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ABSTRACT

In this paper, I argue that men should take primary responsibility for protecting against pregnancy. Male long-acting reversible contraceptives are currently in development, and, once approved, should be used as the standard method for avoiding pregnancy. Since women assume the risk of pregnancy when they engage in penis-in-vagina sex, men should do their utmost to ensure that their ejaculations are responsible, otherwise women shoulder a double burden of pregnancy risk plus contraceptive burden. Changing the expectations regarding responsibility for contraception would render penis-in-vagina sex more equitable, and could lead to a shift in the discourse around abortion access. I describe the sex-asymmetries of contraceptive responsibility and of the risks associated with pregnancy, and offer arguments in favour of men taking primary responsibility for contraception. My arguments centre on (a) analogies between contraception and vaccination, and unwanted pregnancy and disease; (b) a veil-of-ignorance approach, in which I contend that if a person were not told their sex, they would find a society in which men were expected to acquire and use effective contraceptives the fairest arrangement for everyone.

Keywords: contraception, gender, sex, responsibility, veil of ignorance

Word count: 8728

INTRODUCTION

In 2018, parenting blogger Gabrielle Blair penned a widely-shared essay in which she criticised mainstream abortion discourse for focussing on *women's* responsibility for unwanted pregnancy [1]. Blair pointed out that:

> all unwanted pregnancies are caused by the irresponsible ejaculations of men. […] Pregnancies happen when men have an orgasm. Unwanted pregnancies happen when men orgasm irresponsibly. […] Think of abortion as the "cure" for an unwanted pregnancy. To stop abortions, we need to prevent the "disease"—meaning, the unwanted pregnancy itself. And the only way to do that is by focusing on men, because irresponsible ejaculations by men cause 100% of unwanted pregnancy.

The popularity of the post derived from its novelty in inverting the mainstream view on

contraception, pregnancy, and abortion, which are usually seen as women's issues in which men play a minor, fleeting role. Not only does Blair point out that whenever an unwanted pregnancy occurs, a man is inculpated, she also compares unwanted pregnancy to disease, which encourages different notions of responsibility to those that are typically applied.

In this paper, I too critique the irresponsible ejaculations of men, explore the analogy between pregnancy and disease, and comment on the relationship between contraceptive responsibility and abortion discourse. I show that contraceptive asymmetry, which derives from the confluence of sexed medical research agendas and gendered social norms, has bolstered sex inequity by situating responsibility at the site of risk, i.e. within the female body. Accordingly, I argue that since women assume the embodied risk of unwanted pregnancy when they engage in penis-in-vagina sex, men should do their utmost to ensure that their ejaculations are responsible by taking primary responsibility for contraception, otherwise woman face the additional burden of protecting against unwanted pregnancy. My arguments centre on (a) testing intuitions about risk and responsibility through analogies which compare contraception to vaccination, and pregnancy to disease; (b) using a veil-of-ignorance approach to establish a fair distribution of risk and responsibility in relation to unwanted pregnancy. I finish by recommending that long-acting male hormonal contraceptive options be developed and championed in order to enable men to take primary responsibility for minimising the risk of unwanted pregnancy. Once approved, men should adopt these methods as a way of ensuring greater equity around PIV sex. Governments, academic researchers, public health officials, medical professionals, and school-teachers will also have critical roles to play in ensuring that male LARCs gain the uptake necessary in order to contribute to justice in PIV sex.

The injustice of the asymmetry in contraceptive responsibility, and the need for better contraceptive options, is relatively uncontroversial, even if the norms seem resistant to change and the science has been slow to arrive. The novel contribution of this paper is to suggest that men should take *primary* (rather than, say, shared) responsibility for contraception, and to do so via two new lines of argument which consider the distribution of risk and burdens in relation to avoiding unwanted pregnancy. My hope is that these arguments will challenge conventional intuitions as to how risk and responsibility are configured and distributed in relation to unwanted pregnancy.

In this paper, I refer only to penis-in-vagina (PIV) sex, since I am concerned with the risk of pregnancy. I use the gender terms “man” and “woman” throughout. While some trans-men may become pregnant, and some trans-women may impregnate, I am interested in the confluence of biology and social roles: i.e. potential-impregnat*ors* gendered as men, potential-impregnat*ees* gendered as women. This is because contraceptive asymmetry is not only sexed, it is also gendered in terms of the social norms around risk and responsibility. My discussion is also intended only to apply to pregnancies, whether potential or actual, which are mutually *unwanted*, i.e. where both PIV sex partners do not intend or wish to procreate.

This paper is structured as follows. In the next section, I describe the way in which contraceptive responsibility and the pregnancy risks of PIV sex are characterised by sex-inequality. In the following section, I outline how PIV sex asymmetry might be combatted by presenting arguments which aim to establish that men ought to take responsibility for protecting against unwanted pregnancy. The final sections endorse the development and promotion of male long-acting reversible contraceptives as a promising route for moving

towards PIV sex equity, and tackle some anticipated counter-arguments.

RISKS AND RESPONSIBILTIES IN PIV SEX

When a woman engages in consensual penis-in-vagina (PIV) sex, she accepts a non-zero chance of pregnancy, regardless of whether or what contraception is used.[1] No perfect contraceptive exists; PIV sex always has the potential to be unintentionally reproductive. Abstinence is therefore the only way of avoiding the risk of pregnancy, but that means exclusion from an activity that most adults find enjoyable and important to their wellbeing and the flourishing of particular relationships. Though imperfect, contraceptives substantially weaken the causal link between PIV sex and pregnancy, and are therefore important to understanding responsibility for pregnancy. As it stands, women take primary responsibility for the use of contraceptives. Challenging this norm offers a way of destabilising dominant discourses on responsibility for unwanted pregnancy, which also has consequences for the abortion debate.

Contraceptive asymmetry

Eleven methods of birth control act upon the female body, including: barrier methods, such as the female condom, cervical cap, sponge, diaphragm, and tubal ligation; hormonal methods, such as a vaginal ring or contraceptive pill; long-acting reversible contraceptive (LARC) methods, such as an implant, patch, injection, or intrauterine device [2]. Just two act upon the male body—the male condom and vasectomy—and there are currently no

[1] All sex is assumed to be consensual unless stated. The risk of sexually-transmitted infections is set aside in order to maintain the focus of the paper. All pregnancies, whether potential or actual, are assumed to be mutually unwanted.

approved male hormonal contraceptive options. Women alone use contraception in 67.3% of cases of PIV sex. Men alone contracept in just a third of cases (usually limited to causal sex), but since women often negotiate and provide male contraception, they are involved in ensuring contraception is used in 91% of cases [3]. Within relationships, female sterilisation and intrauterine devices are the most commonly used forms of contraception, followed by the contraceptive pill and then condoms [4].

Asymmetries in contraception are both social and medical, and are therefore both sexed and gendered.[2] The medical options are sex-asymmetric because of gendered social norms about responsibility for sex, which have in turn been bolstered by the medical "realities" about who is able to effectively contracept. There are several specific ways in which these norms operate.

First, within the biomedical paradigm, the reproductive capacity of women is over-emphasised, often to the detriment of the research and treatment of non-reproductive health issues [9]. Accordingly, the female body has been taken as the locus of intervention in the development of contraceptive methods over the last century, a trend that is often referred to as the "feminization of reproduction" [10]. Facilitating "safe" penis-in-vagina sex through female hormonal methods became such a dogmatic medical priority in the 1960s and 1970s that side effects were downplayed, and approval was granted even where the risks to women's health were severe [8,11,12].

[2] Though I will not have space to explore this in detail here, it is important to note that contraceptive inequality is not only a gendered phenomenon, but is also inflected by other forms of marginalisation. Women of colour, working class women, disabled women, and Global South women have been subject to contraceptive injustices, including forced sterilisation [5,6], forced contraception [7], and recruitment into dangerous contraceptive trials [8].

Second, there is a tendency to view female bodies as diseased and in need of correction [13].[3] Contraception may be seen as a way of correcting the compromised female body, implying that the propensity to become pregnant is the pathology, rather than the propensity to make someone pregnant.[4] This accedes to social norms of female vulnerability, in which women are represented as "damsels in distress" in need of paternalistic intervention, which in this case comes from biomedicine. The "cure"—modifying the female body—appears to "level up" women by rendering them nearly as invulnerable to the harm of pregnancy as men are inherently. As with other measures for achieving equality, "levelling down"—that is, encouraging or helping men to be more like normative women—is overlooked.[5] Note also that this approach departs from the usual biomedical approach of intervening to correct the risk-carrier (e.g. a potential infector), a point I return to in the next section. The idea of making male bodies benign in relation to the risk of impregnation has only recently become a serious research agenda, and is explored in the penultimate section of the paper.

Lisa Campo-Engelstein has explored the incongruous role of trust in relation to the sex-asymmetry of contraceptive responsibility [13,14]. Across many domains, women are characterised as irrational and untrustworthy, while men are represented as rational agents who are thereby well-suited to roles which require high levels of responsibility and confer considerable social power. It therefore seems contradictory that women should be expected

[3] Consider that menstruation and menopause are often seen as aberrant or pathological, rather than indicative of normal functioning.

[4] The idea of female bodies as pathologically vulnerable—rather than male bodies as pathologically hazardous—has parallels elsewhere: consider that women are deemed to be vulnerable to sexual assault, against which they are expected to continually attempt to protect themselves, while men's sexual behaviour is often seen as inevitable and uncontrollable, which is to say, natural.

[5] Note that efforts towards gender equality tend to focus on encouraging women to access the spaces, roles, and behaviours typically associated with normative men. For example, women's participation in the paid workforce is often used as a proxy for gender equality, while men's contribution to unpaid domestic labour is rarely seen as relevant.

to take responsibility for something as important as contraception.[6] Campo-Engelstein points out that while men are in the *general* case seen as rational and responsible, this is inverted in the *specific* case of the domestic realm, where men are seen as inherently incompetent in relation to domestic labour, and irrational and reckless in relation to sex, since they may be overruled by the "uncontrollable" male libido.[7] This myth defends a gendered social norm, in which women are expected to shoulder the burden of labour and responsibility in the private, domestic sphere as a consequence of their alleged biological suitability (and men's biological unsuitability) to these tasks. [8] Therefore, women must take control of the risks of sex because men cannot be trusted to, but men's incompetence on this score has no bearing on their fitness for power and responsibility in other domains.[9] This myth of domain-specific incompetence and irrationality is liberating for men. It allows them:

> to have sex worry-free, to avoid bodily invasion, and to have enhanced sexual access to women. It also means that men do not have to take the blame for unintended pregnancies (p. 589) [13].

One major moral problem with the asymmetry of contraceptive responsibility is that it gives rise to an asymmetry of blame. If women are the primary agents in the reproductive domain,

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[6] Women are nonetheless often not trusted to make decisions regarding sterilisation, especially if they are young (i.e. in their twenties), white, and childfree [15]. (Women of colour have historically been in the even more marginal position of being liable to be sterilised without consent.) Doctors sometimes refuse on the assumption of the patient's future regret, thereby undermining the patient's autonomous preference [16,17]. Therefore, while women are expected to prevent unwanted pregnancies, they are not always permitted to rule out pregnancy altogether, which raises the question of whose needs contraception is intended to serve.

[7] While women are expected to take the lead in contraceptive-use, this agency does not generally extend to the sexual encounter itself, where men tend to have a greater degree of agency in the negotiation of whether, how, and what sex is done [18,19].

[8] Many attempts have been made to ground the gendered division of household labour in biology. See e.g. [20] for an example of how easily such myths are debunked.

[9] This ostensible domain-specificity of women's increased (and men's reduced) trustworthiness mirrors Miranda Fricker's observation that the "testimonial injustice" experienced by women and people of colour—in which their credibility is unfairly deflated—is also limited to specific areas of knowledge which do not threaten the privilege or authority of more powerful groups. She notes that the "tendency for incoherence in human prejudice, sustained through mechanisms of psychological compartmentalization, is such that significant pockets of epistemic trust can remain relatively untouched, even by a powerful racist [or sexist] ideology that corrupts that same trust in countless other contexts" (p.131) [21].

and are tasked with ensuring that effective contraception is used, then they are liable to be blamed when it fails. This is coherent with a more general tendency to blame women for failings in the private domain e.g. victim-blaming in cases of sexual harassment and assault or domestic abuse, blaming women for untidy houses, blaming mothers for their children's shortcomings. Even the language that is used to describe unwanted pregnancies tends to inculpate the woman and/or erase the role of the man. Consider the common phrase "fallen pregnant" which implies that pregnancy occurs as a matter of course, like an illness (c.f. "fallen ill") within which men play no part, or as a careless accident ("she's fallen over"). There is also the more old-fashioned connotation of a "fallen woman." Even worse is the common expression "got herself pregnant" (see e.g. [22]) which implies that women can singlehandedly bring about conception.

How we assign blame is important because it determines societal responses to unwanted pregnancies. Blame plays a prominent role in public discourse on abortion: amongst those surveyed, pregnancy following rape is considered to be the second most morally acceptable reason for abortion[10] [23], presumably on the grounds that since a person who was raped did not consent to sex, *a fortiori*, she did not consent to gestating a foetus. In cases of consensual sex, women are commonly deemed to be responsible for an unwanted pregnancy in such a way as to reduce the perceived right to an abortion.[11]

Another major moral problem is that while contraceptive asymmetry may promise women greater control over avoiding pregnancy, it comes with considerable burdens.[12] There is the

[10] The first is the mother's health being endangered.
[11] This is known as the "responsibility argument," or the "responsibility objection" to abortion, and has been defended and disputed within the philosophical literature [24–29].
[12] The abundance of forms of female contraception does not necessarily equate to (greater) control over the use of contraception. Reproductive coercion, including birth control sabotage (e.g. tearing condoms,

cost of purchasing the contraception (where relevant); the time, effort, and inconvenience of attending related medical appointments, researching and experimenting to find the most appropriate method, and remembering to use or renew the contraception; the pain and discomfort of medical check-ups. Further, almost all forms of contraception involve side effects, including: bleeding, nausea, breast tenderness, weight gain, acne, decreased libido, mood swings, increased blood pressure, cystitis, increased risk of thrombosis and breast cancer. It is telling that 50% of women have stopped using at least one form of contraception due to dissatisfaction with side effects, rather than inadequate efficacy [31,32].

Finally, while contraceptive asymmetry generally benefits men, there are obvious downsides. Men are unable to take optimal responsibility for avoiding pregnancy, which, particularly in jurisdictions in which men are compelled to make child support payments, fails to offer an acceptable level of control. Consider that the only reversible contraceptive option available to men is a condom, yet condoms have a typical failure rate of between 9 and 18%, while failure rates for implants and IUDs are less than one percent [33,34].

The risk asymmetry of PIV sex

Let us assume that men and women who have consensual PIV sex desire that sex equally, and derive the same degree of enjoyment from it.[13] Women approach that sex with a level of risk that is much greater than a man's, since even when using contraception correctly, a woman has a non-zero chance of becoming pregnant as a result of sex [36]. Sex therefore

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restricting access to contraception or clinics, being coerced into sex without a condom, removing a condom during sex) is common, with up to 15% of those surveyed reporting being subject to these practices. Women of colour, working class women, and victims of intimate partner violence are particularly at risk [30].

[13] Although note that studies show that this is unlikely to be the case: only around 20% of women can reliably reach orgasm through penis-in-vagina sex alone [35].

carries various pregnancy-related risks for women. Men have no risk of becoming pregnant, but also face risks in relation to causing an unwanted pregnancy. Table 1 outlines some of these risks. I do not attempt to quantify the degree of risk, which will clearly differ according to the individual and context, but merely note whether the risk applies to women and men in the general case. Note that some men never find out that they have caused a pregnancy, so that they can be epistemically shielded from some pregnancy-related risks in ways that women cannot.

Pregnancy-related risks associated with PIV sex	**Women**	**Men**
Physical impact of pregnancy	Yes	No
Physical impact of abortion	Yes	No
Cost of medical appointments (e.g. in time, opportunity and/or money)	Yes	Maybe
Distress associated with abortion	Maybe	Maybe
Distress associated with prospect of unwanted child	Maybe	Maybe
Financial and emotional cost of unwanted child	Maybe	Maybe
Distress associated with potential or actual discrimination or stigma (e.g. in employment, as a consumer, in public)	Maybe[14]	No

Table 1: Pregnancy-related risks of penis-in-vagina sex for women and men

As one would expect, in having PIV sex women face greater pregnancy-related risks than men, including bodily risks, emotional and financial burdens, and opportunity costs. However, in jurisdictions in which abortion is available, men generally have less control

[14] Pregnant women and new mothers are at risk of discrimination in the workplace (which can include reduced hours, disciplinary action, inability to progress, and unfair dismissal), as consumers (when buying e.g. cigarettes, alcohol), and when breastfeeding in public.

than women over whether an unwanted pregnancy results in childbirth. In some cases, men can end up making long-term child support contributions for unwanted children [37].

TOWARD SEX EQUITY I: ANALOGIES WITH INFECTION PREVENTION

How can we adjust the terms of PIV sex to ensure that men and women access it more equitably, given the asymmetry in the pregnancy-related risks they face? One option is to reduce a woman's risk of becoming pregnant, by improving her access to a range of contraceptive methods. Yet as the last section showed, contraceptive use is burdensome. Therefore, this cannot be a solution to the inequity problem, since it reduces one asymmetric burden by imposing another, and since the original risk remains non-trivial, this makes PIV sex even more inequitable. While the improvement of current female contraceptive methods (i.e. fewer side effects, higher efficacy, reduced invasiveness, improved control, lower cost) would be a welcome development, it is not, on its own, a satisfactory answer to PIV sex asymmetry.

A second option is to make sure that women have optimal access to safe abortions, so that they are easily able to terminate unwanted pregnancies. Again, access to abortions is important, but this "solution" tends to entrench the inequity of PIV sex. Abortions are generally very safe, but there are common side effects, and in some cases serious risks. Moreover, abortions can be expensive, difficult or inconvenient to access, and remain significantly stigmatised. While abortion is usually presented as a victory for women's sexual and reproductive rights, it has also tended to improve men's access to PIV sex while minimising the consequences for them. Catherine Mackinnon points out that the "availability of abortion enhances the availability of intercourse" and that the rights which

ground access to abortion are like "an injury presented as a gift, a sword in men's hands presented as a shield in women's" [38].[15] As Andrea Dworkin puts it, men had a personal stake in the legalisation of abortion, since it removed a significant barrier to women's reservations about PIV sex: "Getting laid was at stake" [40].

Another option is to improve men's access to effective contraceptives and change the social expectations regarding their use, so that men take primary responsibility for avoiding unwanted pregnancy. I will argue that this is the most promising route to equity, as it would allow men to take optimal precautions to ensure that they are not able to *cause* unwanted pregnancies. My argument starts with the intuition is that if *A* wishes to engage in a mutually enjoyable[16] activity with *B*, knowing that *B* necessarily takes greater risk, that risk should be minimised in ways that require *A* to shoulder a fair share of the associated burdens. In the remainder of this section, I will offer some arguments to ground this intuition.

Consider an analogy. When healthy adults consent to vaccination (or do so on behalf of children), they do so in part to protect themselves from illness, but also to safeguard more vulnerable people who cannot be vaccinated—infants, elderly people, and those who are immuno-compromised—from serious illness or death. Vaccination entails minor burdens: injections are painful, medical appointments take time and organisation, there can be minor side effects, and there is a small risk of more serious complications. Yet many of us would

[15] Mackinnon also notes that the Playboy Foundation (a misogynistic institution by any measure) has donated funds to organisations that advocate for abortion access [39].

[16] As in note 13, "mutually enjoyable" is a slight misnomer, since another PIV sex inequality is relevant here: that of sexual pleasure. Studies show that women engaging in PIV sex with men are less likely than their partners to orgasm and more likely to experience pain [35,41]. Faking an orgasm in order to end "bad" sex is a commonly-reported strategy [19]. Accordingly, one might argue that men have greater responsibility for PIV sex since they stand to gain more physical pleasure from it.

argue that it is morally right that those who can be vaccinated agree to do so in order to better protect those who cannot, and who are likely to suffer most if infected.[17] It would seem unreasonable to instead insist that vulnerable groups avoid normal social behaviour (e.g. interacting with others) which increase their risk of infection, or that they be required to take regular medication with serious side effects which allows them to stay healthy without requiring others to take on any burden. Now compare the disease to pregnancy, the vaccination to some form of long-acting male contraceptive, the normal social behaviour to sex, and the regular medication to a female contraceptive.

A related analogy is helpful in further probing our intuitions. Consider a disease to which only women are susceptible, and for which men are the only vectors. The disease is transmitted through a form of intimate social interaction which most adults consider to be an important part of human flourishing. If women contract this disease, they are infected for nine months unless they undergo treatment, which can be expensive, medically onerous, and may require surgery. The infection itself carries risks of cramp, diabetes, bleeding, back pain, tiredness, digestive issues, urinary incontinence, deep vein thrombosis, headaches, high blood pressure, indigestion, nausea, haemorrhoids, varicose veins, sleeplessness, mental health issues, and mortality [42]. It is likely to affect a woman's ability to work, and may cause her to experience discrimination.[18] There are several ways of preventing women from contracting the disease: (a) women refrain from an activity that most consider to be important to human flourishing; (b) women wear protective gear, take long-term medications to minimise their risk, or provide protective gear for men; (c) men

[17] That also has the advantage of working towards the elimination of the general risk by contributing to the drastic reduction of the pathogen within the population if herd immunity is attained.

[18] Shulamith Firestone famously described pregnancy as "barbaric" [43]; Kraft argues that pregnancy should be seen as a harm, though it does not necessarily follow that a woman is wronged if she becomes pregnant [44].

always bring their own protective gear and use it, or (d) men are vaccinated against the disease so that they cannot transmit to women.

Should women take responsibility—through (a) or (b)—because they can be harmed, or should men take responsibility—through (c) or (d)—because they can cause harm? To put it another way: should we treat women as the subjects of medicalisation since the infection affects their body, or should we treat men as the subjects of medicalisation since their bodies constitute a risk to others? How should the risks and harms of the disease be minimised? Of course, one cannot violate a person's bodily autonomy by mandating bodily intervention, so the question must be settled by considering what the relevant parties *ought* to choose, what health professionals and educators ought to encourage, and, perhaps, what legislators ought to penalise.

Assume that all risk-reducing measures are burdensome. One might argue that a woman has more of an interest in protecting against the disease, since *she* is harmed by it. A woman is likely to see her burdensome intervention as protecting herself, i.e. as a self-interested act, while a man might see his burdensome intervention as protecting others, i.e. as a supererogatory act. Supererogation is more demanding, morally, than self-interest, therefore we might reasonably expect that women would readily protect themselves against harm and men would less readily choose to protect others against harm, thereby justifying the current status quo. Further, failure to perform a supererogatory act is not blameworthy, so that the status quo is not morally troubling.

But this line of reasoning doesn't succeed. Supererogatory acts are those that exceed the requirements of duty, and asking a man to ensure that he cannot harm a woman through

PIV sex seems to fall squarely within his duties to her. To illustrate this, let us return to the previous analogy and draw on arguments made within the work of Jamrozik *et al.*, who argue that opting out of vaccination is blameworthy [45]. They too must show that the duty—in their case, to be vaccinated; in my case, to minimise one's risk of impregnating others—is not supererogatory. They must tackle the contention that vaccination is too demanding, since it is not reasonable to expect a person to do so much in order to minimise their risk to others. Their strategy is to argue that vaccination also benefits the person who is vaccinated. In my case, protecting oneself against impregnating others protects against the burdens of pregnancy as they affect men (see Table 1), which are not negligible, even if they are comparatively small. It seems plausible that for most men, the burden of the prospect of an unwanted child outweighs the burden of using contraception. Second, a person who refuses to be vaccinated in order to avoid the associated burdens, but benefits from herd immunity, can be charged with free-riding. Similar concerns can be raised in relation to a man who benefits from avoiding the burdens of unwanted pregnancies by relying on his partners to be protected. Finally, one can argue that it is justifiable to impose small burdens on members of a society (vaccination, or men contracepting) provided the risks and benefits are shared equitably within that society. Without vaccination, and without men taking primary contraceptive responsibility, the burden of risk falls inequitably on those who are vulnerable, either immunologically or reproductively.[19]

[19] It is illuminative to compare pregnancy to another sexually-transmitted condition: HIV. There are morally salient parallels between the two cases: one person is asymmetrically at risk of causing long-term harm to another person. Bennett *et al.* have argued that a person is wronged by sexually-transmitted HIV infection if their partner was aware of their own infection and they neglected to attempt to protect against transmission [46]. Superimposing that reasoning here: men know that they can make women pregnant, therefore failure to attempt to protect against impregnation using some form of contraception is blameworthy. This doesn't go so far as to require a disruption of the bodily asymmetry of contraception—requesting that protection is used is not the same as taking primary responsibility for it—but more minimally establishes that men must take some responsibility for ensuring that reliable contraception is used. One might object that there is an important point of disanalogy: pregnancy is an *expectable* risk of PIV sex, HIV-transmission is not, which is why disclosure is required in the latter case but not the former. Yet impregnation is an expectable risk only because our social norms and the medical technologies driven by those norms have led us to believe that it is

In this section I have explored some moral intuitions around responsibility for avoiding unwanted pregnancy by comparing contraception to vaccination, and pregnancy to disease. While analogies need not be perfect to be efficacious, an important point of disanalogy must be engaged with: under ordinary circumstances, diseases are always unwanted, whereas pregnancy is in many cases desperately wanted, which would make it a strange kind of disease.[20] Further, I have criticised the medicalisation of women's bodies, only to describe pregnancy—which is considered by many to be a "normal" part of the life-course of many women—as pathological, which seems contradictory. My response to these objections is that while unwanted pregnancy and wanted pregnancy may be *biologically* identical, their *social* interpretations ought to be as different as a long-term illness is to an exciting new opportunity; the first tends to limit one's life, the second to further one's life goals.[21] In this article, I am only concerned with unwanted pregnancies and their social interpretations, and so my analysis is intended to apply only to the *social* category of unwanted pregnancies.

TOWARD SEX EQUITY II: A VEIL-OF-IGNORANCE APPROACH

Another way of approaching the problem of the risk-inequity of PIV sex is to ask what the social norms around contraceptive responsibility would look like in a just society. Or, to be more explicitly contractualist, what freedoms could we expect an individual to surrender in exchange for being protected from subjection to an unfair level of burden? A productive

acceptable for men to arrive at a sexual encounter without having in any way reduced their risk to their partner, and for that risk not to be discussed, but to have been dealt with already by his partner.

[20] Thanks to an anonymous reviewer for raising this point.

[21] Even that dichotomy is too simple, since a pregnancy can be wanted and still feel like a disabling disease.

way to proceed in answering these questions is to make use of a "veil of ignorance" approach.[22] Both Rawls and Dworkin have offered conceptions of justice which utilise this hypothetical tool [48,49]

In Rawls' theory, rational agents are asked to agree upon the terms of a just society by deliberating behind a veil of ignorance which prevents them from knowing what their morally arbitrary identities would be in the hypothetical society, but allows them epistemic access to other details of science and human behaviour (e.g. they know that some people will be disabled, that altruism will be limited, that wombs are needed to gestate foetuses). From behind the veil they must attempt to guarantee that whatever characteristics they might have in that society, they will nonetheless have secure access to primary social goods. One heuristic they might draw upon is Rawls' "maximin" principle: rational agents ought only to accept inequalities which advantage those who are worst-off. Rawls reasons that the most just state of affairs within a hypothetical society can be imagined by considering those who are likely to be worst off, and then arranging that society so that those people do as well as is possible having accounted for the differences that make them worse off in the first place.[23] Similarly, in Dworkin's theory, redistributive justice minimises the effects of "natural inequalities" by insuring against them. Specifically, an agent making judgements about which natural inequalities to intervene upon must do so

[22] The argument in this section applies a similar method to that deployed by Anna Smajdor, who contends that research into ectogenesis techniques should be prioritised as a way of liberating women from the harms of pregnancy [47]. Smajdor draws on Dworkin's contention that natural inequalities are appropriate targets for redistributive justice [48], and endorses the implementation of a veil-of-ignorance strategy for determining which inequalities must be prioritised for intervention. She argues that if a person were not told their sex, they would prefer to join a society in which ectogenesis had been perfected, so that no person would have to bear the burdens of pregnancy in order to reproduce.

[23] Rawls' philosophy has been subject to criticism for feminists on various fronts for its failure to account for the experiences of women [50,51]. Here, I co-opt one component of the theory for feminist purposes, as have others [52].

from behind a veil of ignorance, not knowing which natural inequalities they might be personally disadvantaged by.

I wish to draw on the spirit of both of these approaches: any natural inequalities or morally arbitrary details which affect a person's access to resources should be placed behind a veil of ignorance, and we must then decide on a set of fair expectations regarding measures taken to avoid unwanted pregnancy. As Smajdor points out in her work on ectogenesis, pregnancy burdens women, and the "fact that men do not have to go through pregnancy to have a genetically-related child, whereas women do, is a natural inequality" [53]. Correlatively, I take it that the *risks* of pregnancy are also a natural inequality which is an appropriate locus for considerations of justice.

Women are worse off than men *vis-à-vis* PIV sex, since they can become pregnant, which puts them at risk of various harms (see Table 1). Yet men are not completely burden-free: they too experience risks of harm via unintended impregnation. What form should a society take in which the burdens of PIV sex are fairly distributed? Offering multiple safe, effective female contraceptive methods (including abortion) is an important starting point, but, as we have seen, it does not solve the problem since all contraceptive methods come with burdens, which may end up further increasing the disadvantage. I suggest that we instead focus on removing the risk by expecting men to make changes to their bodies so that they do not pose a risk to women via PIV sex. While this would present a burden for men, that burden is less onerous than the cost to women of pregnancy risk plus contraceptive burden, and this would also allow men to protect against the pregnancy-related risks they face without infringing upon the bodily autonomy of women. Then if, from behind a "veil of ignorance" a person was told they would join such a society without knowing the sex of

their body or their sexual preferences, they would be likely to find such an arrangement to be fairest [49]. Ending up as a woman would mean facing the risk of pregnancy, but not the primary responsibility or burden for protecting against it. Ending up as a man would mean accepting the burden and responsibility for avoiding impregnation while having no risk of becoming pregnant.

One might object that consensual PIV sex is voluntary. Accordingly, the risks of PIV sex, which contraception guards against, are as a result of "option luck" rather than "brute luck." As Dworkin puts it, option luck "is a matter of how deliberate and calculated gambles turn out—whether someone gains or loses through accepting an isolated risk he or she should have anticipated and might have declined," while brute luck is "a matter of how risks fall out that are not in that sense deliberate gambles" [54]. Yet men and women both voluntarily engage in PIV sex, but are not exposed to the same level of risk. Accordingly, accepting the reality that many people will voluntarily engage in PIV sex as a more realistic baseline than the expectation of abstinence, and recognising that PIV sex *necessarily* requires both partners, pregnancy-related risks begin to look like bad brute luck for women.

In the next section I consider options for ensuring that men can take responsibility for the pregnancy-related risks of PIV sex.

SEEKING EQUITY THROUGH MALE CONTRACEPTION

As it stands, men do not have contraceptive choices that provide them with the optimal ability to take responsibility for the risks of PIV sex. A vasectomy is a serious surgical procedure which is not always reversible. Male condoms are a reliable form of

contraception if used properly, and have no side effects, but studies show that while men may physically wear them, they do not generally take responsibility for acquiring them or ensuring they are used [55,56], and their failure rate (9-18%) is much higher than that of long-acting female contraceptives [33,34]. Further, it is all too easy for women to also take responsibility for this ostensibly "male" form of contraception. Undoubtedly, given the arguments I have made, justice in the present context requires that men acquire and proactively use condoms, and/or offer to take responsibility for the planning and cost of any additional or alternative contraception their partners may use. Yet men ought also to have the option of more effective, longer-acting forms of contraception, which will optimise their ability to shoulder the requisite level of burden for there to be sex justice in the joint endeavour of avoiding unwanted pregnancy.[24]

The development, authorisation, and uptake of male long-acting reversible contraceptives (LARCs) as a medical intervention would benefit women and men.[25] LARCs may be a particularly apposite form of contraception for men within the current discourse around sexual responsibility, since, as Campo-Engelstein notes, their long-acting nature circumvents any (bogus) argument about a man's uncontrollable sex drive, as the "claim that men cannot use contraception because of their uncontrollable libido only works for contraception that is used in the heat of the moment" (p. 610) [13]. LARCs would also enable men to protect themselves against any concerns they may have about reproductive

[24] I do not intend to suggest that men's failure to assume adequate contraceptive responsibility can be wholly attributed to the unavailability of male hormonal contraceptives. That puts the cart before the horse. Men's refusal to take contraceptive responsibility has discouraged progress towards the development of male hormonal contraceptives. As I have discussed, the medical and social realities are intertwined.

[25] Clearly, a male LARC would have no efficacy against sexually-transmitted infections. As such, male LARCs are only intended in this discussion to serve as replacements for female LARCs, to be used as protection against pregnancy, and only within PIV sex encounters in which the risk of STIs is negligible. Otherwise, a barrier method should also be used.

coercion in the form of non-consensual insemination [57].

Male LARCs also have a temporal advantage over other forms of contraception. As a general rule, if a harm is to be avoided, it is preferable to protect against it at the earliest point in the causal chain. Consider that it is cheaper and safer to require that catalytic converters are installed in car engines so that they do not release noxious gases than merely reactively provide masks and emergency respiratory care to other road users. Public health interventions tend to favour such "upstream" or "distal" interventions. Not only do they make us all automatically safer (cars are less dangerous, measles has fewer potential victims, enclosed public spaces are free of second-hand smoke), they also leave open the possibility of other preventative and curative measures being introduced at later parts of the causal chain, strengthening the overall protection against harm, or the reduction of the harm. Intervening at an earlier point in time means that all subsequent events necessarily inherit the benefits of the protective measure. So if a man uses a LARC that renders his semen optimally non-fertile, and then also uses a barrier method, or his partner is already contracepted, his chances of impregnating somebody are vastly reduced.

Research into alternative male contraceptives only began in the 1970s, fifty years after female contraceptives were first explored [58]. Since then, several different research avenues have been pursued, leading to the development and testing of a diverse set of reversible long-acting male contraceptives [59], several of which have now reached phase III clinical trials. Hormonal methods use exogenous synthetic testosterone and progestogens (in the form of a pill, injection, or skin cream) to prevent the production of normal sperm. Non-hormonal methods target the vas deferens, the tube which carries sperm to the ejaculatory ducts, and which is severed in a vasectomy. The two most prominent of

these vaso-occlusive methods are the reversible inhibition of sperm under guidance (RISUG) which involves the injection of an obstructive polymer in the vas deferens, and the intra-vas device (IVD), an injectable plug which filters sperm from passing through (see e.g. [59,60]).

Regardless of their uptake, the availability of safe, effective, reversible male contraceptives would likely change the discourse around contraceptive responsibility. The addition of new options to an array of value-laden choices is never normatively neutral. Rather, it changes the space of choices and mandates greater reflection as to which is the most appropriate, and can radically boost or reduce the attractiveness of options which were previously acceptable (see e.g. [61]). Many couples engaging in PIV sex may, for the first time, find themselves considering fairness and burden-sharing in their negotiation around contraception.[26] Important conversations are currently conveniently circumvented by the absence of male options; men do not face the difficult choice of taking on the responsibility for avoiding pregnancy via a long-term medication (and all its side effects) because no such choice is available. Those refusing to countenance male LARCs may feel compelled to explain why they nonetheless expect women to use comparable methods, bringing the decades-long contraceptive asymmetry to the fore. It may be that the mere existence of LARCs would lead to a rise in the number of men taking primary responsibility for condom-use, as a comparatively attractive alternative. It would undoubtedly bring about a much greater appreciation of the sacrifice so many women have made for so long in order to minimise the risks of PIV sex for all partners.

[26] The availability of male LARCs would likely necessitate a greater focus on contraceptive negotiation in sex education curricula in schools, which is where many young people receive their knowledge of sex and contraceptive outside the fictions of pornography.

Should male LARCs become a standard, expectable form of contraception, this could affect abortion discourse, and encourage new ways of analysing risk and responsibility which disrupt the well-worn arguments that have long characterised the debate. As we have seen, expecting women to take responsibility for contraception tends to mean they are blamed for contraceptive failure. Instead expecting sexually-active men to have contracepted before they engage in any PIV sex might mean that, in the event of an unwanted pregnancy, questions would be asked about whether *he* was properly contracepted, and if not, why he thought it acceptable to engage in PIV sex when the act of doing so posed a much greater risk to his partner than to himself. As I have noted, common discourses around abortion note that since women who are raped do not consent to sex, *a fortiori* they do not consent to pregnancy. Many people conclude that abortions are acceptable in such cases, if not in others. Accordingly, one might argue that women who consent to sex with men who effectively cannot make them pregnant do not consent to pregnancy, any more than a person who consents to a medical procedure under general anaesthetic consents to pain, or a person undergoing minor skin surgery consents to amputation. If pain or amputation did occur in those cases, it would be attributed to error on the part of the physician, or even negligence if appropriate care was not taken. Likewise, in a world in which male LARC-use is expected, a woman's need for an abortion might be seen to result from the failure of *another person's* attempt to prevent impregnation, or, if no contraception was used, another person's negligence.[27] While one might argue that a woman should still check that a man has contracepted, it is surely not acceptable to expect one group of people to take

[27] Note that these arguments have no effect on the moral permissibility of abortions which occur in women for whom the pregnancy was at some point wanted, but later becomes unwanted. These arguments are therefore not intended to single-handedly defend abortion, but to bring about a shift in the discourse around the practice.

responsibility for another group's responsibilities, or else the original asymmetry is reproduced. In short, men know they can impregnate, and should not engage in PIV sex unless they have made their risk to others nominal.

While the decision to take primary responsibility for contraception by using LARCs would ultimately lie with men, social norms are created and maintained via the collaborative actions of various social institutions. Governments, researchers, public health officials, medical professionals, and school-teachers would have critical roles to play in ensuring that male LARCs contribute to justice in PIV sex in the ways that I have described. While pharmaceutical companies, following the behaviours of markets, are likely to dominate the development and sales of these new methods, other parties will influence their uptake and social significance. Public-funded research would be needed to explore any actual or potential barriers; government funds would need to be committed to ensuring that male LARCs are widely available; public health campaigns and medical professionals would be critical to disseminating accurate information and encouraging male LARCs as the standard method for avoiding unwanted pregnancy; school-teachers would play a key part in explaining and championing the important role of male LARCs in fairly minimising pregnancy-risk.

COUNTERARGUMENTS

I have argued that justice in relation to the pregnancy-related risks of PIV sex requires that men are offered LARC options, and that they thereby choose to take primary contraceptive responsibility. In this section I briefly present and combat a series of concerns and counterarguments.

Men would not use LARCs

Thus far, the major barrier to male contraceptives has been biological: safe, effective male hormonal contraceptives are not available. The failure to develop male contraceptives is largely due to social norms about who ought to take responsibility for PIV sex, which would still apply if LARCs became widely available, and may impede their uptake. Worse, this is not merely a question of responsibility. LARCs are likely to face particular kinds of resistance that condoms do not engender, since the purpose of LARCs is to reduce the fertility of a man. For many men, "virility" is strongly connected to masculinity, which is often a fiercely-defended identity [62].

Yet the available data belies these expectations. In a study conducted in Edinburgh, Cape Town, Shanghai, and Hong Kong, between 44 and 83% of men said that they would use a male contraceptive pill [63]. According to a 2019 YouGov survey, a third of UK men would use a contraceptive pill, which matches the proportion as women who currently use hormonal contraception in the UK [64]. Despite this, representations of male LARCs remain trapped in a cycle of unhelpful and inaccurate social representations, which threaten their medical development and eventual uptake [65].

It is nonetheless important to think intersectionally. A person's relationship to long-term contraception may be differentially determined by their social identities, given the way in which forced sterilisation has been used to violate the reproductive rights of people of colour, indigenous people, disabled people, and poor people [5–8]. Those groups may be particularly resistant to new forms of long-acting contraception, and any concomitant public health campaigns. Clearly, sensitivity to particular histories is needed in discussing

and delivering new and existing forms of contraception.[28]

Women would not trust men to use LARCs

In discussions of male contraceptives, it is often claimed that women would not trust male partners to use contraceptives. If that were the case, even if male LARCs were available, women would be likely continue to use their own contraception, thereby perpetuating the current asymmetry and perhaps even rendering male LARCs superfluous. This myth itself derives from problematic assumptions about men's inability to take responsibility within the sexual domain, which, as we have seen, derive from the same discourse which underwrites the idea that men cannot control their sexual urges and are inherently incompetent at performing domestic labour [13,14].

Again, the data challenges these assumptions. In a study carried out in Scotland, South Africa, and China, just two percent of women said that they would not trust their partners to use a male contraceptive [67]. As Campo-Engelstein convincingly argues, women do not see their male partners as instances of some generalised stereotypical man, but rather as the individuals they know them to be [14]. Therefore, in longer-term relationships, it is likely that women would trust their partners to take responsibility for contraception. Within such relationships, men are less likely to be able to easily evade the responsibilities arising from an unwanted pregnancy, and more likely to empathise with the plight of a pregnant partner, and so have a vested interest in avoiding unwanted pregnancy. In more casual encounters, barrier methods are in any case preferable.

[28] That said, women of colour (say) must not lose out in terms of continued contraceptive injustice through a failure of the medical profession to engage appropriately with men under the banner of cultural sensitivity. Consider Kimberlé Crenshaw's ground-breaking work on the failure of intersectionality in suppressing domestic abuse statistics in Black communities due to sensitivities relating to racist stereotypes of Black men as violent, thereby under-serving the needs of Black women survivors [66].

Women value control

Another important objection derives from the fact that many women value the control they have over the risks of PIV sex, and find contraceptive sovereignty empowering. The terms of PIV sex—i.e. how and when it is done—are still primarily determined by men, against the backdrop of a society in which women's sexual autonomy is delimited and policed by gendered social norms. In this context, it is perhaps expectable that some women may be protective of the power they wield over managing the risk of pregnancy. It might even be argued that since the consequences of sex take place in a woman's body, only she ought to have control over whether *or not* PIV sex is contracepted. Shifting the responsibility for contraception onto men may feel like relinquishing the limited control women have over PIV sex.

Valuing the burden of contraceptive responsibility could be described as an adaptive preference, in which women come to internalise the modicum of control they have over PIV sexual encounters, and desire what is burdensome as a way of avoiding the cognitive dissonance of confronting the obvious injustice [68]. If that is the case, the introduction of other options in the form of male LARCs might provide conditions under which these deformed desires could be modified. One would also hope that the shift in discourse brought about by a more just distribution of contraceptive responsibility would change the terms of PIV sex in ways that would allow women more meaningful sovereignty over other aspects of PIV sex. The introduction and uptake of male LARCs would likely improve contraceptive negotiations, and one would hope that this would lead the way for greater reflection and negotiation in relation to other aspects of PIV sex.

CONCLUSION

Given that women are burdened with the risk of unwanted pregnancy when they engage in PIV sex, men should do their utmost to ensure that their ejaculations are responsible, otherwise women shoulder a double burden of pregnancy risk plus contraceptive burden. The development of male LARCs would optimise men's ability to take responsibility for protecting against the pregnancy-related risks of PIV sex. Accordingly, it would likely change the discourse around responsibility for PIV sex, and problematise the double burden—of pregnancy risk plus contraceptive responsibility—it places on women. In light of the biological necessity of the former burden, I have argued that the fairest way to distribute the latter burden is for men to reliably assume sole or chief contraceptive responsibility. At present, that means that men should acquire and use condoms and, where possible, contribute to any costs incurred in the use of female contraceptives; in the future, men engaging in PIV sex should ensure that they use a LARC. This would make the terms of PIV sex more equitable. It might also shift our conceptions of responsibility for unwanted pregnancy in ways that impact on the debate around abortion.

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