EDUCATION AND HEALTH STANDING COMMITTEE

INQUIRY INTO ATTENTION DEFICIT DISORDER AND ATTENTION DEFICIT HYPERACTIVITY DISORDER IN WESTERN AUSTRALIA

TRANSCRIPT OF EVIDENCE TAKEN
AT PERTH
WEDNESDAY, 16 JUNE 2004

SESSION 2

Members

Mrs C.A. Martin (Chairman)
Mr M.F. Board (Deputy Chairman)
Mr R.A. Ainsworth
Mr P.W. Andrews
Mr S.R. Hill

Co-opted Member
Mr M.P. Whitely

[10.45 am]

JENKINS, ASSOCIATE PROFESSOR HEATHER J.
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The DEPUTY CHAIRMAN: Good morning and welcome. I am sorry that we are running a little behind, but that is the nature of these things, particularly when three people give evidence. Thank you for your submission, which we found very interesting, as is the work that you are doing. This committee hearing is a proceeding of the Parliament and, as a result, you cannot deliberately mislead the committee.

Assoc Professor Jenkins: I have no wish to mislead you.

The DEPUTY CHAIRMAN: Have you signed the "Details of Witness" form?

Assoc Professor Jenkins: Yes.

The DEPUTY CHAIRMAN: Did you understand the notes attached to it?

Assoc Professor Jenkins: Yes.

The DEPUTY CHAIRMAN: Would you like to make an opening statement, summarise your submission or tell us your thoughts on our inquiry? Then we will ask questions and try to explore it a bit further.

Assoc Professor Jenkins: My qualifications are in education and psychology and, as far as possible, I will confine myself to those aspects that impact on ADHD. ADHD is a significant and substantial disorder that causes many problems in schools. My concerns are to address it and to manage individuals with ADHD as effectively as possible. The studies that have been done to date that I have reviewed, and in line with my own research and clinical evidence, indicate that the administration of either methylphenidate or dexamphetamine, combined with good behavioural, psychological and educational management, is the most effective way of managing individuals with ADHD. However, one of the issues at present is that I believe that ADHD is a neurological disorder, particularly the neuropsychological functions that are disordered. There is limited evidence about the impact of stimulant medication on the neuropsychological functioning. What we see in the meta-analyses of evidence is that although behaviour unquestionably is improved by the administration of medication, those effects do not always flow onto more complex learning outcomes, and in particular its impact on working memory, which is critical as children's learning becomes more complex as they move through school; on children's self-regulation capacity; and on their capacity to problem solve and so on. In general terms, it is the more complex cognitive ability. My current research project, which is still to be initiated - we are still gaining ethical approvals and so on - is to investigate whether atomoxetine, a new non-stimulant medication alternative, has a more beneficial effect on cognitive and learning capacity. Studies indicate that it is comparable to the stimulants in its effect on behaviour.

The DEPUTY CHAIRMAN: All the issues that you have raised really go to the heart of our inquiry. You made the statement that there is no doubt that dexamphetamines or other stimulants have an effect on behaviour, but you are concerned about the long-term learning issues. Do you have any evidence that long-term learning may be affected by the repetitive or long-term use of these stimulants?

Assoc Professor Jenkins: When the stimulants are administered effectively to children who are properly diagnosed, the dosages are appropriate and so on, because of the behavioural

improvement, obviously they can pay more attention in class. A child who can pay better attention in class is clearly in a better position to learn. However, Nola Purdie and John Hattie, who are quite distinguished educational researchers, have undertaken a meta-analysis of 74 different studies that have looked at the effect of medication on educational outcomes. Although the effect of the medication on behaviour and the social outcomes are quite significant, the effect size on intellectual test performance and on language outcomes is reported as 0.34, or in that region. That means that there is an improvement of approximately only one-third of a standard deviation, which is not a very significant improvement. Taking a meta-analysis of 74 studies is quite substantial evidence. What they refer to as the flow-on effects to learning are not happening. We suspect that the small improvements that we are seeing - obviously this is my interpretation - are a consequence of the fact that at long last the child can focus his attention. However, children need more than to just be able to focus their attention to get past about a grade 4, 5 or 6 level in school, because in about grade 5 the curriculum switches from being fairly concrete to something much more abstract in its approach.

The DEPUTY CHAIRMAN: Is that the fault of the drug, or are we expecting too much from one drug to handle all the different aspects and side effects of ADHD?

Assoc Professor Jenkins: I am not a pharmacologist, so this is only an opinion. I understand that the stimulants act on the dopamine pathways and that dopamine is critical in the basic attentional processes. However, there is evidence that action is required on alternative pathways to have these other effects. Yes, I think we probably expect more of the stimulants than is appropriate. Clearly, every medication has an action in a very specific way. We know that atomoxetine is what is called a norepinephrine re-uptake inhibitor. I use the analogy of a telephone line - if the pathogenesis of ADHD is that the synaptic transmission is flawed, the messages simply do not get through. A variety of chemicals operate in the synaptic transmission. One is the dopamine system and the other is the norepinephrine system. The stimulants work by operating on dopamine. Atomoxetine is thought to operate on the norepinephrine system. It is a different pathway for achieving the same outcome, which is improved neural transmission.

The DEPUTY CHAIRMAN: To summarise what I think you are saying, people think that prescribing dexamphetamine solves the problem. In fact, it solves only part of the problem, and people need alternative treatments for the learning aspects that should follow as a result of having more attention.

Assoc Professor Jenkins: Yes, and they need that support both medically and educationally. I will give another analogy. A 10-year-old child who cannot read has his eyes tested. It turns out that he needs glasses, so he is given glasses, but he still cannot read. That child must still be taught all the complex learning and problem-solving strategies that he has missed out on.

Mr P.W. ANDREWS: I am glad to hear you say that because my experience has been as a teacher. At my school, each week one kid was diagnosed with ADD. When those kids went on medication, there did not seem to me to be any great change in their behaviour, but they were high school students. Certainly there was no real change in their study patterns or what I call their general learning; it just did not seem to change. The explanation that you have given satisfies my experience of it. I will ask you the same question that I have asked everyone. You have said that there is no doubt in your mind that ADD is a neurological disorder. On what do you base that? What have you read, or how have you come to that absolute conclusion?

Assoc Professor Jenkins: I will just unpack something in your question first. Are we using ADHD or ADD as the preferred acronym?

Mr P.W. ANDREWS: ADHD.

Assoc Professor Jenkins: My understanding is that ADD is the inattentive type. I am convinced principally by the functional magnetic resonance imaging studies, which demonstrate different

patterns of activation in different parts of the brain of children with and without ADHD. In April I attended a conference of the American Educational Research Association, at which a researcher by the name of Gabrieli from Stanford University presented evidence of its FMRI studies. I can check the details, because it was a conference. Along with his colleagues, he has undertaken systematic imaging studies of normal children, children diagnosed with ADHD and, separately, those children diagnosed with ADHD both with stimulant medication and without stimulant medication. The patterns of activation show that we can differentiate between the children with ADHD and those without ADHD in the FMRI outcomes.

Mr P.W. ANDREWS: How did they define those students with ADHD?

Assoc Professor Jenkins: They would have been diagnosed using the DSM-IV criteria.

The DEPUTY CHAIRMAN: We do not have his paper. Did he table a paper at that conference?

Assoc Professor Jenkins: No, but I could find out and get some of that evidence.

The DEPUTY CHAIRMAN: We would be very keen to get a hold of that.

Mr M.P. WHITELY: You may not be aware, but had the children who were diagnosed with ADHD who were unmedicated ever been medicated; and, if so, how long had they been medication free? That is one of the criticisms.

[11.00 am]

Assoc Professor Jenkins: First of all he talked about the normal children and then he talked about the children with ADHD. While I was sitting there I wondered what happened when they were put on Ritalin and then he said that he had put them on Ritalin and he showed - I will need to check this - I think, the cordate nucleus and the putamen. One was underpowered, so to speak, without medication, and it came up to normal levels with medication, and the second area functioned not at all in children with ADHD. When they were given the medication, that second area kicked into action, and resembled the normal pattern.

Mr M.P. WHITELY: Thank you for that study. You referred to 74 studies of improved behaviours.

Assoc Professor Jenkins: Yes.

Mr M.P. WHITELY: Can you point to one study which is the definitive study and which, if we were to read it, would give us the snapshot that provides the evidence and may be cross-referenced to other studies, but basically is the one that is held up as the one that proves the improved behaviour? I have read widely on the subject, frankly, and every study that I have read has a fundamental flaw. However, is there one that can be pointed to that states, "This is how the research was done, this is our methodology and this is how it was verified"?

Assoc Professor Jenkins: Have you referred to the National Institutes of Mental Health study across six sites, which was conducted in the US? It is referred to as the MTA study. There are a series of papers on it, but it is fundamentally the one study.

Mr M.P. WHITELY: I have, and I have heard some criticism along the lines that I have previously mentioned. Sorry, what was it?

Assoc Professor Jenkins: It was a study conducted by the National Institutes of Mental Health in the US. It is referred to as the MTA study. The methodological criticisms of it are minor compared with the power of the study and the careful monitoring of both the interventions and the outcomes.

Mr M.P. WHITELY: If the FMRI is valid, it would be a diagnostic tool, would it not?

Assoc Professor Jenkins: Yes.

Mr M.P. WHITELY: Why does the DSM-IV acknowledge that there are no neurobiological or diagnostic tools; the only diagnostic tools are in fact behavioural, and the behaviours are all hard to define?

Assoc Professor Jenkins: I cannot explain to you why the American Psychiatric Association publishes what it does, but I can tell you that DSM-IV was published a number of years ago, and the FMRI studies are ongoing as we speak. The more studies that are published in the area, the more confidence the American Psychiatric Association will have.

Mr M.P. WHITELY: Is FMRI used as a diagnostic tool, or is it used as something to validate research afterwards? Are you aware that FMRI is actually used -

Assoc Professor Jenkins: FMRI is a massively expensive procedure that requires very careful ethical approvals and so on to be undertaken. At this point it is at the research stage only. However, the reason the research is being done is that all of us hope to have what might be called hard-wired, if you like, evidence.

Mr M.P. WHITELY: So at this stage it is not a diagnostic tool.

Assoc Professor Jenkins: No, it is not realistic for it to be a diagnostic tool at the moment. That is the end hope.

The DEPUTY CHAIRMAN: You are about to enter into research on this new drug. Has that drug - just for our evidence - had acceptance elsewhere in other jurisdictions; and, if so, for how long? Has there been any clinical evidence of better outcomes as a result?

Assoc Professor Jenkins: The drug is called Strattera in its commercial form. It was released in the US in approximately February 2003 on the basis of a series of clinical trials which had been published in the literature and which are independent of the work done by Eli Lilly, which is the company that distributes it. At the moment, in the literature, it is better than a placebo and comparable with methylphenidate in its effects in reducing the behavioural or so-called core symptoms of ADHD. It has different types of minor side effects. It is more likely to cause nausea, and it also causes sleepiness, which I have to say is a cause for great rejoicing among the parents because of the effect of insomnia. The side effect situation is looking good in that the side effects are minor and wear off. It was not approved until February of this year for release in Australia. I understand that that is because Australia's therapeutic goods authority has stricter guidelines for its release than those in the US. In the interim 12 months, some more studies have been published that show that over longer periods it is a safe drug to use.

Mr M.P. WHITELY: How long are those periods? Currently, children are put on dexamethaphine or Ritalin from as young as four, and they stay on it presumably through their adult life in many cases. For how long have the studies of Strattera been conducted?

Assoc Professor Jenkins: I would have to look up the references and get them for you. My understanding is 26 weeks, but I can locate those references for you.

The DEPUTY CHAIRMAN: I assume it is not on the PBS.

Assoc Professor Jenkins: No. It has been released as what is called a second-line therapy for children who do not tolerate the stimulants for a variety of reasons.

The DEPUTY CHAIRMAN: I will just get off that for a moment. I am interested in your views on alternative treatments, because you mentioned that in your submission. What sort of experience have you had with that or research into that? Is there a body of evidence that could show that alternative treatments are equally successful, or, in the case of some people, more successful? We are trying to get to the basis of whether this State is over prescribing and whether not enough alternatives are sought before prescription drugs are given. I would appreciate your thoughts on that whole area.

Assoc Professor Jenkins: Okay. The evidence is quite substantial that ADHD is on a continuum from normality, rather than being a discrete categorical disorder. I would refer you to Professor David Hay from Curtin University of Technology for the evidence of that. If we accept that some people have mild through to moderate and severe aspects of the disorder, then clearly the level of intervention must be scaled up in accord with the severity of the disorder. The first test, if a teacher or parent is concerned about their child's level of behaviour in the classroom, is to apply a very effective behaviour modification strategy. If the behaviour responds quite capably to a well-designed behaviour modification program, then it is not ADHD. When I say well designed, I mean a program that uses appropriate levels of reinforcement and is implemented for at least three weeks. It takes persistent application over a minimum of three weeks to see any changes in behaviour. If positive reinforcement and, if they are appropriate, combinations bring children's behaviour into appropriate levels of behaviour, then it is not ADHD. ADHD is a dysfunction of response inhibition. It is caused by their neurological problems, and it cannot be modified by behaviour modification. Once their transmission is brought within the normal realm - it is still not brought down to what is the same as normal, but at least the extremes are brought down - then the levels at which those individuals and families can manage can be facilitated by good educational management strategies.

The DEPUTY CHAIRMAN: That says to me that every young person - it does not have to be a young person, but we will talk about young people - should have that alternative or the opportunity for prescriptions given to them.

Assoc Professor Jenkins: Yes.

The DEPUTY CHAIRMAN: And that does not happen, does it?

Assoc Professor Jenkins: It probably varies school by school. The Students At Educational Risk strategy is intended to implement positive behaviour management programs. The current literature suggests that a type of program called positive behaviour support, which actually teaches all children how to respond positively and gives them appropriate rewards for it, is the best way to go. However, those approaches take a whole-school approach, and many schools have so many issues that they have to choose a focus and work with it. For some schools, that is not what their focus is.

The DEPUTY CHAIRMAN: What then follows is a difficult question, and you may not be able to answer it, but you can give me your opinion. A lot of young people who are currently on prescription drugs may have been better dealt with, and could have been appropriately dealt with, through other means, or they may not even have ADHD, but have ended up on prescription drugs because they may have had a learning problem or some behavioural problem that was not in fact ADHD. What is your opinion on that?

Assoc Professor Jenkins: I cannot comment on the accuracy of diagnosis. I do know that I have met with the ADHD interest group of paediatricians, and they are extremely conscientious and responsible professional people. The paediatricians in that group do not diagnose ADHD lightly or irresponsibly, in my experience. I say that because, as professional people, they are not in the business of just dishing out drugs. I am constantly at pains to address that issue. I do not know why, but ADHD attracts that kind of criticism more than, say, medication for asthma or medication for juvenile diabetes.

The DEPUTY CHAIRMAN: I am not sure that one follows. I am not trying to take you out of your field, but it seems to us that the alternatives are not considered for every person who has been diagnosed as having ADHD and ends up on prescription drugs. That is the evidence that has been given to us. How does that come about?

Assoc Professor Jenkins: One of the main reasons is that medication is managed by the pharmaceutical benefits scheme and by Medicare and so on. However, for many years psychologists - I am a registered psychologist - have not been able to access health benefits and so

on. The cost of psychological supervision is very high, and the APA hourly rate is about $160 an hour at the moment. That is way out of the level of the average family. The education department downsized its school psychology service. You can wait - again, this is only anecdotal evidence - about three to six months to see all of that.

The DEPUTY CHAIRMAN: I agree with everything you have just said. I think that is a tragedy that needs to be sorted out. However, having gone back to the responsible paediatrician who is now giving a script, would that responsible paediatrician not ask, "What other alternatives have you sought before I do this?" Does that happen?

Assoc Professor Jenkins: I do not know. I am not a paediatrician.

The DEPUTY CHAIRMAN: I am saying that the evidence given to the committee is that it is not happening enough. I guess the issue is why that is not happening.

Assoc Professor Jenkins: The fundamental issue to me is that paediatricians may have a desperate family in front of them. We know the statistics for families with ADHD. The parents are more likely to be divorced. The children are more likely ultimately, if they are undiagnosed and untreated, to engage in the kind of impulsive behaviour that in adolescence gets them into a range of problems. We do know that medication in the very first instance improves their behavioural and social functioning in about 85 per cent of cases. Therefore, in the absence of any other services, it is an important first-step response. A paediatrician or any other professional would be irresponsible to deny that.

The DEPUTY CHAIRMAN: Obviously, the individual or the parents should have had an equal opportunity to get alternative treatments or advice in a cost-effective way; and that is what you just said.

Assoc Professor Jenkins: Yes. If that were available, that would be a real asset, and it would be an asset not just for children with ADHD; it would be an asset, as you said, across the board for many families.

Mr M.P. WHITELY: I think you hit the nail on the head when you said that the financial support is there because dexamphetamine is on the PBS. Therefore, all the financial support that is offered by government - I am talking about the various levels of government - is for the medication. Diverting some of those resources into other intervention opportunities, such as speech therapy, occupational therapy and psychological services -

Assoc Professor Jenkins: Yes, early intervention.

Mr M.P. WHITELY: You are saying that that is a positive, and it will lead to decreased pressure on paediatricians who are faced with a family that is in a desperate situation, and the paediatrician is therefore, in your words, if I understand correctly, obliged to offer the medication. You are saying that diverting resources towards the other options is a worthwhile -

[11.15 am]

Assoc Professor Jenkins: No, I am not saying to divert resources; I am saying there should be additional resources. In another forum I might discuss with you the distribution of our national budget and its priorities. I do not want resources diverted; I want extra resources.

Mr M.P. WHITELY: I was not suggesting taking it off the pharmaceutical benefits scheme, but if you had other services, there might be less drain on the PBS because fewer kids would be on medication.

Assoc Professor Jenkins: Even for children who need medication, there are appropriate other forms of management so that perhaps the levels of dosage might be able to be reduced. Even that would be significant.

Mr R.A. AINSWORTH: My question is related to what has just been said. You mentioned earlier the varying levels of disruptive behaviour that a group of children might have. If there were some intervention of another type, it might reduce the number of children in total who require medication as opposed to alternative intervention. One of the things I have been looking at fairly closely in the past few months is the different ways of dealing with children in an educational setting, particularly at primary school. A program called Tribes changes the way in which education is presented. It is very much more positive through peer support and self-esteem being lifted and that sort of thing. I am certainly not a trained teacher by any means, but from my external view of this it seems, when we look at the background of some of the kids in classes where this program is being applied and we see children who come from broken homes, that perhaps some other factor is contributing to their disruptive behaviour as opposed to something that is inherent in them because of some disorder. A layman would say from looking at those children superficially that their behaviour is indicative of ADHD. When they are in a different situation in a classroom where they are able to function in a more positive way because of interaction with other students and the teacher - I use the Tribes program as one example because I think it is a very good one - the behaviour of those children changes. Not only that, the important thing is that the educational outcomes improve at the same time totally without medication and purely as a result of an environmental change in the classroom. We can see in some cases quite significant changes in attitude and self-esteem. The whole process goes forward in a positive way. I am making the statement, but having given that very verbose overview, do you think that type of approach and program needs more resourcing to perhaps minimise the number of children who progress to the next stage of being diagnosed for ADHD?

Assoc Professor Jenkins: There are two points I want to make in response to that. The first is that disruptive behaviour is not caused by broken homes. The evidence of the Western Australian child health study that was conducted by the Telethon Institute for Child Health Research shows that educational underachievement is most closely linked to the parents' level of education, thus we can see the whole cycle repeat itself. If we can improve the children's participation in education, they will become more effective parents and their children will go on to have more effective education. I am quite sure you are aware of the Western Australian child health study. When the effects of divorced and single parents were factored out, they were shown not to be responsible for educational underachievement. It is a matter of the parents' level of education and, beyond that, quality that contribute to poor outcomes in education.

The second factor is, yes, the notion that using programs like Tribes, which are part of a broader movement called Making Schools More Inclusive, is an extremely valuable strategy. There are a range of different approaches to this, and the Tribes program is a very good one, particularly for indigenous children, which is strongly in its favour. There is a whole-government school strategy called Building Inclusive Schools, to which I and a range of other people contributed. A report has been sitting on Alan Carpenter's desk. For some reason he will not release it, but through the budget he recently assigned $40 million to the Building Inclusive Schools strategy. If this committee can contribute to the development of that in Western Australia, it would be very powerful.

Mr R.A. AINSWORTH: Perhaps I was incorrect in focusing only on broken homes because that is unfair. What I was really looking at is the range of dysfunctional families that I have seen personally. Things have happened in those families that have affected the children's schooling; for example, their concentration span. Even whether they have had breakfast can be affected by whether things are working at home. That has a negative impact on their learning and on their behaviour. That can be modified to a large extent by the sort of program we are talking about.

Mr P.W. ANDREWS: Again, this is more of a statement than anything else. I agree with much that I have heard this morning, but I find scary the concept that doctors prescribe medication as what we have heard of as the first step response because of a lack of alternative screening. When

we mix that with what we heard earlier, that sufficient studies have not been done on the long-term effects of the medication, to my mind that is very scary.

Assoc Professor Jenkins: There is considerable evidence on the long-term effects of stimulant medication. It has been used safely for 50 years in the treatment of ADHD in various forms.

Mr M.P. WHITELY: We will not go back over it, but we did have evidence last year that one of the long-term effects is brain atrophy.

Assoc Professor Jenkins: A study has shown that the brain size of children with ADHD is smaller -

Mr M.P. WHITELY: It is the same study.

Assoc Professor Jenkins: Yes, and when they received atomoxetine the volume increased.

Mr M.P. WHITELY: The children with the smaller brain volume had been medicated. Is it the ADHD that is causing the smaller brain volume or is it the medication that is causing the smaller brain volume?

Assoc Professor Jenkins: Those are correlated studies, and correlation is not causation.

The DEPUTY CHAIRMAN: Let us draw ahead.

Mr M.P. WHITELY: I am interested in hearing a little bit about the study on the use of Strattera because I have visited Eli Lilly Australia in Sydney. I must say that it was difficult to get information, but one of the side effects seemed quite similar to those of dexamphetamine and Ritalin. However, Eli Lilly said that one of the benefits was that Strattera had less addictive properties so there were fewer black market issues than there were previously. Can you tell me a little bit about the study, what it is trying to achieve and Eli Lilly's involvement in it? One of the criticisms we have continually heard is that much of the research is funded by drug companies that obviously have a vested interest. It is therefore an obvious question that needs to be asked. What is Eli Lilly's involvement in the study, is it funding it, what control does it have over it, and how is it conducted?

Assoc Professor Jenkins: First, dexamphetamine is not addictive, if I might correct your earlier comment.

Mr M.P. WHITELY: Okay. Let us talk about atomoxetine.

Assoc Professor Jenkins: I object to statements being made that in my opinion are incorrect.

The DEPUTY CHAIRMAN: What we are trying to do is to get your opinion rather than argue the case. If the witness could just answer the question.

Mr M.P. WHITELY: GlaxoSmithKline Australia thinks it is addictive. It is the manufacturer. Anyway, we will not go into that.

The DEPUTY CHAIRMAN: We want to draw out your opinion on these matters. We can argue the case later in committee. If we could have your opinion.

Assoc Professor Jenkins: The study is an independently initiated trial. I am an independent investigator. Eli Lilly has signed all forms that are issued by Curtin University. Curtin University owns the intellectual property of all outcomes. They will be published in peer-reviewed scholarly journals. Eli Lilly's involvement is necessary because it will supply the Strattera. It will not supply the dexamphetamine. There is a control group for dexamphetamine and a control group for atomoxetine. I cannot obtain atomoxetine other than through Eli Lilly. At the present time I am going through all the approval procedures for Eli Lilly to approve this study and issue the atomoxetine. Other than that, Eli Lilly has funded me $15 000 a year for three years. It has handed over a cheque for the first $30 000. It has asked for no accountability whatsoever. It has not influenced me in any way; it has not influenced my presentations at conferences, my publications or

any other aspects of my work. The study will also have to meet all the National Health and Medical Research Council ethical guidelines. We will be conducting all the testing of the children independently of the paediatricians. I will be employing research associates both here and in Sydney. We will be doing testing in schools. We will not be doing any testing in paediatricians' offices or any premises other than schools.

The DEPUTY CHAIRMAN: Is there anything more you want to add?

Assoc Professor Jenkins: The main thing that I would like to see come out of this inquiry is an acknowledgment of the extensive research in this area in a way that enables parents to seek support for their children in appropriate ways. The extent to which parents are made to feel as though it is their fault, in inverted commas, that their child is behaving in this way is completely inappropriate. If parents can be given more support to manage individuals with ADHD through a range of options, such as the ones we have talked about, I would welcome the outcome, because I think it would then make teachers' tasks more straightforward. With the support given to both families and schools, we could have a very good situation in Western Australia.

The DEPUTY CHAIRMAN: That is exactly what we are trying to do. In fact, one of the factors that brought about the inquiry is the number of parents who have experienced detrimental social outcomes and criticisms from schools and public health departments when they thought they were trying to do the right thing. It is a confusing situation. The state policy lacks clarity. If we can serve that purpose, that is what we intend to do. I thank you for your submission and your forthrightness today, which we need. It is important we get that kind of evidence, because the only way we will get clarity is if we start to get some real information. That is important to us.

You will receive a copy of the transcript of your evidence. If you find any errors, you are entitled to correct them, but only if they are errors. If you want to expand on any information, you can send supplementary information to us. You have 10 days in which to do all that, otherwise the transcript will be deemed to be correct.

Assoc Professor Jenkins: If I can locate some of those references to which I referred, may I send them?

The DEPUTY CHAIRMAN: We are in an information-gaining exercise here. The more we can get hold of, particularly from recent relevant studies, the more delighted we will be, because that is what we need. Thank you for your evidence today.

Committee adjourned at 11.29 am