in diabetes at Glasgow, and somewhat to my surprise, I got that job, and that was really the beginning of my diabetic involvement. It was general medicine, principally, but with a very big diabetic clinic - one that would have people throwing up their hands in horror, now. People used to come at half past twelve, with a clinic that started at two, so they wouldn't have to wait, which was a bit ironic, really. But all these Glasgow people, they were lovely people, the Glasgow people. They're very friendly and... but very ordinary and easy to get on with. And the consultant, Alec Imrie, that I worked for: he was a real old-fashioned physician, but he was extremely astute. He

didn't have to examine patients to know what was wrong with them! And if I asked anybody in the clinic to take their clothes off to have a look at them,

- (3) "oh, Dr Imrie doesn't need to examine me to know what's wrong"! But I learnt a lot from him, about looking after patients in general; looking after patients as people, not as diabetes with a person attached to it. But, at the same time, I was also lucky, because Keith Buchanan was the registrar there, and he was just beginning to work on an insulin assay. I mean, he didn't develop it - it was developed by Yalow and Berson - but he was using it in Glasgow. He was having trouble getting it to work in the beginning, and an extra pair of hands made all the difference, and suddenly we were going ahead. And we did a lot of work on looking at insulin levels in people with diabetes, and all sorts of other things, so I had the research interests as well, along with the good clinical background of diabetes, which was a very good mix. And I learnt so much at that job. I went there in 1964, as an SHO, and then Keith, who was the reg... The senior registrar left; Keith, who was the registrar, was promoted to the senior registrar job; and I was lucky enough to get his registrar job. So, that kept me going in Glasgow for... up until 1969.

Can you tell me a bit more about these large old-fashioned clinics? Give me a sort of snapshot.

Well, there was a huge waiting room, and all the people would sit there and would be called in, in turn. There were four of us doing the clinic together: there was the consultant and Keith and myself, and I can't remember who the fourth one was, but I know there were four of us. But we each had our allocated patients that we would see, so that the patients who came to the clinic tended to see the same doctor every time. So, Dr Imrie was always there, and he never minded, if there was a problem, to go and ask him. He didn't really expect you to need to ask him! I think he probably saw most of the new patients - I can't really remember the detail of that. But, you know, the patients kept coming back and back. At that time, there were no diabetic nurses, GPs didn't look after the diabetic patients, so, you know, all their care was through the diabetic clinic, and we became friends. The continuity, they've always seeing the same patients, you know, and they didn't seem... most of them didn't mind having to wait!

Can you remember what kind of numbers were involved?

I think there were probably about eighty patients, on an average clinic, but, you know, between four, that's twenty, so. If they had actually come at their appointment time, they wouldn't have had to wait so long, but they had to come early to be seen first.

How long did they get with you?

Well, I think I probably took at least ten minutes with them. I think the boss would have probably sorted their problems out in three minutes! I remember

having a patient in the ward once, and she had been at the clinic the week before. And I said "Didn't you tell Dr Imrie about this problem when you were there?" And she said "No. When I went in, he said "my, you're looking well", so I hadn't the heart to tell him I didn't feel well"! But, you know, that makes him sound bad, but he wasn't. I mean, he was very astute, and it was unusual for him to have missed that there was a problem, but. He said to me that, he said. . . I said "how do you manage to get through them so quickly?", and he said "well, when they come in, I tell them they're looking well", and that did leave me a lot of problems!

You said he was an old-fashioned physician. What did that mean to you then?

Well, I probably didn't think he was an old-fashioned physician then. I think it's just looking back now, and I think physicians, now, are different. People, now, have to do tests to know everything, and he just seemed to know by instinct. I mean, he'd come into the ward, sometimes, after a take day. And he'd stand at the door talking to sister, and then he'd come over and say "I think the patient in that bed needs a lumbar puncture", which nobody had even thought about. And he just had this uncanny knack that he knew things. And, you know, you didn't have to do hundreds of tests to make a diagnosis. And I think now, modern physicians are so busy watching their back, in case you miss something, people have lots and lots of tests, which I'm sure, half of the time, are not necessary.

(4) What kinds of patients came to the clinics?

Well, they were a mix of type 1 and type 2, because, as I say, the GPs didn't look after anybody's. . . in depth. So, all diabetic patients tended to come to the clinic, and keep coming to the clinic. We had two clinics a week. We had no specialist nurse; we did have a chiropodist. I can't remember what happened with the pregnant diabetics. I wasn't so involved with them in Glasgow, because I was relatively junior, but I think they probably did have a special clinic where they saw them, but I don't remember that; don't remember much about the pregnant ones.

Can you talk about how patients were treated in the 1960s?

Well, the type 1s were all on insulin, but we didn't have many types of insulin. The one thing, which is quite different to now, was they didn't have disposable syringes, so they had to sterilise the syringes. And we had three different strengths of insulin: we had twenty units per cc, forty unit per cc and eighty unit per cc, and the patients had to work out whether the units were divided by two or four. And sometimes you could get mistakes, because people had got the wrong strength of insulin. And that was a huge advance, when they changed to just one strength of insulin. It made life a lot simpler, because sometimes it was very difficult, if the patient hadn't actually brought their insulin, to be sure which strength of insulin they were using. And from everybody's point of view, having the disposable insulin syringes made life so much easier, and, of course, the needles were so much sharper. We didn't have any blood testing for patients. They had to do urine testing. I think, when I started, they'd got rid of boiling

the stuff up. At least they had the tablets that they dropped in, but it wasn't even... we didn't even have Clinistix, at that time. It was the old Clinitest tablets that people had to drop into their urine, and watch it and see what colour it was: orange or blue or green. And obviously, the accuracy of the measurement of the blood sugar from that, as opposed to the modern blood testing, is... you couldn't begin to get the same levels of control, because you couldn't assess it. And we didn't have haemoglobin C measurements. It was just all on the blood sugar, as it was at the time. So, the level of control that we were achieving was obviously a lot, lot less than what we would accept now as desirable. Some of the patients used to test for ketones; we did do that, and now I don't think that's very much done. But certainly, much less level of control. Diabetics, the ones who were on tablets, we had, I think, only Chlorpropamide, in the beginning, and Metformin, which used to make people sick, but. There was a very limited range of tablets, and the Chlorpropamide, being long-lasting, you used to occasionally get nasty hypos in the Type 2 diabetic, which, nowadays, you would virtually never see hypos in a Type 2 diabetic. You get them, obviously, a lot in the insulin ones, so that was a bit of a problem.

When you say there was no blood testing, the patients couldn't do it in their own homes, but did you...?

Yes, we did do blood tests in the clinic, but we didn't - certainly in the early years - we didn't have the blood test result when we saw them, and not everybody had one done. But you'd sort of find yourself on a Fri... one of our clinics was on a Friday night, and sort of Friday night, you'd be frantically 'phoning people, because their blood sugar had come back and it was sky high, and you thought "we can't leave this over the weekend". So, you know, the modern luxury, where you know the patient's blood sugar when you see them, is just... I think we worked a lot by the skin of our teeth, really; a lot of it was instinct. And we obviously didn't reach anything like the levels of control that we would now be feeling that if we didn't achieve, we were not doing our job properly. But it was keeping people alive, and it was better than it had been before there weren't... before, obviously, before insulin was discovered. Insulin had been around a long time, even then. But it has... the treatment of diabetes, over that period of time, has just totally, totally changed, because of technology, which makes it easier to get good control.

(5) Tell me about your research during the 1960s.

Well, it was all based on insulin assays, so it was not being very invasive to the patients. Usually, it was patients who were having glucose tolerance tests, anyway. And we just took a little bit extra blood off, so we had enough to do their insulin levels, as well as their blood sugar. And, in fact, I presented a paper to BDA of results of oral glucose tolerance tests in two hundred diabetic patients, which was not anything obscure, but no one had ever done that amount of work in that number of patients; that my advantage was having a huge amount of clinical material on which to do a very simple research project. And I was very lucky that Keith Buchanan... I mean, he was the one that was leading it, and

I was helping him all along. And we both then joined the BDA, very soon after I came, because we wanted to go to the meetings. And the only way we could get funding to go to the meetings was if we presented a paper. So, it was a question of always trying to find out one thing that we could do about our insulin results. And I think we did papers on Type 2 diabetes, Type 1 diabetes, patients with Cushing's syndrome, patients with anything else under the sun, to get funding to go to the meetings. And that was great, because you learnt things at the meetings. And we used to take it in turn to present the papers, but we could both get funding to go. And at that time, the BDA was small. I mean, I remember one of the most enjoyable meetings we went to was in a dairy theatre in Cork, and, I mean, it only held about sixty people. Well, at that time, that was a place you could still go, whereas now, diabetic meetings have all got to be in huge conference centres, 'cause there's hundreds of people going. And there's all different plenary groups, and you don't know half the people. And it was great fun, at that time, because there were only small numbers of people, and everybody knew everybody. And if you presented a paper, even if you were a junior SHO, then the sort of senior consultant people would come and talk to you afterwards, and speak about it. And I think that it was fun, and it helped my career, because when I then went to look for a consultant job, I'd met these... various of these diabetic top people, one of whom was on the interview committee, and he knew that I'd done this, and he'd met me. And you're slightly, then, not an anonymous person, who's just down there for an interview. So, I had fun, and I got good experience out of it. And now, I think that these meetings are so big and anonymous. They're useful, and they're probably much more informative than ours were, but I'm sure they're not so much fun.

You said that your advantage, when you went to BDA meetings, was the large numbers of patients you were able to work with. Were your

(6) clinics much bigger than most other people's?

I don't... I should think that, probably, most hospitals, at that time, had similar sizes of clinics, but I think I had the big advantage of having that clinical thing. But because of Keith, and because the Professor of Medicine in Glasgow was very supportive to us - although we weren't in a university department, he let us have the facilities of the university department to do our research - so, I think it was just because I had access to the two sides at the same time. Whereas, even at that time, there was a tendency for people to either be doing research, or to be doing clinical work - and doing a big lot of clinical work and research at the same time. And it was also before the time that junior doctors had any kind of hours that they were supposed to work. And, I mean, I suppose that a couple of afternoons a week, that now I might have had as time off, I spent in the lab; and nobody thought anything about it. You just worked all the time that was there. And that was the normal way of working. Once you move on to a situation where you're only supposed to work forty eight hours a week, if you're doing forty eight hours of clinical work, there isn't time to do any research. You

could do it in your own time, but then I'm not even sure you'd be allowed to do that, because it would be working, and you're breaking your work hours. . . And I think that life, now, is much more difficult for people to fit these things in. I worked long hours, but I enjoyed it. And I went home at night and wrote papers, and I did my MD thesis. I was very lucky, because Keith, actually, went off to America, for a year, to do something different, and I carried on with the insulin assay after he left. Although we actually got a technician to help, at that time, so I worked with the technician instead of working with Keith, 'cause he was in Seattle. And when he was in Seattle, he did a lot of other stuff, and he used that for his MD thesis, so he said I could have all the insulin results for my thesis. So, my MD thesis was written on insulin assays in diabetes and related conditions. And it was pure and simple that. I mean, there was nothing clever about it, but it got me my MD, which, again, was another plus point when I came to looking for a consultant job.

(7) Tell me a bit more about the life of a junior hospital doctor in the 1960s.

Well, we worked hard, and we worked long hours. But, I think we had a lot more job satisfaction than the current lot of juniors do, because we had our own firms, we had our own patients, and we looked after them virtually all the time. Obviously overnight, if there was an emergency and you weren't there, someone else would come and see the patients. But, in general, we still had the team; these were our patients. Whereas now, on the current system, people don't seem to have continuity of care, and patients are all divided up into their specialities, almost from the beginning, which may mean that they get a more intensive level of care, but they haven't got the continuity. And I think that that is less satisfactory, both for the doctor and for the patient. I really liked the fact that these were my patients. And if I came in the next day and found that somebody hadn't called me about a problem, I really felt upset that someone else had been involved. And I would've come if they'd asked me. So, I think that there have. . . I don't think that people enjoy medicine, now, in the same way as we did, because there's too much bureaucracy. And cutting down the hours is fine, and maybe it was necessary, but it has got its knock-on effects.

Tell me about getting your next job.

Well, I moved back to Dundee as a Senior Registrar, in 1969, back to the firm that I'd been on before. It was only the second. . . I'd applied for a senior registrar job in Aberdeen, and, funnily enough, the chap made a sideways move from my old firm in Dundee. So, I didn't get that one, but I got the one that he left, so that I was back on to familiar territory, but now, obviously, as senior registrar, rather than as houseman. And now, of course, I was involved in the diabetic clinic regularly, twice a week. It was a busy job. There was myself and a registrar and the two housemen. And I worked, actually, for three consultants: Dr Semple was the one who ran the diabetic clinic, and I think that that's the side that I was most interested in. Dr Frew did a general medical clinic - can't actually remember what his special interest was, but the registrar worked with him. And I worked with Dr Semple, because he knew that my special interest

was in diabetes. And Professor Ian Hill had a few patients on that ward as well, but we weren't too directly involved with him. I did a general medical outpatient clinic with Dr Semple, as well as the diabetic one, but the diabetes was still, then, my thing that I found most interesting and most enjoyed doing. Still we had no diabetic nurse; we did have a chiropodist. The clinics at Dundee were not huge like the ones in Glasgow. I think they were more selective in the patients that they continued to follow up. GPs did a bit more of the other routine follow-up, at that time.

(8) We haven't talked about diet. What were the orthodoxies on diet at Glasgow and Dundee?

I think, at that time, we were still really talking about carbohydrate portions. And at that stage, the importance of fat in the diet had certainly not been realised, and I think we were maybe feeding people on the wrong things. Because, if people were rationed in the amount of carbohydrate that they had, then they used to fill up more with fatty food, and that was considered to be acceptable. It's difficult to remember just when it was that the importance of fat in the diet, and coronary artery disease, and generalised atherosclerosis - which, I mean, is a huge problem in diabetes anyway - and there was a time when people suddenly thought "help, we are actually making our diabetic patients have more problems with vascular disease, because we're feeding them on the wrong diets". Because it was carbohydrates and blood sugar that had been the thing in the beginning. And going back, interestingly, to Professor Randle, he had early had this idea that it was... fatty acid cycle was something to do with diabetes. But I should think it was during my time at Dundee that we began to realise that we should not be concentrating completely on the carbohydrate on the diet, but thinking also about the amount of fat, and certainly saturated fat.

And tell me about getting your next job.

Well, the next job was always going to be a bit of a problem, because the move to consultant - and at that time, certainly, as a female - it was quite difficult to get a consultant post. I mean, people say there was no female discrimination. There clearly was. One job, I wasn't even short-listed for, and somebody in my class, who'd been much lower down the academic scale than me, he was interviewed for it. I said "well, I don't understand it"; he said "well, they didn't want a woman, that's why they didn't put you on the shortlist". Various other jobs I was interviewed for, and I didn't get, including one where they said "you'll be glad we didn't give you this job, some day, because you're much too good for it", and that's not something you want to be told when you've just not got a job that you wanted. And then - originally I had applied for every job in Scotland that was going - but the next year, I thought "well, I'll have to start looking at nice bits of England". I went to Chester for an interview; didn't get that job. The next one, I went to, was Gloucester, and I thought "well, I won't get this one either". There was somebody there from New Zealand - come all the way from New Zealand to be interviewed for this job. I thought "well, he's going to get it", which was fine, so I just interviewed completely naturally. One of the questions



I was asked was: why did I think there was discrimination against women in medicine? I said “well, you’re the men, you should know the answer”! And I was absolutely gob-smacked when they came and said I’d got the job. I think it was because they were looking for somebody to do big diabetic clinics, and I’d been in the habit of doing big diabetic clinics, and I don’t know that the others had been. Anyway, I got the job, and that was my move to Gloucester, which turned out to be a very nice part of England to live in, and the start of a very happy and productive consultant job. In fact, what I discovered, afterwards, that one of the consultants on the interview committee: his daughter was, at that stage, a final year medical student. And I think that that’s part of his reasoning for asking the question, and obviously being interested in seeing women making progress in medicine.

(9) What was treatment like for people with diabetes in Gloucester, in 1973?

Well, before I arrived - I mean, mine was actually a new appointment - it was the consultant clinical pathologist who had run the diabetic clinic, although he didn’t have beds, and I’m not sure how their care then went over to whichever consultant. But, of course, in those days, there were only three consultants doing the general take, so everybody looked after everything. It was much less specialised than now. But after I arrived, then the diabetics almost always came to me, and I certainly, obviously, did the diabetic clinic. I had two wards, at that time. The hospital was split between two sites in Gloucester. There was a new hospital that looked finished, when I went for my interview, but I think I worked there for nearly a year before we actually moved into it. When we moved into it, that made quite a big difference, because all the medical admissions were on one site. Before then, they had been split between two sites. But the casualty department was on the site where I worked, as the only consultant physician, so anything that came in through casualty that wasn’t fit to move to another hospital, we were virtually on take seven days a week. So, it was hard work, but again, it was satisfying, and they were my patients and I looked after them. I nearly got started on a disaster, because, I think within my first month there, we had a young girl admitted with diabetic ketosis. And, at that time, it was part of the conventional treatment of diabetic ketosis that they were given quite a lot of bicarb. And she developed cerebral oedema, which then became... later was reported as something that did happen, if you changed the pH too quickly. And at one stage, I thought she was going to die, and I thought “what a way to start as a new diabetic consultant, with my first patient with diabetic ketosis dying”, but fortunately she didn’t. But that was a bit of a shaking up. And after that, there were certainly several reports of people who had died, in exactly the same situation. And it did become modified how... we did still give them bicarb, but certainly not so much.

(10) What proportion of your work was with people with diabetes?

I would think, probably, about 30%. I mean, I did general medical outpatients and diabetic clinics, so I saw more - a bigger percentage, perhaps - of outpatients who were diabetics. But the patients that were admitted to the ward were mostly

patients who were admitted as an emergency, and so they were across the board, all kinds of cases. We didn't, initially, when I moved there, have an intensive care unit, but soon after... in fact, the day that the new hospital opened, the intensive care unit opened. And that same day, ironic... Because the new hospital was on the same site as I worked at, the... our patients didn't move into the tower block. They moved the ones from the other hospital first, and we were going to move a few weeks later. But on the morning that they opened, I had a patient collapsed on the ward, who went straight on to ITU - not a diabetic, as it happened. But if the ITU hadn't just happened to open that day, that patient would have died, who otherwise survived. So, things did change. And life was easier, once we were all on the same site, because we did, then, our one in three, as opposed to the fact that I had to cover for the other end, if patients came into the wrong place. So, life did get a bit easier. But it was still taking one in three of... every third day we were responsible for patients coming in with every condition, which to my mind was interesting and enjoyable. I'm not complaining about that; I enjoyed it. As we got more and more consultants, over the years that I was there, and more and more of the other bits got hived off, then I would probably be spending a slightly bigger percentage of my time looking after diabetics. But I also looked after all of the diabetics in the hospital, because at that... up until 1989, I didn't have a diabetic specialist nurse. So, diabetics who were admitted on the surgical wards, orthopaedic wards, I always went and looked after them myself. I trained all the new diabetics myself: taught them about diabetes, how to do their injections, and everything else. So, it was very much a one-man band thing, which was fun; I enjoyed it. And the bit of my work which I really got, I think, the most satisfaction out of was looking after the pregnant diabetics, because that was a sort of challenging situation. The outcome for pregnant diabetics is still not as good as for non-diabetics, but the better you get their control, the better the outcome is. And because it's a finite thing, even some of the naughty teenagers could be really very motivated to be compliant, while they were pregnant. And I got a tremendous amount of satisfaction out of that aspect of my work. And having done six months of obstetrics as a junior doctor, I had that bit of knowledge, which was useful.

(11) Were there many changes for pregnant women with diabetes, between 1973 and 1998, when you left?

Oh, yes. I think people increasingly recognised that the thing that would improve the outcome was for their control to be as good as it could be, and also, preferably, that we got their control excellent before they even conceived. It was a dream that you would have it excellent before they conceived, but we tried. The thing, of course, which then made it easier to get nearer to that was when it became possible for people to test their own blood sugar, because that way, then, they could aim for better control; we knew what was happening. And also, with the measurement of the haemoglobin A1s, that you could know what it had been like over a period of time, rather than just a spot: "right, they're at the clinic today, and their blood sugar is such and such". And we were able to aim for tighter control. Because, in the old days, before people could measure their

own blood glucose - when you were treating them on urine sugars, or that's what they could only use themselves - then they had no way of knowing that they were... the difference between what we would call "as near normal as possible", without being hypo. Whereas, with measurement of blood glucose, then at least you could get closer to ideal control, without pushing people into hypos all the time, which is obviously not desirable either. So, I think that the modern technology made it easier to aim for tighter control. It didn't necessarily meant it happened, and especially in the teenagers. I mean, they weren't very good at control at the best of times, but they did try. But quite often, they might be pregnant before they even thought about it, so it was never going to be a perfect situation. But pregnancy was a great motivator to them, as well as to me, and sometimes you could really establish a good relationship with a rather wayward diabetic pregnant youngster. And sometimes, it actually carried on after they were pregnant, that they suddenly realised that looking after their diabetes properly, and being better controlled, was worthwhile. And it was a very good way of forming a relationship with the diabetic, because they were just so much more motivated when there was something else involved than just themselves. And I think it was really a part of my work that I found the most satisfying. But even in the non-pregnant situation, you could aim for much better control, once diabetics could measure their own blood sugars. They vary about how well they did it, but it was certainly a big help.

(12) In general, how much did people do what you suggested they did?

Well, that's about as how long is a piece of string. I mean, a lot of people would do what you asked them to do. A lot of people would try to do what you asked them to do. I think if you asked people to be too tightly controlled, you might just antagonise them, and they give up. So, I think that you've got to give a bit of leeway. There's no doubt that people would... I think on the blood testing, probably less so than on the... When we used to get them to bring along their urine tests to clinic, I mean, people would come along with test sheets that was blue, blue, blue; that's negative all the time. And you knew fine that wasn't true. I think people were probably less inclined to falsify if they were writing down their blood glucose results, although maybe that's not true either. But I think if they took the trouble to... maybe they weren't even doing it, maybe they were just writing the results down. But I think the majority of people did want to look after themselves, and at least if they didn't do it, they didn't falsify the results. Once we could measure haemoglobin A1c, then we had a measure of what had been happening over the last two or three months anyway, so you could say "well, look, I didn't believe your results before; now I know that they're not right"! But, most people do want to look after their health, and people with diabetes are worried about long-term complications. And it is a bit of a moot point of how much you talk about complications, particularly with young people. You're trying to motivate people by saying "look, if you stick to your diet, if you do your insulin, if you do everything else, you may not get heart attacks, you may not have your legs fall off, you may not go blind". But, I well remember: I used to go - I went twice, I think - there was a... one of the insulin companies

helped to fund holidays for diabetic teenagers, up in Scotland, near Loch Tay. And it was a super holiday. They did all sorts of activities - a lot of mountain walking and sailing and canoeing - and, obviously, they had to learn how to cope with their diabetes during these sort of situations. The people who went - who were invited to go on these holidays - were already selected, because the idea was that places would send a couple of motivated teenagers who would learn this, and they would then come back and talk to the local youth group, and try and pass these ideas on to other people. So, they were self-selected, but also selected by the firms. But there was one young lad there, and I think the people who were running the course were absolutely horrified when this well-motivated lad said "well, I might as well enjoy myself while I'm young, because I'm going to die when I'm thirty five from a coronary, anyway". And, you know, that was such a negative thing in someone who seemed to be selected. So, it's a difficult point, how far you push complications to young people as, you know, "if you don't do what I ask you now, you may have all these complications when they're older", as opposed to being positive that, you know, "why don't you control your diabetes, so that you're well now, as well as in the future". I think there is very good evidence that the better control is, the less likely they are to get complications. But you have to be, I think, careful just how far you push that, to make people do things that you want them to do.

(13) Can you talk about the treatment of complications, over the years?

Well, obviously, the treatment of complications has really enormously changed. Things that... retinopathy, there was no treatment for at all, when I started, and now, with laser treatment, there is a very good chance of picking it up at the early stages, and preventing people from going blind. So, it made retinal-screening increasingly more important, whereas before, if people had retinopathy, well, it was very sad, but you couldn't do anything about it. So, screening of the retina for complications became increasingly an important thing to do regularly. And in Gloucester, I got involved in actually doing a clinic in the eye department, where I would see the patients, and could immediately refer them on to the eye people, if they had a problem. Renal situation totally changed, as well. I mean, when renal dialysis started, diabetics didn't even have a chance of getting on the programme. There wasn't enough dialysis available for everybody who could be helped by it, and because the diabetic's life expectancy was poorer anyway, and treating them with dialysis was more complicated, they had very little chance of being taken on. Whereas, by the time I finished, diabetics with renal problems were accepted for dialysis on the same basis as everybody else. Though, I do remember the consultant who ran the dialysis centre saying "you know, we don't seem to get so many diabetics coming through as we should do". And I think the reason for that was that quite a number of them were dying of coronaries before their renal failure got bad enough. Because, when you talk about complication of diabetes, you think about neuropathy, renal failure and retinopathy. But the big complication, which doesn't tend to come as a diabetic complication, is coronary artery disease, and that's what most diabetics die of, even in this day and age. But again, that, now, they have better chances, because we're no

longer feeding them on these fatty diets, which makes their coronary arteries get bad, and they have the same chance of being taken on for bypass graphs. There is no longer a sort of downside, that if you've got diabetes, your complications won't get treated, as if you... the same as you've got non-diabetes. So, that is better. Treatment of vascular disease in the legs, that is much improved, with bypasses and angioplasties, and they have the same chance as that. I think the one situation, in which probably there hasn't been any major advance - except if you could improve their control, maybe they don't get it so much - is diabetic neuropathy, because there is still no effective treatment for diabetic neuropathy. And that's one of the things that, along with the vascular problems, can lead to amputations, but also lead to a lot of pain and distress. And I think that, certainly, is the one complication from which there has been very little change or improvement in management, over the years.

(14) Can you talk about how much help you got, in the treatment of people with diabetes, in Gloucester?

Well, in the beginning, when I started, I think there was me and an SHO doing the clinic. And then, I had a number of... I think I had two GP clinical assistants; one in one clinic and one in the other. And that was very useful, because they not only were helping me in the clinic, but they were improving their own knowledge of diabetes. And about that time, more and more GPs were actually beginning to do diabetic clinics in their surgeries, and I used to quite often talk to the local GPs about diabetes. And I, once or twice, would go out and visit their own clinics that they were running in the surgeries, and help make sure that they were going along the way that we thought they ought to be going. And then, of course, the huge amazing difference to my life was when I finally got a diabetic nurse, which was in 1989: Jan Haddon came. She had actually been a diabetic nurse in Hereford for, I think she said nine years, before she came to me, and she was very experienced and knew what she was doing. And suddenly, I didn't have to be going round all the wards, all the time, looking at the diabetics, and teaching - on all the new ones - teaching them, myself, what to do, how to do their blood tests, and all these things. So, my life suddenly became extremely much easier. Jan was a huge help, and I had her as a diabetic specialist nurse all the time, until I retired. In fact, she had an assistant by the time I retired, so there were two of them, which made a huge difference to my work-load. And I'm sure it made a huge difference to the patients, because, although I enjoyed teaching the new patients, and in a way I missed it when I didn't do it, but there was a limited amount of time that I could spend. Whereas, she could be going round there and seeing them much more frequently, and she would go and see people at home after they'd gone home; they had her phone number after they went home. So, the back-up was just so much better, that the involvement of diabetic nurses was a major advance. And some of the GP practices now have diabetic specialist nurses. Not of the level of skill, obviously, that Jan was, but they're practice nurses. Jan used to run regular sessions to teach the practice nurses, so that she was passing her expertise further out into the community. And I think there is much more

knowledge out there, now. But she was always available to them on the phone, which is a huge confidence booster. I mean, not so much the knowledge that they get when they phone, or the answer to the questions, but the just very fact that there is somebody that they can phone and that they can ask, then that makes life so much easier for people to cope with.

Was there a clear demarcation line between what a doctor does and a nurse?

I think that the role of the nurse has increasingly changed to be more like the doctor. And Jan and I worked extremely closely together, and we never had any demarcation disputes. If she had something that she wasn't sure about, she always rang me. If I had something that I thought she could deal with better than me, I would ring her, and we worked very much as a team. I don't know that that always happens. But I think that across the board, now, nurses are doing more and more things. In fact, the biggest problem, I think, is now finding people at the lower level, who are willing to do the basic nursing stuff. And I think that's one of the ways where patients are missing out, that nurses are becoming increasingly more specialised and academic. And that is good, but somebody still needs to do the basic things, like making sure the patients are able to eat their food, and making sure that their pressure sores are being treated. And somehow, or other, I think we've lost that basic nursing skills, by encouraging the nurses upwards to being nearer doctors. We've now had to bring in a lower grade of people - nursing assistants - to do the things that nurses used to do.

(15) Can you talk about how you were affected - if you were affected - by changes in the National Health Service?

Well, I think there became increasingly more management. When I started, there was one manager in one hospital, and one in the other, and they each had their secretaries. And now, goodness knows how many there are. And it's all target driven. I think that's the biggest problem: that the government sets targets, and we've got to do this and do the next thing, and clear everybody in four hours. And although these targets are maybe desirable on paper, the costs of them are something that managers don't really have time to think about. And aiming for 90% or nearly 100% bed occupancy means that the minute somebody's out of bed, you've got to put another patient in. And this is one of the problems why we have trouble with infections, because there isn't time to allow things to be cleaned properly. They've taken the domestics off the wards, so there is no longer the team spirit that everybody is working together on that ward. And the drive for efficiency is just taking over. And I know people who've turned up to be admitted for some cold procedure, and they're sitting there waiting for the person to get out of the bed to go home, so that they could get into it. And this doesn't really allow for any decent amount of time for keeping the place clean and tidy. Doctors are told that they've got to do this within a certain time span, and that's not also, necessarily, in the patients' best interests. We could make the turnover faster. They can't seem to realise that in a factory, if you produce more things, yes, you make more profit. In a hospital, if you treat more

patients, it costs more money. If you have ten patients in that bed in the course of a fortnight, it will have cost a lot more money than if you've had two patients in that bed in the course of a fortnight, because it's the first forty eight hours that somebody's in bed, in the hospital, that all the tests and everything else is being done. And although the cost per patient may go down, the total cost to the hospital goes up. And that's why hospitals are struggling to make their ends meet.

You said that at first, there was just one manager on one site in Gloucester, and one on the other site, with a secretary each. How did they manage?

Well, I think we all just got on and did our work, and there wasn't any managing needed. But as soon as you have ten managers, then they've got to have meetings, so that they discuss with one another what they're doing, and decide who's doing this and who's doing the next thing. And all the time that they're spending at meetings, is time that could have been spent better doing something else, like managing. I mean, apart from the managers having meetings with one another, and taking up time - I mean, I remember one occasion when all of the senior medical staff in the hospital, and all the managers, we had a whole half day set aside to discuss what our mission statement was going to be. And the amount of medical time cost of the cost of that was fantastic, and it was a complete waste of time.

Can you remember anything about what your mission statement was?

I can't even remember what the mission statement was, at the end of the day!

When was this?

I would think it was about '93, '94, when everybody had to have mission statements.

(16) And finally, would you like to reflect on forty years in medicine, from the late '50s to the late '90s?

Well, obviously, there have been huge, huge changes over that time; a complete change from sort of, probably, medicine by instinct, to medicine where everything has got to be measured down to the last T, and instinct maybe goes out of the window. I think the outcome for a lot of diseases, now, is just totally different. People live longer, live healthier, we have more effective treatments. Sometimes, I think, slightly, in the process, we've lost the human touch. Patients are numbers, targets to be treated, and I am extremely glad that I was a doctor in the days when it wasn't all scientific and tests, and that you had a good relationship with patients. Not saying that people don't have a good relationship with patients now, but there is so much pressure; you're hurried to do this and do this, and meet the targets. And I enjoyed my career, and I don't think I would enjoy it to be back there now. One of the nicest things that a patient ever said to me was one of my rather naughty diabetics - not terribly co-operative, but I'd helped her through two pregnancies - and the day I was leaving, she came up with a bunch of flowers and said "thank you for being my friend, as well as my doctor".

And then, just as a postscript, you forgot to mention the new clinic that you had.

Yes, all my working life, I was sort of camped in one outpatients' after another. And then, there was going to be money raised to build a new haematology clinic, for the leukaemic patients and similar conditions. And they raised quite a lot of money for it, and there was then the question of really, was it justifiable to have this clinic, just for haematology. And we were able to take it over as a diabetic clinic, as well. And we had the use of it two afternoons a week, and Jan Haddon, my diabetic nurse, had a permanent office there. So, for the first time in my working life, in the early '90s, we actually had a proper diabetic clinic.