JNDS Journal of the Nuffield Department of Surgical Sciences

Equality, Diversity, Inclusion

Biology, Society and Sex: Deconstructing anti-trans rhetoric and trans-exclusionary radical feminism

Emily Hotine¹

¹Nuffield Department of Surgical Sciences, University of Oxford

Athena SWAN, Trans Exclusionary Radical Feminism.

Introduction

In 2020, JK Rowling took umbrage with the phrase 'people who menstruate', tweeting, '"People who menstruate." I'm sure there used to be a word for those people. Someone help me out. Wumben? Wimpund? Woomud?' When it was pointed out to her that there are women who, in fact, do not menstruate and that the term 'woman' would have been less accurate and less inclusive, she doubled down, tweeting, 'If sex isn't real, there's no same-sex attraction. If sex isn't real, the lived reality of women globally is erased...'' It's worth noting that while celebrities such as Emma Watson and Daniel Radcliffe decided to publicly affirm their views that trans women are women, Rowling did not do the same'.

With that, Rowling was deemed a transexclusionary radical feminist (or 'TERF')². TERFs are members of a branch of feminism whose ideological beliefs hinge on the idea that sex is biological and fixed, rejecting the idea of socially constructed gender. In essence, TERFs don't recognise transgender women as women because they believe that a person's sex is based purely on their biology and is therefore fixed. This belief undermines the rights of trans women by implying that they cannot ever truly be women.

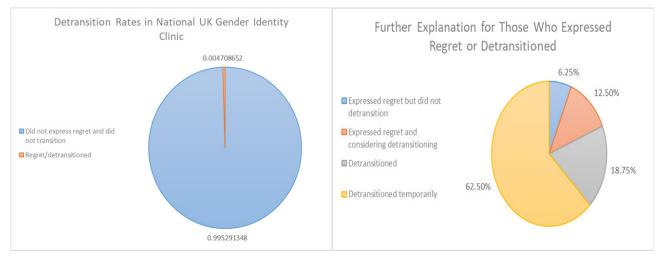
Women who subscribe to this ideology decry the term TERF as a slur, preferring terms like 'gender critical feminist', but Judith Butler has argued, 'If they do favour exclusion, why not call them exclusionary? If they understand themselves as belonging to that strain of radical feminism that opposes gender reassignment, why not call them radical feminists³?' TERF is no more a slur than 'tory': it merely describes a political standpoint. If the term has come to attract a negative connotation, that is due to the ideology it represents.

Trans individuals already bear a heavy burden of discrimination, stigma, violence and HIV⁴. The rhetoric being espoused by such figures as Rowling is particularly abhorrent and dangerous as it feeds into anti-trans rhetoric and stigma that trans individuals already face. By shrouding their anti-trans dogma behind various dog whistles and a veneer of respectable concern and pseudo-science, TERFs are working to further de-stabilise trans' peoples standing in society and their safety.

Gender criticism and biological essentialism

A foundational aspect of TERF belief is the primacy of biological sex versus socially constructed gender. Susanna

Term	Definition
Sex	Either of the two main categories (male and female) into which humans and most other living things are divided on the basis of their
Gender	biological features The set of behavioural, cultural, psychological and social characteristics and practices associated with masculinity and femininity.
TERF/gender critical feminist	A feminist who excludes the rights of transgender women from their advocacy of women's rights. They typically believe sex to be defined along biological lines and do not subscribe to the belief of gender as a social construct, which became a prominent school of thought in Second Wave feminism
Trans(gender)	Denoting or relating to a person whose sense of personal identity and gender does not correspond with their birth sex.
Cis(gender)	Denoting or relating to a person whose sense of personal identity and gender corresponds with their birth sex.
Hormone/puberty/pubertal blockers	Medication intended to delay the onset of puberty/puberty-related changes by blocking sex hormones (e.g. oestrogen and testosterone)
AFAB (assigned female at birth)	A person who was designated female at birth. This term is preferred to "biological male/female", "male/female bodied", "natal male/female", and "born male/female", which are defamatory and inaccurate.
Gender dysphoria	Anxiety and/or discomfort regarding one's sex assigned at birth.
Gender identity	One's internal sense of being male, female, neither of these, both, or other gender(s). Everyone has a gender identity, including you. For transgender people, their sex assigned at birth and their gender identity are not necessarily the same.
Gender expression	The physical manifestation of one's gender identity through clothing, hairstyle, voice, body shape, etc. (typically referred to as masculine or feminine). Many transgender people seek to make their gender expression (how they look) match their gender identity (who they are), rather than their sex assigned at birth. Someone with a gender nonconforming gender expression may or may not be transgender.



*Figure 1: Detransition rates in UK gender clinics*¹⁹.

Rustin argues:

'women's lives are shaped by their physical differences from males as well as the cultural meanings derived from these[...]We do not accept the much newer concept of gender identity (the feeling of being male or female) as a substitute[...]Because if "sex" ceases to be talked and thought about, how will we recognise and tackle sex-based oppression⁵.'

This argument revolves around the ways that the female body is instrumental in discrimination against women. Women's labour as unpaid carers is exploited and linked to their role in reproduction, women's ability to become pregnant makes them specifically and physically vulnerable to rape, etc. Scratch beneath the surface, however, and this argument works against TERFs. It is not the female body that creates these vulnerabilities, it is our social interpretation of the body and our preconceived biases and gender norms that are responsible. Biology has been used to justify the narrative that women are 'natural caregivers' and that their responsibilities to provide unpaid care are therefore justified, but this exploitation of female labour does not arise purely because women give birth. It arises because of social biases that create the link between the female body and gender norms. In a similar vein, women are systematically excluded from clinical studies not inherently because of their bodies, but because of a pervasive bias that 'male' is default and 'female' is Other, leading predominantly male researchers to design malebiased studies, resulting in health disparities for men and women. Furthermore, sex assigned at birth is not a perfect indication of physiology and anatomy, as changes to bodies over time, such as through hysterectomy or orchiectomy, will change a person's sex-based health risks⁶. Rustin goes on to say that TERFs 'seek a form of equality that recognises' this difference, not one that solves it. But if you assess the situation with a view to solving these disparities, excluding trans women and attempting to minimise the effects of social bias is a worthless endeavour.

Feminists who oppose TERF ideology do not deny the existence of biology. Instead, they recognise the complexities of the way biology intersects with culture and acknowledge the distinction between sex and gender. This distinction does not dismiss the biology of sex. Rather, it highlights the way social expectations and gender roles are constructed and perpetuated by sustained performance across generations until its origin as performance is erased and it becomes falsely grounded in biology. Alluding to Kafka's 'Before the Law', Judith Butler writes:

'I wondered whether we do not labor under a similar

Figure 2: Reasons for expressing regret or detransitioning¹⁹.

expectation concerning gender, that it operates as an interior essence that might be disclosed, an expectation that ends up producing the very phenomenon that it anticipates[...]Secondly, that performativity is not a singular act, but a repetition and a ritual, which achieves its effects through it naturalization in the context of a body...⁷

My aim is not to deny the existence of biological markers of sex. I simply seek to demonstrate their arbitrary nature and draw attention to the idea that privileging them poses no benefit - rather, a threat - to feminism. A desire to define something in scientific terms is understandable. As a society, we tend to privilege science as the logical, rational school of thought free from bias and emotion. But science is conducted by scientists, who do possess biases and have often sought to further their own agenda through their work. Polygenism and texts like The Bell Curve sought to support white supremacist values by grounding racial differences in scientific theory⁸⁻¹⁰. Scientific discourse around sex has been no exception. Studies published as recently as 2014 have claimed to prove that sex differences are mapped onto our brains, proving innate differences in male and female nature^{11,12}. These ideas, too, are being continually debunked^{13,14}.

The idea that sex can be categorised into neat, binary categories using biology is also flawed. Newborn babies are typically sexed by inspection of their genitalia, but genitalia alone isn't how we define biological sex (if it were, TERFs would recognise trans women who have undergone genderreassignment surgery as 'full' women, which they don't). Genetics play an important part in sex determination, but intersex conditions and differences in sex development (DSD), which affect up to 1 in 100 people¹⁵, demonstrate that biological sex is not straightforward. Individuals can have one X chromosome (XO) or an extra chromosome (XXY), or their genitals can develop in ways that are not typical to people with their chromosomes¹⁶. Add to that the role of hormones in the biological expression of sex: we tend to relate oestrogen and testosterone strongly to the idea of masculinity and femininity, but in developed adults, oestrogen and progesterone levels are on average similar between males and non-pregnant females¹⁷. Heritability studies have shown that up to 44% of an individual's testosterone, which exhibits the largest difference between male and female adults, can't be explained by genetics, thereby indicating other, external influences on hormone levels18.

These arguments that focus on biological sex prove dangerous to feminist ideology as they fail to recognise the social implications of this obsession. By arguing that sex is biological and fixed, one argues that it is innate. When you draw connections between the female body, female nature and the female experience, you allow for socially-constructed gender norms to become naturalised. You give the idea that women are biologically destined to be caregivers (and men the providers) scientific backing. When you reduce a woman to her biological functions, you seek to unravel years of feminist action. You undermine every effort made to free women from the domestic sphere and give them agency outside of their own home. You threaten the rights of the people you claim to be fighting for in exchange for freely spreading your hate.

The dog whistles

JK Rowling states that her trans exclusionary beliefs are born of a sincere concern for the very people that TERF rhetoric targets:

'I'm concerned about the huge explosion in young women wishing to transition and also about the increasing numbers who seem to be detransitioning[...]Some say they decided to transition after realising they were samesex attracted, and that transitioning was partly driven by homophobia, either in society or in their families².'

Notably, Rowling's concern centres on trans men because they were assigned female at birth (AFAB). She believes that there is a significant proportion of trans men who come to regret transitioning and, within that group, a significant number who transitioned out of a desire to avoid homophobia due to their attraction to women. But are we really facing an epidemic of young lesbians transitioning and later regretting their decision? Although some people do regret transitioning, the numbers are incredibly low. One study found that 0.47% of participants expressed transition-related regret or detransitioned (it is worth noting that detransitioning did not always denote regret as many viewed transitioning as a necessary part of their journey). Detransitioning was most often prompted by social difficulties, with a few cases citing physical complications and changes in gender identity. Detransitioning was most often temporary-in fact, only 0.08% detransitioned permanently¹⁹. Comparatively, nearly 20% of women who undergo voluntary sterilisation and almost 5% of women who have abortions regret their decision^{19,20}.

I suspect the word 'young' is doing a lot of work in Rowling's argument. Perhaps she feels that we shouldn't be allowing children and teenagers to make permanent decisions about their gender expression and anatomy. It sounds like a reasonable argument, but it misrepresents the standard process of treatment of gender dysphoria in teenagers. Before December 2020, children and teenagers with gender dysphoria could be referred to the Gender Identity Development service, where they could access hormone blockers alongside psychological support²¹. Hormone blockers (sometimes referred to as puberty blockers or puberty inhibitors) prevent the release of sex hormones and delay the onset of puberty²². However, a recent court case ruled that children under 16 cannot give informed consent to undergo such treatment, a decision that has made it more difficult for children to access treatment and has drawn heavy criticism on scientific and ethical grounds²³⁻²⁵.

Hormone blockers are considered safe, the effects are reversible and they have been used to treat cases of precocious puberty for years²⁶. Investigations into cases of detransitioning refer to individuals who had transitioned socially and do not provide a sufficient argument against

pubertal blockers²⁷. Further research is needed to assess the more long-term effects of hormone blockers, but the risks associated with gender dysphoria and a lack of access to hormone blockers has been studied. Access to pubertal suppression is associated with favourable mental health outcomes and reduced suicidal ideation²⁸. Many trans women have labelled pubertal changes as "traumatic", as puberty exacerbates their dysphoria and, in extreme cases, has led to attempts to remove their genitalia²⁹. The evidence is clear that the consequences of denying access to treatment to children with gender dysphoria are severe and that an assessment of the overall risks and benefits clearly indicates that attempts to prevent access to such treatments is unethical and illogical.

Another area of TERF concern-trolling lies in the debate over gendered bathrooms. Rowling argues that creating trans-inclusive women's toilets will threaten the safety of cisgender women:

'When you throw open the doors of bathrooms and changing rooms to any man who believes or feels he's a woman – and, as I've said, gender confirmation certificates may now be granted without any need for surgery or hormones – then you open the door to any and all men who wish to come inside. That is the simple truth².'

This argument collapses immediately when one considers that public restrooms in the UK do not employ any special security measures and that men can, in fact, enter a women's toilet with relative ease. Indeed, if a man seeks to enact violence against women in a public restroom, he need only walk across the threshold. Ignoring this fact, the argument also doesn't stand up to data-driven scrutiny. One study reports that protecting trans rights through legislation around public restroom use has no relation to the number of criminal incidents in such spaces³⁰. An equality impact assessment from the Scottish government supports this conclusion, stating 'no evidence was identified to support the claim that trans women are more likely than cisgender women to sexually assault other women in women-only spaces³¹.' Indeed, there is a consensus that women do not face greater risks of violence when trans women are allowed use of women's toilet facilities³²⁻³⁴. On the other hand, almost half trans people in the UK don't feel comfortable using public toilets, and over 40% have experienced a hate crime because of their gender identity³⁵.

TERFs, white feminism, and race

When gender critical feminists prioritise the biological over the social construction of sex, trans and non-binary members of society are not the only people who are harmed in the process. It is problematic that a wealthy white woman with the power, the privilege and the platform that Rowling has decided to attack the existence of trans people in the midst of the Black Lives Matter protests. Just as the world was finally focused on race-based inequalities and violence against Black people, Rowling grabbed focus in an act of White centring.

Like with gender, there have been many erroneous attempts to explain race in biological terms, with scientific racism shaping scientific discourse for years^{8–10}. Race has also been proven a social construct, unable to be defined through the use of concrete biological markers³⁶. Despite the fact that race is not predicated on biological markers, racial discrimination still exists: Black women are more likely to die in childbirth, Black citizens are more likely to receive custodial sentences and Black children are twice as likely to live in low income and material deprivation, making them considerably more likely to achieve lower grades in school³⁷⁻⁴¹. Discrimination does not need to be rooted in biology to be real. Racial discrimination creates significant health and social risks for Black people and demonstrates why focusing on biologically-based discrimination is fundamentally flawed.

Rowling's brand of feminism therefore concerns itself with the middle class White woman. She writes about protecting women, protecting children, protecting lesbians from trans influence. She does not write about protecting Black women. The logic that TERF ideology is founded on does not allow for the inclusion of Black women as Black women: to be included, Black women must be women first and foremost and Black secondarily.

Conclusions

My intention is not to deny the existence of biology. There are, indeed, biological markers making the female sex distinct from the male sex. I instead argue that the biology of sex is less relevant than the meaning that our society attributes to the categories of 'male' and 'female', which is far more significant in shaping the lived experience of women. Arguing otherwise implies an innate 'essence' of womanhood that is as false as it is dangerous. Our categorisation of sex into two binary categories is a social artifice done in the name of convenience. There are plenty of people with intersex conditions or DSD, but we have categorised them as aberrations rather than a natural point on the spectrum of sex. We all have differing hormone levels, but we do not, and should not, use this to deem some women to be more or less female than other women. Our determination to naturalise the idea of male and female is not the scientifically sound approach.

Excluding trans women and invalidating their existence as women serves no one, and there is no compelling argument to do so. It has been proven time and again that trans women are not a threat to cisgender women. Trans women may not have the same lived experience as cisgender women, but cisgender women are not a monolith. Biological sex cannot define womanhood as neatly and universally as gender critical feminists would wish to believe; women have differing hormone levels, their bodies change through the years, not all of them menstruate, not all of them give birth. Womanhood cannot and should not be defined purely along biological lines. Women's experiences are shaped by much more than gender. Our lived experiences are shaped by our ethnicity, our socioeconomic privilege, our education and our role models.

When we ignore the ways culture shapes our experience, we absolve ourselves of our culpability in discrimination and the responsibility to remedy it. The way we have used biology to justify confining women to the domestic sphere, the way we accept sexual harassment and rape culture and couch our acceptance of that behaviour with platitudes of 'boys will be boys', the way we undervalue work that is predominantly undertaken by women and expect more of mothers than fathers and the way we systematically exclude women from medical research are all social phenomena. It is not our biology that causes discrimination, it is our interpretation of biology that both shapes, and is shaped by, our biases. To focus on biology and the relationship between female bodies and discrimination is to focus on the symptom rather than the cause. To borrow and idea from Butler, we have too long seen biology as an 'essence', as the undeniable truth of our nature, using it to justify gender norms and biases and, now, transphobia.

Conflicts of interest

None.

Funding

Not applicable.

References

1. Gardner A. A Complete Breakdown of the J.K. Rowling Transgender-Comments Controversy [Internet]. Glamour. 2021 [cited 2021 Jun 22]. Available from: https://www. glamour.com/story/a-complete-breakdown-of-the-jkrowling-transgender-comments-controversy

2. Rowling JK. J.K. Rowling Writes about Her Reasons for Speaking out on Sex and Gender Issues [Internet]. JKRowling.com. 2020 [cited 2021 Jun 10]. Available from: https://www.jkrowling.com/opinions/j-k-rowling-writesabout-her-reasons-for-speaking-out-on-sex-and-genderissues/

3. Ferber A. Judith Butler on the culture wars, JK Rowling and living in "anti-intellectual times" [Internet]. New Statesman. 2020 [cited 2021 Jun 10]. Available from: https://www.newstatesman.com/international/2020/09/ judith-butler-culture-wars-jk-rowling-and-living-antiintellectual-times

4. Winter S, Diamond M, Green J, Karasic D, Reed T, Whittle S, et al. Transgender health 1 Transgender people: health at the margins of society. www.thelancet.com [Internet]. 2016;388. Available from: http://dx.doi.org/10.1016/

5. Rustin S. Feminists like me aren't anti-trans – we just can't discard the idea of "sex." The Guardian [Internet]. 2020 Sep 30; Available from: https://www.theguardian. com/commentisfree/2020/sep/30/feminists-anti-transidea-sex-gender-oppression

6. Alpert AB, Ruddick R, Manzano C. Rethinking sexassigned-at-birth questions. BMJ [Internet]. 2021 May 24;373:n1261. Available from: http://www.bmj.com/ content/373/bmj.n1261.abstract

7. Butler J. Preface (1999). In: Gender Trouble. Abingdon: Routledge; 2007. p. vii–xxviii.

8. Barkan E. Race and the Social Sciences. In: Porter TM, Ross D, editors. The Cambridge History of Science: Volume 7, The Modern Social Sciences [Internet]. Cambridge: Cambridge University Press; 2003. p. 693–707. Available from: https://assets.cambridge.org/97805215/94424/ sample/9780521594424ws.pdf

9. Erickson PA, Murphy LD. A History of Anthropological Theory. 5th ed. University of Toronto Press; 2017.

10. Smith RA. Types of mankind: polygenism and scientific racism in the nineteenth century United States scientific community. Electron Thesis Collect [Internet]. 2014;105. Available from: https://digitalcommons.pittstate.edu/cgi/viewcontent.cgi?article=1136&context=etd

11. Brizendine L. The Female Brain. London: Bantam Press; 2008.

12. Ingalhalikar M, Smith A, Parker D, Satterthwaite TD, Elliott MA, Ruparel K, et al. Sex differences in the structural connectome of the human brain. Proc Natl Acad Sci [Internet]. 2014 Jan 14;111(2):823 LP – 828. Available from: http://www.pnas.org/content/111/2/823.abstract

13. Rippon G. The Gendered Brain. Vintage; 2020.

14. Eliot L. Neurosexism: the myth that men and women have different brains [Internet]. Nature. 2019 [cited 2021

Jun 14]. Available from: https://www.nature.com/articles/ d41586-019-00677-x

15. Ainsworth C. Sex redefined. Nature [Internet]. 2015;518(7539):288–91. Available from: https://doi. org/10.1038/518288a

16. NHS England. Differences in sex development [Internet]. 2019. Available from: https://www.nhs.uk/ conditions/differences-in-sex-development/

17. Sun SD. Stop Using Phony Science to Justify Transphobia [Internet]. Scientific American. [cited 2021 Jun 10]. Available from: https://blogs.scientificamerican.com/ voices/stop-using-phony-science-to-justify-transphobia/

18. Kuijper EAM, Lambalk CB, Boomsma DI, van der Sluis S, Blankenstein MA, de Geus EJC, et al. Heritability of reproductive hormones in adult male twins. Hum Reprod [Internet]. 2007 Aug 1;22(8):2153–9. Available from: https://doi.org/10.1093/humrep/dem145

19. Davies S, McIntyre S, Rypma C. Detransition rates in a national UK Gender Identity Clinic. In: 3rd biennal EPATH Conference Inside Matters On Law, Ethics and Religion [Internet]. 2019. p. 118. Available from: https:// epath.eu/wp-content/uploads/2019/04/Boof-of-abstracts-EPATH2019.pdf

20. Edwards G. 1 in 3 women has an abortion, and 95% don't regret it - so why are we so afraid to talk about it? The Independent [Internet]. 2015 Jul 16; Available from: https://www.independent.co.uk/life-style/health-and-families/features/1-3-women-have-abortion-and-95-don-t-regret-it-so-why-aren-t-we-talking-about-it-10392750. html

21. NHS England. Gender Dysphoria Treatment [Internet]. [cited 2021 Jun 11]. Available from: https://www.nhs.uk/ conditions/gender-dysphoria/treatment/

22. Planned Parenthood. What are puberty blockers? [Internet]. [cited 2021 Jun 11]. Available from: https://www. plannedparenthood.org/learn/teens/puberty/what-arepuberty-blockers

23. Holt A. Puberty blockers: Under-16s "unlikely to be able to give informed consent." BBC News [Internet]. 2020 Dec 1; Available from: https://www.bbc.co.uk/news/uk-england-cambridgeshire-55144148

24. Beattie C. High court should not restrict access to puberty blockers for minors. J Med Ethics. 2021 Feb;

25. Giordano S, Garland F, Holm S. Gender dysphoria in adolescents: can adolescents or parents give valid consent to puberty blockers? J Med Ethics [Internet]. 2021 May 1;47(5):324 LP – 328. Available from: http://jme.bmj.com/ content/47/5/324.abstract

26. Kim EY. Long-term effects of gonadotropin-releasing hormone analogs in girls with central precocious puberty. Korean J Pediatr [Internet]. 2015;58(1):1–7. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4342775/ 27. Ashley F. Gender (De)Transitioning Before Puberty? A Response to Steensma and Cohen-Kettenis (2011). Arch Sex Behav [Internet]. 2019;48(3):679–80. Available from: https://doi.org/10.1007/s10508-018-1328-y

28. Turban JL, King D, Carswell JM, Keuroghlian AS. Pubertal Suppression for Transgender Youth and Risk of Suicidal Ideation. Pediatrics [Internet]. 2020 Feb 1;145(2):e20191725. Available from: http://pediatrics. aappublications.org/content/145/2/e20191725.abstract

29. Giovanardi G, Morales P, Mirabella M, Fortunato A, Chianura L, Speranza AM, et al. Transition memories: experiences of trans adult women with hormone therapy and their beliefs on the usage of hormone blockers to suppress puberty. J Endocrinol Invest [Internet]. 2019;42(10):1231–40. Available from: https://doi.org/10.1007/s40618-019-

01045-2

30. Hasenbush A, Flores AR, Herman JL. Gender Identity Nondiscrimination Laws in Public Accommodations: a Review of Evidence Regarding Safety and Privacy in Public Restrooms, Locker Rooms, and Changing Rooms. Sex Res Soc Policy [Internet]. 2019;16(1):70–83. Available from: https://doi.org/10.1007/s13178-018-0335-z

31. Scottish Government. Potential impacts of GRA reform for cisgender women: trans women's inclusion in women-only spaces and services [Internet]. 2019. Available from: https://www.gov.scot/binaries/content/documents/govscot/publications/foi-eir-release/2020/01/foi-202000011201/documents/foi-202000011201-document-5---earlier-version-of-literature-review/foi-202000011201-document-5---earlier-version-of-literature-review/g

32. National Centre for Transgender Equality. School Officials Agree: Policies Protecting Transgender Student Do Not Compromise the Privacy or Safety of Other Students [Internet]. [cited 2021 Jun 13]. Available from: https://transequality.org/what-experts-say

33. Steinmetz K. Why LGBT Advocates Say Bathroom "Predators" Argument Is a Red Herring [Internet]. Time. 2016 [cited 2021 Jun 13]. Available from: https://time. com/4314896/transgender-bathroom-bill-male-predatorsargument/

34. Jones C, Slater J. The toilet debate: Stalling trans possibilities and defending 'women's protected spaces.' Sociol Rev [Internet]. 2020 Jul 1;68(4):834–51. Available from: https://doi.org/10.1177/0038026120934697

35. Bachmann CL, Gooch B. LGBT in Britain: Trans Report [Internet]. 2018. Available from: https://www.stonewall. org.uk/system/files/lgbt_in_britain_-_trans_report_final.pdf 36. Coates T-N. What We Mean When We Say 'Race Is a Social Construct.' The Atlantic [Internet]. 2013; Available from: https://www.theatlantic.com/national/ archive/2013/05/what-we-mean-when-we-say-race-is-asocial-construct/275872/

37. Knight M, Bunch K, Tuffnell D, Shakespeare J, Kotnis R, Kenyon S, et al. Saving Lives, Improving Mothers' Care - Lessons learned to inform maternity care from the UK and Ireland Confidential Enquiries into Maternal Deaths and Morbidity 2016-2018 [Internet]. 2020. Available from: www.hqip.org.uk/national-programmes.

38. Anekwe L. Ethnic disparities in maternal care. BMJ [Internet]. 2020 Feb 12;368:m442. Available from: http:// www.bmj.com/content/368/bmj.m442.abstract

39. Office for National Statistics. Child poverty and education outcomes by ethnicity [Internet]. 2020. Available from: https://www.ons.gov.uk/ economy/nationalaccounts/uksectoraccounts/ compendium/economicreview/february2020/ childpovertyandeducationoutcomesbyethnicity

40. Department for Education. GCSE results ('Attainment 8') [Internet]. 2020. Available from: https://www.ethnicity-facts-figures.service.gov.uk/education-skills-and-training/11-to-16-years-old/gcse-results-attainment-8-for-children-aged-14-to-16-key-stage-4/latest

41. Strand S. Ethnicity, deprivation and educational achievement at age 16 in England: trends over time [Internet]. 2015. Available from: https://assets.publishing. service.gov.uk/government/uploads/system/uploads/ attachment_data/file/439867/RR439B-Ethnic_minorities_ and attainment the effects of poverty annex.pdf.pdf