Grace Jackson, MD
Senate Health & Welfare Committee
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Testimony on S.287

(Dr. Jackson's written handouts are posted at
http://www2.leg.state.vt.us/CommitteeDocs/Senate%20Health%20and%20Welfare/Bills/S.287/Witness%20Testimony/2-6-2014~Grace%20Jackson~S.287~Brain%20Repair.pdf
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Dr. Jackson: Good morning, this is Dr. Jackson.

Agatha Kessler: Hi Doctor Jackson, this is Agatha calling from the Vermont Statehouse, how are you?

Dr. Jackson: Hi, I'm good thank you

Agatha Kessler: I have another line here with the Senate Health and Welfare Committee and I'm going to turn this one over now to Senator Ayer, she's Chair of the Committee.

Dr. Jackson: Wonderful

Sen. Ayer: Good morning, thank you. I'm sorry, we got behind in our testimony today, Dr. Jackson. We are looking at a bill called S.287. And I — I'm [ ] you've been asked to talk to us about our focus in this committee, there's a lot of overlap between judiciary and health care, as you know. But our focus is on quality of care and access to care, as it's affected by this bill and judicial process, and we were hoping you would speak to us for five or ten minutes about that and then you might have a couple of minutes for questions.

Dr. Jackson: Wonderful

Sen. Ayer: So, go ahead

Dr. Jackson. Yeah. You want me to just — turn it over to me, is that right?

Sen. Ayer: That's right.

Dr. Jackson: Why, thank you very much Senator and the members of your committee because it is a true pleasure and a privilege to be invited to present some materials and I don't often have this opportunity. I should preface the remarks by saying I grew up in the neighboring state of New Hampshire

Sen. Ayer: Ahh

Dr. Jackson: Where the slogan is still Live Free or Die. So, my remarks may be coming a bit from that perspective

Sen. Ayer: OK

Dr. Jackson: And if not, I appreciate what Vermont's trying to accomplish here.
I think I'll start off just by summarizing my professional background, in order to explain for the committee clinical basis of my remarks.
I graduated from medical school in 1996. I finished my residency in psychiatry in the US Navy in the year 2000, and so I've been practicing psychiatry for more than thirteen years in a variety of settings that include the following — it's certainly not limited to these, but it includes military hospitals, private practice, community health clinics, Department of Corrections in North Carolina, both low custody and medium custody prison settings. I have worked on Assertive Community Treatment teams around the state of North Carolina. I have worked in Medicaid funded health centers in the state of North Carolina, a variety of those facilities. And most recently I've been working as a clinical psychiatrist, mostly in inpatient hospital settings in northern Arizona, and I'm currently working as the Acting Medical Director of an eleven bed inpatient unit. So the questions and the ethical issues that are presented by this topic, involuntary treatment, specifically involuntary medication, are very near and dear to my heart as I have witnessed them and experienced them from the provider side in a variety of settings. I should also preface my remarks for your committee and say that I was trained very conventionally as one would expect in the US Navy, and was expected to embrace the following beliefs:

Number one, that medication must be given in order to prevent a patient's progressive decline.
Number two, that medication benefits are predominant and predictable.
And number three, that medication adverse effects are actually quite rare.

These fundamental tenets were widely distributed to me by most of my teachers and by most textbooks. But over time, as I reflected on these principles in my training and as I was actually watching the real world, lived experiences of my patients, and then as I performed my own independent library research I really went through a process of what I have to call re-education, or de-indoctrination. And I grew to appreciate that there are three phenomena that are associated with the use of all prescription drugs, but these are especially important for a practicing psychiatrist.

The first of these is, in the United States medical system at this moment in time there is an inordinate emphasis upon symptom suppression rather than the actual eradication or mitigation of the causes of symptoms. By that, I mean we focus on symptom suppression, that medicine in general has departed from the mission of identifying essential causes of disease or discomfort.

The second thing that I've grown to appreciate with the use of prescription drugs is a term

which has been introduced by other, other providers and researchers called allostatic load. What that really refers to is really a set of counterproductive adaptations that are made by the body in response to any medication or any drug. So that the drugs themselves become a new stress, upon the, upon the human body.

And then the third phenomenon that I've witnessed with prescription drugs is very important, and that is something called target organ toxicity. And this refers to the harmful effects which drugs exert on specific bodily organs. And when I use that terminology, I use it in a very specific sense that as a practitioner in a specific specialty of medicine, that being psychiatry, the target organ about which I am most concerned on a daily basis is actually the brain. So a cardiologist's target organ will be the heart, a gastroenterologist's target organ will be anything between the mouth and, and the other end, and et cetera. So my target organ of concern is the brain.

So what my practice has been about really has been a tremendous soul searching and re-education process to understand these phenomena as they apply to the use of prescription drugs in psychiatry — why we focus on symptom suppression rather than the root causes of our patients' distress;
how the medications themselves become a stress on the body. And specifically, how psychiatric drugs become harmful for the target organ of the psychiatrist, that being the human brain. Having observed these phenomena in clinical practice over the past thirteen years, I have been compelled to drastically alter my philosophy of care, different than what I was taught by my early teachers and text books. And today the approach that I have raised is my work at the hospital is an approach that I, I've developed called PHARMARU. And that's "P" "H" "A" "R" "M" "A" "R" "U."

What that phrase refers to is pharmaceutical avoidance when possible, pharmaceutical reduction when people are already taking medications, and responsible use in all scenarios. And so my purpose or my privilege in testifying before your committee today is to really underscore the importance of legislative measures that protect both the public and health care professionals from any kind of coercive care that does truly not promote the best interest of the patient. And I believe that legislation must balance the interests of the state in protecting the community but also in protecting the individual from consequences of [ ]. And so in trying to balance these interests I believe that the strategy of pharmaceutical avoidance, reduction and responsible use is an awfully good policy to actually consider.

Now I have got — sent to Agatha a package, and I'm not sure if the members of your committee have it, it's, it's called, it's actually a power point presentation with a tight narrative below each slide and it's entitled Brain Repair.

Senator Ayer: Yes, we have that. Thank you. And we have a second list of references.

Dr. Jackson: OK, so, I have got — basically written and published two books in my career which reflect a lot of the independent research that I had mentioned earlier. And I know it's an awfully long slide presentation but I thought I would just highlight a couple of points

and then we could turn this whole thing to questions.

Sen. Ayer: OK

Dr. Jackson: The highlights of that presentation, which is a lecture I presented a little bit over a year ago in Philadelphia at an annual conference of professional orientation basically was to address or introduce some of these issues leading up to the concept of PHARMARU — why it's so important. The beginning of this is really the introduction of what initially was called the sixteen state study which included Vermont, very broadly, and actually turned into an eight state study. Basically fifteen years ago, sixteen states received grants to review the outcomes of their public mental health clients. And what was interesting is — eight of the states really provided full data for the study, and that included Vermont, Virginia, Utah, Texas, Rhode Island, Oklahoma, Missouri and Arizona. And the findings were remarkably concurrent between these states. What they looked at were the outcomes for patients who fell under the designation of serious mental illness. So that included the diagnostic categories of bipolar disorder, what we would call manic depressive or affective disorder; schizophrenia, meaning a long lasting, usually, longer — longer duration psychotic disorder; major depression; and the category also included attention deficit hyperactivity disorder.

What these states were actually finding is that compared to people without those diagnoses in the states reporting on this information, people who had those serious illnesses were dying at significant numbers higher than the non mentally ill. One to 3.5 percent of those with these diagnostic categories or serious mental illnesses were dying each year. This was roughly three times, three times the annual background rate of death for the US population as a whole.

When matched also by age to non mentally ill people, these seriously mentally ill patients in the states that reported this data were dying at a much younger age. They were dying thirteen to thirty years earlier than expected. Mean age of death was usually between the late forties and the age of sixty. And most of these patients were, were very, very ill, they were experiencing a number of physical conditions, especially two or three or more significant medical illnesses at a much greater percent or higher rate of — of more seriously mentally patients had numerous significant medical conditions than those without serious mental illness.

Senator Ayer: Doctor Jackson, I think we might have seen a report that clearly indicated that, that seriously mental ill people in Vermont do have a much higher rate of co-morbidities and do die earlier.

Dr. Jackson: Right —

Sen. Ayer: So —

Dr. Jackson: It's called the, the —

Sen. Ayer: Yeah

Dr. Jackson: Absolutely. So that report — although this was published in 2006, the papers that were reporting these trends in all eight states — and while the data that was captured reflected information from fifteen years ago, from my, my perspective as a clinician it's unclear what impact this information has really had on day to day operations of medicine and psychiatry. So the elephant in the room that no one really talks about or goes near is what is the impact of medication in this outcome? The premature mortality, dying thirteen to thirty years earlier than expected, the high rates of death among the SMI relative to the non seriously mentally ill each year, and to the co-morbidities of serious medical conditions. And when one goes into the, the literature to actually try to put some flesh on this skeleton, it is remarkable just how much the risk or rate of serious medical conditions and premature mortalities are aggravated by all categories of psychiatric medication, but none quite so much as with the antipsychotic drugs. Now the antipsychotic drugs are also most likely to be the drugs that are used, from my experience, in court ordered treatment in the hospital settings, or on assertive community treatment teams or under outpatient commitment orders. So the fact that the State, under the doctrine of *parens patriae*, has the ability —

Sen. Ayer: I'm sorry, I didn't under — what document — what doctrine is that?

Dr. Jackson: Just the concept of *parens patriae* —

Sen. Ayer: OK

Dr. Jackson: Which is the role of substitute guardians for those, those who need extra protection. It seems to me that there's such a high moral imperative and ethical duty to be sure that when the state intervenes on behalf of someone who cannot provide adequate care for themselves, that state intervention is to uphold the highest quality care in order to decrease the likelihood of premature mortality, medical co-morbidities and worse outcomes instead of better outcomes.

So, the final thing I want to say to the committee, which I hope is new information, is there's quite a bit published on the link between antipsychotic drugs, for example, and diabetes, or antipsychotic drugs and heart disease. What I hope the committee will hear and take in and be curious to know further is the link between all categories of psychiatric medication and damage to the brain, particularly dementia. And that is something that is not yet well discussed or recognized in the United States.

So the antipsychotics, probably more than any other category of medication are predictably neurotoxic. And the interesting thing is that historically doctors have been taught or educated to look for certain kinds of neurological adverse effects associated with this category of medication. What is not yet commonly known is the emerging literature that associates antipsychotic medication with changes in the brain that are associated with Alzheimer's disease.

Now I have been working on an eleven bed unit here in Arizona since I applied in Sedona. And we have a fairly large demographic of aging patients. So the unit I'm on started as a geriatric psychiatric hospital ward. It has now expanded and serves adults of all ages. But I have had the unique and wonderful privilege and opportunity to work with older patients, to really observe two very interesting trends: one is, we don't see old SMI patients. I believe they're already dead. So we don't see many people who live to be a geriatric age coming in to a typical community hospital with diagnoses of years of bipolar disorder or years of schizophrenia. They're already deceased before they get to us. When we do receive some of these individuals, they have profound dementias.

On the other side, we have the opportunity to watch what happens when we administer medicines sometimes to people who are needing the substituted decisions and protections provided by a state public fiduciary. And I have gone to court when folks have needed guardians because they are unable to provide adequate care for themselves and they are basically gravely and persistently disabled. When we use these medications in people who already have dementia and cognitive impairment, the outcomes are very very difficult to predict. In some cases, when we have people with advanced stages of dementia, we are usually trying to balance the risks and the benefits of how close a patient might be towards the end of life or death.

Clive Ballard is a very, very important researcher in the United Kingdom. He and his group have looked at how dementia patients fare when antipsychotic medicines are used for brief periods of time and then safely or gradually withdrawn. And there is a remarkable difference in terms of the outcomes. So people who are taken off of the antipsychotics live longer and live just as well in terms of quality of life. People who are maintained on the antipsychotics once they have dementia usually are dead within three years.

We echo that statistic here, and we recognize — probably strange for me to say this under oath or in testifying to a committee, but we recognize, I think in most places in psychiatry that once people have dementia, the antipsychotics are a fairly predictable way of euthanizing patients. So — I'm using that term not to be inflammatory, but to say there are predictable risks of mortality that can be hastened once we add these medications.

Having said all of this, where does this place the State of Vermont, and where does this place your legislation and the average clinician and the public? I think there isn't a single doctor who takes an oath to serve as a doctor who does not have the best interest of patients at heart. I think where the controversy currently arises is the fact that we have had a true crisis in the integrity of medical literature published in the United States for the past twenty to fifty years. And there are — so these — that capture the real world outcomes better than some studies that are highlighted in text books or highlighted in the typical training programs. So we are some years away from the actual practice of medicine catching up to the real world, lived experience of our patients.

What I would hope would occur in Vermont legislation is what I think might occur well in the state where I'm currently practicing. I think, I'm very glad to be in a place right now where my fellow workers embrace the same philosophy of care that I introduced: the

concept of pharmaceutical avoidance, reduction and responsible use. The other point of this is to return to the three issues I identified in the opening, which is to say, why are we focusing so much on symptom suppression when sometimes that leads to excluding an appropriate consideration of the essential cause of somebody's distress? And I think there's a great deal of confusion at times when the term "untreated psychosis" is kicked around, as though treatment only equals medication. So I would hope that there's a new recognition of the fact that treatment may consist of many different things, and medication may need to be placed in the background while other psychosocial interventions are prioritized.

So again, the issues of symptom suppression unfortunately had received emphasis. In my current position here at the hospital we try to not make that our only focus or even the primary focus. Allostatic load, meaning the stresses that medicines pose to the body, are a constant focus of our work, where we try to identify all the biological conditions that are affecting any one of our patients, and specifically, you know, prioritize that diagnostic consideration and appropriate treatment. And the target organ toxicity is probably what is most unique about the work that I'm able to do here and what I've tried to bring to my other jobs, but it is a unique opportunity to work as a psychiatrist and to have a full appreciation of how each category of psychiatric medicine adversely affects the target organ in psychiatry, which as a biological organ, certainly not the psyche, but certainly the brain is important. And so in approaching our work we routinely balance the risks and benefits of medication with respect to how they are affecting each of our patients' brains. So our responsible use here really looks at a full biopsychsocial approach to patient care

— the CD was changed —

And when we use these responsibly we're trying to balance the very unique set of risks and benefits in each individual patient one case at a time.
I welcome your questions and appreciate, thank you for your time and opportunity to speak with you this morning.

Sen. Ayer: Thank you very much. We do have some questions, I believe. Maybe you could just say your name when you ask the questions

Sen. Lyons: Well I — this is Senator Lyons. I just want to thank you for your, for your information. I've been scrolling through your power point while you've been talking and it's just chock full of information.
So I went down to the Ritalin section, and I know we're not talking about specific drugs and we're not talking about the use of — well we are, possibly in ADHD and other uses — are there longitudinal studies going on with some of the — some of the work that you have presented here, not, you know, just — such as with Ritalin?

Dr. Jackson: Oh gosh, that's such a delightful question. And I can't believe I'm really having a chance to talk to Senators about this topic. You have to excuse me, it's sort of unusual and wonderful.

Ritalin and longitudinal studies. There have been very few long term studies yet to actually study what is happening to generation Rx — I think you folks may be familiar with that term. The real surge in the diagnosis of ADHD and the prioritized use of medications for that condition really started in the 1980s and 1990s in the United States. So we're now — you may be aware of this in Vermont because certainly other states are battling this — the issue of prescription drug diversion on college campuses, and how the issue of the graduation of the ADHD generation is impacting our colleges and our work force.
So the real questions are: what kinds of long term studies are being done on the ADHD generation and what is actually emerging in the literature in terms of some of these concerns that I've identified with the other drugs. Very very few in terms of the specific issue of target organ toxicity. What was interesting is that perhaps twenty years ago there was more of a thought or an acknowledgement among clinicians that ADHD was something that two thirds of children or more would simply outgrow by their teenage years.

In the past ten years, I don't think it would be an exaggerated remark to say that the pharmaceutical industry and its selected key opinion leaders in certain academic regions have aggressively campaigned to create a new legacy called adult attention deficit disorder for the purpose of expanding the market, and it's created sort of a new monster and a new challenge for clinicians.
So what we know about target organ toxicity at this point, with early exposure to stimulants and even more importantly, continuous, prolonged exposure to stimulants is concerning. There's one group of researchers at the University of California San Francisco that really was trying to understand from a neurology standpoint, how many people coming in to a Parkinson's disease clinic — and, is everybody on the panel familiar with Parkinson's disease?

Sen. Lyons (?): Yes.

Dr. Jackson: You may know Michael J. Fox, the young actor who — wasn't he in Vermont most of the time? — very courageous. So, these groups of researchers were trying to understand, OK, we have a Parkinson's Disease clinic, how many people who we are seeing right now coming in in their forties actually had certain exposures where we can begin to identify a risk factor, and try to do something with the next generation or other people, and do something with prevention.
They were initially limiting that kind of research, which was retrospective exposures, they'e taking people with an identified outcome, Parkinson's disease, and asking those patients: How many of you were exposed to, fill in the blank. And their initial questions were really focusing on recreational drugs that were known to cause Parkinson's disease. So what would those be. That would be methamphetamine or amphetamines, that people would be snorting or injecting, or smoking. We have a lot of this out in this part of the country, we are predominantly methamphetamine land in Arizona, when the East Coast is mostly cocaine and North Carolina very different. But they were really on the West coast very tuned in to the methamphetamine question. Another con — another recreational drug that they found, which was also expected, associated with Parkinson's disease and early Parkinson's disease too was another stimulant known as Ecstacy, MDMA.

What they did in a second or subsequent study was expand their, their set of questions to include, What about prescription stimulants? And lo and behold, that was the first study that actually was finding what I'm sharing and what many people would predict from the animal studies: and that is, yes they are seeing many people with Parkinson's disease in their forties who are giving the story, "I never smoked methamphetamine, I took Ritalin."

So it is in fact a concern in some of us who are watching this trend. I should say that in my clinical work when I sit with somebody in their twenties, thirties or forties and I elicit a pediatric history of early stimulant exposure, I'm already studying the bodies and the faces for Parkinsonian movements. So it is, I believe, a coming epidemic which we probably will not see for another twenty years or thirty years, but we have the opportunity to take what we already know from the physiological principles of medicine and the toxicology models which we can well study in animals. And if any members of your committee are interested in further discussion from this, a book that I wrote in 2009 called Drug induced Dementia goes into each category of psychiatric medication in terms of these different kinds of brain effects. But I would be even more delighted, you know, to provide you with succinct references for a very very short discussion. It's a very important thing but to answer your question Senator Lyons, the long term outcome studies where someone has latched on to say, let's look at all the kids in Vermont who started Ritalin and AdderalL, you now, twenty years ago, how many of those kids — where are they now? And those kind of long term qualitative discussions — how many are employed, how many in prison, I'm not sure just how many of those studies have been done, or if

Sen. Ayer: So, we don't have the longitudinal studies, then?

Dr. Jackson: We have longitudinal studies in terms of addiction.

Sen. Ayer: OK, you've got your question

Dr. Jackson: And we've got some longitudinal studies in terms of addiction to cocaine and nicotine. Some of the most important studies actually come out of California, there was this northern California study

Sen. Ayer: OK, I think we've got — I've got enough of that.

Dr. Jackson: You bet.

Sen. Ayer: Any other — final question? Senator Pollina?

Sen. Pollina: No, I'm good.

Sen. Ayer: Dr. Jackson, thank you very much.

Dr. Jackson: You are welcome and thank you for allowing me to speak with you this morning. I appreciate it.

Sen. Ayer: Thank you.

Dr. Jackson: You bet. Bye bye.

note from LZ: re: Parkinson's and Ritalin see:

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