Attitudes and experiences of health care professionals when caring for transgender men undergoing fertility preservation by egg freezing: a qualitative study

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Abstract

Background: As gender-affirming treatment may have a negative impact on fertility, reproductive health counseling to patients seeking medical or surgical gender-affirming treatment should be provided, including the option to undergo fertility preservation (FP). Experiences of transgender men undergoing FP treatments aimed at oocyte freezing have reported a negative impact of the treatments on gender dysphoria. No previous studies have investigated the experiences of health care professionals (HCP) when caring for transgender men undergoing such treatments.

Aim: The aim of this study was to investigate HCP's attitudes and experiences when meeting transgender men undergoing FP through oocyte freezing.

Methods: Individual interviews were conducted in 2016 with 13 HCPs working at a Reproductive Medicine clinic in Sweden. Data were analyzed by thematic content analysis.

Results: The main theme found, How to maintain professionalism, showed that HCPs experienced important challenges to their professionalism when their preconceived opinions and values about gender and transgender were confronted.

Discussion: Our findings demonstrate the need of continuous efforts on assessing learning needs as well as addressing preconceived opinions and values of HCP. By gaining knowledge and self-confidence in the care of transgender individuals undergoing FP, a professional care for transgender people can be achieved and a safe environment can be established for the patients. This in turn may alleviate some of the distress that may arise when transgender men undergo FP.

Keywords: fertility preservation, gender dysphoria, health care provision, qualitative research, transgender health, transgender men

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fertilization of oocytes at the time of extraction using sperm from a partner or a donor. If the transgender man is having an oophorectomy, cryopreservation of ovarian tissue may also be an option. However, this method will require auto transplantation of the tissue in the future, or a further establishment of methods such as in vitro follicle growth of oocytes obtained from the tissue, which are still under development. The option of cryopreservation of mature oocytes, colloquially known as egg freezing, has achieved clinical standards and it does not involve another party other than the patient. In transgender patients, timely FP is preferably performed before the gender-affirming hormone treatment (GAHT) is initiated, to ensure optimal outcome. Fertilizable oocytes are retrieved after conventional controlled ovarian stimulation (COS) and ultrasound-guided transvaginal ovarian follicular aspiration.

In Sweden and other Scandinavian countries, FP has been included in the publicly funded health care system for over 20 years and the services are provided at large programs for FP established at university hospitals. Previous reports of FP in cisgender patients in that setting are available. However, FP was not offered to transgender patients in Sweden until 2013, when sterilization as a prerequisite for change of legal gender, was removed by a change in the legislation. The Swedish sterilization prerequisite has been considered an example of difficulties in accessing health care for transgender individuals in favor of social marginalization, stigma, discrimination, and violence.

In general healthcare, transgender individuals have reported negative experiences worldwide, which had negatively impacted on their general health and quality of life. On the other hand, only a few studies have so far investigated healthcare providers’ (HCPs) experiences of caring for transgender individuals. Studies among HCPs working in diverse health care areas show that there is limited knowledge about gender dysphoria and the appropriate care strategies. A study among physicians showed that insensitivity toward transgender individuals could be understood mainly in moral terms, where some physicians had personal beliefs about gender identity, sexuality, and sexual health that clashed with their patients’ lives. The lack of knowledge and competence in transgender health among HCP could maybe also be explained by lacking of discussion on this topic in most HCP’s educational curriculum. Although studies investigating medical and mental health specialist’s perception of FP in transgender parents are available, no study has previously assessed healthcare specialists in the field of reproductive medicine.

At the reproductive medicine center at Karolinska University Hospital in Stockholm, a program for transgender people aiming at FP was initiated in 2013, following the change in legislation allowing such treatments. We have previously reported on the experiences of transgender patients undergoing FP procedures aimed at oocyte freezing. That study indicated an increase of gender dysphoria during FP, which was triggered by several factors, such as the discontinuing of testosterone treatment; the pelvic examinations, including transvaginal ultrasound; the hormonal stimulation required to achieve follicle development; and oocyte maturation, but also due to factors related to healthcare provision such as the use of a wrong pronoun or of gendered words for body parts during the consultations. The present study was thus designed to investigate HCP’s experiences when caring for transgender men undergoing FP by oocyte freezing and capture the difficulties, aiming to further improve the healthcare that is provided to transgender patients.

Methods

Context

The tax-funded Swedish health care system provides the basis of an equitable health care system where all residents have the same opportunity to receive good health care. Transgender medicine gender teams with specialists in psychiatry, psychology, endocrinology, plastic surgery, speech and language pathology, dermatology, gynecology, and andrology have been available at the Swedish university hospitals including ours since 1999 for diagnostic evaluation, support, and gender-affirming treatment including hormone treatment, top surgery, gender-affirming genital surgery, voice treatment and hair removal. In connection with the 2012 change in the legislation, the Reproductive Medicine unit of Karolinska University Hospital became a part of the extended transgender medicine team of the hospital.

In order to develop a program for the new patient group and aiming at achieving optimal care, a pilot
A pilot research project involving patients and healthcare personnel was also created in parallel with the healthcare program for transgender individuals at Karolinska University Hospital, Stockholm, Sweden. Aiming at capturing individuals’ experiences and achieving optimal care, the project was introduced at our center using the framework suggested by INVOLVE, to involve individuals in research. The aim was to interview and obtain feedback from the patients during the process of developing a FP program, within the frame of qualitative research.

At the clinic, the following preparations were made to fill in the knowledge gaps: (1) Lectures by professionals from the gender team of the hospital aiming to increase knowledge about the transgender patients, the evaluation process and the gender-affirming treatments. (2) Lectures by representatives from the Swedish Federation for Lesbian, Gay, Bisexual, Transgender and Queer (LGBTQ) Rights (RFSL, a non-profit organization working for LGBTQ people’s rights) aiming to give an insight in transgender peoples’ unique experiences and needs. (3) A small group of HCPs was assigned at the clinic to be primarily responsible for caring of the new patient group, in order to provide healthcare and continuity for the transgender patients. This small group received further education and participated in scheduled meetings together with the hospital gender team. The group also worked toward adopting existing clinical guidelines for FP and the logistics surrounding it. Thereafter, when the clinical routines and experience were achieved, a broader group of HCPs was involved in FP healthcare provision to transgender individuals. A COS protocol incorporating an aromatase inhibitor (letrozole) alongside gonadotropins, aiming at reducing systemic estrogen levels during COS was introduced for the ovarian stimulation of transgender men. This protocol has been previously validated for FP of women with estrogen-sensitive breast cancer, thereby reducing potential oestrogenic side-effects when undergoing COS aimed at FP.

Study participants and procedure
This study was conducted between January and April 2016, at the time when most HCPs at our center have cared of transgender patients undergoing FP. All HCPs working at the center were contacted by e-mail and invited to the study. Inclusion criteria were having cared for at least one transgender man after the patient group had been introduced at the clinic. Participation was voluntary and could be interrupted at any time. No incentives for study participation were offered. Informed consent was obtained from all participants before the interview.

Semi-structured interview: The semi-structured interviews started with one question: “In what way have you been involved in the care of transgender men undergoing cryopreservation of oocytes or ovarian tissue at the clinic?” The interviews covered the following areas: preparations at the clinic, experiences of meeting the patient group and practical circumstances. When needed, supplementary questions were asked, such as “Can you tell me more?” or “What did you do then?” Field notes were taken with reflections about the interviews, and these were used as a
tool to evaluate preliminary findings. Recruitment of HCP participants continued until saturation was reached, that is when no new information was acquired through the interviews.

Ethical approval: The study was approved by the Regional Ethics Committee of Stockholm, Sweden, Dnr: 2011/1758-31/2 and 2014/286-32 with Kenny Rodriguez-Wallberg as the principal investigator.

**Participants’ characteristics**
Thirteen HCP including 12 women and 1 man, all cisgender, participated in face-to-face semi-structured interviews (Table 1). The participants were involved in one or more situations of the patient’s flow chain of healthcare, from the booking of appointment and outpatient reception (administrative personnel), to the clinical evaluations, physical exams, oocyte pick-up and postoperative care (physicians, midwives, embryologist). The interviews lasted between 17 and 53 minutes (mean 34.7, SD 10.56). The staff ratio female/male was 10/1 at time of the study.

**Data analysis**
All interviews were performed by the first author (G.A.) and conducted face-to-face. The interviewer had no professional connection with the HCPs at the fertility clinic. Interviews were digitally recorded and thereafter transcribed verbatim and analyzed by thematic content analysis. An inductive approach was used, where the analysis is data driven rather than driven by theory or a framework. This is especially recommended where little or nothing is known about the studied phenomenon. Each participant’s interview was read carefully to get a sense of the person’s story. By using open coding—words, phrases or sentences were identified and summarized using notes. Notes describing the same content were then brought together into categories with subheadings reflecting their content. These were then hierarchically sorted into main-categories, sub-categories and themes. Overlapping and similar categories were grouped together, in order to reduce the number of categories. By using constant comparison, transcripts were read again and compared with the categories and sub-categories in order to ensure that all data related to the study aim were reflected in the results. Analysis, including the identified meaning units, the categorization and abstraction were performed during research group discussions. The study participants did not review or participate in the discussions regarding categorization. The results are illustrated by quotations from the participants. The interviewer’s questions, clarifications and excisions (three dots) are marked with squared brackets. The software program NVivo version 11 (QSR International) was used to facilitate data management during the analysis.

**Table 1. Demographics of Participants.**

| Characteristics                      | N = 13 |
|--------------------------------------|--------|
| Age, mean (SD, Range)                | 53.2 (7.09, 42-63) |
| Years worked at the clinic, mean (SD, Range) | 7.04 (4.63, 0.5-15) |
| Sexa                                 |        |
| Female, n (%)                        | 12 (92.3) |
| Male, n (%)                          | 1 (7.7)  |
| Profession                           |        |
| Midwife, n (%)                       | 5 (38.5) |
| Administrative personnel, n (%)      | 4 (30.8) |
| Physician, n (%)                     | 3 (23.0) |
| Embryologist, n (%)                  | 1 (7.7)  |
| SD: standard deviation.              |        |

**Results**
The analysis resulted in identification of one main theme consisting of three sub-themes with underlying main- and sub-categories (Table 2). The main theme, *How to maintain professionalism*, is about how the HCPs, through *The learning experience, Encounters with the patients* and *Modifying of procedures*, learned the needs of the new patient group, developed their professional skills and also identified how their professionalism was challenged as they were obliged to confront their preconceived opinions and cis-normative assumptions. Through a combination of new knowledge, experiences of meeting the transgender men and the adjustments of the FP procedures, HCPs found ways of providing care for transgender men undergoing cryopreservation of oocytes in a professional manner.
The learning experience
This sub-theme, consisting of two main-categories and six sub-categories (Table 2), is about the gathering and accommodation of knowledge of the new patient group. The preparations, comprising lectures, seminars and case discussions, before the patient group was introduced at the clinic, gave a direction by introducing knowledge that impacted on the understanding of the needs of the patient groups. Also, over time, new learning needs were identified.

Creating a direction. While the lectures from experts within psychiatry gave a medical understanding of the diagnosis, and what it may imply for the treatment in connection with FP, the lectures by representatives for transgender people gave an understanding of the transgender men’s experience of living with gender dysphoria. The HCPs described how the new knowledge helped them to understand the complexity of the diagnosis combined with the special needs arising with it. By gaining understanding, they felt that they were better prepared and could anticipate what to expect:

It is good to know how they [feel] because we don’t know how this patient group think. “Okay, they find this and that offensive. I had no idea about that!” And then we can adapt and strive to respect it as well. (HCP P12)

Even though the preparations mostly gave a positive direction, the lectures about the special needs in the patient group sometimes created apprehensions even before meeting the patients, and after being told what to do or not to do some felt that their professional knowledge was being questioned. In knowing about potential pitfalls, the need to use certain language and to adapt to certain needs, some HCPs felt dismayed and even felt that it would have been better not to know about the special needs for fear of making an error:

The woman [from the LGBTQ organization] told us about what to expected, which made us quite horrified, I can say. Because it was so much you weren’t supposed to say, so many words one couldn’t use, and there were so many things we had to think about. So I think we felt quite nervous . . . it felt like “This will be tough.” (HCP P10)

The HCPs described how the formation of a smaller project group condensed knowledge, experience, situational awareness, and insight. This was especially important, as the patient group was relatively small by limiting the number of HCPs patients encountered, they created a sense of security for patients:

They become the specialists. [Do you think it’s good for the patients that there are only few who have the responsibility?] I think so. They meet the rest of us when the treatment starts and it’s time to take out the eggs or via the phone and everything, but . . . Yes, I do think that it’s an advantage. [ . . .] It’s hard for everyone to get all education and to go to all the courses. (HCP P6)

However, having a small project group was not uniquely positive, where some of the HCPs outside of the group felt excluded and that they had
limited knowledge of what was going on. This sometimes created a problem as it was not always feasible to assign a specifically designated gynecologist or midwife to a patient coming for a visit, as the patient group grew quickly and more professionals became involved in their care.

Identifying learning needs. Over time, the HCPs identified learning needs that only became evident when they had met and cared for the transgender men. They felt that they had limited knowledge about the group’s situation when it came to mental health, such as problems with self-harm and suicidal behavior:

They have much higher . . . [ . . .] suicidal tendencies and self-harm behaviours and things like that. It has become much more tangible [after meeting them at the clinic]. It might not change anything, but it would have been nice to have known about it in some way. (HCP P10)

The HCPs also called for practical knowledge about how to work with the group, such as what alternative words to use, or special needs in connection with FP. Most described how they had little knowledge about the next step following FP as they only had vague knowledge about the transgender men’s reproductive choices and legal rights. This made them feel inadequate when the transgender men asked questions about it. Also, many described how they felt uncertain about the need of FP for transgender men as a group, as they did not know how they could have any use for the frozen gametes:

I wonder how they’re intended to have children. In which constellation, it will happen. It’s very unclear, I think. Can it become a reality? [Do you want to know more so you can answer questions?] No, I think it’s more for my own sake [ . . .] to be able to relate to this particular group. (HCP P1)

Encounters with the patients
This sub-theme, which consists of two main-categories and sex sub-categories (Table 2), is about the meetings between HCPs and the transgender men. The encounters led to reactions toward the patient group, both of positive and negative nature. While being aware of shortcomings regarding their professionalism, HCPs hoped that the transgender men could be understanding, as these shortcomings were dependent on the HCPs relative inexperience with the situation.

Reactions toward the group. The understanding of the patients’ situation gained by the accommodation of new knowledge, were often followed by feelings of empathy when meeting the patient group. The HCPs theoretical knowledge about transgender individuals’ situation in society and about gender dysphoria in general gave them an understanding of why some transgender men reacted as they did, when, for example, a wrong pronoun was used or when they underwent examination by transvaginal ultrasound.

I understand that it feels awkward to come here and do this, you know. Because clearly it’s really tough to get here and to awaken something they don’t want to acknowledge. (HCP P11)

The HCPs also described how the work with the transgender men had forced them to see what cis-normative and binary assumption they harbored, and mostly the HCPs described this as something being positive and refreshing. It had led to a reformulation of earlier knowledge and preconceptions:

It was an eye-opener in the beginning . . . that on some forms it was written “woman” and on other forms “man.” I think it was quite good, to be awakened. “Why is this so?” (HCP P11)

However, others expressed ambivalence toward the group. They found the new patient group as alien as the transgender men’s gender expressions were difficult to understand and made them feel uncomfortable. They understood that the transgender men had special needs but found it hard to handle the demands that were set as they sometimes found them unnecessary and needless, such as demanding gender-neutral toilets or paper forms:

They’re born in the wrong body, I can understand that. But one cannot both want something and at the same time not wanting it. [ . . .] The person I talked with didn’t want to be reminded of being a woman [ . . .] but the most important thing in life was to save these gametes in order to use them later. It was weird. (HCP P8)

The perceived strangeness of the new patient group combined with the limited knowledge about needs and expectations also gave rise to a fear of doing wrong, and they described how negative encounters had reinforced these fears, which in turn led to them trying to avoid the patient group.
He thought I was rude. [. . .] And I started to think about what I had said that was so sensitive. [. . .] And I remember how sad I was. . . it was like getting a cold shower. So in the end I became terrified to meet them. (HCP P2)

Seeking understanding. The HCPs were aware of their shortcomings and worked actively to improve their care of transgender men. However, they sought understanding of their shortcomings by pointing out that they were unexperienced, still had a lot to learn regarding gender dysphoria and the needs following it:

I don’t expect them to understand, but it can be really difficult for us who haven’t changed our sex . . . [. . .] You don’t do it out of spite [use the wrong words]. And it’s not because you think you can say things because you always have done so . . . it’s more about that one really don’t have the knowledge or experience. (HCP P8)

The HCPs also sought understanding for sometimes using the wrong name or pronoun. They explained that it was especially hard to say the right thing when they did not experience the patient’s gender expression as masculine. However, even if the patient had what they read as a more masculine gender expression, it was easy to slip and to use the pronoun she when the transgender men were in situations that the HCP perceived as feminine, such as when the transgender men were lying in the examination chair in lithotomy position or during transvaginal ultrasounds:

It’s sensitive what you call them [. . .] If they haven’t changed their appearance, and have so far only decided to change their sex but still looks feminine, it’s easy to slip and say something that’s not gender neutral. (HCP P13)

Modifying procedures

This sub-theme, consisting of two main-categories and four sub-categories (Table 2) is about the HCPs modification of the existing procedures in connection with cryopreservation of oocytes to also fit the new patient group consisting of transgender men.

Adjusting examinations. In the clinical work with transgender patients, some of the HCPs stated that they did not change any routines when it came to the examinations. They described that they were always careful and responsive to all patients and did not feel that the transgender men had different needs. Others, however, described how they perceived the transgender men being tense and more worried than other patients. The HCP knew that some transgender men had never undergone pelvic examinations before, and some had never had receptive/penetrating sex. Also, the knowledge about possible gender dysphoria motivated them to act differently when caring for the transgender men. Some discussed the examination beforehand in order to obtain information about the patients’ preferences, for example if they wanted the HCP to show on the monitor during the transvaginal ultrasound or not:

I thought it was easier to learn from patients. Actually, saying to them “I don’t really know what you want me to say, but let’s figure it out together.” That one is honest towards the patient. (HCP P11)

However, most HCPs described a silent responsiveness as they worked toward being extra sensitive to the patient’s reactions and signals during the examinations. They covered the transgender man’s genital area in order to guard their integrity, slowed down the examination if the patient became tense, and prepared each movement by telling the man about it:

I have been caring for a few [transgender men] at the surgery [in connection with retrieval of oocytes], and it’s been distressing for them. One feels that they need extra support and extra privacy. . . I mean, you’re supposed to treat all patients...
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Rethinking communication. A challenging part that was described in the encounter with the transgender men was the communication. The encounters made the HCPs aware of the gendered language and symbols that were used at the clinic, and they were forced to change already settled way in how to communicate about the procedures following FP. Some transgender men felt uncomfortable with gendered words and the HCPs tried to find new ways to communicate about the procedures, for example, by trying to find alternative words, such as *gametes* or *bleeding* instead of *eggs* and *menstruation*. However, as many of the words are not replaceable some of the HCPs described a restraining behavior in the way that they sometimes held back in their communication, as they were afraid of using the wrong words or the wrong pronoun:

I do not think it’s been more difficult [to do the examinations]. But one doesn’t talk so much in the meantime. [Do you think you talk less with them than you do with your regular patients?] Yes, I think so. [ . . ] One is afraid that one would use the wrong words, and then it is better that you don’t say as much. (HCP P6)

An alternative way to handle the issue was to listen to the patient and hear what words the patients used. If the patients’ them-self used gendered words such as *egg* they also used the words, otherwise they used gender-neutral words such as *gametes*. Importantly, the clinic also adapted the electronic medical records system to enable identification of transgender patients. Through this HCPs involved in the care could be informed about the persons preferred name or if special attention was needed:

We ask “What name do you use?” And then we write it down, unless the midwives haven’t written it already. “Wants to be called . . .” and the name they have chosen. [ . . ] By doing so you show respect. (HCP P12)

Also, paper forms given to patients caused problems in the beginning, as the clinic only had had cisgender patients previously and the forms were color coded—blue for cryopreservation of sperm and pink for cryopreservation oocytes. As the transgender men were scheduled to cryopreserve oocytes, they were given pink papers developed for this purpose. Before the clinic changed the color to green, some of the transgender men protested as they felt that the clinic wanted to assign them as females, as pink often symbolize femininity in many cultures:

They must experience this a much tougher than our usual patients, and they have probably been very nervous about coming here. And then we comes and hand out pink paper [ . . ] One might think ‘Why, the color of the paper doesn’t matter!’ But they really do [feel that that it matters]. (HCP P3)

Another administrative problem that arose regarding communication was data systems connected to the FP procedures. The transgender men who came to the clinic to undergo FP were at different points in their transitions and sometimes they had already undergone change of legal sex. The Swedish personal identity numbers are binary and indicate a male or female sex in one of its digits. This raised problems when the cryopreserved oocytes should be registered—the electronic medical record system did not allow a male personal identification number to be tied with the registration of cryopreserved oocytes:

In the beginning we had problems with how to freeze eggs with a male personal identification number as only female numbers functioned in the system. Now we have changed it so that you can leave eggs with any personal identification number [ . . ] It works, maybe not completely without hitches as the system is not perfect yet, but we constantly get suggestions for improvements. (HCP P12)

Discussion

The present study clearly demonstrates that HCPs experienced challenges in their professionalism when meeting the new patient group of transgender men undergoing oocyte freezing. These challenges stemmed not only from the uncertainty about how to communicate and perform the FP procedures, but also from clashes between preconceived opinions and values, and the transgender men’s gender expressions and needs. Prior preparations were considered essential by the HCPs, but they also recognized the importance of continued learning. Striving to maintain professionalism, the HCPs worked actively to gain knowledge and experience, as well as to attempt a
better understanding of this new patient group. Similarly, a recent grounded theory study among both HCPs and transgender individuals showed that some of the HCPs struggled with the concept of gender dysphoria. However, it was described that interpersonal stigma functioned as a way to reinforce medical power and authority in the face of provider uncertainty. In addition, that study reported that those HCPs who felt empathy for transgender patients were more likely to express resistance to stigmatization. Professionalism in health care is defined as the habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values, and reflection in daily practice for the benefit of the individual and the community being served. When analyzing the material of our study, we came to understand that the study participants felt that their knowledge, communication skills, emotions, and values were not sufficient and they described different ways how to overcome the sense of insufficiency of their own capacity and skills.

In the present study, one challenge toward optimal care was to attain good communication, which also has been described by transgender individuals as an important part of professionalism. In the present study, the HCPs described how they struggled with using the right pronoun when communicating with transgender men, especially when the appearance and/or voice of the patient was incongruent with the gender identity—which is often the case in the beginning of the physical gender transition. Transgender individuals have an understanding of this, but it has mostly been experienced as an indicator of their gender identity not being recognized or accepted. When meeting the transgender patient group, the preferred route to overcome this problem is always being aware of the communication issue and working actively to avoid mistakes—and when a mistake occurs to acknowledge it and apologize without making any evasive comments. Importantly, it is recommended to document the right pronoun in the patients chart, and this strategy was also highlighted by the HCPs in the present study. Other problematic aspects of communication beside pronoun use were the use of gendered words such as vagina, uterus, or eggs that made patients feel uncomfortable, as previously reported. The HCPs found different ways to deal with the issue, such as asking the transgender men or by using the words used by the patients themselves. This strategy also opts for a true patient-centered care where the patients define themselves and their problems. Notably, a third response of HCPs to managing the situation was to hold back on communication. However, with this strategy there is a risk that the transgender men might receive less information than other patients, which in turn may compromise patient safety.

Even if communication issues resulted in problems, most HCPs described how the experience had inspired them and stimulated their interest, developing new ways of thinking and acting out of their comfort zone. In the results we did not find any norm critic reflexion from the study participants. However, we found quotes such as regular patient in comparison to the transgender male patients, reflecting an underlying cisgender normativity and maybe also exoticism. Thus, this may indicate that more knowledge is needed but also new ways of thinking. This is supported by previous work, in which an intervention study of interactive theater workshops, aiming at providing a better understanding of sexual and gender minority patients, encouraged HCPs to rethink previously held assumptions about LGBTQ people and their needs regarding reproductive care.

Our aim with this qualitative study was to explore the HCPs experience of providing care for transgender men receiving FP in a university clinic in Sweden, and our results cannot therefore be generalized. Nevertheless, we think that our results could be of value to other reproductive care clinics within different financial care systems, as the medical procedures in connection with FP are similar.

We followed the consolidated criteria recommendations for reporting qualitative research, and the criteria for trustworthiness described by Lincoln and Guba. The co-workers had meetings to discuss the analysis and presentation of data and the research group had different professional and discipline backgrounds, such as nursing, psychiatry, and reproductive care, being an important asset in the analytical process. The research group members had also different knowledge and experience of transgender medicine and transgender patients. Inclusion of HCPs throughout the patients’ whole healthcare chain allowed us to capture experiences of caring for transgender men undergoing FP from different
standpoints. The diverse background with different values and beliefs of the research group was also an asset regarding the analysis. The study participants were not part of the analysis and were not presented to the results. As such, we cannot rule out that this could have added additional information. No one in the research group has a transgender background with that the thematic analysis might have been different.

Not all HCPs working at the clinic participated in the study, however, those who declined participation had not met transgender men at all, or only occasionally. It cannot be entirely dismissed that a larger sample could have captured additional experiences, however, the study was completed when saturation was reached.

Conclusion
In summary, findings presented herein clearly indicate that HCPs meeting transgender men undergoing FP were obliged to confront preconceived opinions and cis-normative assumptions. In addition, a need to acquire new knowledge was recognized and accepted in order to maintain professionalism. The data demonstrate the difficulties that may arise when introducing a new patient group in an already established clinical routine workflow and how continued professional development is required to assess learning needs of HCPs. Importantly, addressing issues related to negative experiences in patient encounters as well as having open dialogue about the impact of personal values should be encouraged.

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Author contributions
K.A.R.W. and G.A. designed the study and constructed the interview guide. J.I.O. and K.A.R.W. were responsible for enrolling subjects and FP procedures. G.A. interviewed the participants. K.A.R.W., G.A., and C.D. performed the analysis, with GA having the main responsibility. G.A., J.I.O., C.D., M.S., and K.A.R.W. participated in the writing of the manuscript and approved the final version.

Conflict of interest statement
The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Ethical approval
All procedures performed in the study involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. The study was approved by the Regional Ethics Committee of Stockholm, Sweden, Dnr: 2011/1758-31/2 and 2014/286-32 with Kenny Rodriguez-Wallberg as the principal investigator.

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