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35 Am. Psych. Assoc'n (2006), Evidence-Based Practice in Psychology, AM. Psychologist, Vol. 61, No. 4, 271 at 272.

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- f. A review of multiple trials;
- g. A meta-analysis of multiple trials that maximizes the number of patients treated despite their methodological differences to detect trends from larger data sets.
- The strongest forms of scientific knowledge emerge from the latter 79. three types of research—randomized, blind trials; reviews of multiple randomized, blind trials, and meta-analyses. When the APA Task Force on Promotion and Dissemination of Psychological Procedures considered what criteria would empirically validate a treatment, the task force relied heavily on whether a procedure had been "tested in randomized controlled trials (RCT) with a specific population and implemented using a treatment manual."35 Social affirmation of children, use of puberty blockers as a treatment for gender dysphoria, and administration of cross-sex hormones to adolescents, have never been clinically tested and validated in this way.
- Critically, "there are no randomized control trials with regard to 80. treatment of children with gender dysphoria." (Zucker, Myth of Persistence, at 8.) On numerous critical questions relating to cause, developmental path if untreated, and the effect of alternative treatments, the knowledge base remains primarily at the level of the practitioner's exposure to individual cases, or multiple individual

cases. As a result, claims to certainty are not justifiable. (Levine, Reflections, at 239.)

- Unfortunately, advocates of unquestioning affirmation further 81. complicate efforts to understand the available science by speaking indistinctly, ignoring differences between approaches that are likely to be clinically important. For example, the recent APA resolution speaks of "individuals who have experienced pressure or coercion to conform to their sex assigned at birth." (APA GICE at 1.) "Pressure or coercion" does not describe either the "watchful waiting" or psychotherapy models I have described above, nor therapy structured around a patient's own desire to become comfortable with his or her natal sex. Nor is it possible to extrapolate from outcomes experienced by those who have been subjected to "coercive" techniques to predict outcomes for patients who receive responsible "watchful waiting" or psychotherapeutic care as I have described and as many experienced practitioners practice.
- Unsurprisingly, prominent voices in the field have emphasized the 82. severe lack of scientific knowledge in this field. The American Academy of Child and Adolescent Psychiatry has recognized that "Different clinical approaches have been advocated for childhood gender discordance. . . . There have been no randomized controlled trials of any treatment. . . . [T]he proposed benefits of treatment to eliminate gender discordance ... must be carefully weighed against ... possible deleterious effects." (Adelson et al., Practice Parameter, at 968–69.) Similarly, the APA has stated, "because no approach to working with [transgender and gender

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nonconforming children has been adequately, empirically validated, consensus does not exist regarding best practice with pre-pubertal children."36

- 83. Contrary to the impression that statements in the recent APA GICE Resolution might leave, recent published research has not changed this situation. It remains the case that no randomized controlled trials of any treatment for gender dysphoria have been conducted, and recently published studies suffer from other serious methodological defects as well.
- For example, the APA GICE Resolution cites Turban et al. (2020), 84. Association between recalled exposure to gender identity conversion efforts and psychological distress and suicide attempts among transgender adults,³⁷ ("Association"), and this article has been cited to support claims that failing to affirm a transgender identity in children presenting with gender dysphoria results in a higher risk of their attempting suicide.
- But the sample and methodology of Turban, Association (2020) are 85. profoundly flawed and cannot support such a conclusion. A group of researchers has published a detailed critique of these defects, 38 which I will not attempt to replicate here. To highlight the most obvious defects, however, Association (2020) relied entirely on data drawn from an online convenience sampling of transgenderidentified and genderqueer adults recruited from trans-affirming websites. It is well

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³⁶ Am. Psych. Assoc'n (2015), Guidelines for Psychological Practice with Transgender & Gender Nonconforming People, Am. PSYCHOLOGIST 70(9) 832 at 842.

³⁷ 77 JAMA PSYCHIATRY 77(1) 68-76.

³⁸ R. D'Angelo, et al., One Size Does Not Fit All: In Support of Psychotherapy for Gender Dysphoria (2021), ARCH. SEX BEHAV. 50, 7-16.

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known that one "cannot make statistical generalizations from research that relies on convenience sampling." Nor did the authors of Association (2020) control for the subjects' mental health status prior to the reported exposure to what the study deemed a "gender identity change effort." I agree with D'Angelo et al. (2021) that "failure to control for the subjects' baseline mental health makes it impossible to determine whether the mental health or the suicidality of subjects worsened, stayed the same, or potentially even improved after the non-affirming encounter." (D'Angelo (2021) at 10.)

- 86. Looking at the literature in this area more broadly, a review of 28 studies of outcomes from hormonal therapy in connection with sex reassignment reported that these studies provided only "very low quality evidence" for a variety of reasons. 40 Large gaps exist in the medical community's knowledge regarding the long-term effects of sex-reassignment surgery (SRS) and other gender identity disorder treatments in relation to their positive or negative correlation to suicidal ideation, attempts, and completion.
- 87. What is known is not encouraging. With respect to suicide, individuals with gender dysphoria are well known to commit suicide or otherwise suffer increased mortality before and after not only social transition, but also before and

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³⁹ Handbook of Survey Methodology for the Social Sciences (2021) (Lior Gideon, ed. Springer).

⁴⁰ H. Murad et al. (2010), Hormonal therapy and sex reassignment: a systematic review and metaanalysis of quality of life and psychosocial outcomes. CLINICAL ENDOCRINOLOGY; 72(2): 214-231. See also R. D'Angelo (2018), Psychiatry's ethical involvement in gender-affirming care, AUSTRALASIAN PSYCHIATRY Vol 26(5) 460-463, noting the large number of non-responders in follow-up outcome studies, and observing that "it is generally not known whether they are alive or dead," and that "it is . . . pure speculation to assume that none committed suicide."

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after SRS. (Levine, *Reflections*, at 242.) For example, in the United States, the death rates of trans veterans are comparable to those with schizophrenia and bipolar diagnoses—20 years earlier than expected. These crude death rates include significantly elevated suicide rates. (Levine, *Ethical Concerns*, at 10.) Similarly, researchers in Sweden and Denmark have reported on almost all individuals who underwent sex-reassignment surgery over a 30-year period. The Swedish follow-up study found a suicide rate in the post-SRS population 19.1 times greater than that of the controls; both studies demonstrated elevated mortality rates from medical and psychiatric conditions. (Levine, *Ethical Concerns*, at 10.)

- 88. Advocates of immediate and unquestioning affirmation of social transition in children who indicate a desire for a transgender identity sometimes assert that any other course will result in a high risk of suicide in the affected children and young people. Contrary to these assertions, no studies show that affirmation of children (or anyone else) reduces suicide, prevents suicidal ideation, or improves long-term outcomes, as compared to either a "watchful waiting" or a psychotherapeutic model of response, as I have described above.⁴²
- 89. In considering "suicide," mental health professionals distinguish between suicidal thoughts (ideation), suicide gestures, suicide attempts with a

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⁴¹ C. Dhejne et al. (2011), Long-Term Follow-Up of Transsexual Persons Undergoing Sex Reassignment Surgery: Cohort Study in Sweden, PLOS ONE 6(2) e16885 ("Long Term"); R. K. Simonsen et al. (2016), Long-Term Follow-Up of Individuals Undergoing Sex Reassignment Surgery: Psychiatric Morbidity & Mortality, NORDIC J. OF PSYCHIATRY 70(4):241-7

⁴² A recent article, J. Turban et al. (2020), *Puberty Suppression for Transgender Youth and Risk of Suicidal Ideation*, PEDIATRICS 145(2), has been described in press reports as demonstrating that administration of puberty-suppressing hormones to transgender adolescents reduces suicide or suicidal ideation. The paper itself does not make that claim, nor permit that conclusion.

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lethal potential, and completed suicide. Numerous studies have found suicidal ideation to have been present at some time in life in ~40-50% of trans-identifying persons. This figure is approximately twice that reported in gay and lesbian communities. In the heteronormative communities, ideation is approximately 4%. Mental health professionals distinguish clearly between gestures and potentially lethal attempts, which often result in hospitalization.

- 90. I will also note that any discussion of suicide when considering younger children involves very long-range and very uncertain prediction. Suicide in pre-pubescent children is rare and the existing studies of gender identity issues in pre-pubescent children do not report significant incidents of suicide. The estimated suicide rate of trans adolescents is the same as teenagers who are in treatment for serious mental illness. What trans teenagers do demonstrate is more suicidal ideation and attempts (however serious) than other teenagers.⁴³ Their completed suicide rates are not known.
- 91. In sum, claims that affirmation will reduce the risk of suicide for children are not based on science. Such claims overlook the lack of even short-term supporting data as well as the lack of studies of long-term outcomes resulting from the affirmation or lack of affirmation of transgender identity in children. They also overlook the other tools that the profession does have for addressing depression and

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⁴³ A. Perez-Brumer, et al. (2017), Prevalence & Correlates of Suicidal Ideation Among Transgender Youth in Cal.: Findings from a Representative, Population-Based Sample of High Sch. Students, J. Am. ACAD. CHILD ADOLESCENT PSYCHIATRY 56(9) at 739.

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suicidal thoughts in a patient once that risk is identified. (Levine, Reflections, at 242.)

- A number of data sets have also indicated significant concerns about 92. wider indicators of physical and mental health, including ongoing functional limitations;44 substance abuse, depression, and psychiatric hospitalizations;45 and increased cardiovascular disease, cancer, asthma, and COPD.46 Worldwide estimates of HIV infection among transgendered individuals are up to 17-fold higher than the cisgender population. (Levine, *Informed Consent*, at 6.)
- Meanwhile, no studies show that affirmation of pre-pubescent children 93. or adolescents leads to more positive outcomes (mental, physical, social, or romantic) by, e.g., age 25 or older than does "watchful waiting" or ordinary therapy. Because affirmation and social transition for children and adolescents, and the use of puberty blockers for transgender children, are a recent phenomenon, it could hardly be otherwise.
- Given what is known and what is not known about the incidence and 94. causes of suicide attempts and suicide in children and adolescents who suffer from gender dysphoria, and what is known about the incidence of suicide attempts and suicide in individuals who have transitioned to live in a transgender identity, it is in

⁴⁴ G. Zeluf, et al. (2016), Health, Disability and Quality of Life Among Trans People in Sweden—A Web-Based Survey, BMC Public Health 16, 903.

⁴⁵ C. Dhejne, et al. (2016), Mental Health & Gender Dysphoria: A Review of the Literature, INT'L REV. OF PSYCHIATRY 28(1) 44.

⁴⁶ C. Dragon, et al. (2017), Transgender Medicare Beneficiaries & Chronic Conditions: Exploring Feefor-Service Claims Data, LGBT HEALTH 4(6) 404.

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my view unethical for a mental health professional to tell a young patient, or the parents of a young patient, that social transition, puberty blockers, or use of cross-sex hormones will reduce the likelihood that the young person will commit suicide.

- 95. Instead, transition of any sort must be justified, if at all, as a life-enhancing measure, not a lifesaving measure. (Levine, *Reflections*, at 242.) In my opinion, this is an important fact that patients, parents, and even many MHPs fail to understand.
- V. KNOWN, LIKELY, OR POSSIBLE DOWNSIDE RISKS ATTENDANT ON MOVING QUICKLY TO "AFFIRM" TRANSGENDER IDENTITY IN CHILDREN AND ADOLESCENTS.
- 96. As I have detailed above, enabling and affirming social transition in a prepubescent child appears to be highly likely to increase the odds that the child will in time pursue pubertal suppression and persist in a transgender identity into adulthood. This means that the MHP, patient, and in the case of minors, parents must consider long-term as well as short-term implications of life as a transgender individual when deciding whether to permit or encourage a child to socially transition.
- 97. Indeed, given the very high rates of children who desist from desiring a trans identity through the course of uninterrupted puberty, it is efforts to "affirm" a sex-discordant gender identity in prepubescent children that should be understood as the therapeutic path that is most likely to "change" or "convert" the child's adult gender identification, diverting the child from his or her probable maturation away from trans-identification.

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affirmation practices are safe and effective. (APA GICE Resolution at 3.) But if we consider the long term—a life course perspective— a great deal of data point in the opposite direction. The multiple studies from different nations (including societies which pride themselves on being actively inclusive of sexual minorities, such as Sweden and Denmark) that have documented the increased vulnerability of the adult transgender population to substance abuse, mood and anxiety disorders, suicidal ideation, and other health problems warn us that assisting the child or adolescent down the road to becoming a transgender adult is a very serious decision, and stand as a reminder that a casual assumption that transition will improve the young person's life is not justified based on numerous scientific snapshots of cohorts of trans adults and teenagers. American public health professionals repeatedly have published descriptions of trans populations as marginalized and vulnerable to many adversities.⁴⁷

- 99. The possibility that steps along this pathway, while lessening the pain of gender dysphoria, could lead to additional sources of crippling emotional and psychological pain, are too often not considered by advocates of social transition and not considered at all by the trans child. (Levine, *Reflections*, at 243.)
- 100. I detail below several classes of predictable, likely, or possible harms to the patient associated with transitioning to live as a transgender individual.

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⁴⁷ K. L. Ard, & A. S. Keuroghlian (2018), *Training in Sexual and Gender Minority Health - Expanding Education to Reach All Clinicians*. NEW ENGLAND J. OF MED, 379(25), 2388–2391; W. Liszewski et al. (2018), *Persons of Nonbinary Gender - Awareness, Visibility, and Health Disparities*. NEW ENGLAND J. OF MED., 379(25), 2391–2393.