The Whistle-Blower in Medicine

by

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The Chairman of the meeting was The Honourable Justice
Murray Kellam.

In 1988 I took up my post as consultant cardiac surgeon at the Bristol Royal Infirmary. Unfortunately, the problems that arose in Bristol were manifest from a very early time, and the mortality rates and the complication rates for paediatric cardiac surgery in Bristol led me to write to the Chief Executive of the hospital in less than two years of taking up my consultant post. The reason that I had to write to the CEO was because I hadn't really had much success in dealing with any of my consultant colleagues.

In 1992, there still having been very little progress, I applied for a post in a hospital outside Bristol, because I wasn't prepared to continue as a consultant working in a service that was providing a level of mortality and morbidity as the one in Bristol. In order to do that, I needed referees, and I went to my Professor of Anaesthesia who was the President Elect of the Royal College of Anaesthetists and asked him for a reference for a job in Oxford, and he said, "I will provide you with a reference, but if you don't get the job, will you collect data on paediatric cardiac surgery? I will then act on that data on your behalf." I didn't get the post in Oxford and so Andy Black who was another anaesthetist and I set about collecting the data on the paediatric cardiac surgery service, and by March 1993 that data was available.

The data that we were now looking at was an initial impression of a high mortality rate. This came from my experience in the operating room, from logbooks that I had previously been keeping which just logged cases, but when in Bristol whilst I was logging cases, I also noted whether they survived. In 1990 the audit meeting also confirmed the impression that there was a high mortality rate in Bristol, and that we had tried to do something about it, and that partially succeeded. The annual report for the unit for 1990 to 1991 demonstrated, taking average cases, that the mortality in Bristol was twice that for the rest of the country.

The data that appeared in 1993 that Dr Black and I had collected at the behest of the Professor of Anaesthesia indicated that there were even more serious problems than this. For tetralogy of Fallot, which is a particular operation on children with congenital cardiac disease and for AV canals the mortality rate in Bristol was statistically significantly worse than that for the rest of the country. We looked at a lot of other operations, because we wanted to see if there were things that we did better in Bristol, but there was no evidence that there were any operations that were done better than the national average in Bristol.

As time was progressing, Mr Wisheart, who was then the Senior Paediatric Cardiac Surgeon became the Director of Cardiac Surgery,

and he then became the chairman of the hospital medical committee, the committee that represented all the hospital consultants in the hospital. In March 1993, Professor Pryce Roberts rang the Chief Executive of the hospital on the basis of the data that we had provided him, and explained that there was a serious problem in the paediatric cardiac surgery unit. In May of that year, Professor Angelini, who was a new professor of cardiac surgery, arrived and he also wrote to and spoke to Mr Wisheart and the Chief Executive of the hospital, and in fact in November of that year, within six months of his appointment, he took the unusual step of writing to the chairman of the hospital board explaining that there was indeed a serious problem in the hospital's paediatric cardiac surgery unit.

The data that was now available to us was that for Mr Dhasmana. The data was that his neonatal arterial switch mortality was nine children dead out of 13. One of the objections of the surgeons at the General Medical Council inquiry to the data that was presented was that the numbers are very small. Statistical analysis is very difficult, but comparisons have to be made here. In Great Ormond Street in London, Mr de Leval had undertaken 58 operations with one death; in Birmingham, Mr Braun, who had trained at the Royal Children's Hospital here in Melbourne, had undertaken 200 operations with only one death; and I think while it is possible to raise the spectre of insufficient statistical analysis, in fact, these figures don't need statistical analysis. His switch mortality for children over 30 days of age was 50 per cent mortality, and the operations should have been safer than the neonatal operations, so his operative mortality rate should have been less than one in 200, so the figures in a way were actually speaking for themselves, they didn't need further analysis. For Mr Wisheart, his AV canal mortality was six out of seven. The national average survival was 80 per cent, so that his mortality rate should have been of the order of 20 per cent, and his mortality rate for the switch operation was also high.

The unit's mortality rate for truncus arteriosis which again should have been of the order of 20 per cent was 11 out of 15. For Mr Wisheart the mortality rate was nine out of 11, and nobody knows what happened to the other two children. One we think is brain damaged, and one is known to be brain damaged. So for this operation, there were no intact survivors. Exactly at what point that becomes an operation that you shouldn't be undertaking is something that we can discuss later.

I was so concerned at this time, that by June 1993, I was trying to contact as many people as I could to explain my concerns to them. I contacted the Professor of Surgery, and the reason for this is that there

tends to be a definition of roles within the medical profession. It is very difficult for a surgeon to be given orders by an anaesthetist. It is very difficult for a surgeon to tell an anaesthetist what to do. I believed that by putting the information into the surgical sphere and asking the surgeons to deal with it amongst themselves quietly in a back room without actually causing any adverse publicity and without them feeling that the anaesthetists were putting them under pressure might have produced some change. Unfortunately, the operations proceeded, and the backdrop to all of these dates is that there was a continuous rolling mortality rate for operations being undertaken in the unit.

In December 1993, I went to the Department of Health and in the same month, Professor Farndon who was the Professor of Surgery, also went to the Department of Health, in fact he spoke to them the day after I did. We were told that there was very little that we could do; we could activate the General Medical Council's inquiry procedure, but in those days the General Medical Council was only allowed to investigate doctors if they considered that the doctor either had a psychiatric disease, was addicted to alcohol, or was addicted to other drugs. There was no remit for looking at performance.

The other data that was accumulating was that these patients were not just suffering a higher mortality rate, but they were suffering more complications. The most important one is probably brain damage. The brain damage rate for paediatric cardiac surgery has been quoted as between zero and five per cent. In Bristol we think that there are a large number of children who have suffered permanent brain damage who have not been counted in the figures because they are technically successes, and unfortunately they are going to be very expensive failures when they all begin to claim. Other failures did occur, and one of the comments that I have heard from the unit since I left, is that the children are still dying from the consequences of their early curative operations, and this is something that we haven't begun to look at. The late mortality rate is still much higher than it should be.

In June 1994, I was able to recruit six of my cardiac anaesthetic colleagues to write to the Director of Anaesthesia and ask for a review of the switch program. We felt that this was very, very important, and we wanted an open and thorough review. In July of the same year, I provided the same results to the Department of Health because I felt that it was important that they were armed with the figures in dealing with any criticisms from Bristol when they took any action.

In August 1994, Professor Angelini was asked by the Department of Health to produce a report on the Bristol Royal Infirmary, and he did so.

The next month, the Trust agreed with the report, and we thought that the problem had been solved in-house, quietly with no further publicity, and in many ways that would have been a very optimal outcome for everybody concerned. Unfortunately, in December of that year, another arterial switch operation was listed for that January, and I think probably in one of the worst Christmases I've had, Gianni Angelini and I and everybody we knew, were told about the concerns that we had for the safety of this child. On the day before the operation was scheduled a multi-disciplinary meeting of cardiac anaesthetists, paediatric cardiologists, and cardiac surgeons reviewed the total record for the arterial switch operation in Bristol. This was the first time that type of review had occurred. I was put under a lot of pressure at that meeting to agree that the operation should go ahead, but at the end it was minuted that I was in sole opposition to this procedure occurring. Mr Dhasmana then went up to the ward, he spoke to the parents, he didn't mention the meeting, he took the consent from the parents, the operation went ahead the next day, and the child died on the operating table. I think professionally for me, that was probably one of the lowest points in my life, and that day I spent away from the hospital trying desperately not to think of what was going on in the cardiac surgery unit.

The Department of Health, having been advised of the risk to the patient, and having contacted the Chief Executive and asked him to ensure that the operation did not go ahead, then advised the Trust that they should now produce a report by two outside experts into paediatric cardiac surgery. Mark de Leval, a Great Ormond Street paediatric cardiac surgeon, and Stewart Hunter, a cardiologist from Newcastle, came down to the Trust and spent a day taking evidence before they produced their report. The report then came back as a very secret document, it was kept in a safe in the Trust headquarters, and you could only read it in the presence of the headmaster. You weren't allowed to take cameras or any other copying devices into the room when you went in with the headmaster to read the report.

Unfortunately, the Chief Executive of the Trust was away when the report was produced, and we all agreed the contents of the report identified a high risk surgeon, and identified solutions. When the Chief Executive returned, he decided that the first report was actually a working document and he was going to produce a second, modified report, in which the concerns of the anaesthetic department had raised the anxiety levels in the surgeons to the extent that they were unable to operate safely. This was the content of the second report which I felt very, very unhappy about, and at that point I considered going to a

local television station to say, "The report which you are going to see criticises me, but I don't believe that that criticism is justified."

After that, the story reached the newspapers, and we know that there was a lot more publicity surrounding the history of the unit. Even then, Mr Wisheart continued to operate on children as late as May 1995. In fact 7 May which was the date of his last fatal operation, was the day that Ashpur Wadi, the new paediatric cardiac surgeon who also trained at the Children's Hospital here in Melbourne, took up his appointment. Even then, the hospital medical committee in September of that year was prepared to pass a motion supporting their current hospital medical director and the chairman of the hospital medical committee. At that point, Mr Wisheart did resign from the audit committee of the hospital.

The aftermath of these events has been that the GMC were encouraged to hold an inquiry. They had received about 20 complaints from parents, but they have only ever received one complaint from a doctor about what happened in the Bristol Royal Infirmary, and I only felt secure in writing to the GMC when I had achieved an appointment in another country. The GMC inquiry was the longest in the history of the GMC, and it cost over $7.5 million. Since the GMC inquiry, over 200 parents have come forward with cases of children that died in the Bristol Royal Infirmary. We have seen modifications of some of the administrative procedures around medical accountability in hospitals in the United Kingdom, and chief executive officers have now been given a legal responsibility for the quality as well as the cost of the services that they run.

The BMA has also produced guidelines for practice for medical practitioners, and my hospital, the Bristol Royal Infirmary, has now written in a whistle blowing contract; you are in breach of contract in Bristol if you do not report senior colleagues, including the medical director of the hospital, if you believe that their practice is substandard. I think that clause, ten years earlier, would have saved an awful lot of headache and heartache.

The Disciplinary Committee Hearing ran from 1997 to 1998, and at the end of that, the government ordered a public inquiry which started this week. It is expected to cost about £40 million and it is going to last in excess of 18 months. There are currently over a 100 civil cases outstanding against the hospital Trust. The Avon and Somerset constabulary have looked at the evidence that was provided to the GMC inquiry to decide whether criminal charges should be taken up against the doctors involved in that inquiry, and as I explained earlier, there

have been changes to the regulations, called Clinical Governance, and also revalidation procedures for doctors as they continue in practice.

For me, there are still a lot of unresolved issues in this story. Exactly what was the problem in Bristol? Was it a failure of audit; was it a failure of surgical practice; was it a failure of administration; was it medical, legal, political or administrative? Who should have implemented the solution; who should have agreed the solution; and what was the correct solution? And my biggest concern, and I suspect the concern of all of us, certainly in the medical profession, and I'm sure in the legal profession, is that we must make sure this never happens again.

QUESTION: MR CONNOR. I would like to ask the doctor some questions which the lawyers would like to hear answered. The professional conduct committee appears to have consisted of seven members and a legal assessor. I'd like to know whether this was manageable or unmanageable. It seems that you could only have a hearing if eight people were available. There were 65 sitting days over a period of about 35 weeks, and that rather suggests that the hearings were not continuous, and I wondered whether that caused any problems. What was the role of the legal assessor? Was the legal assessor a judge or a barrister or a solicitor? Were there counsel assisting the committee? Who presented the evidence against the doctors? Were the doctors represented by senior or junior counsel? Did the committee produce a decision in writing, and was it unanimous or were there dissents? How long after the hearings concluded was the decision handed down? Were there questions concerning the admissibility of evidence and who decided those questions and what is your general opinion about the effectiveness of the procedure?

DR BOLSIN. The disciplinary committee was set up under the statutes of the General Medical Council, which is slightly different I think, in the UK from here, but it is a statutory body which receives its authority through an Act of Parliament. The disciplinary committee was chaired by Sir Donald Irvine who is the President of the General Medical Council, and they have lay members and medically qualified members, and then also a QC who is the legal assessor who advises the committee on points of law.

Everybody was legally represented. There was senior and junior counsel representing each of the defendants and also presenting information on behalf of the complainants who were the parents and myself. I think probably the most interesting feature of the proceedings and what happened, was that the two surgeons didn't appeal the

decision. Only the Chief Executive of the Trust appealed the decision of the disciplinary committee, and that was on the basis that he was acting as an administrator, not as a doctor, and that appeal is in front of the Privy Council at the moment. That decision is expected in the next few weeks, I think.

QUESTION: MS JOCKEL. I'm a lawyer. You have obviously put your career at risk, and it's a very unfortunate aspect of anyone speaking out. Having said that, what you raise is a very difficult issue for all professionals, not only in medicine or law. How does one approach the fact that one of our colleagues may indeed be incompetent and not capable of fulfilling their role adequately? What can we learn from your experience? The dilemma is that we all know that we have incompetent colleagues and yet none of us have enough evidence or indeed courage to do anything about it. Further, the system encourages us to resolve these problems in-house, sometimes in a way which is not very satisfactory, to ensure that no further harm is caused to the innocent.

DR BOLSIN. If I can just address the issue of courage. When you're doing something that has to be done and it's the right thing, it doesn't seem like a brave thing at the time, so for me, courage didn't really come into it. The other thing is that it's not something you do on your own, and it's very much a team effort, and I couldn't have done it without the family's support.

In terms of monitoring performance of complex procedures in paediatric cardiac surgery, there are techniques that we can use to look at the outcome that we would expect on the basis of previous performance and other centres' performance. We can then decide whether the centre that we're looking at, or the individual that we're looking at, is achieving what we would expect for that individual. In doing that in medicine we take into consideration risk factors about the patient's condition, about the time of presentation, about what medications they're on and about how seriously ill they are at the time of the operation. All of those risk factors can be statistically analysed to produce a weighted effect to achieve an overall risk for that patient. The fact that we can do it for one of our most complex medical interventions - cardiac surgery - means that we can also do it for a lot of our simpler interventions. I suspect that if a group of lawyers were to sit down and look at the expected outcomes and the achieved outcomes from legal interventions, either simple or complex, then they could produce a similar list of factors that were either present and contributed to an

adverse outcome, or were absent and helped achieve a good outcome. By collecting that data and making sure that people are approaching the expected outcome as opposed to achieving what Bristol was doing, which was achieving unexpected outcomes for children of relatively low risk. I think it can be done.

QUESTION: MR HAYES. I have listened to this rather extraordinary, serious account of surgical mis-results in Bristol. England fathered our own college here in Australia, and I would have thought the surgical audit system that we've been running in Australia for the last five years at least, with peer review, and annual auditory turns for each surgeon, would be an automatic filtering process to draw attention to such bad results in any particular case. By way of encouragement we can't be complacent, but it seems to be most unlikely that any such circumstances would occur here in Victoria or in Australia. Do you have any comment on those matters?

DR BOLSIN. I think Bristol was a very unusual case, and in a way it's one of the things that made it easier for me to address. If it had just been a slightly longer operation scar or a few extra days in hospital, then I don't think I'd be talking to you here this evening. It was because the worst outcome was being achieved, and it was being achieved in a lot of cases where it shouldn't have been achieved, that I was actually forced to stand up.

In Australia there is a much more robust peer review. Surgeons and their medical colleagues are very much more prepared to look critically at their work and examine it with their colleagues, and make decisions on that basis. At the same time, the surgeons that I have spoken to, and I have given this talk to surgeons at other hospitals, are also very aware of the possibility that something like this - not necessarily as bad as this might be going on in Australia. They are acutely aware of the fact that they have to bring in a systematic approach to make sure that it doesn't happen in Australia, not necessarily in cardiac surgery, but in other specialties as well, and there are some very good efforts being made around the country to ensure that it doesn't happen again.

There is also a slight cultural approach, and I've given this talk as I say, in New South Wales and in Perth and in Victoria. I have never had an Australian who has come up to me and said, "Well, Steve, I really do think you should have just kept quiet for a bit longer, they were obviously going to repair the process and everything was going to be all right." Everybody has come up to me and said, "You did exactly the right thing." A colleague of the cardiac surgeon I worked

with in Geelong, when he came back from a European Cardiac Surgery Meeting, phoned him from the airport when he landed in Melbourne, and said, "David, I'm ringing you from the airport, I've got to tell you you're working with the least popular cardiac anaesthetist in Europe." For me that was the cultural difference between Australia, the New World, and the Old World. What I did in the UK was beyond the pale, it was unthinkable; in Australia, it was what everybody was doing anyway, it was part of robust peer review.

QUESTION: MR SUMMERS. I congratulate you. I can't imagine the bravery that was required under the circumstances to become a whistle blower. The role of a whistle blower, I'm sure that everybody knows, is extremely difficult. As an anaesthetist, how much blame was put on to the anaesthetists and what were the standards across the rest of that hospital?

DR BOLSIN. I don't think that the anaesthetists were specifically blamed. I think that when it became apparent that they were going to have to explain results in a certain way, then they wanted to share the blame between anaesthetists and surgeons. The standards in other services were, as far as I can tell, pretty good. I don't think there were any complaints about other services. Having said that, there hadn't been any cardiac surgery until relatively recently. I think the problem was in the paediatric cardiac surgery department. I suppose I need to say that Mr Wisheart, irrespective of what happened in paediatric cardiac surgery, after the GMC inquiry, was still employed as an adult cardiac surgeon by the hospital. He only resigned when a report was produced by the hospital which demonstrated that his risk-adjusted mortality, which allows for the seriousness of the illness of the patients, for adult cardiac surgery was four times that of his colleagues in Bristol. He was in an extremely powerful position in the hospital. He was the Director of Cardiac Surgery; he was the chairman of the hospital medical committee; he was the chairman of the hospital audit committee; and he was the medical director of the Trust. So whatever avenue you went through, whether it was within the hospital through the audit committee or the hospital medical committee, the data went through Mr Wisheart to the Trust board, and even when it got to the Trust board, he was sitting on the Trust board and could say, "Don't worry, this is a turbulent anaesthetist." Even when the Department of Health came to the Chief Executive, he could then go to the Chief Executive and say, "Don't worry, this is something we've known about for some time, and it's all being dealt with." It's a question of this Gothic tale of power being

kept in very small numbers of hands and being used to sustain a practice which was obviously unacceptable.

QUESTION: MR RITCHIE. Doug Ritchie, orthopaedic surgeon. I retired about five years ago and I can speak freely. In the teaching hospitals in this country, this could not happen. Each week we are exposed to a ward round, everybody attends an X-ray session and everybody attends morbidity meetings regularly. The one area that concerns me are those people who have opted out of the public hospital/ teaching hospital system, and are practising entirely in private hospitals which are not monitored. I wondered how we could cope with this problem.

DR BOLSIN. I think that we have to roll out the same processes that we develop in public hospital practice to the private sector. In the UK, some of the private providers are actually asking for data on outcomes from their physicians and their surgeons in order to ensure that there is no disparity between practice in the two services. But for me it is a professional responsibility, and I think that the good members of the profession have an obligation to make sure that everybody is participating in the sort of data collection which will ensure that quality is high wherever you have your operation or your medical consultation.

QUESTION: DR DOWLING. I'm a heart specialist in an open heart surgical unit, but not a surgeon, and I feel embarrassed that my cardiology colleagues, the physicians on the heart side, who sent the patients to the surgeons to be operated on, did not act a lot earlier in just not sending any of these children to those particular surgeons. I find it inconceivable that they didn't do something very much earlier or, after all this happened, quietly resign. Could you please comment?

DR BOLSIN. I think there are two points there. One is the medical point. In 1982, which is even before the date of public inquiry which commenced in 1984, the paediatric cardiologists in Plymouth, who should have been referring to Bristol, decided unilaterally, to send all their cases to Southampton. The reason we suspect is that they were concerned about the high mortality in Bristol, so some cardiologists were doing what you consider to be the right thing.

Unfortunately, and this leads to a legal engagement, the paediatric cardiologist and the paediatric cardiac surgeons were being funded by a system which gave them a million pounds a year and latterly two million pounds a year to run their paediatric cardiac surgery service. Had they stopped referring patients to their service, they would have lost the money. The solicitors are now very actively looking at the

lost the money. The solicitors are now very actively looking at the possibility that the compensation that the parents should be getting isn't just the seven and a half thousand pounds for the death of a child, but ought to include aggravated or punitive damages because there was a pecuniary interest behind the continuing of the service. Under those circumstances, when you are into punitive damage, there is no top limit, so if you consider 200 cases of children who have died unnecessarily in a unit that was gaining pecuniary advantage from continuing, then the top amount for the compensation suddenly blows out enormously.

QUESTION: MS HARTLEY. There are two possible sources of solution that I wanted to ask you about. The first is the parents. Why were parents not jumping up and down with the deaths of their children and demanding some form of action much earlier given the numbers involved and do you see that there is a difference in consumer activity here, as distinct from England, and is that part of the explanation? The second legal process that I wonder about is the coronial process. Why were there not coronial inquests into these deaths, and if there were, why wasn't this pattern of problems picked up earlier through the legal system?

DR BOLSIN. If I could deal with the parents' question first, and this is again is another interesting legal problem. The parents were often quoted the national average mortality, not the unit's own mortality. This is why the Avon and Somerset constabulary are involved in the case. The lawyers acting for the families are saying that they weren't fully informed of the results of the unit, they were only informed of the national average results, and as we saw for the truncus arteriosis operation, they were the converse. In Bristol, 80 per cent died, and the parents were quoted 80 per cent survival. Now, the lawyers are saying that's not informed consent. If you operate on somebody without informed consent, then that is battery or assault, and if they die within a year and a day, then it's manslaughter, so there is the possibility of these operations all having been carried out without proper informed consent.

Having said that, the parents were very well informed about the potential risks; they were told that there was a 20 per cent risk of dying, or whatever the national average risk was, and then they were told their child was one of the 20 per cent. There were no counselling or grieving or support groups where they could get together and say, "Goodness, there's more of us here than we would have expected." They were very much kept apart and kept out of the system.

The second question was about the coronial form of inquiry. There were coroner's inquests, and I think the coroner was given the same information as the parents, which was, "Well, these are difficult operations. Yes, we do have mortality, you have to expect it with these very sick children." I don't think the coroner was informed enough to be able, on a case by case basis, to begin to contract records in which he could say, "Actually, I shouldn't be expecting to see this many cases."

I will tell you a story about a friend of mine who works in Ballarat now as an anaesthetist. He and I were doing some work into adult outcomes, and it meant going into the mortuary and finding the records of the patients to find out whether they'd survived or if they were dead, in the mortuary. He went in to look for some adult case notes one evening, and it was a very, dark, damp, stony, echoing corridor, and he met the mortician who looked suitably Eastern European, but was actually a west country man. He said, "I've come to look for the adult cardiac surgery patients' notes", and the mortician said, "Doctor, you're only interested in them adults dying. What about all these children over here?" He had three paediatric cardiac children post-operatively, and he was concerned, because he was getting more than he thought he should have. The coroner perhaps should have been concerned, because maybe he was seeing more than he should have, but the figures weren't available. Even now the figures are disputed as being statistically not valid or not analysable.

QUESTION: PROFESSOR McDERMOTT. Frank McDermott, general surgeon. Again, congratulations for turning the lights on in Bristol. I have a question and a comment. The question is were these deaths entirely due to surgical technical problems, or related to pre-operative care and post-operative care? In regard to Victoria, we're facing a problem here of not just doctor inadequacies or doctor failures which you demonstrated in Bristol, but system failure. The Consultant Committee on Road Traffic Fatalities in Victoria which has been meeting since 1992, a two panel committee, each of 12 Melbourne specialists, has examined the clinical and emergency management of 500 patients who, having had a road crash, were alive on arrival of the ambulance services. In our assessment, we found that the average number of problems - deficiencies in treatment - is ten per patient, half of which - five - have contributed to the patient's death. These problems are very much due to system inadequacies, that is the patient doesn't have adequate reception at the hospital. They are seen by junior staff who are inexperienced, and a cascade of errors follows in

the priority of treatment. We found that five per cent of the deaths are definitely preventable and a further 32 per cent potentially preventable. Victoria is presently trying to address this, and the address is towards the system.

DR BOLSIN. In terms of whether the results were due to surgical incompetence or not, I am not sure that we necessarily know exactly what the cause was. We know that there were two sites - one for open heart surgery and one for closed heart surgery - and that may have contributed to some of the deaths. Having said that, the operations took a long time, and that the patients spent a long time on the cardiopulmonary bypass machine. We know that for operations that take a long time with a long bypass time, the outcomes are uniformly worse than if the operations are done quickly and speedily, and we think that the lack of experience of the surgeons, combined with possibly a lack of technical ability, may well have been what contributed to the deaths. It is difficult to say much more until there has been a more thorough inquiry into all of them, but we did look at bypass times in the data that Andy Black and I kept. There is no national comparative for the length of operational bypass time - but we did ask other units, and they did say that they would not have expected the operations to have taken that long, and they would have thought that there were inherent problems in operating times of that length.

The other comments that I have been exposed to, was first, one of the anaesthetists now working with Mr. Dhasmana who is reoperating on a lot of these children as they come up for subsequent surgery, has told me that they sometimes cannot recognise the anatomy as it was described in the operative notes, and they are not sure what the understanding of the surgeon was in making the notes that he did, or doing the operation that he did. Secondly, Bill Braun, who was an expert adviser for the GMC actually helped to retrain Mr Dhasmana to undertake the switch operation better in the mid 1990s. He was absolutely convinced, and in fact confirmed me, of the opinion that Mr Dhasmana should not be doing the switch operation, because he believed that he did not have the technical ability.

Now, you all know how difficult it is in a technical field to make that type of judgment, but this was a cardiac surgeon's judgement of another cardiac surgeon; this was not an external independent non-qualified person.

QUESTION: PROFESSOR RANSON. As a forensic pathologist, I'm considerably involved in auditing medical outcomes, and I am also

somewhat dubious about it, having been a Senior Registrar of the BRI during some of these problems in pathology.

In relation to the coronial question, I think that it's quite an interesting area. Not all of those deaths would have been referred to the coroner, particularly if they survived beyond certain stages. In relation to Professor McDermott's point about the Consultant Committee in Road Traffic Fatalities, I undertook a small study myself looking at the cases which the Consultative Committee had identified were deaths that were, if you like, preventable, because they'd occurred substantially because of the medical treatment. I went back and looked at all of those cases to see what the coroner actually said in those cases. There were 14 cases I looked at; in six, the coroner in the finding did not mention that medical treatment had occurred; in four there was mention of medical treatment but no comment as to its efficacy; in two the comment was made that it was good; and in another two there was a full and very detailed inquest exploring all of those issues. I think the answer is that the coronial system is not a sufficiently scientific or sensitive medical audit process that actually allows us to evaluate these often very difficult and complicated issues.

QUESTION: MR NAYLOR. Cedric Naylor, surgeon. I'm interested in that the power of the Bristol was confined to the Bristol Infirmary. It wasn't a review by outside bodies. Can I refer to recertification - I'm in the College of Surgeons here - and because I graduated beyond a certain date, every year I have to be recertified. My work has to be exposed; my work has to be reviewed to an independent assessor. I also am a Fellow of the College of Surgeons of England, but I have heard nothing from England. But this afternoon while I opened the Annuals of the College of Surgeons, January 1999 there is an article on - they don't say recertification, I see they say "Revalidation" - and they are thinking that surgeons maybe or should be exposed to a quality control. That being the case, do you anticipate further Bristols around Britain?

DR BOLSIN. I certainly hope not. I'm not sure that we can afford them or their legal consequences, but seriously I think that there has been a major deficiency in the profession, not just surgical. It's easy to pick on the surgeons because they do something and then there is an outcome and it's either good or bad. I think that we should all, as professionals in the medical profession, be examining everything that we do, and comparing it with the expected outcome for that patient under those circumstances. Whether it's road traffic accidents or

whether it's routine elective surgery or whether it's a psychiatric outpatient consultation, we should all have expected outcomes, and we should be measuring our outcomes relative to what we observe. The person who has had least say in all of this which is the patient, that's the least that they deserve. I am pleased to hear that the surgical profession in Australia is way ahead of its surgical colleagues in the UK. It doesn't surprise me to hear that, but I think that "revalidation" is moving towards what you're doing over here.

QUESTION: DR TAM. John Tam, physician. As cardiothoracic units are organised into quite large interlocking teams, what was the effect of these events upon the teams? There are lots of people - some of them medical, some not medical - and there are training surgical registrars on those teams. My experience of senior registrars in England is that they are quite critical. They are also quite discreet. But what about their job prospects? What happened to them? How were they affected?

DR BOLSIN. I think that that's an important point. I think it's one of the systems of patronage which is extensively used in the UK to ensure that when trainees leave a post, they don't criticise it. They have to get a reference from the consultant surgeon in the unit. I spoke to registrars about the problem but I think they felt as powerless as everybody else did to address the issue. I think that, as far as the team is concerned, and we're talking about support workers and nurses and intensive care nurses and everybody else, there were enormous emotional difficulties. For example, for the switch operation only one nurse in the theatre suite would scrub for Mr Dhasmana, and that's because everybody else was aware of the results causing concern. The figures were not available but they were concerned that this was a higher than expected mortality rate. There were very serious problems, and there were a lot of work related problems. I was chronically depressed for a lot of the time that I was in Bristol, and I had to get away from it to re-emerge as it were. I think that other people within the unit probably experienced the same effect. It did have a terrible effect on the unit and it's very difficult for them to see how they could have done anything differently, because they were very very powerless.

The good that has come out of it is that they now have one of the best records for paediatric cardiac surgery since the new surgeon started, in the whole of the country. In fact he trusted me enough to do, for the first time in the UK, an operation that he had never performed on his own before, and the anaesthetist that he chose was me. He was very confident that he could achieve a good outcome with it. There

were good things that came out of it, but there were an awful lot of chronically bad things as well.

QUESTION: DR TANGE. I'm Margaret Tange, I'm a physician. Even with your data, you faced an entrenched power base. What advice would you give to someone in your situation, who is confronting this for the first time?

DR BOLSIN. I think that you have to do all the things that you would expect to do. You should confirm that the data is correct; you should then discuss it with the colleagues in your specialty area. You should then take it to the director of your department, or if necessary the academic leaders in the department, and then take it across with their backing to the second professional group. I think what you would normally find is that that group was actually aware of the problem, and only needed to be nudged in order to take some action, but if they didn't, then you should be able to expect that group to deal with it.

I think it's probably easier to achieve that now. I was at a meeting recently of the Intensive Care Society of New South Wales, and they were saying that since Bristol, whenever anybody goes to a manager with a clinical competence problem, it's usually dealt with in about two hours, whereas previously it took about two weeks. Necessary committees and approvals are obtained very, very rapidly with the full authority of the CEOs of the hospital, so that I hope that those problems will become less frequent as we improve our revalidation and as we improve our procedures, but I think dealing with them would also become much easier as well.

QUESTION: DR MEDLEY. My name's Gabriele Medley and I'm a pathologist, mainly a cytopathologist, and it is interesting that there's been at least one hospital in Britain where the pathology department was incriminated in one of these processes, and at least two others where the cytopathology departments have been involved. One of the outcomes is that, particularly in cytopathology where it is a part of a screening program, the responsibility has been placed not only on the pathologists that were actually involved and were found to be incompetent, but on the whole management. I would be quite interested to hear from one of the lawyers about the sort of trail of responsibility that occurs in a case like this, when it becomes actionable.

DR BOLSIN. I agree with you. I think that it would be interesting to hear a legal opinion on the ramifications of Bristol.

JUSTICE KELLAM. The estimated cost of this at the time of the handing down of the decision of the disciplinary committee was £50

million. It is likely that is an underestimate in the light of the events that are now about to take place and the broadening of the inquiry. Whereas the disciplinary committee had the one issue - were these doctors guilty of disciplinary offences - the inquiry will be much more far ranging, and will be making a variety of recommendations both of a medical and probably a legal nature in terms of processes.

MR MONTGOMERY. Patrick Montgomery, solicitor. I think the lawyers that would be acting for these families would be keen not only to prove negligence against the obvious targets, the surgeons who are incompetent, but obviously would have a great interest in getting the insurance reserve from the hospital. Assuming the consultants are not insured by the hospital, the consultants would probably be considered independent contractors, so they'd be very keen to look at the responsibility of the hospital. If negligence was only failing to act on appropriate information that had been given to them by an anaesthetist such as you, then I'd have thought they'd have quite a difficult job in defending that sort of claim. If you were talking about exemplary damages, the more defendants you have in, the better from the point of view of the claimants.

MS MILNE. To put an insurance slant on it, I administer the professional indemnity scheme for lawyers. Certainly in the case of the members of the board of the hospital, the trustees, and they're strictly independent, would have had some exposure themselves from their professional point of view for failing to have heeded the warnings that were given to them. They were employing incompetent staff, so not only would the hospital's professional indemnity cover have responded, but also its directors' and officers' cover in respect of the failure on behalf of the trustees to have acted on the information they had.
