**IN THE UNITED STATES DISTRICT COURT**
**EASTERN DISTRICT OF ARKANSAS**
**CENTRAL DIVISION**

**DYLAN BRANDT, et al.,**

**PLAINTIFFS,**

**v.** **No. 4:21-CV-00450-JM**

**LESLIE RUTLEDGE, et al.,**

**DEFENDANTS.**

**SUPPLEMENTAL DECLARATION OF DR. MARK REGNERUS**

Pursuant to 28 U.S.C. 1746, I declare:

1. My credentials, research, and professional qualification are detailed in my declaration in this matter dated July 7, 2021. Here, as there, my opinions are based upon my knowledge and research in the matters discussed. The materials I have used to research and write this report are the standard sources used by other experts in my field. I have actual knowledge of the matters stated in this declaration. This declaration does not exhaust my opinions.

2. I have reviewed the newly submitted supplemental declarations by Dr. Deanna Adkins (dated July 15, 2021) and Dr. Armand Antommaria (dated July 15, 2021), as well as the declaration submitted by the plaintiffs' new witness, Dr. Jack Turban (dated July 16, 2021). As I detail below, these new declarations contain numerous errors and mistakes.

3.

4. Dr. Turban accuses me (and other state's experts, as well as the Swedish and Finnish reports' authors) of misrepresenting and omitting "key research" on a variety of outcomes here, listing eight studies about pubertal suppression and six on gender-affirming hormonal treatment. My intention from the outset was not to offer a comprehensive literature review of the entire field of research in transgender science—especially but not exclusively that which focused on minors. That is a task unsuited to this document. Rather, one of the central purposes of my report was to describe how any supposition that there is a legitimate scientific consensus about treatment for adolescents is unmerited, and why. The research I cited and discussed is compelling evidence favoring a proper interpretation of this field as "in development" rather than as "settled science."

5. Dr. Turban offers the unsubstantiated claim that "[a]ll existing published data…points to the fact that gender-affirming medical interventions improve mental health for transgender adolescents." Such a categorical claim is simply untrue, as my original report already documented.

6. As an example of this erroneous categorical claim, Dr. Turban immediately highlights on the very same page an example of how "research has shown that sexual functioning (along with romantic development) improves" after gender-affirming medical interventions on adolescents.[1] The study he cites, however, reveals no such thing. "Improvement" cannot even be measured here, since the study was a cross-sectional one, not longitudinal. The study, rather, asked transgender youth a series of questions about sexual and romantic experiences and satisfaction (at a mean age of 14, no less). The results revealed that, in comparison to the general

[1] Bungener, S. L., Steensma, T. D., Cohen-

population, transgender youth displayed less sexual and romantic experience. It is an odd study to reference in support of his (ironic) claim about state's experts' purported mischaracterizations.

7. Dr. Turban's attempt at explaining both the surge in gender dysphoria and the reversal in the sex ratio of presenting patients is weak and speculative, demonstrating my original claim that some researchers and clinicians are indeed uninterested in understanding a pair of important social developments that may shape how practitioners and their professional societies approach treatments.

the sort to compare with the correction the Bränström and Pachankis study yielded.[2] Whereas the latter study's primary narrative—that "affirmative" surgeries contributed to patient's subsequent mental health—evaporated, Littman's correction merely concerned the language she used and did not change the results of her study.

10. It is nevertheless ironic for Dr. Turban to criticize Littman's use of an opt-in, recruited "anonymous online survey," when he has published extensively—including citations in his own report—from the 2015 United States Transgender Study. The USTS recruited networked, self-idaG[(-)riaG[(-)riaG[(-)riaG[(-)riaG[(-1Aa/F1 12 Tai[(-)riaG[(-)riaG[(-)riaG[(-1Aa/F1 12 Tai[(-)

11. That Dr. Turban should commend the Almazan and Keuroghlian study (on page 25) is another irony, since it too is based on the USTS. Talk of a "control group" in medical research connotes a clinical trial, randomization, and/or some sort of multi-wave analysis in order to establish an obvious time order to events. The USTS, however, offers none of these values.

12. Moreover, the USTS creates the impression that the data collection effort was a population-based random sample, like the US Census. It is not. Indeed, the USTS yields information about the transgender population that is decidedly different from that which can be learned from the 2014 CDC's Behavioral Risk Factor Surveillance System (BRFSS) data, the product of a probability sample from 19 states (and Guam).[6] When the two are compared, stark differences are revealed, further suggesting that the empirical "truth" about the transgender population is simply difficult to discern—a fact of life in this domain of research. For example:

a. Unemployment: 15% in the USTS vs. 8% in the BRFSS
b. Sexual orientation: 47% of male-to-female identify as LGB in the USTS vs. 15% in the BRFSS; 24% of female-to-male identify as LGB in the USTS vs. 10% in the BRFSS
c. Currently married: 18% in the USTS vs. 50% in the BRFSS
d.

13. On page 7 of his report, Dr. Turban favorably cites a study published in a 2015 issue of *Psychoendocrinology* that measured Child Behavior Checklist scores based on parental self-report. Thus, Dr. Turban, who criticizes (on page 32) Littman's reliance on a parental questionnaire, has no trouble with parental self-report6M9a000C00m-3(7)-9(a)u3(s)-rement t Chechnial

one, provoking contests over the meaning of a study's results. Given that it is arguably the largest longitudinal dataset capable of tracking the long-term effects of hormones and surgery, its lack of findings (following the editor's requested correction) has ramifications for the treatment of adult and adolescent patients alike.

17. Dr. Turban's own attempt (beginning on page 33) to explain the surge in gender dysphoria and self-identified transgender cases is odd and under-

20. Finally, Dr. Turban attempts to explain why clinics are "seeing more birth-assigned females than males in recent years"—which is a rather mild way of describing what is not a mere uptick but a radical reversal and surge, as I previously described. Dr. Turban begins with the observation that "tomboys" were much more likely to be "accepted in society, whereas feminine boys are ridiculed." Perhaps so. But then he speculates that this phenomenon "likely led to more transgender males being satisfied with pushing gender expression toward more male without seeking support from a gender clinic…" In asserting this, Dr. Turban categorically and anachronistically redefines tomboys as transgender males who simply had no access to a gender clinic. Where are they today? Still hidden, having suppressed their true identity? This explanation beggars belief. Perhaps instead, yesterday's tomboys are largely content to have avoided medical dependency, living without health implications or impairments from lifelong treatments that were, at the time, unavailable. Their gender non-conformity fostered their own resilience.

21. Dr. Turban claims that "sex ratios that favor birth-assigned females" among the population of transgender patients is not unprecedented. While I can appreciate the subsequent international citations and consideration of international data, the sample sizes are simply too small (24 total cases of "female-to-male transsexuals" who "came from different parts of Poland" over four years in the study Dr. Turban cites[7]) to suggest anything about the sex ratio of transgender Poles in the 1970s. The rate of the much larger number seeking "sexologic" treatment from which this small pool is drawn, however, revealed the standard male-dominated pattern.

[7] Godlewski, J. (1988). Transsexualism and anatomic sex ratio reversal in Poland. *Archives of sexual behavior*, *17*(6), 547-548.

22. On page 36, Dr. Turban contests my claim that "there is no defined psychotherapeutic method for treating gender dysphoria that can be widely characterized and consistently identified as 'conversion therapy' in order to be banned." He misrepresents my claim. I did not state that there are no definitions. Rather, I assert that there are no "widely" and "consistently" agreed-upon definitions, like there is with the vast majority of clinical conditions, practices, and treatments. Only his reference to American Academy of Child and Adolescent Psychiatry (AACAP) offers a definition for conversion therapy. The subsequent citations each refer to conversion therapy but do not define it.

23. Following the AACAP's policy on conversion therapy, Dr. Turban employs a "frame alignment"[8] move to suggest efforts at conversion therapy for same-sex attraction and gender expression are equivalent, since both—he claims—specifically "aim to promote heterosexuality" (page 36). That is, he links interpretive orientations between two distinctive movements—the one to suppress gay conversion therapy and the one, noted above, on gender identity "conversion" efforts—in the hopes that overlapping interests, values, beliefs, and goals are complementary. But I am not talking about heterosexuality. I concur with another critic who has observed, "Studies of conversion therapy have been limited to *sexual orientation*, and, moreover, to the sexual orientation of *adults*, not to gender identity and not of children in any case."[9] Here again is evidence that a central framework for uF1 12 Tf

All identified studies are observational, and few are controlled or followed-up over time."[11] Dr. Turban laments how "the NICE report also erroneously excluded" his own 2020 USTS-based *Pediatrics* study. But it is plausible

cause some irreversible changes, such as body fat redistribution and vocal changes, these effects are primarily cosmetic."[14] Fat redistribution is hardly a more significant irreversible change than infertility. But for Dr. Turban, infertility seems largely irrelevant. He misrepresents a 2019 study, claiming that "fertility was similar between transgender men who had been on testosterone treatment and cisgender women."[15] In reality, the study is about comparing the pregnancy success rate of assisted reproductive technology—an expensive, demanding process with modest success rates—between self-identified transgender males (natal females) and a parallel group of women.[16] Given that over 98 percent of live births in the United States do not employ assisted reproductive technology[17] and involve no "fertility preservation" of the sort that WPATH recommends to counseled patients, the reference to "similar" fertility is apt to mislead.

32. Supporters of "affirmative" treatment approaches tend to formally endorse the Dutch protocol. Yet at the same time, that protocol is far more rigorous and exclusive in its selection than the majority of patients who make up published American transgender research samples.[18] In the Dutch protocol, baseline health and high functioning are *reqf1 0 0 1 121.82 0 TJETQ 0.00 umend*

childhood gender dysphoria (i.e., adolescent-onset only) are grounds for exclusion from subsequent treatment. This is inconsistent with the contemporary practice in American

problems in school, peer relationships and managing everyday matters outside of home continued to have problems…" Indeed, "[p]sychiatric comorbidities, particularly depression, anxiety disorders and autism spectrum disorders as well as suicidality and self-harming