Introduction

Italy’s birth rate is low and declining, yet Italian women use less effective contraceptive methods compared with other European women [1,2]. This paradox led to Italy being termed an ‘imperfect contraceptive society’ [3]. Contraception empowers women in their reproductive and family planning goals by increasing their autonomy and ability to determine their family size [4]. Many women worldwide choose non-daily methods (e.g. the vaginal ring, intrauterine device [IUD], implant and patch) because of their convenience and low failure rates [5–7], but these methods garner low use and approval in Italy [1,8]. Further, fewer Italian women (27%) are ‘very satisfied’ with their current contraceptive method compared with other European women (>50%) [8]. Investigation into Italian women’s contraceptive beliefs and experiences is warranted.

The primary contraceptive method in Italy remains the male condom, followed by the oral contraceptive pill; however, pill use among Italian women is lower than among women in other European countries [1], and 17% of Italian women report using less reliable methods (i.e., ovulation tracking, withdrawal) at much higher rates compared with other European women (2.5–5%) [1]. Women in Italy select non-hormonal methods over hormonal methods [1,5,8] perhaps because of misconceptions regarding the long-term health consequences of hormonal methods [1,3,9–12]. Italian women’s fear of the impact on fertility of hormonal contraception [4,10,13] results in lower satisfaction and initiation rates [8]. Owing to these concerns, Italian women frequently switch contraceptive methods to avoid short- and long-term negative health effects, and also express health risk concerns [8].

The literature notes that religion, socio-political systems and health information-seeking behaviour impact the dynamics of contraceptive use [3,4,8]. Religious beliefs may encourage heavier reliance on natural methods (e.g. ovulation tracking) [3]. Wider societal beliefs may influence responsible contraceptive choice contingent on protecting health and fertility, in which more medicalised methods (e.g. hormonal and/or long-acting methods) are perceived as unsafe and morally unsound [3]. Health care providers’ handling of contraceptive counselling also impacts women’s choices. European physicians who question patients about the side effects of hormonal contraception most often recommend non-hormonal options [8,14]. Recent studies in Italy also demonstrated factors affecting condom uptake, including condom sensation during intercourse, cost, reliability, frequency/type of intercourse and relationship status [8,15].
Literature gaps persist regarding contraceptive use in Italy, particularly in qualitative work exploring the influences and concerns affecting women’s choice of contraceptive method. Given the low birth rate, Italy provides a noteworthy case for understanding the role of contraception and its purpose in women’s lives. The objective of this study was to explore contraceptive knowledge, perceptions and experiences among women in Italy, to support their empowerment in sexual and reproductive health decision making.

Methods

As part of a larger mixed-methods project, this study investigated the contraceptive perceptions and experiences of women living in Italy. Researchers conducted 46 in-depth interviews, in English, from June to July 2017. Eligible women were between 18 and 45 years old and using the Italian health care system. The study was approved by the institutional review board of Purdue University, with a letter of support from Florence University of the Arts, our in-country partner institution.

Participants were recruited in person through printed flyers and social media advertisements. The flyers provided information about the study, a website address with more details and contact information of the principal investigator. Study information was available on the website to ensure awareness of the study purpose and the benefits and risks of participation. Recruitment flyers were posted in libraries, schools, restaurants and shops. Facebook advertisements were used to recruit a broader sample. Additionally, researchers approached women in the public places previously mentioned to inquire about interest in study participation. Women were shown a paper flyer, and then received a brief study explanation. This method was used to open-recruit those who might not have seen posted flyers, and to secure participation on the spot. This method was also used to increase representation among women who might not have been exposed to the Facebook advertisement.

Researchers approached women with study flyers; only if the woman asked questions about the study would researchers engage with her. If they were interested in participating, women were directed to arrange an interview date and time. In-person recruitment occurred at different hours, sites and times to prevent homogenous or biased recruitment. Following each interview, researchers asked participants to recommend other women who may be interested in the study, allowing for snowball sampling [16]. Multiple recruitment strategies allowed for various opportunities to access potential participants and ensure a greater spread of study information, to better capture diverse contraceptive experiences.

Interviews

Interviews lasted approximately 1 h. Participants gave their informed consent to be interviewed. All conversations were recorded using the Apple SoundNote iOS application. After the interview, participants completed a brief form giving their socio-demographic data. Each participant received a €20 gift card to compensate her for her time and effort.

Interviews followed a semi-structured protocol, allowing researchers to iteratively add, change and reorder interview questions and build conversational partnerships [16,17]. In addition, participants had the opportunity to present ideas. The interview began with questions about the participant’s daily routine, in order to build a rapport and encourage disclosure. The interview protocol was developed specifically to explore the following topics among women living in Italy: their pregnancy prevention methods (i.e. different contraceptive options), how they choose a contraceptive method, their perceptions of the safety of hormonal contraceptives and their experience of visiting a consultorio (family planning clinic) (Table 1). Probing questions further developed the conversation to explore participants’ contraceptive experiences. Questions allowed participants to discuss various aspects of contraceptive use and decision making and provided a robust understanding of women’s reproductive health perspectives. Interviews continued until theoretical saturation and study concepts were fully developed.

Research team

Interviews were collected and transcribed verbatim, along with memos and observer comments to maintain reflexivity [16,17], by 15 undergraduate and graduate students (aged 18–23 years) participating in a research-based study abroad programme. Students were trained in graduate-level qualitative research methodologies and fully immersed in the Florentine culture and community throughout data collection. Coding and analyses were completed by two graduate students (JRO and SM) with a robust history of carrying out qualitative and contraception-related research. Procedures and outcomes were confirmed by the principal investigator (ALD), ensuring inter-rater reliability. Authors used data tables, code manuals and mind mapping to ensure an explicit procedure moving from data to theme development.

Data analysis

Researchers used a grounded theory approach and employed thematic analysis [16,18,19]. This inductive approach prioritises participant voices and experiences. Participant words were incorporated into the coding scheme along with relevant concepts from the literature. HyperRESEARCH, a qualitative analysis software, was used in data management (version 3.7.5; Research Ware, Randolph, MA). Researchers completed iterative open and axial line-by-line coding and continued with selective coding for thematic development (Figure 1). Specifically, researchers coded text portions with descriptive tags (i.e. open codes). Following open coding, researchers used a constant comparative method to build categories via axial coding, where codes were grouped and categorised based on research objectives. Finally, axial codes were grouped into themes and subthemes using selective coding. All authors frequently met to discuss coding and emergent themes, and any discrepancies were resolved through consensus.
transmitted diseases, not just a problem of having a child. Contraceptive use, uptake was reflected in additional participant narratives: 'To prevent pregnancy was a primary motive for contraceptive use was to reduce the risk of unintended pregnancy. Pregnancy prevention was one reason for participants noted, 'Many of our friends just do not want to have a child… should not have to have a child and should be able to be sexually active any way they prefer to.'

Results
The mean age of the 46 participants was 32.1 ± 6.3 (range 19–45) years. Most (93.5%, n = 43) lived in Florence at the time of the study and most indicated they were in a non-marital relationship (65.2%, n = 30), while some were married (13.0%, n = 6) or single (19.6%, n = 9). A majority self-identified as heterosexual (84.8%, n = 39), while some identified as bisexual (13.0%, n = 6) or homosexual (2.2%, n = 1). Higher education had been begun or completed by most participants (84.8%, n = 39); seven participants (15.2%) had high school education or less.

Factors influencing contraceptive decisions
Reasons for contraceptive use
Participants described myriad reasons for contraceptive use (e.g., pregnancy prevention, satisfying lifestyle needs). Participants noted, ‘You have to be free to have sex whenever you want’, suggesting contraceptive use helped reduce the risk of unintended pregnancy. Pregnancy prevention as a primary motive for contraceptive use was reflected in additional participant narratives:

<table>
<thead>
<tr>
<th>Topic</th>
<th>Question</th>
<th>Probe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pregnancy prevention</td>
<td>How do Italian women typically prevent pregnancy?</td>
<td>For example, do most women have access to the pill? NuvaRing? IUD? Are natural methods such as family planning or withdrawal preferred to hormonal methods such as the pill or IUD? Describe how a girl or woman would go about obtaining a contraceptive prescription. Where would she receive her method from? How much does contraception typically cost? What can you tell me about emergency contraception? Do you think there are any barriers to accessing this method?</td>
</tr>
<tr>
<td>Choice of contraceptive method</td>
<td>How do you make decisions regarding contraception?</td>
<td>Where did you learn about contraception? What method or methods do you use? Why did you start? Why did you choose this particular method? Have you faced barriers to accessing contraception? Can you describe any barriers that you have heard about from other women?</td>
</tr>
<tr>
<td>Hormone safety</td>
<td>In general, would you say hormonal contraception such as the pill or IUD is healthy or unhealthy?</td>
<td>How does religion influence contraceptive choice? How does it influence contraceptive use? What messages (commercials, advertisements, etc.) have you seen about contraception in your community?</td>
</tr>
<tr>
<td>Experience of the family planning clinic</td>
<td>Have you or your friends used family planning services?</td>
<td>If so, what services? What did they cost? If not, why do you think women would use a family planning clinic? Is the family planning clinic in a convenient location for you?</td>
</tr>
</tbody>
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Contraceptive features and decision making
Participants navigated various factors when describing contraceptive choice, including effectiveness. One participant noted a discussion with her provider where she: asked [the doctor] what she thought was the [safest method] and she said that [the implant] was the best one because she said that I would be safe from the first day to the last day. Thus, increased effectiveness of pregnancy prevention was an important consideration. Though this factored into this participant’s choice, others did not perceive efficacy differences across contraceptive methods. One participant said, ‘For the most part I’ve never heard of anybody being afraid of [contraceptive methods] not being effective when taking those prescribed’. She perceived efficacy as a given, without considering factors that impact typical-use effectiveness, illustrating a potential gap in contraceptive knowledge.
Women also described contraceptive decisions contingent upon convenience, citing varied perspectives among options such as the condom, pill and implant. One participant noted, ‘The condom and the [pill] are used more easily’, suggesting these provided ease-of-use benefits. This was reflected among other participants: ‘The pill is faster, you take [it at] your time and it’s done’. By contrast, others cited their personal feelings surrounding ‘not [being] reliable with pills’. One participant expanded on this: ‘I’ve not wanted to take the pill because I would never remember it every single night so … I wanted something I didn’t need to think about’. Recognising this barrier to consistent and correct contraceptive use prompted some to choose a different method:

Here in Italy I didn’t know anyone who had the implant and those people [friends who live in other countries] I talk to were very happy with it. So, when I heard that it was possible to do it … I was like ‘yeah, why not!’ It’s something that’s there, I don’t have to think about it.
Though this option was not frequently discussed within her community, she chose it because of the added benefit of convenience. Thus, contraceptive choice is sensitive to preference and lifestyle. One participant described some of these considerations: ‘Does she like having something she can control, like the pill that she takes every day?’ This conceptualisation of control depended on user-directed contraceptive uptake. Another participant considered convenience, control and other lifestyle influences:

> Just personally, what works best for them. So, whether, they ... want to get pregnant, maybe in the near future. Obviously, they don’t want to get something [that] lasts for 5 years. But I think it’s just a very personal thing. It depends on the woman.

Frequency, participants’ interpretations of control and reproductive life planning informed their contraceptive choice, underscoring the personal nature of these decisions.

**Sexual relationships and contraceptive choice**

Sexual relationships impacted contraceptive choice. Women often began using contraception after starting a sexual relationship, interpreted as when a woman ‘[started] with birth control pills ... [when I] had [my] first real, important boyfriend’. Though sexual relationship initiation often prompted contraceptive uptake, participants also described contraceptive choice ‘depending on the type of relationship you have’. In particular, contraceptive choice differed by relationship status, with long- and short-term sexual relationships impacting choice. One participant noted, ‘It depends if you have a long-term relationship, like a boyfriend, then you get pills. If someone you were with is not a real relationship, then condom’. Condoms appeared to be the method of choice when engaging in non-monogamous, short-term sexual relationships or infrequent sex. As one participant illustrated, ‘I have no sexual activity constantly, that’s why I don’t use [the] pill’. However, contraceptive choice could change with shifting relationships: ‘So I would say condom is better but I would ... if I ever get into a relationship, I would definitely go for the pill’. Relationship context matters when engaging in contraceptive decision making. Participants also noted relationships with partners may require discussion and joint decisions. One participant expanded on her partner’s role in contraceptive decision making:

> I use condoms because I don’t want to take any kind of pills. That is ... actually a decision that I share with my fiancé. ... If I can avoid it that’s good. Any other [method] is too complicated so we actually use the natural method, which is withdrawal or the condom.

Partners provide an additional layer that may impact the contraceptive decision-making process.

**Attitudes towards contraception**

Participants expressed mixed attitudes towards contraception: some perceived it to be a positive, useful reproductive health tool, while for others it had a negative, stigmatised connotation. The ability to ‘be in control of your body’ was cited as a primary positive attitude. Family planning efforts were discussed as a ‘no-brainer’, especially among those whose primary goal was pregnancy prevention. Contraception was viewed as increasing agency: ‘You know, a condom is [typically] a man’s job’. The utility of hormonal contraception as a reproductive health tool specific to women was thus positively viewed. Some participants expressed perceptions that were characterised as positive but were in fact describing pregnancy prevention via contraception as the ‘lesser of two evils’. That is, using contraception for pregnancy prevention was perceived as a more favourable option than potentially undergoing an abortion. One participant exemplified this, stating: ‘Many people [who do not want to have children] believe [their] objective is to abort ... but I think it is [best] to take the contraceptive and [avoid] abortion’. Agency and control of pregnancy prevention consequently contributed to positive contraceptive viewpoints.

Participants with negative perceptions of contraception often chose to forego certain types of hormonal options because they felt, ‘You are changing something in your body’. Though participants did not doubt their effectiveness, other concerns about the effect on normal bodily processes were expressed, ‘It works for what you want it to, but maybe there are some changes [that are] not too good for your body’. Altering body function appeared to be synonymous among participants with being unhealthy and ‘not natural’. One participant asserted, ‘I heard that adding hormones to your body is unhealthy’. Another participant detailed myriad reasons for her beliefs surrounding the negative health effects of hormones:

> I’ve never wanted to take hormonal birth control ... I’m not comfortable with manipulating the hormones in my body, especially because I’ve had breast cancer in the family. So, I don’t want to disturb the natural balance of my hormones.

Hormonal manipulation was seen as detrimental, indicating potential misperceptions about the safety of hormonal methods. The concept of health continued to arise in participant discussions, manifesting in narratives surrounding physical and mental health. The addition of ‘too many’ hormones was often described as influencing mood and temperament. One woman noted, ‘Too much hormones and you feel sad. You feel sad and your head [doesn’t] work’. Another participant mentioned hormonal contraception causing ‘anger, of course’ when she had used it in the past. Contraceptive concerns about altering bodily function and negatively impacting various facets of health influenced participants’ perceptions.

**Social and cultural influences**

Women shared how cultural, personal and religious influences affected their contraceptive decisions. Participants turned to people close to them, especially friends, when making contraceptive choices, as the education system was not cited as providing sufficient contraceptive information. One participant discussed her friend’s influence on her choice of method: ‘I chose this [method because] one of my really good friends ... had it for 2 years, told me how it is, and she convinced me’. Other women received and/or sought out family advice prior to choosing a method: ‘Of course, my parents can give me some advice’; and ‘First information [comes] from my mother’. Family and friends aided in contraceptive decision making, as real-time reviews of their contraceptive experiences were seen as
reliable and trustworthy. For women who were ‘not comfortable talking about these issues [with family], they … get some information from the doctor, information about sexual activities and [condom use].’

Religion was cited as impacting contraceptive decision making, ‘Because the Catholic Church doesn’t agree with contraception’. Women discussed Catholicism’s dominance in Italian culture as a potential barrier to contraceptive uptake. One participant expressed feelings of guilt surrounding contraception due to Italy’s religious environment:

There is this kind of sense of feeling guilty because you have done something that is not right … because you are using contraception. So, there are a lot of these mixed feelings mixed with religion that influence women’s behaviours.

Contraceptive uptake was also impeded by limited knowledge and awareness of available options. Participants discussed religion as a potential contributor to this barrier. One woman said, ‘Because of religion, youth aren’t maybe given all the explanations or information that they could have that would bring [them] to make contraceptive choices’. Religion was continually viewed as a factor limiting contraceptive knowledge and inhibiting uptake.

**Contraceptive access**

Cost was not a frequently cited barrier to access because: ‘Regular contraception is usually something the public health system provides. So, it costs nothing’; and ‘If it does cost something it is really not much at all. It would be €10 for a box’. One participant noted the cost-effectiveness of contraception in Italy compared with her experience in the USA: ‘When I lived in the US I used to get my contraceptive ring here because it’s much cheaper’. However, participants noted some access barriers when obtaining contraceptive prescriptions, as ‘The only person who can give the prescription is the doctor’. One woman said, ‘To get an appointment, it’s very difficult, because you have to wait months’, suggesting difficulties obtaining contraception in a timely manner.

Participants identified family planning clinics as a common place for contraceptive access that reduced waiting times for contraceptive prescriptions. One woman described the facility: ‘It is a place where there is a midwife, gynaecologist, general doctor. You can go, ask questions, and they will give you oral contraception and [condoms]’. The family planning clinic provided accessible services, especially when something happens, at the weekend or at night, and it’s not easy to call a gynaecologist or get an appointment, so you go to the consultorio. The family planning clinic supplemented care, improving women’s ability to obtain reproductive health services when needed. Additionally, participants cited free services as a benefit: ‘Because it costs very little. It is cheaper than a doctor’. Despite limited provider choice, participants benefited from the low-cost or free services, especially when visiting the family planning clinic to see a gynaecologist. The women’s centre in the family planning clinic provided additional valuable services. One woman highlighted it thus:

> It is a special entity called the women’s centre [in the consultorio]. It is provided in many languages, not only in Italian. They provide whatever you want, like advice you can search it over there and they will help you. Also, they provide small workshops and seminars where an expert comes [to give presentations].

Clinical and non-clinical services offered opportunities for women to obtain consultations, contraception, health information and training resources in a holistic approach to health.

**Messaging channels**

Participants expressed a wish for more information about contraceptive methods, suggesting social media, the internet and television as acceptable dissemination options. At present, however, there was little information about contraception: ‘There are [some] commercials on TV that encourage contraception, [but] not much’. To counteract messaging barriers, one participant described the radio as a valuable channel, ‘Italians listen to quite a bit of radio, so that’s usually good. It’s kind of an equaliser, so you listen to radio as well’. Radio reduced barriers to different segments of the Italian population. Participants also identified ‘campaigns to make people more aware’ of contraception, including health campaigns sponsored by the government, campaigns specific to events like ‘AIDS day’ (‘so they’ll inform the population about this risk’), and how contraception can reduce risks for sexually transmitted infections and unplanned pregnancy.

Word-of-mouth and localised messaging channels also emerged in participant discussions, specifically related to local health centres. The family planning clinic was an information hub accessible to a large number of Italians, illustrating an opportune channel for spreading contraceptive messages. Additionally, one participant described messaging ‘in doctor’s offices where you see different posters and [contraceptive] information’. Thus, provider offices may offer an opportunity for contraceptive messaging while leveraging trust women have in provider-offered information. Local hospitals were also cited as an opportunity to improve contraceptive messaging through specific hospital ‘organisation and associations that help promote [contraceptive information]’.

Though few participants identified contraceptive messages that would specifically appeal to Italian women, some offered messaging strategy options. One suggestion was, ‘[Contraceptive messages] should try to make you feel comfortable about using contraception’. Understanding factors that would increase women’s comfort with contraceptive options provides insight into messages that appeal to women. An additional participant described contraceptive messages as ‘it’s more about having fun without fears’, highlighting messaging that focuses on the reassurance contraceptive can provide women.

**Discussion**

**Findings and interpretation**

Participants described pregnancy prevention as the primary reason for contraceptive use. However, the literature indicates that Italian women generally use less effective contraceptive methods [1,3]. Findings suggest women perceive that contraceptive methods have similar efficacy levels,
Despite varying typical-use effectiveness [20]. Thus, Italian women may be choosing less effective contraceptive methods because of knowledge barriers. Additionally, some women felt that less effective methods (e.g., condom, pill, withdrawal) were more convenient and their user-directed nature provided additional layers of control. Italian women may value the autonomy and agency offered by daily and barrier methods to achieve pregnancy prevention goals, which may explain their higher rates of use in Italy compared with other European countries [1]. Cost was not an identified access barrier among participants; yet Italian women continue to choose less effective methods, suggesting alternative explanations.

**Differences and similarities in relation to other studies**

Women's contraceptive choices may relate to attitudes towards hormones. Negative attitudes and concerns surrounding hormone safety, even among hormonal contraceptive users, may explain Italian women's use of less effective methods. This extends existing research indicating that Italian women worry about the long-term health impact of hormonal contraception [1,3,8,11,13]. Our findings suggest Italian women may forego more effective contraceptive methods in favour of methods perceived as safer and less likely to result in health difficulties. The pill is the most frequently used hormonal method among Italian women [1,8]. This may be due to easy discontinuation if desired, as our participants valued having control over whether and when to use contraception. Hormonal methods are safe and effective for most women, with research showing that hormonal contraceptive methods can contribute to disease risk reduction [10,12]. Improving Italian women's awareness of the benefits of hormonal contraception may mitigate hormone-related fears and encourage informed contraceptive choice. Participants described the family planning clinic as facilitating contraceptive access and information provision, suggesting an opportunity to correct misperceptions about the safety of hormonal contraception and improve attitudes towards its use.

Friends, family members and health care providers played important roles in contraceptive choice. Friends’ experiences of contraceptive methods influenced participants’ decision making, echoing prior literature illustrating female friends as factors in women's perceptions and opinions of various contraceptives [21–23]. Family members also influenced participants’ contraceptive decisions. Some participants described family members as negative influences on contraceptive use, citing judgement concerns, potentially relating to conservative social norms. Families may be significant players in women's contraceptive knowledge and acceptance [4]. This strong influence may also cause women to forego using contraception, or use less effective methods. This suggests a need for more widespread contraceptive knowledge among valued members of contraceptive users' social systems to facilitate accurate information-sharing among trusted individuals.

Messaging channels provided opportunities to inform women about various contraceptive methods, with internet and other media outlets (social media, television, radio) serving as preferred information pipelines. Limited contraceptive information offered in Italy indicates a need for the provision of contraceptive messages and the improvement of message dissemination. Health professionals can aid in reducing contraceptive misinformation by spreading knowledge via the information channels cited as most accessible to Italian women, such as engaging in informative conversations with broadcasters on the radio. Focusing on contraceptive comfort and safety messages may improve attitudes towards use of more effective methods, as comfort and safety were frequently mentioned among our study sample. Centring the messaging strategy around the ability to live a carefree life without fear of pregnancy or hormonal issues may also be effective. Messaging can emphasise the reassurance contraception can provide for women to achieve their desired lifestyle. Capitalising on these channels to reach non-contraceptive users, as well as their family and friends, can aid in information diffusion through the social system. The family planning clinic was noted as an information hub where access to information and resources was readily available to Italians. Further exploration of the use of the family planning clinic as a source of community information could provide additional opportunities for contraceptive knowledge sharing. This resource, coupled with identified messaging channels and strategies, may increase information reach.

**Strengths and limitations**

The study's qualitative approach led to in-depth understanding of diverse experiences; however, all conversations were in English, limiting participation. The interview protocol was reviewed for cultural appropriateness by Italian experts and approved by both Italian- and US-based institutions. Interview experiences varied because of the nature of a large research team, though all researchers were equipped with the same knowledge and skill. As participant recruitment was in an urban area (Florence) and the majority of the sample were employed, the results are not generalisable to other Italian populations because of the regional and cultural differences throughout Italy. Despite limitations, our study provides novel information on contraceptive use and decision making among women living in Italy.

**Unanswered questions and future research**

Future research should explore messaging concepts that appeal to Italian women to reduce misinformation and improve hormonal contraceptive attitudes, as these are a barrier to effective contraceptive use. Additionally, we recommend health professionals form partnerships with family planning clinics and other health care facilities to develop culturally appropriate educational programmes for Italians to maximise existing community resources.

**Conclusions**

This study offers insight into the contraceptive perceptions of women living in Italy. By addressing women’s contraceptive safety concerns and improving knowledge, access and awareness via preferred messaging channels, Italian women may be empowered to choose the best contraception to achieve their lifestyles and goals.
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References