

# **The Contraceptive Options, Needs and Challenges for Transgender Men and Non- binary Individuals**

**Word Count: 1994**

## Introduction

An estimated 0.3-0.5% of the global population defines themselves as transgender<sup>(1)</sup>. The number of people identifying as such in the United Kingdom is also increasing<sup>(2)</sup>, meaning an awareness of transgender healthcare is imperative. Gender identity refers to a person's innate feeling of self and is different from biological sex which is based on chromosomes, hormones and anatomy<sup>(3)</sup>. The term transgender refers to someone whose gender identity does not align with the sex they were assigned at birth<sup>(4)</sup>. This essay will focus on transgender men and non-binary individuals who were assigned female at birth.

A transgender male is someone who was assigned female at birth, however, identifies as male. Cis gender refers to someone whose gender identity aligns with their sex assigned at birth. A non-binary individual includes those whose gender identity does not fit into either a male or female 'binary' and they may also identify as transgender<sup>(3, 4)</sup>. It is important to always check the person's pronouns and never assume as this may provide further barriers to healthcare. To affirm their gender, individuals may use hormone therapy such as testosterone, or undertake surgery such as hysterectomy, although individual preference varies<sup>(4, 5)</sup>.

There is a large lack of data regarding contraception in transgender men and non-binary individuals, particularly those on testosterone therapy<sup>(1)</sup>. Unintended pregnancy results in a significant health and economic burden and the rates are similar in this group to the main population, demonstrating a crucial need to address contraceptive options<sup>(6)</sup>. Many also desire to have children so empowering these individuals to make informed decisions is vital in their reproductive healthcare<sup>(7)</sup>. This essay hopes to evaluate the different contraceptive options for transgender males and non-binary individuals (assigned female at birth), illuminate gaps in current research and help provide information which would hopefully improve the contraceptive care of this population.

## Discussion

Transgender individuals are less likely to seek healthcare due to stigma and embarrassment<sup>(8)</sup>, therefore it is vital that measures are put in place to build rapport and increase patient satisfaction. Using the incorrect names, pronouns or lack of inclusive vocabulary represents a significant barrier to care<sup>(1)</sup>. Indeed, one case showed that contraceptive information and leaflets had been shown to not contain transgender inclusive language<sup>(9)</sup>. Non inclusive language is very prevalent in healthcare<sup>(10)</sup> and having information which does not appear accessible to transgender individuals further isolates them and adds to feelings of social stigma<sup>(1)</sup>.

As transgender identity is heterogenous in nature, it cannot be assumed whether transgender males/non-binary individuals have had or are taking certain therapies<sup>(4)</sup>. Before counselling on contraception, it is important to establish whether they have an intact uterus or vagina, whether they have started or even wish to start testosterone therapy and the type of intercourse that the patient is having<sup>(11)</sup>. Assuming certain factors about a patient can negatively impact a consultation. Indeed, it is equally pertinent to establish future fertility desires as this will form the basis of the contraception discussion<sup>(12)</sup>.

Many transgender individuals express desire for future children with figures varying between 39% to over 50% depending on the study<sup>(7, 13)</sup>. Therefore, a clinician cannot assume that simply by transitioning that an individual does not want to be pregnant or have children. Many healthcare professionals and patients incorrectly believe that testosterone itself is a form of contraception; Light et al found that 16.4% of transgender individuals believed testosterone was effective contraception<sup>(14)</sup> and 5-9% of transgender individuals had been advised by a healthcare professional

that testosterone was sufficient to prevent pregnancy<sup>(14, 15)</sup>. With evidence showing that unintended pregnancy still occurs whilst on testosterone therapy<sup>(6, 14)</sup>, the data highlights the need for further education in this field for both clinicians and patients to help improve patient outcomes. However, the studies by Light et al. draw from a very small sample size of 197 and 41 respectively, of which many are not on testosterone at the time of pregnancy and are mainly white respondents, so may not be entirely applicable to a diverse transgender community. To better understand how testosterone affects fertility and pregnancy rates, larger and more robust studies would need to be carried out, to better counsel patients on pregnancy risk.

The next part of this essay evaluates the contraceptive options themselves (excluding emergency contraception) and how this may differ between individuals based on their preferences and situation.

### ***Combined hormonal contraception***

Combined hormonal contraception (CHC) includes the combined hormonal pill, the contraceptive patch, and the vaginal ring. The Faculty of Sexual and Reproductive Healthcare does not currently recommend the prescription of CHC in transgender individuals with a uterus who are taking testosterone<sup>(16)</sup>. Despite this there is no evidence to contraindicate CHC<sup>(17)</sup>, however theoretically there is a chance of interaction or opposing effect of testosterone and a potential increased venous thromboembolism risk<sup>(11)</sup>. Testosterone could cause a rise in haematocrit and oestrogen levels which would then increase the risk of embolism in those taking CHC however there are no studies which document this increased risk in patients<sup>(11)</sup>. Furthermore, CHC has been shown to be effective in successfully preventing pregnancy in transgender individuals and many may not be taking testosterone therapy so CHC may be suitable in such circumstances<sup>(14)</sup>.

A side effect of CHC may be chest or breast tenderness<sup>(18)</sup> which may induce body dysmorphia (feelings of distress to certain parts of your body which you do not relate with<sup>(19)</sup>) in transgender individuals and potentially therefore be an unacceptable side effect<sup>(12)</sup>. Oestrogen is also typically seen as the 'female' hormone and may further be a source of discomfort for transgender individuals<sup>(11, 14)</sup>. Using contraception which requires regular pill taking such as the combined and progestogen only pill may add to a feeling of gender dysphoria as this is a constant daily reminder of anatomy<sup>(11, 12, 17)</sup>, therefore discussion about alternative forms such as long-acting hormonal contraceptives and surgical options may be more appropriate in some instances.

### ***Progestogen only contraception***

Progestogen only contraception includes the implant, Depo injection, hormonal intrauterine system (IUS) and the progestogen only pill (POP)<sup>(16)</sup>. If an individual is looking for the most effective contraception to prevent pregnancy, then the implant would be the best choice, with only 0.05% of individuals experiencing unintended pregnancy within the first year of use<sup>(20)</sup>. However, this data is mainly based on figures from cis gendered women. To accurately counsel transgender individuals (particularly those on testosterone therapy) about the most effective method to prevent pregnancy, more studies need to be conducted on this matter as none have been produced to date.

Bleeding during a menstrual cycle and the accompanied side effects may add to feelings of gender dysphoria and this may be one of the most important things to consider in transgender individuals<sup>(21)</sup>. Although the implant is an effective contraception it typically induces spotting<sup>(22)</sup>, whereas the injection and IUS are better options for reducing bleeding symptoms<sup>(23, 24)</sup>. The IUS and injection are also better choices for inducing amenorrhoea and oligomenorrhoea than CHC, which typically has a withdrawal bleed<sup>(12)</sup>. However, testosterone usually induces amenorrhoea within the

first 12 months of use<sup>(17)</sup>, so this combined with the non-pelvic invasive and long-lasting implant<sup>(25)</sup> may be a very good choice. Data is yet to be produced on the effect of bleeding whilst simultaneously on testosterone therapy and the implant<sup>(11, 17)</sup> so this would be a significant area for future research. Furthermore, it is postulated that levonorgestrel may act synergistically with the androgenising effects of testosterone<sup>(1, 17)</sup>, further making this an attractive option.

Amenorrhoea via the IUS and Depot injection may take up to a year which may not be satisfactory<sup>(12, 23)</sup>, yet an option might be to add norethisterone acetate in the short term to help stop bleeding<sup>(26)</sup>. The IUS also does not require regular pill taking and lasts for up to 5 years, potentially alleviating the stress of contraceptive worry<sup>(11)</sup>.

Methods requiring a clinician to discontinue them such as intrauterine contraception or an implant may be less desirable due to increased visits to clinical settings<sup>(12)</sup>. Pills, patches, and rings can be stopped with much more ease which may be suitable for transgender individuals who are unsure about what contraception they desire. However, the use of pills may be less 'private' than other hormonal, non-hormonal and surgical options which provide more 'concealability'<sup>(12, 17)</sup>. The insertion of intrauterine contraception requires pelvic examination, which can cause significant body dysmorphia and discomfort and may be a strong reason for some individuals to refuse this contraception<sup>(1, 27)</sup>. Transgender men are also less likely than cis gendered women to have had a pelvic examination before due to lower rates of attendance to clinical settings<sup>(11, 28)</sup>, so a sensitive approach is needed. Many also prefer the usage of alternative words for their pelvic organs such as 'pelvic canal' or 'front hole' but this is highly individual, and the choice of the patient should always be respected<sup>(11)</sup>.

An additional consideration is that the Mirena IUS can also be left in situ as part of the progestogen component of hormonal replacement therapy during the menopause<sup>(29)</sup>. However, with testosterone treatment that induces amenorrhoea, it may be hard for an individual to tell if they are menopausal or not<sup>(1)</sup>. Research into the transgender experience of menopause and the contraceptive needs of these individuals during this time is severely lacking.

### ***Non hormonal***

Non hormonal methods discussed here include the copper coil, condoms, hysterectomy, and tubal ligation<sup>(12, 30, 31)</sup>. The copper coil frequently causes heavier bleeding and spotting<sup>(32)</sup> and will need pelvic examination for insertion so may be unacceptable<sup>(1)</sup>. However, in those individuals who do not wish to have surgery or who refuse hormonal methods and are comfortable with the side effects of bleeding, then the coil may be a very effective option<sup>(11, 12)</sup>. The coil can be left in situ for 5-10 years providing a large contraceptive timeframe<sup>(33)</sup>. As with other contraception there is no data on whether there would be bleeding with a patient with testosterone induced amenorrhoea<sup>(17)</sup>, so additional research is needed to confirm potential bleeding side effects.

Condoms have been reported as the most used contraception in transgender males<sup>(14, 34)</sup>. However, both studies utilise very small sample sizes of 197 and 26 and in one geographical area, making this data less reliable in its applicability to a wider and more diverse population set. On the other hand, this data may give insight into the lack of knowledge or counselling that has gone into other contraceptive options. Condoms also must be used at each penetrative vaginal sexual encounter which may therefore be unappealing as a long-term option for contraception<sup>(14)</sup>. However, it is vital that in a contraceptive consultation that sexual health is discussed, which would include the use of condoms as the most effective way to prevent sexually transmitted infections. Discussion should

also take place on HIV prophylaxis, cervical screening, Hepatitis A&B and HPV vaccination where applicable<sup>(16)</sup>.

Hysterectomy is a common procedure in transgender individuals assigned female at birth as it permanently alleviates all symptoms of bleeding and potential dysphoria over pelvic organs<sup>(2)</sup>. It is also a method that can be considered for contraception, but carries risk associated with the procedure and is a non-reversible option<sup>(35)</sup>. Tubal ligation offers a contraceptive option but does not aid in diminishing menstrual symptoms so may be viewed as inferior to other methods of contraception<sup>(11, 31)</sup>. Fertility is a major part of a contraceptive discussion; however, it has been found that less than 25% received this counselling prior to transition<sup>(12)</sup>. It is therefore vital that awareness is increased of future fertility due to the irreversibility of methods such as hysterectomy.

## Conclusion

Overall, it is important to realise that transgender identity is not universal, and each individual is unique. Counselling should be very holistic and ultimately the best contraception is the one chosen by the patient. However, further large cohort studies are needed to evaluate the options in transgender individuals and gather their experiences, particularly those on testosterone therapy. With more data clinicians can improve their own knowledge and transgender patients can be better counselled on pregnancy risk, fertility and associated interactions and side effects which will help improve care and patient experience.

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