Dr Capi Wever - NHS – why did we start it, what are we achieving and where do we want to go

[Start of recorded material]

Male: Thank you very much, Rick. I'm going to try to switch to the laptop. Do we have a ….I'm not seeing anything here. Oh well, somebody is on his way up here. Thank you.

I'm very happy to be here. Very grateful to be here. Greg, thank you for your beautiful introduction. It sort of raises the bar, so to say. I thought it's always very interesting to talk o on conferences like this, even though I am not professionally involved in the field. But I think or I have always experienced – I was talking about it with Sue last night – sort of a benefit if you aren't involved. Actually my career in – and as I stand here today – started with that sort of outside position when I was attracted to a PhD study in the late 1990s in [unintelligible 00:01:38], in The Netherlands, evaluating the decision-making processes of parents who were considering cochlear implants, who were talking at a time when there was still great controversy and the Chairman of the Department, [unintelligible 00:01:55], a senior [unintelligible 00:01:55] and probably the pioneer, one of the pioneers in Europe, for cochlear implantation, specifically wanted an ethical appraisal of the debate. And what he did is sort of similar of, I guess, why I enjoy talking about this issue is, he wanted an outsider. And in Dutch we have a saying that says 'you don't let the butcher judge his own meat'. That can work out …there is some truth to that. So, and it gives you a distance, a perspective on things and not having to go home, which is also a liability and being able to actually talk about it without having to practise it.

It says on my credentials that I am, the label that it mentions is from my private practice but I work in a large university setting at the University of Leiden. We have a large cochlear implant programme and actually my career in Leiden also started in a similar way. The Chairman is a major implant surgeon and thought it was interesting to have somebody on board who, I guess, wasn't challenging him in his field but was still able to provide critique or look inward from an outwards position.

What I'm going to try to do, today, is actually, I've switched the order of the talks because when I was working on them, it seemed to make more sense to lay a sort of ground foundation today, and then try to illustrate you tomorrow how that really affects the way that we interact with parents. They are strongly related. Now we're talking about quality and Greg was mentioning how of much value it is, to see where we are at vis a vis compared to 2001 and we've heard that quality if a very important ingredient of that. And one thing that came to mind and it sort of links into what I will talk about is that you can look at quality as, first of all, sort of in the box way. You're screening system, so to say, as a closed system, really needs to work. And the things that you'll be looking at, and we've heard that as well, is the percentage screened and the number lost to follow up. (Break [unintelligible 00:04:24])

Yes. But the thing that I …that is also, of course, very important is a more broad view on quality and I would, by lack of a better term, I'll label that a more organic view of quality. And, of course, if you do screening, population screening, you have to make certain that whatever you're doing in the system that you are providing, needs to be as close and as good as possible so it makes a lot of sense to talk about the percentage screened and the number that you're losing to follow up. But, that's not really strength, so I won't be talking about that

and there will be plenty of talks regarding that issue. But I'll be trying to go back to Greg's initial question. So one of the first things that I attempt to do when I'm asked to think about a new topic and this is …that's one of the fun things of where I'm at right now, it happens all across the hospital in all kinds of different settings. People ask you to look at a topic that really isn't something that you're working at professionally. And one of the first things that I tend to do is I want to know what kind of space this is? What kind of room is this? Who are the people here? What is driving them? Where did you come from? Why did you come over here and to this meeting? And where are you hoping to head? So it's a much broader perspective because that sort of provides me insight to what I would call the moral space of where people are working at. So just a little, a warning sign for some of you, I was trained in philosophy. Actually, that was one of my …the ways that I got into otolaryngology. Before I did, I did a study on general disability based on interviews. And so it does frame the way that I look at things. I like to look at things from the ground up, trying to understand what motivates people and trying to understand what the original reasons was that moves people. Why are people here? And build up from there.

So, today, I will talk about sort of a general foundation. Where do we stand? Why do we do what we do and what does it all mean to us and where are we heading? And tomorrow, I will show to you that I think, by providing some detail in that, it really interacts very strongly with how we think about parents and how we interact with parents. And the first issue is, of course, very important is we want a quality system. We have talked about that again and again, a little bit more, a broader system, looking from the outside inside and ….otherwise we risk that we get stuck in the do of the day. And as I've also said, the way that I like to do that is what they call in Google terms these days, back engineering. I think that you sort of go backwards and try to trace a route backwards and try to see what you find there and, based on what people say and based on what you find in the historical terms of what you're doing, it becomes clearer, so to say, what the moral space is and that really provides a lot of clarity to what we're doing. So, contrary to what I think many of us do professionally, and I know I do, and I'm sure that my wife does, and I'm sure many of you do as well, we're just caught up in the daily business of screening or caught up in the daily business of practising medicine or caught up in the daily business of, in the case of my wife, of being a radiologist and you don't …aren't really invited to stand still and look at the situation where you're at and look back and listen to each other and try to reflect. And that is really something that, I think, is very appropriate at the beginning of a conference like this one.

Because if we are involved in such a massive endeavour as newborn hearing screening, there must have been a reason in everything that we do. I mean, there's an old car standing there at the side of the road. It may have broken down so that might be the reason that people got out of the car and there's a road there. They could have gone up the road or down the road and the direction that they took, I'm assuming, really is driven by an idea of the future and an idea of where they wanted to go. And by eliciting those factors, by getting them clear, by making them more transparent, it really helps you to understand where you're at. So, I'm going to try to figure out what our point of departure was. And I'm going to try to give a little bit of insight of where we're heading. What was our purpose when we started newborn hearing screening and where are we heading and how are we doing? What are we achieving? And that all refers to that quality cycle. We do not want to get caught up in the do

of today. There was a purpose why we started it and if we know that purpose, it really relates to where we would want to go in the future. And that's when we close the quality cycle that we need to do. That's the only way we can check on our progress. We can learn and improve what we're doing. So we need a compass. We need a vision of the past and a vision of where we're going in the future. As I said, as well, you don't want to get caught up in close of the actual business of doing what you're doing, but you really want to look back at what was the original plan. And many of us, I think, have forgotten that there was a plan. But if you do not have an idea of what the plan was, what are you going to check? And how is that system going to work? You need to be aware of the place that you're taking in space and time to be able to really close that quality circle beyond the percentage screens and beyond the people that you're losing to follow up. So, in this case, contrary to the wife of Lot, it really does make sense to look back and you won't turn into a pillar of sand or salt and I think it really can be the start of a journey that really helps you to understand what you're doing. So, when I was asked, a couple of years ago, to get on board decibel study which is the evaluative study of newborn hearing screening in The Netherlands, which is actually directed by the Department of Paediatrics in the University of Leiden, that's how I really started. That's how I got into the process. So, semi-naïve, I sat down with the first reading and started to ask questions; questions that pertained to exactly these issues. So why are you doing this? And what are you trying to achieve? Though, you may say, that this is a typical Dutch situation. It's a very misty kind of context, this is really what I encountered. I encountered a very misty, maybe mystified sort of context where I wasn't getting clear answers to the questions that I was seeking. And, of course, it's not just about diagnosing early, it's about the intervention and, sometimes, people were vaguely mentioning that the circumstances in the [unintelligible 00:12:05] time was sub-optimal and, of course, they were. I knew that from my PhD study. And often, but oftentimes, they didn't mention what's the specific intervention was that people had in mind. And it also didn't mention what the specific gains were that we were expecting. What were we expecting of this new process. So, really, it kind of vexing, the kind of critical landscape that you need to move ahead. You have to have an answer to these questions.

So, if that's the case, how are we going to monitor a system like this? What is the standard of care? What are our outcome demands? And how do we improve ourselves if it's so opaque and so unclear what's the purpose of what we're doing? Now, I am a surgeon and even though I don't practise autology and I don't do any cochlear implants, I do work in a cochlear implant team so maybe it's my bias but as I walked into the first meeting with the paediatricians, my idea was that, of course, we're doing this to improve hearing and we're doing this for language and, maybe I was thinking, spoken language and maybe I was thinking, downstream benefits. But, as I was engaging in those initial talks and I started to look through literature and, you have to forgive me for this; this is a very rough screen through the literature. What I found is that the leading Belgium study by Verhardt doesn't even report on speech. And I encountered one of the Australian studies that didn't find a correlation with speech. And then, my own study, the study that I was involved with, the [unintelligible 00:13:44] publication, didn't find a correlation with speech. Okay. That's interesting.

Well, whatever the outcome was of the study, what is more interesting to me, here, is that it didn't seem to bother anybody. So, I was concerned about, that there wasn't an outcome. I mean, that's perfectly understandable but surprised me in the interaction was that the people that…I seemed to be the only one at the table that was a little bit confused by this and the leading authors and leading people who were pushing this study, were perfectly okay with the fact that we were not finding a correlation with speech. Yet, on the other hand, they seemed…it did not seem to inhibit them in their forward motion. They were very motivated in what they were doing. They seemed to be very convinced that it was right, what they were doing. And the fact that we weren't finding any correlation with speech did not seem to lead to any kind of reflection at all. And that was surprising to me; very surprising to me. It made me think; it's like, what's going on here? How do I need to understand this? Am I supposed to perceive this as a form of ahistoric agnosticism and it does happen; a lack of time awareness and, hence, being stuck in the do of today, just being completely focused on what you're doing, could explain something like this. Or maybe that's not enough of an explanation; maybe something else was going on; maybe I was missing the point; maybe it wasn't about hearing at all and I was wrong and, really, maybe there's a subtext there, a symbolic function of what we're doing that I was missing. And I kind of felt insecure about it so I wasn't really…I didn't keep on asking questions to these people, really thinking that I was missing the point and this does happen. I mean, as a surgeon, as a physician, I know that it happens so it wouldn't be surprising if it happens in newborn hearing screening.

And this picture, here, is on the screen to depict another example, a parallel of hearing loss prevention in adolescence because of the use of iPods. I was asked to be a coordinator in that as well and started looking at the literature and couldn't really find a lot of evidence that it does a lot of harm but it doesn't seem to inhibit the forward motion, on a political level, of an ENT level. And people are just emphatically involved with this and it doesn't seem…it doesn't…they don't seem to be bothered by the fact that the science isn't really out there or isn't as strong as you would think that it is. And, indeed, some things don't make sense without symbolism, without understanding that subtext, and maybe I was missing the point.

Now, having been trained in philosophy, it didn't really surprise me that it could be the point because it's been described abundantly in literature and I think that French philosopher, Foucault, was one of the most strongly opinionated about this specific issue. He, actually, wrote part of his oeuvre around this and also specifically aimed at medicine and said that the political and the social and the moral and science really interdigitate. And it's very rare that you can look at medicine, especially, as a separate sort of scientific unit. You have to understand what the moral subtext is. So, he made clear that the ethical and the moral basis are always the main ingredient of the debate and there are no shortcuts and I'll get back to the shortcuts later. And it's when we lose track of this or when people try to convince you that there is no subtext, that there is no deeper meaning than the p values, etc., that you should be alerted. And in general, when you see that there is emotions involved, when there's a political level involved, and when there's a high level of societal involvement, you should be alerted or when you see that a specific group does claim a monopoly on the debate, be aware. Because a monopoly on the debate, the monopoly on the language not

allowing others to engage in dialogue with you is really a position of power. So, when we alk about science, and I'm …not sure if this really works for all science but, let's just say, for non-data science. We're not talking about maths or physics or chemistry. And to make things clearer, I explicitly consider medicine to be part of that. Medicine is not a beta science. Medicine is part of the humanities just as well as being a part of the biological sciences. So what Foucault made clear is that he said that whatever people like to claim about non-beta sciences or about medicine, they do not stand by themselves. They're not isolated. They're a a part of our living world. There is power factors involved. There is symbolism involved. There is heroism involved. There's emotion involved. They're part of our social system so we ought to look at the system in that way to try to understand it and get to a deeper understanding.

Now, you may say, "Okay, so how dos all of this pertain to screening?" So I'm going to be a little bit brave by making the crossover to mammography screening. And I know that I'm risking that I won't be let back in the room afterwards. But the point is, I think that why …the interesting part about mammography screening is that it is considered sort of the basic, the most proven – if you ask people on the street what kind of population screening do you believe in, they're likely to say mammography screening. I mean, it's the best known, it's probably the largest initiative that we take and many people take it for granted. But, and my wife actually does this so she doesn't like it when I say this, behind the screens, there's a lot going on that many of us don't know about. There is a discourse and a discussion going on and one of the people that is actually driving this forward is Peter [unintelligible 00:19:52]. He published his book and the title really speaks for itself and now, if some of you think that you can discard this person, Mr [unintelligible 00:20:04], well he has 350 medline publications on his name and he is Chairing one of the largest European Commissions on breast cancer so no, he can't. it is an important figure. And what he really does and what he really says, he's being very sceptical about mammography screening. And this is from a…an excerpt from his piece in the The Guardian that really makes clear just a little bit of what he's writing about. He says that he speaks of personal attacks on him and other researchers from what he calls the pro-screening lobby. He talks about financial interests and he compares those who are for screening as religious believers and almost those who are against as blasphemers. So don't look at the details of this excerpt. It's just it sketches a little bit of the emotions that are involved or can be involved. As I said, it's hard to discard him. Actually, you know, in 2012 there was a publication in what, for us, as surgeons, is probably the Bible of all journals, the New England Journal of Medicine and there as a very important article that was very critical about mammography screening. So there actually is some truth to it.

So, in general, if I try to apply what's …seeing what Foucault and others have said, the field of science, I think that when you hear a discourse, when you encounter a medical field or an audiological field or a screening field, where you feel that there is a strong, normative undertone, that's a symbolic….that's symbolism that I'm looking for. I don't know what it is in breast screening. I think always I've felt that there's something with women involved. Something to do with you stand up for women, female rights, although I'm not sure. If you feel that there is a lot of suggestion of principle or heroism, if there's a lot of emotions involved, strong societal support, and very important – what Greg talked about before, typically this goes hand in hand with a neglect of the damage that you may incur. And it's

either not looked at at all or it's perceived as, what they call in war terms, collateral damage, which is just part of the deal. We don't need to look at the liabilities; that's just part of what's going on. If a situation is like that, be critical because it lacks every ingredient that you need to have a controllable quality process. This is all…this tends to lead to a very uncontrollable situation. Now if you think that that is surprising, as I said, well to me, it's not surprising. And I don't know what the state of medicine is like in New Zealand but in Europe, we are being whacked left and right, right now, by politics; in the media, there's hardly anything good that doctors can do at this point in time. So we are very self-aware of that and we have been for 30 or 40 years and we've been forced, if it wasn't natural, to look at our own situation more critically and we know that, of course, the main subtext that medicine uses, the main rhetoric or symbolism that medicine uses is this one. We save lives. Are you against it? Who's going to stand up and say 'yes'. It's very difficult to stand up against a line like this.

So, how about science. Surely what we're doing is scientific. I mean, what is all this talk about symbolism about? There has to be some truth about what we're doing? Well, of course there is a lot of truth about what we're doing but, again, science is just part of what we're doing. We know that researchers tend to interpret data to fit their hypothesis and we know that when emotion is involved and political issues are involved, it tends to become worse. And we know that the p value, even though it provides us a lot of clarity on that sort of autistic, close little space that we're working on, it can sometimes say very little about the wider perspective. Let's just make another comparison, here, and look at HIV Aids.

Initially, when the first studies came out that were looking at the use of a vaccine for HIV Aids, and this is actually from one of those studies, these were the numbers that were put out in medical journals. They looked at about a large group of 8200 people in both arms of the study. One of them was getting vaccinated; the other group was not. And what they found was that 51 of the participants in the group that was vaccinated felt ill, got AIDS, compared to 74 in the group that did not get vaccinated. Hence leading to a p value of .04 which is really the starting point of this acceptance of vaccination as a standard of care in medicine and had the suggestion this other p value speaks for itself. But does it? Does it really? Or is the question, is the effect that we're talking about large enough? That is the moral question? Is it large enough for practical significance? And a significance test, as we know, can really blur that vision, can really blur that distinction between statistical significance and practical relevance or importance and that's really what we should be looking at. And again, I don't think that this is malignant at all. I just think that this is the [unintelligible 00:25:37] that's the way we function. We are in this business of – I don't know what the scientist is doing, looking at a dark spot and surrounded by all kinds of furry brown stuff going on and reporting in journals about what he's finding and the number of hairs that he's counting and …but what he's forgetting, that it's really the teddy bear that we're looking at and we're forgetting that that wider image is really what we should always keep in the back of our mind. So the p value – yes, of course – it is important. But it tells us nothing about the magnitude of an effect, let alone what it means to us. And that is really something that I would love us to go back for. And, in general, I become more sceptic, the larger the group of people is that we need to produce a p value. I mean, I'd like to tell my Residents, " If you need 10,000 people to find a p value of .94, you really should start scratching behind

your ears. Why do you need such a large sample to find a statistical significance? If it's really out there, if it's a big difference, you will find it in 100." So, we need an organic, more historical view and, as I said, back engineering, reverse engineering is a way to do that, is a way to look at things or, in another way, verbalise, we need a wide-angle lens rather than a macro-lens, to look at the subject that we're looking at today. And as Foucault has said, there always is an ethical subtext and we should be looking for it and the key question in the HIV Aids study is, is it really worth the .3% difference of getting infected and have we looked close enough at the liabilities. And it depends on many sub-questions such as, and it was reported before, what are the side effects? What is the invasiveness? What is the mortality? What is the emotional burden? - and many, many, many more questions. They all matter and they all form what we really ought to be looking at which is the question of proportionality. So there is no statistics without ethics so we should always being asking that sort of question and I really believe that there are no shortcuts. You think that there can and I become very sceptical when people are suggesting that there are shortcuts. And if we do, if we do not, if we accept that situation that it is, we really risk that we start drifting, as I said in my initial slides, to lose control over a process that's sort of become, like this bear here, a victim of the little piece of ice that we're drifting on rather than being in control which is where we want to be.

Let's look at another example. The renal dialysis – also a fascinating history and it shows you a couple of things that are really important to retain, I think. For those of you who are unaware of the history of renal dialysis, it started in the 50s and the 60s, the science was developed to actually make this possible. And before it was added to Medicare – in the USA, Medicare is the social insurance that they have there – of course, just like in cochlear implants, just like in newborn hearing screening, there were some founding studies done that really showed the efficacy of what they were doing. But, the initial efficacy studies that were done in renal dialysis were based on a selected population meaning that the people who participated were very young, were very healthy, and had only end stage renal failure – nothing else. There were no other disabilities involved. And as it …renal dialysis got insured and became a standard of care, slowly – and I don't think it was intentionally but slowly they moved away from that. And if you look at renal dialysis today, you can see that, now, the average patient is older, but also has significant more morbidity. Hence the initial trials that were used to sort of justify the use of renal dialysis say very little about the situation that we are in today. And this is from an ethical study by Colada and Colada, indeed, says that 'a new dialysis population includes patients with chronic illnesses such as cancer and heart disease and even senile patients who are delivered to dialysis centres three times a week from their nursing homes. And according to doctors who treat these patients, dialysis patients are often deeply unhappy and, indeed, the science is also there. The science shows that the MMPI tends towards depression. Interviews with these people shows that they say that they feel captured by the medical profession and suicide rate is seven times higher than in a normal population, even though that is often found in other chronically disabling conditions as well.

So, it doesn't lead to a self-critical attitude and it seems to what is happened here is that you're riding along this road and there's this beautiful woman who is hitchhiking – it can be a guy as well – and you're stopping your care and then, from behind the bushes, this guy

jumps out. And you're like, that's without us noticing it, this is really what seems to have happened in renal dialysis.

So, let's get back to the sub-text. Let's get back to the symbolism or to the rhetorical context that we're in. I think it is critical, I think none of us are using rhetoric purposely but I think we do, all the time, in whatever field we're in and I think that the first step in making progress and to getting a really an awareness of where you are at in space and time is to start to unravel the rhetoric of your own professional language and that is really something that we need to do, I think, if we want to be released from our position in space and time. So, if I refer back to the renal dialysis case, there is that ethical question, again, that rhetorical question – how can we deny somebody a chance to live? How do we explain that the only thing that stands between life and death is dollars? That is called, in philosophical terms, the 'back against the wall' argument. It really denies every form of debate. As I said before, who's going to stand up and say that you're against that? It really makes a three dimensional debate two dimensional and doesn't allow space for dialogue.

So, medicine has made use – it sounds like strategy; I don't think it is. I argue with the head and neck surgeons in my own clinic all the time and it doesn't seem to be something that they plan out strategically but it is there. As soon as life and death is involved, in medicine, there is almost no space for dialogue and I call that a linear absolute, meaning that medicine considers every gain in life as something that matters, first of all. And second of all, it matters so much that every other element, every liability or every other aspect involved in the discussion is silenced. It is not allowed into the debate. So it's something like this. As soon as life and death is involved, it consumes everything else around it and it makes a three dimensional discussion impossible and it really reduces it to a two dimensional debate. Now, interestingly enough, the change in medicine occurred in the 1960s. An the main reason for it was that new technology came to the forefront, especially in life sustaining technology in ICUs. And the rhetoric of medicine of posing life versus death in a dualistic scheme, black and white dualistic scheme, started to fail. And a huge grey area started to fill the gap between life and death, hence really focusing the light on the liabilities of the things that we were doing. Medicine was critiqued fiercely because of that in the 60s and the 70s and our critics were really forcing us to look at our own rhetoric and for our mistakenly using rhetoric instead of truth, or lack of irony or lack of modesty. And we were forced to think more deeply about what we were doing. It was the paradigm that we were using the life and death paradigm was imploded, it reached its ceiling. So, indeed, if you look at medical history, there is a good reason why it failed because if we look at medicine in the pre-1950s and you look at the major technological innovations that characterised the first half of the twentieth century: general hygiene, the immunisation programme and the introduction of antibiotics, you see that, indeed, they led to huge gains in life years gained. And at the other hand of the cycle, there were very little liabilities involved. People who were getting antibiotics weren't really paying a price or hardly were paying a price. People who got immunised, who got their shots, their flu shots done, didn't really pay a price whereas, on the other hand, if you were looking a the life years gained, look at the two yellow arrows, this is the first, the technological gains. Between them, the 1900s and the 1950s, you see that blue curve really going up. So yes, there was a gain in life and, no, you weren't paying a big price for it. But in the post-1950s, things changed and the technology that came to the forefront, such as

childhood leukaemia, chemotherapy, heart surgery, transplantation programmes and haemodialysis such as I just talked about, did not result in this massive gain in life years anymore. And on the other hand of the formula, there were definite liabilities involved that I just talked about; the liabilities were huge, yet they were still denied. And the interesting thing is that medicine really was, still, in the grip of the life and death paradigm. It did not want to talk about the liabilities. And as soon as life and death is involved in medicine, all statistics are being bent and no questions are being asked. I think it's wrong, in itself. And it's even more wrong if it is applied this way of thinking, this dualistic way of thinking, is applied to a field that has nothing to do with life or death because as doctors, and certainly in your field, we are not the same as a chemical laboratory where we're [unintelligible 00:36:08] substances into test tubes. We are about life. The world that we live in is the real world and, certainly, when we talk about newborn hearing screening, which is a developmental issue, you are in the middle of the real world. And real world problems, oftentimes, are very complex and are not two dimensional at all. And going back into literature, I found this interesting, I thought interesting, theory by Whittle and Weaver in the end of 1960s, what they argued is that these problems, the problems that we deal with, developmental problems but also medical problems are wicked problems as opposed to tame problems, as opposed to two dimensional problems. And you can see some of the issues characterised here. They're multicultural and we're all very familiar with this; I've summarised them here. They're multicultural. Many of them are idiosyncratic and it really demands an eclectic approach to what we're doing. We cannot assume we should avoid systematic approaches of issues such as this. we should avoid any monolithic approach. And that also means, and I'll be talking about that tomorrow a little bit more, that the idea of utopia, the idea that a perfect world exists, the idea that a perfect intervention exists and is aiming at optimising what we're doing, we should be wary about doing that; and pragmatism and modesty are really what is called for.

So let's look a little bit more at hearing screening today. As I said, we need a compass or, at least, I need a compass. I'd like to understand what we're doing and where we're at. And as I've also illustrated to you, what I encountered was a lack of that. I didn't encounter a clearly defined position in space and time. And I asked myself why. I've already summarised some of the reasons why. Another reason why might be the technological imperative. I've actually heard people say this; actually, telling me that we have this technology so why use it? I mean, why are we going to keep doing the [unintelligible 00:38:18] and it makes perfect sense. I mean it's very hard to rebut an argument like this. But the last line, I'm not so sure about. There are no losers, just winners and that is really making a problem into a two dimensional problem which it is not. So what's causing the mist? Well, it might be more strategic reasons to do that as well: unclear purpose definitions can be very convenient if you don't really state clearly why you're doing what you're doing. There might be political premises that I am missing. There might also be a sort of strategic boldness saying that, you know, for the next ten years, we're just going to ignore all the liabilities because we need to settle this and get it on the market and we know there's going to be damage done but we accept that for the time being, or we consider it an experimental stage and we know it's not going to be perfect but we will fix it as we go. Well, that might all be true but there also might be a deeper reason that I've just referred to; a reason of really implicitly believing in

the righteousness of what you're doing, being locked up in the do of today and not seeing the rhetorical language and the symbolic subtext that we are using. Hence, we're being imprisoned by our own rhetoric and we're mistakenly perceiving what we do for being a tame problem. And as I said, making a problem into a two dimensional problem has strategic advantages as well. It's very convenient when nobody is rebutting your arguments. It's great. I'm a physician. I can tell you, it's fantastic if you have the idea that it really makes you, we're talking about that last night. There's a physician in the UK who's initials are G O D. It does make you in a G O D sort of say. And even today, in The Netherlands, where physicians are being criticise fiercely, many of us …we go along with it. Okay, we accept it but we accept it with a grin on our face. We don't like it. We don't like to be challenged. We don't want to engage in dialogue and many of us don't say why but I think one of the main reasons why is because we love that position of having a monopoly of the debate. We don't want a dialogue. So, wicked problems do depower. They absolutely depower. If you stop considering a problem, a two dimensional problem but rather a three dimensional problem such as the field that you're in, it does depower you as a professional.

And this is a picture of a Dutch landscape. Very flat and I'm sure some of you know that way of practising politics in The Netherlands is called polder politics. This is a Dutch polder which is a flat land with a lot of cows on it. And it means that opposed to polder politics, we would label guerrilla politics. And guerrilla politics is what I say, you just ignore every debate and you just forcibly overrule whatever happens in your field. So that's a way of practising politics in many countries. In The Netherlands, we sit down with our stakeholders and we, sometimes endlessly, debate the issues and accept that they are wicked problems and accept that there are contradicting values involved and the only thing you can do is sit down and try to come to a compromise. And there are no shortcuts.

This is an example of a PET MRI, I think, from sensitive periods in deafness, actually. There are no shortcuts. I really deeply believe that and it's trying to translate a wicked problem into a two dimensional problem and there's good reasons to do that but it's not the right thing to do.

Now let's make the shift to hearing screening again. We talked about medicine and the rhetoric that medicine uses, the subtext that it uses, the life and death paradigm. But we have one of ourselves. And this is one that I encountered early on when I started looking around cochlear implants. How can one deny a child the right to hearing, even if it's just a little? Now there we go again, who's going to stand up? That's a difficult sentence to counter. It is a sentence that has every element of a rhetorical sentence. But it does have the same characteristics as the life and death paradigm that I showed before. And again, just like in the life and death paradigm, the key question, is this every word gained really of practical significance to the child involved? Is it a linear absolute or is it not? Well, I don't think so. And are we…is this the paragon, is this our way of …our subtext that is really related to the life and death paradigm in medicine, in trying to frame the debate when we talk about hearing loss. So does it function as a hearing absolute? It does seem to look that way. And if you look at this text which is from a site from the USA, all this in free America, you see exactly what I'm trying to portray. Here you see a world that's being depicted that is all about gains in hearing and where every decibel in hearing and gain in hearing is perceived to be of benefit to the child. And the question is, is that appropriate?

Let's go back to Foucault before and it is essential, I think, to keep realising that the ethical and the moral are an intrinsic element of everything that we do and when we lose track of this, so are we …see these pictures of PET MRIs or people who are suggesting that we are beyond debate – be alerted. And people tell you that they have become irrelevant. I remember the actual from the Brooker guy who got me into ENT, years later, after I finished my PhD in 2002, told me, "Oh, that was all nice copy, what you did, but it really is irrelevant now, isn't it?" So, that is really the frame of mind. No, it's not. And you should be alerted when people say that, and especially when a highly emotional field such as childhood deafness is involved. Children, in general, tend to raise the bar and it's just the same when it comes to hearing loss. When people try to claim the floor and tell you that nobody else matters, be sceptical about it. If not, I think there is a danger that we repeat history and I'll talk a little bit more about that tomorrow. Our children are too diverse, I think. The results are too multifactorial and too far downstream and our values are too diametrically positioned to allow that kind of an environment. So we have to be self-critical; looking back and trying to get a feeling for where we are in space and time is really important. We should avoid symbolism as soon as you hear a two dimensional symbolic subtext, be alerted. When you hear high emotions or heroism involved, be alerted and try to get a better feeling of where you're at. Avoid every kind of symbolising heroism. There are no quick solutions. There are no shortcuts in this field. We are convicted to talking to each other and trying to reach common ground. And this is, of course, something that we really want to avoid. We don't want to end up with this guy sitting next to us thinking that we had somebody else on board so what we need is a balance. Look, that is critical, I think. It is difficult, especially if you are in the profession yourself. It's always difficult to look from the outside inward and it's also difficult to operate, to translate it into, 'Okay, so what does that mean for my counselling position? What does that mean for how I should deal with parents' and that is what I will talk about a little bit more today because, I think, they really interdigitate very strongly so.

Thank you very much.