EDUCATION AND HEALTH STANDING COMMITTEE

AN INQUIRY INTO IMPROVING EDUCATIONAL OUTCOMES FOR WESTERN AUSTRALIANS OF ALL AGES

TRANSCRIPT OF EVIDENCE
TAKEN AT PERTH
WEDNESDAY, 28 SEPTEMBER 2011

Members

Dr J.M. Woollard (Chairman)
Mr P.B. Watson (Deputy Chairman)
Mr P. Abetz
Ms L.L. Baker
Dr G.G. Jacobs

Hearing commenced at 10.29 am

GOOSSENS, DR CAROLINE
Child Psychiatrist, Faculty of Child Psychiatry,
examined:

The DEPUTY CHAIRMAN: On behalf of the Education and Health Standing Committee, I would like to thank you for your interest and your appearance before us today. The purpose of this hearing is to assist the committee in gathering evidence for its inquiry into improving educational outcomes for Western Australians of all ages. At this stage, I would like to introduce myself and the other member of the committee present today. The Chairman, Janet Woollard, will be here shortly; she has been detained this morning. My name is Peter Watson; I am the Deputy Chair. On my right is Mr Peter Abetz, and Mr Graham Jacobs. The research staff are Dr Brian Gordon and Miss Lucy Roberts; the Hansard staff is Amanda McQuillan.

The Education and Health Standing Committee is a committee of the Legislative Assembly of the Parliament of Western Australia. This hearing is a formal procedure of the Parliament, and therefore commands the same respect given proceedings in the house itself. This is a public hearing, and Hansard will be making a transcript of the proceedings for the public record. If you refer to any documents during your evidence, it would assist Hansard if you could provide the full title for the record.

Caroline, would you like to make an opening statement, or would you just like us to ask you some questions?

Dr Goossens: I would just like to clarify that I have probably changed roles since this title has been put there. I am still the WA representative on the bi-national executive of the faculty of child psychiatry of the Royal Australian and New Zealand College of Psychiatrists. I have to the end of my role as chair, and I have passed that on to Dr Nadine Caunt; I just wanted to clarify that. In my public service role, I am in a different role from what is stated here; I just want to clarify that. But I am here in my faculty role, rather than in my public service role, and I wanted that to be clear as well.

The DEPUTY CHAIRMAN: That is okay. We know you are an expert in this area, and we just want to glean as much information as we can from you while we have you.

Dr Goossens: Absolutely. It is just easier in my faculty role; I can speak as an expert.

The DEPUTY CHAIRMAN: Is there anything you would like to start off with?

Dr Goossens: I really welcome the opportunity to address the committee, and I think it really indicates that there is a much better understanding now between the links between emotional and mental health, and educational outcomes. I think, before, they were really separate, and people thought that cognitive development was entirely separate from emotional development and mental health outcomes related to that. But I think increasingly now there is an awareness regarding brain development, that a lot of the brain development that is occurring in the first few years of life, dating back to the point of conception, is very responsive to environment, and that the two are inextricably linked, and that anything that affects emotional health is also going to affect cognitive development and capacity to be available to be educated, really.

The DEPUTY CHAIRMAN: We saw something last week; there were three brains showing the size of the brain when the baby was born, at three years, and then an adult. There is not much between the three years and the adult.

Dr Goossens: No. There is an amazing increase in volume in the brain in that first year, so really you just have to imagine that all the neurons have gone to their right place, if a baby is born at term, but none of the wiring has occurred. I think, now, there is a much more sophisticated understanding that nature needs nurture. It is not a nature versus nurture debate anymore; it is that nature needs nurture, and that for a brain to develop optimally it needs to be in a good enough environment. There are particular parts of the brain that we are very interested in that influence your capacity to be available for education later, and that is probably what we call the prefrontal cortex. If you think of the brain as being like a little fist—that is a very kind of gross comparison—the prefrontal cortex is that bit where your thumb is in behind; the front bit. In that part is the orbitofrontal cortex, and we are really interested in the development of that now. We call that the senior executive, or the thinking part of the emotional brain. It is the bit that really pulls everything together and really coordinates a lot of the different capacities of the brain that involve capacity for attention, capacity to regulate emotions, capacity to identify one's own emotions and to be able to identify others' emotions, the capacity to settle emotions as they get bigger, our capacity to relate to others, our capacity to think about our own actions and think about our own thoughts and feelings, and also, interestingly, our autonomic nervous system, so the whole way our system is really—that fight–flight; all of the way our system is set up. That is deeply connected to the limbic system, which is also very much important in terms of emotional regulation.

The DEPUTY CHAIRMAN: When I had young children, the big thing was to nurture them and to cuddle and to love them. That is still a very important part, but what you are saying is that there should be more interaction?

Dr Goossens: Oh, that is absolutely important. I think a lot of that emphasis that you are probably talking about came out of—there has been a real swing. In the 1950s there was a huge behaviourist emphasis, and Watson, who was a big behaviourist said, "For goodness sake, do not coddle your child."

The DEPUTY CHAIRMAN: Don't knock the family!

Dr Goossens: He really had a big effect. There was a big swing back the other way, with the attachment movement of thinking that, obviously, all of that is incredibly important in nurturing a child, and providing warmth and affection is really important. I would say that we now have actually a scientific basis to say how important that is, and with all of that comes a lot of brain wiring. The whole thing to think about is about neurons that fire together wire together—that is the, kind of, buzz phrase—and that as a child is soothed or sung to or connected with, with that physical nurturing as well and that warmth, we actually get certain sections of the brain lighting up. The more that that happens, those pathways are getting established that really help in the longer term with emotional regulation. What you are talking about with that is this idea of the connection—we just think about it day-to-day as our relationships and we know how important they are innately—but you are really talking about helping a child to regulate as an outside person, and the more that is done and the more those pathways are strengthened, the more the child has the capacity to do that for themselves, so it becomes an internal process.

The DEPUTY CHAIRMAN: With my two grandchildren, I read to them in the womb, and they both love books now.

Dr Goossens: Yes. They probably liked your voice.

The DEPUTY CHAIRMAN: I do not know if there is a connection there, but they love listening to me reading them stories. It was just something I read somewhere about reading to the child in the womb.

Dr Goossens: It is true. There was a great experiment done; they suddenly realised, in one of the neonatal intensive care units in England, that when the *Neighbours* music came on, all the babies in the whole NICU would settle, and they are often very fractious little babies. They were pretty

perplexed about that, and they realised, when they worked backwards, that during their pregnancies all of the mums had put their feet up in front of *Neighbours*, and that was a moment of quiet time for them, and the actual music and the noise of it had had an effect on the babies and they associated it with a calmer state. That is one of the very early bits of evidence that people have used to start to think about how much babies are experiencing antenatally, and the answer is a lot. Babies, at an incredibly young age, will turn preferentially to the voices that they know, within a day or two of life. It is very true that relationships start to begin antenatally, and that babies are hardwired—we are deeply genetically ingrained—to attach. We now know that about babies; it is part of our absolute hardwiring. Because it is so hardwired and so deeply genetically ingrained, we will do it in whatever situation we are placed in, so sometimes, even in situations of deprivation and abuse, babies will still attach. That attachment is going to look very different to when it is in a good situation, but they will still do it in spite of all logical reasons not to, perhaps.

The DEPUTY CHAIRMAN: So how will that affect the brain?

Dr Goossens: What we see in situations of deprivation and significant trauma is a lot of impact on brain development. It is not 100 per cent, but you get high rates of changes depending upon the level of deprivation and abuse. But what we see is that this part of the brain that is developing—we can see this in what we call functional MRI scans now—this orbitofrontal cortex, is not nearly as well developed, and that in a situation of difficulty these children do not have the same cognitive control that we would see in other children over a situation of adversity, because of the deficits in their environment.

Dr G.G. JACOBS: How does the mother's state of mind—there must be some science in this as well—affect the child, and what evidence do we have that, basically, the mother's state of mind will actually have an effect on the child's future state of mind?

Dr Goossens: There is a big body of evidence about that now, and an increasingly large body of evidence. I am going to kind of go back a little bit to talk about, we know that there is all of these things happening in terms of brain development that begin antenatally, but what happens subsequently is mediated by the environment in which you arrive. I think that is very important information—I am going to go back to your point in a moment Dr Jacobs—because I think for a lot of mothers who have had a very difficult pregnancy and have suffered a lot of anxiety and depression, perhaps, in their pregnancy, they are very alarmed that they have already damaged their baby on arrival. What we are really keen to say is that it is the environment they subsequently arrive into, the brain is very plastic, and there are all these important mediators on arrival. So, even if you have had a really difficult time during pregnancy, yes, the baby will have been affected by that, but the quality of the environment that the baby has thereafter will have an enormous effect on the baby's development. Part of that cognitive environment is the mother's state of mind; it is not all of the environment, but it is important, especially if she is the primary caregiver; it is a very important mediator in the environment. We, obviously, do not underestimate the role of fathers either, and of extended family; for example, if a mum is ill, other people can step into that primary care-giving role very well and the child will develop very well in that context. I just want to make that bit of a proviso before I go on to talk about state of mind.

We probably need to talk about state of mind of the primary caregiver as being incredibly important. In the bulk of situations that will be the mum, but in some situations it is not; and in some situations, indeed, a child might be fostered out, so it would be another caregiver. But if we are looking at the state of mind of the caregiver, what is so fascinating is that our capacity to be a caregiver is imprinted in us from our own earliest experiences. I am sure everyone has probably had the experience that you call upon your own parenting experience when you become a parent. It is not something that you consciously think about, it is just what happens and the way our mind works. It is fascinating that now we can predict the kind of style of attachment a parent is going to have with their child antenatally. We can interview parents antenatally and look at their state of

mind regarding attachment and regarding relationships, and then predict what kind of relationship they are going to establish with their unborn child with about 80 per cent accuracy, which is fascinating, really, if you think about it. What we know from this research is that if your state of mind regarding attachment is what we would call unresolved and you have had quite difficult experiences throughout your own experience of being parented and relationships, then we can predict with a good degree of certainty that there are going to be major problems in your establishing a relationship with your own child. That can be shifted with the right help.

Dr G.G. JACOBS: Can you quantify that in any way? If a mother is a severe depressive, then what is the likelihood of the child having depression?

Dr Goossens: When we are talking about state of mind regarding relationships, we are really talking about the capacity to be able to reflect on our own experiences and the capacity to think about the qualities of our relationships, so it is not really talking about a direct link between a mother's mental illness and a child's capacity to become mentally ill. The mediating thing that we are talking about is the quality of relationship. It is, however, true that if a child has very difficult attachment experiences in their life, it does increase their risk of later mental illness. I am sure you are probably all aware of the statistic that if we look at, particularly, disorganised attachment, which is the one that is most linked with later adverse mental health outcomes, in the Minnesota study by Sharif, they looked at 800 children and found that the biggest predictor of clinically significant mental health problems at age 17 and a half is a disorganised attachment measured at 18 months, so we are looking at the quality of relationship. Obviously, if a mother has severe depression, we are looking at a child who might have a number of different points of adversity. We have, perhaps, a genetic loading for depression later, so we have to consider that; we have to have a look at if a mum has significant depression yet she remains the primary caregiver, we know that mothers with significant depression interact with their infants in a different way. I can go into what that looks like, but they have less positive emotions expressed and they experience the baby in a far more negative way, they do not have many gaze-to-gaze experiences, and they have a decreased capacity to regulate their infants. This is all very much an involuntary thing and reflects their difficulties at the time. If a baby is in an experience where they have a lot of other care-giving experiences, obviously the effect of that on their own emotional development will be reduced. But if this mum is their sole primary caregiver, it obviously has a far bigger effect and would compound their, perhaps, natural biological predisposition, maybe, later to depression because they have had those early care-giving experiences. Obviously, the quality of attachment that develops also then very much influences how they are going to go in the long term.

Mr P. ABETZ: Do we have any knowledge of the strongest predictors of things happening in that early childhood time that impact negatively on educational outcomes in particular?

[10.45 am]

Dr Goossens: Absolutely. We know, with mothers who have had significant depression in the peri-natal period, that their children go on to have—I am just trying think of exactly to quantify it—a great deal more difficulties with attention and concentration, and they have different performances in their early education from children who do not. We know that children who have a disorganised attachment, for example, really struggle in the classroom. They have a whole lot of problems; they struggle with, really, attention and concentration, and their capacity to settle themselves enough emotionally to be available for learning. They have struggles with their peers and they have far more conflictual relationships, often. They are far more internally preoccupied frequently by what is going on in their own minds, and yes, so that really impacts on their capacity.

Mr P. ABETZ: That almost sounds like, from what I am hearing in schools, 25 per cent of the kids starting school, which is a bit of worry.

Dr Goossens: I think it varies from where you are—in which schools—but, yes, schools in suburbs perhaps with more significant adversity and with more socioeconomic disadvantage, you might

have as much as 20 per cent of kids beginning school who are really not school ready and who have significant difficulties. I think we are probably looking at about a core group of about five to 10 who are really in quite significant difficulties and who should be accessing more sophisticated help.

Mr P. ABETZ: You mentioned disorganised attachment; can you clarify what that is? I am not sure what that means.

Dr Goossens: Yes; sure.

The CHAIRMAN: Caroline, I did come in when you were talking about the lack of eye-to-eye contact and how problems because of postnatal depression could then affect later development for the child. We have heard that in South Australia when families are identified as being at-risk families, they will have more visits from the equivalent of our child health nurse. But because of that lack of communication, how are those early problems being picked up here; where are the failings in identifying them; and when they are picked up, who should those children then be referred to?

Dr Goossens: That is quite a big question.

The CHAIRMAN: I am sorry.

Mr P. ABETZ: Do not forget my question, by the way!

Dr Goossens: You will have to remind me, and I will come back it to.

We have a good system to detect difficulties, I think; there has been a huge advance in that. Antenatally, now, there is screening for both anxiety and depression in women.

The CHAIRMAN: Who is that done by?

Dr Goossens: That is done at the point of their antenatal care, so it varies from site to site.

The CHAIRMAN: So it could be the GP or it could be at King Edward's?

Dr Goossens: It is probably more at their antenatal care, yes, so that is actually done at their reviews. I think there is a great awareness now, peri-natally, about this; postnatally, at six weeks, the Edinburgh Postnatal Depression Scale, which is a highly researched and validated instrument that is used worldwide for detection—it is a screening tool for anxiety and depression; it is not diagnostic—is administered by the child health nurses. I know, from contact with child health nurses, that the problem then starts when you get a positive on the screening, and that, really, the gaps in our system are around a comprehensive response with different levels of response and really good pathways for people who score positively. I think it is really important to have that in one's mind when you are thinking about this area, that it is not going to be a one-size-fits-all for all families; it is going to probably reflect myriad difficulties. What we really need to do is have different tiers of intervention. For example, for some women who come up with a positive screening, going to a mums' group that is facilitated, that might have a component in it of helping with depression, will be sufficient, and they will do very well with that, and if you rescreen them, their score would have gone down and they feel much better; they needed a little bit more social support, for example. Other mums, as well as that, will need to visit their GP and be able to have a conversation around how their mental health is going. For other mums, that will not be sufficient, and they will need more on top of that; they may have quite complex difficulties, they may need actually specialist mental health intervention, and even once their depression is addressed, they may need far more expert help at looking at what is going on in the relationship itself.

The CHAIRMAN: You said at six weeks, then, they have the Edinburgh —

Dr Goossens: Postnatal depression score.

The CHAIRMAN: If a child health nurse administers that and finds there are problems, who then follows on with that? Is it the child health nurse's responsibility then to get that family back at 12

months and 18 months; or is there a central register where someone is notified about those families, so that if someone moves, maybe from south of the river to out in the regional area, they are followed up on? What happens? Yes, they are identified, but then how do we know those children are followed up on?

Dr Goossens: Yes, that is very difficult, isn't it? I think a lot of it is falling upon the child health nurse to actually make sure that these families enter different referral pathways and have different support to address the issues. The score is repeated at six months and at 12 months, so that there are opportunities to see how the parent is going, but, as we know, we tend to get a drop-off. We know that in WA we get this really significant drop-off in attendance to the early childhood nurse. I think it varies from district to district, so we do not have something that is really comprehensive. I think, with a great deal of respect to GPs, that there is a huge variation in capacity to deal with mental health difficulties at the GP level. I know a lot more education is going on to assist GPs.

There is a gap that I really see. I know we have, for example for mums who are really struggling and who have very significant depression, our mother–baby unit, which is an excellent specialist unit, that they can be admitted to. But I think the problem we would all agree with is that post a mother–baby unit admission, which is a very intensive period of treatment, there is a real gap in what is provided as back-up thereafter. For a lot of mums in this period of life, they may not want to attend a specialist adult mental health facility, which is often very much focused around the very severe end of mental health, and they would find it somewhat alienating and stigmatising to attend such a service. That service, itself, probably does not have the capacity to attend to the mother–baby issues in the sensitive way that they need to be attended to, following the resolution of the depression, to assist the mum in preventing the baby having the difficulties that we know do occur for babies where a mother has had significant mental health issues. We have a step-down gap, if you like.

The CHAIRMAN: How do we fill those gaps?

Dr Goossens: I think we really need to look at identifying infant and peri-natal mental health as a specialty area, and how that gets integrated into the tiers of community intervention. So, for parents who have had significant difficulties, we need to be very careful and they need to be integrated back into their community resources, which would include things like playgroups, and to be provided with the social supports they need. They probably also need some specialist peri-natal input until it is resolved, that has significant attention paid to the infant mental health—the developing infant—and what the quality of the relationships are like in the family, to make sure that they do not have this recruitment of adversity that we see for infants.

The CHAIRMAN: Can that role be done by the child health nurse? Who do you feel would be more appropriate to deal with that? Once you have identified this person as having problems, is there a more appropriate health professional who should be following up on those children?

Dr Goossens: I think what the child health nurse needs when she is in this situation is a raft of things that she can help a family into, depending upon the level of need and severity. That would go from tier 1 and 2 services in the community, which would be perhaps more around community support, engagement, playgroups, mums' groups, all of those kind of things—support in the home, access to good quality respite child care; that kind of thing—and it would go up then towards intervention that can be delivered by special allied mental health and psychiatric staff in the community. When we look at more successful interventions, we have had probably a bit of a partnership approach between child and infant, child and adolescent mental health and adult mental health to deliver a package of intervention for a family. What we know for this to get good uptake is that it needs to be really community based, and away from the more traditional mental health facilities—that is the best way of putting it. It is a really traumatic experience; if you talk to a mum who has had a significant antenatal depression and postnatal depression to have to go and sit in a waiting room with other people with really severe mental illnesses like schizophrenia. I think it

really does decrease uptake of what is a very vital service. I really understand this—this is no criticism to our adult mental health service—they have really had to retract to this very severe end. They also then do not have the people who have the capacity to provide the kind of interventions that these mums need that really are attending to what is going on.

Mr P.B. WATSON: Do you think there should be a separate section for —

Dr Goossens: Peri-natal and the infant, yes. I think there needs to be something that looks at that area of life that is very much community based and that is linked in with other child and family services.

Mr P.B. WATSON: It is so important, is it not, because of the money we will save in the long run?

Dr Goossens: Absolutely. There is a lot of evidence to support that; that all of the dollars that you put in at this end saves you a great deal later.

The CHAIRMAN: Are the problems worse now than five years ago or 10 years ago?

Mr P.B. WATSON: Or are they more noticeable now because they have been brought out?

Dr Goossens: I think that, on the ground, people say that the problems that they are seeing are more complex and difficult, and that there seems to be less give in any system to be able to deliver. I think it is relevant that we have had a 20 per cent boost in the population between zero and four—I am sure you are probably more aware of those statistics than I—and no increase in services. That would then really support that sort of experience on the ground, that there is less and less to kind of work with, and more and more difficulties. I do not think we have planned particularly well for our population boom. I think that is one issue. I think there is an increasing capacity to identify these difficulties in child health nurses, for example, and I think an increasing frustration that they do not have the raft of kind of interventions I have talked about available for them to easily refer to. I think that is very stressful if you are a child health nurse—that you see a problem and then you do not have a pathway to actually address it. I think the other issue is that we have had substantial social change in WA as well; things like we have had a huge influx of families who have young children and who have moved away from their social supports, and we have a large shift to FIFO workers. It was interesting that when I was doing a clinical intervention with young children that 80 per cent of the group that I ended up treating were FIFO families. I think that has a huge impact. That is just anecdotal; that has not been done in a study, but it does make sense, doesn't it, that that has a huge impact on the capacities of families to cope in that first year of life, especially if they are away from their other social supports and extended family, and then they have a husband who is flying away. I think, really, we were not designed or created or engineered to parent alone. Unfortunately, a lot of caregivers find themselves in that situation.

The CHAIRMAN: How long has the Edinburgh scale been administered to children at six months and 12 months?

Dr Goossens: Six weeks, and now antenatally as well. Because it is not my day-to-day work, I could not tell you the exact schedule, but it is now administered antenatally, and at the six-weeks, six-month, and I think 12-month stage.

The CHAIRMAN: Do you know for how long?

Dr Goossens: The scale itself has been used for probably nearly 30 years—20 to 30 years—but we have been routinely screening, I think, probably in WA it would be at least 10.

The CHAIRMAN: We are also hearing of lots of problems once children have developed, and so we need the evidence to say "more funds; we need more help here". Is there a way of looking at those scores? Are they collected —

Dr Goossens: Yes, and there have been prospective studies.

The CHAIRMAN: — so that we can then see that children who scored badly on the scale at one year are the children who are still having problems at 12 or 13.

[11.00 am]

Dr Goossens: Sure. I think you would probably have to put together some different pieces of research at the moment to give you that exact answer. There is a loss of prospective evidence around difficulties for children whose parents did score highly on the Edinburgh. But I just want to emphasise when you score highly on the Edinburgh, it is not just picking up depression. It is a really ragbag of difficulties that it picks up. It picks up parents who are struggling, really. They may not actually have a formal depression, but they may have lots of difficulties. So, yes, I think that that parent group may not actually have depression, but they may be having lots of other difficulties that they may need assistance with. My understanding is that there have been lots of long-term prospective studies—I cannot quote them exactly, so I would have to bring them in later—to look at the longer-term outcomes for children; and, yes, there are significantly adverse findings.

There are lots of other studies that look at children's quality of attachment, which has an overlap and is linked with depression and other difficulties, which also have really significantly adverse outcomes. The most significant of that would be the group that has disorganised attachment, which bring me back to Peter's question, which was around this idea that we can measure at one year of age the quality of relationship that exists between a care giver and their child. This quality of relationship is persistent, and we are to keep measuring it as the child gets older, unless there is a significant alteration in the family circumstances or an intervention that occurs.

So there are four categories. There is a lot within them, but there are four categories. The first is secure, which is the best category to be in, where you have a fairly robust relationship with your parent; where the parent usually is enjoying parenting; they have a capacity to tolerate both positive and negative emotions in their child; they are physically affectionate; and they can think about what they do as a parent. They do not have to get it right all the time. We know as parents that we make mistakes constantly, and that is fine; in fact, you would not want to be perfect. It is about having a capacity to have a think when things are going wrong, and then look at about how you might repair it with the child. I think that is really important information to have out in the public arena—that no-one is expecting you to be perfect as a parent. It is the mistakes that we make and how we fix them that are probably most associated with growth both in the relationship and for the child than when we get it perfectly right. So for children in this group—this lucky set—we know that they have far better educational outcomes; they have better relationship with their peers; they have better relationships with teachers; and they have a much greater degree of resiliency and optimism. They have got this fence that when bad things happen, well, good things are going to come their way afterwards, because that is their experience of the world. It is a lens through which they view life and experience life, and of course it is a lens that set them up for future success. It does not mean obviously that these children are going to be super kids. It just means that they are normally healthy, and they are going to have the capacity as they grow up to make the best of their opportunities, and to have much better occupational outcomes and relationship outcomes, and the capacity to be a parent in the future.

We have two other groups. One is what we call the insecure attachments. They are called avoidant and ambivalent resistant. It is not ideal, but they are not terrible either. So, for these kids, they have had certain experiences in their relationships where you might get an increased rate of anxiety and mild depression as an adult. We call them perhaps the worried well, this group. You know, they are not perfect outcomes, and they do have an impact throughout their lives, but they are not disastrous either.

The CHAIRMAN: So you have the data showing that the kids in that group are more likely to suffer depression?

Dr Goossens: Milder forms, yes, not really severe; and they do have different outcomes.

Then we have the group that we perhaps are more interested in clinically, and I think from a population health and a government point of view that you would be really wanting to look at what is happening for this group, because these are ones who eat up your resources later, and that is the disorganised attachment group. This group are really struggling. They do not have a coherent strategy and relationship to fall back on. That is why we call them disorganised. This group varies. In a good sample, if you go into a middle class kind of sample where people have not got significant adversity, and that is obvious, we are looking at around five to eight per cent. Whereas if you are looking at a sample of children growing up with parents who are drug abusing, violence, significant trauma of any sort, really severe mental illness, it can go up to 80 to 90 per cent. So it really depends markedly on the quality of environment.

The CHAIRMAN: When those children are identified by the child health nurse, who then tries to put in those measures —

Dr Goossens: Sorry to interrupt, but just to go back a little bit, this quality of attachment, we have not got an easy way for a child nurse to identify. It is not like an EPDS —

The CHAIRMAN: So it is not a score that they get from this questionnaire to then say these are the problem children?

Dr Goossens: No. This is very much a research concept, where we have looked at these children, we have followed them up longitudinally, and we know what difficulties they have got. But they have got some red flags in terms of the way they are presenting at a child health nurse level, where they can really identify that these children are at risk. To actually qualify what is going on in terms of attachment, you have to do a procedure called the strain situation procedure. That is really a research procedure looking at where you stress the relationship. A common way of saying it is that they put salt on to measure the relationship by doing an assessment of the child with the parents where there are repeated separations and reunions. It is obviously stressful to any parent and child to be separated and for the child to be left alone for three minutes, and so we are stressing it to see what happens in the relationship under stress, and that is how that quality of attachment is measured. However, having said all of that, there are these red flags that we can identify. The child health nurses in my experience are very adept at identifying when there is something significantly wrong going on.

Mr P.B. Watson: That is if there are enough of them to go around.

Dr Goossens: Yes.

The CHAIRMAN: I have one last question and then I will hand it back to you, Peter.

Mr P.B. WATSON: Thank you! We do appreciate you sharing!

The CHAIRMAN: With those red flags that are identified, if we go back to South Australia, where they identify the families, and the families then get 30 visits from—they are not called child health nurses there, but it is the equivalent to our child health nurses —

Dr Goossens: So it is more like Olds' home visitation scheme?

The CHAIRMAN: Yes. In the UK, a similar thing would be the health visitor. When the child health nurse then gives a child the red flag because of those assessments, should we as a committee be saying that there should be additional funding once a child has got that red flag? At the moment, we know that the screening is done at so many weeks, so many weeks, so many months, so many months, 18 months and three years. Should we be saying that as soon as a child is identified with a red flag, the child should be taken out from that system and they go into a system whereby—again, I am asking you—for maybe one year or two years they are visited on a regular basis by either a child health nurse or a community mental health nurse or someone to ensure that they are actually being connected with all the supports that can be given in the community?

Dr Goossens: I am really glad you said that, because I think the really important thing that has come out of Olds' work—I do not know if everyone is familiar with that —

The CHAIRMAN: Who is that?

Dr Goossens: It is David Olds. That is an amazing piece of respective research that has been tested again and again, when he looked at high-risk samples. He has just repeatedly tested his hypothesis and kept on proving that, by looking at high-risk samples, where he picked up women who were having their first baby and provided them with an intensive home visiting service throughout the first year of the baby's life, and onward if it was required. He found that that program was only as good as the other services that existed in the community in that it helps link in to other things that you need. It is not the dose that you need on its own. I think that is a really, really important thing. It is the thing that, when I have talked to people about it before, they have not really understood; that is, that that relationship is very, very important. The things that Olds has proved about the efficacy of that program and what predicts its efficacy are very important. It is incredibly important that the nurse who is visiting is a trained professional. It cannot be a lay person, because it does not work the same. Everyone has gone, "Great, we will get volunteers to do it, because it is cheaper", but it does not work. Secondly, he found that the person needs to have access to really good quality clinical supervision and support. As you can imagine, it is not an easy job going out to people's homes and dealing with often quite complex and difficult situations. He found also that it needs to be integrated with other community resources, so that you do not have major gaps in the things that you then can link these families into. It was Ken Henry who said this, and I think it was a really good statement that he made. He talked about human capital, and he said that what we are really talking about is building this human capital and starting very early in that process, and he said that one has to understand that for families with complex and severe difficulties, you are often going to require interventions that are sophisticated and complex in themselves, and just a home visiting service, or just this or just that in itself, is not going to be enough for the families. You are often talking about multigenerational difficulties and quite entrenched difficulties.

The CHAIRMAN: Is Ken Henry, Ken Henry Olds, or is it someone else?

Dr Goossens: No; this is Ken Henry the secretary to the Treasurer. He did the Henry tax review.

The CHAIRMAN: Yes!

Dr Goossens: That is why I thought it is interesting that you have got someone who is coming from this very economic point of view who can really understand the building of human capital and the spectrum of interventions that you need. I think everyone is always looking for a one-size-fits-all; if you just have this little program, that will work. But for a lot of these families, yes, home visiting would be incredibly useful, but it must be home visiting that can link into a range of other services that these families might need.

The CHAIRMAN: For this home visiting, is there a model in South Australia, Victoria, Queensland, the UK, America or Canada that you believe the committee should look at further as a—what is the word—kind of gold standard?

Dr Goossens: I guess Olds' model is one model. I know the federal government has had Olds come out here to talk.

The CHAIRMAN: He is from where?

Dr Goossens: I should know this. It will come back to me in a second. He is in the States. I am trying to think of the state that he comes from.

Mr P.B. WATSON: We will find him!

Dr Goossens: His program is operating in a number of states in the US now. It has spread to a number of different states. But I would still emphasise that it is not the whole picture and that these tiers of intervention in communities are really, really important. By "tier", I mean that you get the

prevention and universal services that are available to all families, and then levels upwards where you get access to more intensive services and more targeted services, and then specialist services, and they all have to integrate and support each other; and that is what we do not have at the moment.

I just want to go back to another government initiative, which is the DCP hubs. I know there was a plan at one point to have nine DCP hubs. This really came out of looking at mandatory reporting for emotional abuse and neglect rather than just sexual abuse and this kind of recognition that this is going to open the floodgates of having families identified that are really struggling, and what are we going to do with them; and then this idea came up of the hubs where it would not be about families just coming into DCP and it would not be a DCP shopfront but it would be a number of services co-located, which is a great idea. We would have to enhance what services exist to be able to do that, but, yes, it is a great idea.

The CHAIRMAN: Do we have a DCP hub here?

Dr Goossens: I think the decision was made when mandatory reporting was dropped to think, "Oh good; we will just have one, maybe, in Armadale". But even with the Armadale one, for example, specialist mental health is not involved in the Armadale one, which I think is missing something, because we know that for all these children who experience significant emotional abuse and neglect, a huge range of them—up to 70 per cent of them—have mental health difficulties. So we really need to be planning that we allow families to access social support, family support, family education, all sorts of things, but as well some specialist input to look at how we fix the relationship once it has gone awry; and we need to integrate all those things. I think the really key point is integration.

Mr P.B. WATSON: Would you be able to give us the top three major risk factors for early brain development? Also, for children from a one-child family, how much is their integrating with other children their own age a plus for their brain development? Say you have a family with one child, should they encourage their child to interact more with other children of their own age in the early years?

[11.15 am]

Dr Goossens: To go back to the first part of the question, which is about risks to brain development, we know that a current major risk to brain development is substance use antenatally, particularly alcohol. We have a current tragedy going on with our Indigenous population with antenatal exposure to alcohol, which is going to have an untold effect in terms of diminished social capital. It is very alarming, because we know that 40-something per cent—I have heard different stats, ranging between 42 and 48 per cent—of the Indigenous population are now under the age of 18. In some areas, we have very high rates of foetal alcohol syndrome spectrum disorders, and I would say that is a huge problem. For these children, these ones at the more severe end, who have actually got the disorder, this will have a huge implication in terms of their capacity to be educated and their capacity to become independent and functioning citizens in the longer run. We do not know the stats completely about that, but that is my understanding. We are only really just setting up monitoring systems. We are really very, very far behind where we want to be, I would think.

The CHAIRMAN: What monitoring systems are you aware of? You would have seen that one of the other terms of reference of this committee is that we will be looking at foetal alcohol syndrome.

Dr Goossens: There is one paediatrician who I know it is their expert area and they are involved in the public health initiative. I would have their name; it is just not at the tip of my tongue.

The CHAIRMAN: We will accept that from you by way of supplementary information. Thank you very much.

Dr Goossens: I can provide that later. That is one huge risk. I think from a public health point of view, the message is out there about antenatal exposure to alcohol. The women who are attending

good quality antenatal care are being educated about it. So I think we have got good public health initiatives. It is with the more disadvantaged population, who maybe are not attending antenatal care, who are not engaged in it in a positive way, that we are really struggling.

Another risk is exposure to trauma in the early years. There is obviously a range of that. For children who are exposed to one-off traumas, there is still an impact. But what we really are concerned about is repeated exposure to trauma and to relational trauma. It has huge impact on the developing brain.

Mr P. ABETZ: That would include domestic violence, and parents on drugs and issues that go with that?

Dr Goossens: Yes. It is really interesting when you look at an infant and the development of post-traumatic stress disorder. The thing that is most likely to precipitate a post-traumatic stress disorder is not threat to themselves but threat to their primary caregiver. So that does really highlight the negative impact of domestic violence, because often it is about witnessing violence to the primary caregiver. We are so hard wired to link into that primary caregiver and to be terribly concerned about their wellbeing, and that is why it so traumatising.

The CHAIRMAN: So the child does not actually have to be abused themselves; it is seeing that abuse going on within the family?

Mr P.B. WATSON: Mental abuse.

The CHAIRMAN: Seeing mental or physical abuse going on within their family is a traumatic event for that child?

Dr Goossens: Yes.

Mr P.B. WATSON: My other question was about —

Dr Goossens: Sorry, but just to get back to the first question, the other risk factor would be the impact of severe metal illness in caregivers on young children. They will be my top three; so, substances, trauma, and mental illness. I think you asked for three.

Mr P.B. WATSON: You can have four if you like!

Dr Goossens: They are the most significant ones. The other part of the question was singletons, little ones who are on their own in families. Yes, I think for all children, varied developmental experiences are important, and obviously part of that is going to be relating to other small children. But I think the key thing for all of that is the relationship to other children. When they are very little—I am talking about threes and under—it is about being supported by an attachment figure whilst you do that. Does that make sense to help you navigate that? I think that is where children really learn. It is in that context.

Mr P. ABETZ: That would suggest that parenting classes helping parents to be aware of issues with their kids, could be a very useful mechanism that would lead to better educational outcomes in the long term.

Dr Goossens: Yes, and I think we have seen that with a program like PPP, which is a primary kind of health initiative for families. I think parents preferentially are picked up for that program where they have got issues, perhaps of behavioural difficulties in their children, their very young children, to learn how to be a more effective parent. That does have a good result in terms of outcomes. I think probably there is a shift now to looking at trying to provide parents with more attachment-based information that they can incorporate in their daily lives. I think unfortunately attachment in a way has been associated with this idea that you always have to be nurturing and warm with your child, without this sense that you have to take charge. All the modern attachment research supports that it is about the capacity to take charge wherever necessary, and that obviously the warmth and

support is very important, but it does not undermine your parental capacity to be the one in charge; and children need to know that it is you as a parent who is in charge, not them.

Mr P. ABETZ: Too many parents allow their kids to be in charge!

Dr Goossens: That is right, and it is really unhelpful for them, and obviously it does not set them up well for school, where they are going along and suddenly they are in an environment where they are not respecting an authority figure, and they find it very difficult to cope.

Mr P. ABETZ: Because the world is not revolving around them any more.

Dr Goossens: All the time, yes, and that is not helpful for them.

Dr G.G. JACOBS: I just want to ask about the Child and Adolescent Mental Health Service. Firstly, do you think we have got enough of those? Secondly, do you think that is the best way of engaging the problem and engaging children and adolescents? What has been your Fremantle experience as a model of servicing that need in the years nought to 18?

Dr Goossens: The first thing is that when we look at a mental health service at the specialist end, we look at benchmarking of what we call full-time equivalents, or FTEs, per 100 000 of population. I think that is probably the best way of looking at it so that it is not anecdotal. It is an experience of where you are looking at services and how you plan and how you plan your response to population. You go back to what has been researched to say this is the number of people that you need at this level to actually adequately deliver a service. The UK data suggests that we need 21 FTE of community-based CAMHS, meaning child and adolescent mental health service clinicians, per 100 000 of population. Queensland has come out with our Australian benchmarks, and we are looking at 14 FTE per 100 000 general population for community-based CAMHS clinicians.

Mr P.B. WATSON: And we have got seven.

Dr Goossens: Yes, and we have got seven. So that gives you some picture. So that is the first part of it: no, we do not have enough. It has been really grossly under-resourced and just completely ignored. It is interesting that when you are looking at mental health, I think child and adolescent mental health has been part of adult mental health. This is really understandable—that you tend to direct your resources to where the problem is noisiest; it happens, does it not? If you are thinking of CAMHS, that is what happens as well in child and adolescent mental health services—that you direct the problem where it is most acute and difficult and causing the most impact, and really that would end up being largely in adolescents, and it would be around adolescents who are at significant risk to themselves and others. So it is then very hard to redirect your resources back, when you are operating at that kind of skeleton level, to looking at what we are doing when we take a history of an adolescent. What we do in CAMHS is we sit down and we often go back a couple of generations and we take a history and have a look at all of the factors that have brought this adolescent to this point at this time. There is always that dismaying feeling where you think we could have intervened then, we could have intervened then, we could have intervened then; and if feels like pretty late intervention, really, when there have been multiple points at which we could have intervened when the family has been in contact and in difficulty, and there have not been pathways for that to occur. So there is always that dismaying sense of it would have been much nicer to have intervened earlier.

So having said all of that, moving on to is CAMHS just alone the answer, no, it is not. It is one part of the puzzle. I think when you are looking at a specialist mental health service, you do have to resource it to adequate levels. When you start to resource it to adequate levels—I am talking benchmarks levels, so a minimum of 14 FTE per 100 000—you then can start to do the capacity building in other organisations that you need to do. So CAMHS is not only an important face-to-face with families who are really struggling—who have been through other child and family services but are really still struggling. That is where CAMHS has its role, when families have not been able to get the help they need or have not responded to the support and help provided, and you

then could come in and do a consult or provide intervention. It has an enormously important role in up-skilling other agencies and consulting with them and educating them and providing the more expert stuff that then feeds into your more tier 2 and tier 1 services. So I see that as essential. It is very hard when a service has got seven FTE per 100 000; of course it retracts back to most severe problems face-to-face, and you lose that capacity to do that other work which is incredibly important. It has got a lot of non-tangible kind of effects.

I think there was another part to that question, too. I am just trying to think back to what it was. Was it about what I did at Fremantle?

Dr G.G. JACOBS: Yes.

Dr Goossens: With that in mind, because obviously some of my passion was around intervening very early, and my training in New South Wales was very much around infancy and peri-natal mental health, I started to look at, just in the Fremantle district when I was working there as a consultant in child and adolescent mental health, what we could do to start to assist families with these kinds of difficulties. One of the things that we did was we formed a partnership approach with the child development service to start to identify these families as they got referred in by child health nurses, to look at providing a more mental health-enhanced service to some of those families that initially began in a playgroup. That service has evolved over time. It does not hit enough of the families that we know it needs to, but it is a beginning, and it has a huge impact on the families that are able to access the service. What that involves now is an eight-week parenting program which is based on a Circle of Security DVD package. It is quite a high-level therapeutic program that is backed up by a two-term intervention of a high-risk playgroup where parents get to try out and be supported by clinicians while they are interacting with their children in live time. Because what we know is that there is a huge division between what we can learn intellectually, but sometimes there are significant barriers to how we might put that into place at an emotional level on a daily basis. So it is about providing an environment where that can be supported. A lot of those parents who have been through that program have needed some work of their own, and we have facilitated referral for that, and they have needed quite a lot of social support. So this program is not just, again, a stand-alone program. It is integrated with a whole lot of other initiatives. A lot of these children have got more than one developmental difficulty, as occurs in this age group, so there is a huge overlap with other developmental difficulties. We know that mental health and the other aspects of development are kind of all tangled up and interrelated, so sometimes accessing other developmental services helps child development as well.

The CHAIRMAN: You talked about the assessments at birth, the Edinburgh scale. In Victoria, when children start at primary school, they are given a questionnaire to help identify problems with the child or with the family, and the results of the questionnaire are either needs help, may need some help, or no help is needed. They are looking to develop a similar questionnaire for use by the school nurse at a high school level to, I guess, help flag any problems. Are you aware of any tools that are being used by school nurses or school chaplains, or someone in the schools, to try to identify those children and those families in need? One of the things we will be looking at is the role of the school nurses, whether they can play a greater role in trying to get families the support that they require.

Dr Goossens: Am I aware of any tools that they are using that are reliable and well researched?

The CHAIRMAN: Yes.

Dr Goossens: No. That would have to be a question directed at Education; and I would say it might vary from site to site, too. It would be interesting to establish that. Again, I think they are adept at identifying families in difficulty, but the issue is about what do you do then. I think that childcare workers, for example, are incredibly adept at identify young children who are in difficulty, because they have got enormous experience on a practical day-to-day level at calibrating children's behaviour. For example, if you think about public health problems and cost to government, a

diagnostic word would be conduct disorder, which has a huge impact and chews up all of your resources. These are children who develop—this is generalising—persistent externalising behavioural disorder. That has a very poor outcome in adulthood. There are a number of these young people who go on to develop significant antisocial personality disorders, who are heavy users of the justice system, have poor educational outcomes, often have high rates of substance use, and high rates of public health use in various probably unproductive ways. So if we think about that diagnostic group, we would really like to either prevent conduct disorders; or, if they develop a conduct disorder, to have very early intervention and to work quite hard at changing what is going on for that child and family so that we can limit its severity and longevity. I think that, for example, childcare workers are very adept at identifying persistent aggression and difficulties with pro-social behaviour in children in child care but have very few ways of referring them out or getting a consultant in to look at what we need to do at this point.

[11.30 am]

Mr P. ABETZ: That is very interesting. Thank you.

The CHAIRMAN: Before we close, because you have had an opportunity to look at all the things we will be looking at in this inquiry, could you take a few minutes to maybe summarise for us what you believe are the key areas that we could look at, and I guess really point us in the right direction to make sure that this is a valuable inquiry?

Dr Goossens: It is a big question, is it not? From my perspective, I think that we need to really focus on providing a framework for what is needed, the components of support and service that families with young children need, and a framework of collaboration and integration between those components. That is the kind of really big picture stuff, I think. We need to make sure that this is a focus, and that we roll it out. What is happening now is that there are bits of things developing everywhere, but there is no underlying framework for it to be developed in a coherent or integrated way. And when we think about the service components, they have to range from universal services and social support and integration, right through to more sophisticated interventions for families that have got significant difficulties. A playgroup will not on its own change the trajectory of a family with complex and severe difficulties. I think there is a delusional thought out there, that people think it will. It really will not. It will obviously be helpful, but what is actually going to change the trajectory of that young person is more intensive intervention. We just need to have all of our service components identified and working in an integrated way. I think that probably the role of government is to provide that framework and to facilitate it. Obviously from my own perspective we really need to plan for population increases and we need to resource them. In this state, with our significant increase in population, we cannot expect to deliver the same service with the same resources—which, if you think about a child and adolescent mental health service perspective, is significantly under-resourced to begin with.

The CHAIRMAN: In terms of that planning for the future, in the south metropolitan area, would it be Nicole Feely—I think that is her name—who would be looking at mental health services as well as the hospital services? Who is looking and saying we only have seven —

Dr Goossens: There has been a change in mental health in that child and adolescent mental health services have been integrated in under the child and adolescent health service, and there has been a change in the topography of our landscape in that now we also have a Mental Health Commission that looks at what it wants to purchase and sets a good idea of strategic policy and development about where it would like to go. So there have been these two changes. So from a health service point of view, currently Health is delivering about 80 per cent of the mental health interventions. But I think from a strategic point of view that the commission would like to shift that to being more spread out in the non-government sector as well. That is my understanding of the development of that. So I think there are two roles. There is a role for Health to get its own house in order and to recommend what it thinks it needs in terms of both health and mental health, and integrating that,

especially for young children, and then there is a role for the Mental Health Commission to understand the issues and to decide what it wants to purchase. Does that make some sense? So, child and adolescent health services as a whole now have the responsibility for determining what they recommend in terms of young children, what they need in terms of service components.

The CHAIRMAN: Thank you very much.

On behalf of the Education and Health Standing Committee, I would like to thank you for your evidence before the committee today. A transcript of this hearing will be forwarded to you for correction of minor errors. Any such corrections must be made and the transcript returned within 28 days from the date of the letter attached to it. If the transcript is not returned within this period it will be deemed to be correct. New material cannot be added via these corrections and the sense of your evidence cannot be altered. Should you wish to provide additional information or elaborate on particular points, please include a supplementary submission for the committee's consideration when you return your corrected transcript of evidence.

Again, this is our second day of hearings into this inquiry, so we are just starting. Therefore, when you return your information, if there are any other issues that you think it would be well worth us investigating, even it is in point form, we would appreciate those recommendations from you. Thank you very much.

Dr G.G. JACOBS: Madam Chair, Caroline mentioned the Sroufe study in Minnesota. Could you provide the reference for that, as well as for David Olds?

Dr Goossens: Sure; I can provide the reference for that.

Dr G.G. JACOBS: That would be great.

Hearing concluded at 11.36 am