

Prof. John Whitehall National Chair Christian Medical and Dental Fellowship of Australia

Dear Producers,

11 March 2020

## ABC Four Corners. Re Not a boy, not a girl.

With regard to your interesting programme on Monday night March 2, I wonder if I could bring a few points to your attention?

1. Regarding the side effects of 'blockers'. It is well publicised that blockers may interfere with bone density but it is also well known, though not publicised, that administration has been shown to cause sustained damage to the limbic system in sheep with demonstrable ill effects on memory and decision making and on emotional stability<sup>123</sup>. Cognitive effects have been demonstrated on human adults when blockers have been administered to reduce the effect of sex hormones eg in prostate cancer, but, of course, there are confounding issues of age and disease process<sup>45</sup>. Anxiety and mood disorders have been found in association with blockers. And so has an increased rate of intestinal disturbances in adult women receiving blockers for

<sup>&</sup>lt;sup>5</sup> Craig MC et al. Gonadotropin hormone releasing hormone agonists alter prefrontal function during verbal encoding in young women. Psychoneuroendocrinology. 2007;32(8-10):116-1127. Doi <u>10.1016/j.psyneuen.2007.09.009</u>



Office • 35A/9 Hoyle Ave, Castle Hill 2154

Postal • PO Box 877, office Baulkham Hills, NSW 1755

p +612 9680 1233 f +612 9634 2659

<sup>&</sup>lt;sup>1</sup> Nuruddin S, Krogenaes A, Brynildsrud OB et al. Peri-pubertal gonadotropin-releasing hormone agonist treatment affects sex based gene expression of amygdala in sheep. Psychoneuroendocrinology. 2013;38(12).3115-3127. Doi <u>10.1016/j.psyneuen.2013.09.011</u>

<sup>&</sup>lt;sup>2</sup> Hough D, Bellingham M, Haraldsen IRH et al., 2017 Spatial memory is impaired by peripubertal GnRH agonist treatment and testosterone replacement in sheep. Psychoneuroendocrinology. 2017;75(1):173-182. Doi <u>10.1016/j.psyneuen.2016.10.016</u>

<sup>&</sup>lt;sup>3</sup> Nuruddin S, Bruchhage M, Ropstad E et al. Effects of peripubertal gonadotropin-releasing hormone agonist on brain development in sheep...a magnetic resonance imaging study. Psychoneuroendocrinology. 2013;38(10):1994-2002. Doi <u>10.1016/j.psyneuen.2013.03.009</u>

<sup>&</sup>lt;sup>4</sup> Grigorova M, Sherwin BB, Tulandi T. Effects of treatment with leuprolide acetate depot on working memory and executive functions in young premenopausal women. Psychneuroendocrinology. 2006;31(8):935-947. Doi <u>10.1016/j.psyneuen.2006.05.004</u>



endometriosis: biopsies have revealed a 50 reduction in myenteric neurons, suggesting a widespread role for the blocked hormone in the maintenance of neuronal integrity<sup>6</sup>.

It is therefore misleading of you to publicise without discussion, the reassurance that 'the effects (of blockers) are generally reversible'.

It is not irrelevant to recall the direction of the High Court in Rogers vs Whittaker that a medical practitioner has the responsibility to disclose even remote possibilities of side-effects.

Similarly, it is misleading to accept the proposition that administering blockers 'gives a young person time to explore' their gender identity. This concept is biologically implausible because of several reasons. The first is the activity of a little understood but proven centre in the region of the midbrain that facilitates sexualisation in association with the blocked hormone (Gonadotrophin Releasing Hormone...GnRH)<sup>78</sup>. Blocking GnRH blocks that mid-brain effect of facilitating sexual identity. Second, blocking GnRH prevents the development of the sex hormones, testosterone and oestrogen, which, according to an unknown 'clock' were appointed to activate brain centres organised several weeks after conception. Their effect is widely recognised: puberty is a time of awakening of sexual interest. Third, devoid of the orientating effects of sex hormones, the child's sense of identity may be further weakened by disruption of the limbic system (according to studies on sheep in Glasgow), which integrates emotion, cognition, memory, reward etc into a kind of world view to be pursued by executive.

<sup>&</sup>lt;sup>8</sup> Pfaff DW. Luteinizing hormone-releasing factor potentiates lordosis behaviour in hypophysectomised ovariectomised female rats. Science. 1973.182(4117):1148-1149.



Office • 35A/9 Hoyle Ave, Castle Hill 2154

p +612 9680 1233 f +612 9634 2659

<sup>&</sup>lt;sup>6</sup> Prange-Kiel J, Jarry H, Schoen M et al. Gonadotropin releasing hormone regulates spine density via its regulatory role in hippocampal oestrogen synthesis. J Cell Biol. 2008;180(2): 417-426. Doi 10.1083/jcb.200707043

<sup>&</sup>lt;sup>7</sup> Riskind P, Moss RL. Midbrain Central Gray: LHRH infusion enhances lordotic behavior in estrogen-primed ovariectomized Rats. Brain Res Bull. 1979;4(2):203-205. Doi 10.1016/0361-9230(79)90282-X



It is, therefore, biologically implausible to argue a 'blocked' child will be better able to contemplate identity: the hormones influencing such a process will have been 'neutered' and, according to the sheep experiments, the integrity limbic system will have been damaged, and emotional lability increased. By promoting the concept of 'giving more time' without rebuttal, I am afraid you are misleading the general public.

As well as neutering the biological process and delaying its timeliness, administration of 'blockers' extends and reinforces the period of 'social construct' of gender identity in which the authority figures in the child's life, including such programmes as yours, emphasise the gender confusion.

2. Some of the children in your programme appear to have been started on cross sex hormones but you did not refer to any possible side effects. It would have been very appropriate to have mentioned the lasting effects of cross sex hormones on the human brain, particularly when the hormones are administered at the time of great and complex development in adolescence, and then continued through life. You portrayed a temporary 'happiness' without mentioning the long term cost. For example, It should have publicised that the adult brains of natal males on cross sex hormone shave been shown to shrink at a rate 10 times faster than ageing, after only 4 months<sup>9</sup>. Those of natal females on testosterone hypertrophy. It would have been appropriate of you to have mentioned the structural effects on the brain of blockers that have been revealed on imaging studies<sup>10</sup>.

It is all very well to have portrayed an on-camera 'happiness' but you should have looked into the future and considered the high rate of suicide in transgendered adults. Proponents claim that rate results from failure of societal acceptance but other possibilities are as plausible. For example, happiness was not found in the later years adulthood despite all the sufferer had undergone,

<sup>&</sup>lt;sup>10</sup> Schneider MA, Spritzer PM, Soll BM et al. Brain maturation, cognition and voice pattern in a gender dysphoria case under pubertal suppression. Front Hum Neurosci. 2017;11:528. Doi: 10.3389/fnhum.2017.00528.



Office • 35A/9 Hoyle Ave, Castle Hill 2154

Postal • PO Box 877, Baulkham Hills, NSW 1755

p +612 9680 1233 f +612 9634 2659

office@cmdfa.org.au www.cmdfa.org.au

<sup>&</sup>lt;sup>9</sup> Hulshoff Pol HE, Cohen-Kettenis PT, Van Haren NE, et al. Changing your sex changes your brain: Influences of testosterone and estrogen on adult human brain structure. Eur J Endocrinol. 2006;155(1):S107–S111. Doi 10.1530/eje.1.02248



including chemical if not surgical castration ( a common complaint of detransitioners). Also, given the structural effects of the hormones on the brain, who can declare such physical distortion did not contribute to such psychological distortion that resulted in suicide.

Your portrayal of the temporary 'happiness' without long term consideration was misleading.

3. Regarding 'reduction of adverse mental health outcomes' which the endocrinologist suggests will follow affirmative therapy, your programme should have revealed the very high rate of mental disorder in children reported to have preceded the development of the symptom of gender confusion, if not contemporary with the onset of that symptom.<sup>11</sup> Take autism for example, which has been found in up to 20% of some series of children who subsequently evince the symptom of gender dysphoria. Autism does not cause gender dysphoria, but its associated problems with reality may include gender identity. It was unbalanced of you not to consider gender dysphoria as a symptom of underlying mental disorder.

It was misleading of you to promote the concept that hormonal therapy was THE treatment for gender dysphoria and associated mental distress. You should have mentioned substantiated success with family and individual psychotherapy. For example, you might have referred to success in Western Australia by psychiatrist Robert Kosky<sup>12</sup> who, before the advent of hormonal therapy, diagnosed a symbiotic relationship of pathology between mother and confused boy which was treated with psychotherapy. And, you might have mentioned the success of 'watchful waiting' by Kenneth Zucker who lead the gender clinic in Toronto for many years. It was unbalanced to promote one point of view.

You should have also mentioned the contributory effect of the high rate of family disruption because it, too, is associated with psychological

<sup>&</sup>lt;sup>12</sup> Kosky RJ Gender-disordered children: does inpatient treatment help? MJA.1987:146; June 1:565-569.



Office • 35A/9 Hoyle Ave, Castle Hill 2154

Postal • PO Box 877,office@cmdfa.org.auBaulkham Hills, NSW 1755www.cmdfa.org.au

p +612 9680 1233 f +612 9634 2659

<sup>&</sup>lt;sup>11</sup> Becerra-Culqui TA, Liu Y, Nash R et al. Mental Health of Transgender and Gender Nonconforming Youth Compared With Their Peers. Pediatrics. 2018;141(5). Doi 10.1542/peds. 2017-3845



disturbance. Had the families of the four children in your programme been stable? Had any parents suffered from mental disorder? Parental disorder, particularly in the mother, has been found to have been present in a higher rate than expected.

You should be aware of the possibility of gender confusion resulting from child abuse, perhaps even from access to pornography. It used be emphasised to paediatricians that abuse be considered when a child demonstrated disturbance of sexual behaviour or identity. Now the role of access to pornography by children should be considered. Have your four children been 'turned off' sex because of what they have been viewing? In which case, counselling would be preferable to chemical castration.

You should have explored if not mentioned other contributory factors rather than promoted, at least indirectly, the current ideology of gender fluidity and the direct message of hormonal and surgical intervention.

For a variety of reasons, children displaying symptoms of gender dysphoria are vulnerable, at risk, and deserving our compassionate care. All of the associated problems such as autism, depression, anxiety and family disruption are known to be associated with a higher rate of self harm, and need our care. But, it should be emphasised that gender dysphoria, per se, has not been demonstrated to pose an increased risk.

The concept of that increased risk is, however, a powerful tool, scripted on various web-sites. The distraught mother of one of your children displayed that fear when, tearfully, she declared going on to 'blockers is actually saving her life'.

Somewhere, for some kind of balance, you might have referred to reports that puberty blockers may actually increase rather than decrease mental distress. For example, the report of 'Anxiety and mood disorders associated with Gonadotropin-Releasing Hormone Agonist Therapy' which described the onset of 'symptoms consistent with various psychiatric disorders, including panic disorder and major depression with and without psychotic features'<sup>13</sup>. You might also have referred to the much higher incidence of suicide in transgendered

<sup>&</sup>lt;sup>13</sup> Warnock JK, Bundren JC. Anxiety and mood disorders associated with Gonadotropin-Releasing Hormone Agonist Therapy. Psychopharmacology Bulletin. 1997;33:311316.



Office • 35A/9 Hoyle Ave, Castle Hill 2154

Postal • PO Box 877, Baulkham Hills, NSW 1755 p +612 9680 1233 f +612 9634 2659

office@cmdfa.org.au www.cmdfa.org.au



adults, reported from the most accepting countries<sup>14</sup>. And you might have considered a most recent retrospective review on "Pubertal suppression for transgender youth and risk of suicidal ideation' <sup>15</sup> which, though it declared a reduced rate of suicidal ideation associated with puberty blockers, the actual percentages were not dissimilar 64.8 vs 50.6 %, while the percentages of 'ideation with plan and attempt' were higher (24.4 vs 21.5%), as were 'attempt resulting in inpatient care' (45.5 vs 22.8%). Retrospective studies with low numbers of correspondents are, of course, not noted for reliability but, at least, there was no convincing evidence FOR the use of blockers to reduce suicidal attempts. It should be recalled that the veterinary studies on sheep in Glasgow, conducted in a scientific manner years ago, revealed disruption in emotional stability as a result of puberty blockers<sup>16</sup>.

It was unbalanced of the ABC to promote the concept of an amelioration of mental health with blockers and other affirmative therapy, without any reference to such contrary evidence. While it might be unreasonable to expect the researchers of Four Corners to be able to perform a review of medical literature on this complex subject, surely they must have heard of the increasing phenomenon of 'detransitioners'? Surely, they would have heard of the litigation being directed at UK's Tavistock Centre on behalf of two such de-transitioners who are claiming they were subject to experimentation. And, in support, available on the web, the condemnation of affirmative therapy as 'unregulated experimentation' on children, proclaimed by the Professor of Evidence Based Medicine at Oxford<sup>17</sup>.

By your unbalanced promotion of the concept of gender confusion being able to be ameliorated with permanent intervention by hormones and surgery, without

<sup>16</sup> Wojniusz S, Vogele C, Ropstad E et al. Prepubertal gonadotropin-releasing hormone analog leads to exaggerated behavioral and emotional sex differences in sheep. Hormones and Behaviour. 2011;59(1):22-27. Doi 10.1016/j.yhbeh.2010.09.010

<sup>17</sup> Heneghan C. as quoted Daily Mail Australia . April 8. 2019.



Office • 35A/9 Hoyle Ave, Castle Hill 2154

Postal • PO Box 877, office@cmdfa.org.a Baulkham Hills, NSW 1755 www.cmdfa.org.au

p +612 9680 1233 f +612 9634 2659

office@cmdfa.org.au

<sup>&</sup>lt;sup>14</sup> De Cuypere, Elaut E, Heylens G, et al. Long term follow up: psychosexual outcome of Belgian transsexuals after sex reassignment surgery. Sexologies. 2006;15:126-133.

<sup>&</sup>lt;sup>15</sup> Turban JL, King D, Carwsell J et al Pubertal suppression for transgender youth and risk of suicidal ideation'. Pediatrics. 2020.145 (2). 1-8.



mentioning proven, positive effects of psychotherapy, you are doing the taxpayer a major disservice. You owe it to your sponsors to present all sides of the arguments. It should be needless to say that the side-effects of structural alteration of the brain and castration, without the comfort of any evidence of positive effect, is, indeed a grand experiment to which you are contributing the imprimatur of the national broadcaster and the income of your supporters.

Sincerely

Ask Whitehall

Prof. John Whitehall MB BS, BA, DCH, MPH and TM, MRCP (UK), FRACP. Professor of Paediatrics and Child Health. National Chair Christian Medical and Dental Fellowship of Australia



Christian Medical & Dental Fellowship of Australia

ABN 95 084 292 464

Office • 35A/9 Hoyle Ave, Castle Hill 2154

Postal • PO Box 877, Baulkham Hills, NSW 1755

p +612 9680 1233 f +612 9634 2659

office@cmdfa.org.au www.cmdfa.org.au