



# BMJ Open Awareness of risk when prescribing and taking combined hormonal contraceptives (CHCs): a qualitative study with women and health professionals in three European countries

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## ABSTRACT

**Objectives** To explore the experiences of women and health professionals when communicating about combined hormonal contraceptives (CHCs), with a focus on venous thromboembolism (VTE). We also focused on information sources consulted by women for their decision-making process regarding contraceptives.

**Design** Qualitative semistructured face-to-face interviews were conducted with 24 women and 16 health professionals. The study followed a phenomenological approach, and data were synthesised using the framework analysis method.

**Setting** Community health centres across three countries in the UK, Denmark, and Slovakia.

**Participants** Adult (aged 18+) women using CHC and health professionals eligible to prescribe CHC in their respective countries.

**Results** Women tended to be positive about CHC's safety and seek information about CHC through their health professionals, family and friends. They would like to receive further information from health professionals, particularly when it comes to risks of CHC and alternative methods of contraception. Health professionals reported using a variety of methods to communicate about CHC and generally report giving advice based on national and local guidelines. In line with women's perspectives, they reported time constraints and lack of resources as barriers to communication about CHC. Health professionals in our sample believed there is a lack of standardisation in the information offered and guidelines used to prescribe CHC, with little contact with international regulators such as the European Medicines Agency.

**Conclusions** It is necessary to improve the conditions under which contraceptive counselling is provided, as well as supporting health professionals in this task. Exploring the lived experiences of women and health professionals about how they discuss contraception choices can shed light on the best approaches to improve reproductive health consultations.

## INTRODUCTION

Combined hormonal contraceptives (CHCs) are contraceptive methods that contain both oestrogen and progestin, which are female

## STRENGTHS AND LIMITATIONS OF THIS STUDY

- ⇒ In-depth exploration of first-hand accounts of women and health professionals about combined hormonal contraceptive (CHC), providing a reflection on the topic from different stakeholders.
- ⇒ Data were collected in the UK, Slovakia and Denmark through an equivalent interview protocol used by local interviewers in participants' own languages, which allowed richer descriptions of people's experiences.
- ⇒ The inclusion of three countries provided us with a wider and more thorough overview of real-life experiences of how women decide on the use of CHC and how health professionals prescribe these across Europe.
- ⇒ Danish and Slovakian interviews were translated to English prior to data analysis, meaning some colloquialisms and language-specific terms may have been lost in translation.

hormones that help regulate the menstrual cycle, and which can be taken orally, intravenously through transdermal patches and vaginal rings.<sup>1</sup> It is estimated that in Europe alone one in five women use oral contraceptives ([www.statista.com](http://www.statista.com)) and common side effects include headaches, nausea, dizziness and breast tenderness, as well as rarer yet more serious risks such as arterial or venous thromboembolism (VTE).<sup>2</sup>

Although CHCs are associated with an approximately threefold increase in the risk of experiencing VTE among non-pregnant women,<sup>3–6</sup> the absolute risk of VTE is small, and the European Medicines Agency (EMA) Committee for Medicinal Products for Human Use has concluded that the benefits of CHC in preventing unwanted pregnancy outweigh these risks.<sup>7</sup> As a decentralised agency, EMA (for the purposes of this article, it is important

to contextualise that data collection took place when the UK held European Union membership, and therefore, at the time, regulators such as EMA were equally relevant to the three countries involved in this research) ([www.ema.europa.eu](http://www.ema.europa.eu)) targets medicine development and supports the regulation of its use for the benefit of people through research and the dissemination of guidelines to complement national and local health governing bodies, such as the Faculty of Sexual and Reproductive Health in the UK ([www.fsrh.org](http://www.fsrh.org)).

There is literature about what contributes to the decision-making process for women using CHC in specific groups, such as a study focusing on contraceptives used by women over the age of 40<sup>8</sup> or, for instance, how personality traits impact women's contraception choices.<sup>9</sup> However, little is known about how women take CHC risks into consideration when making their choices, particularly VTE, and how these risks are discussed with health professionals. We also know little about the information sources, both formal and informal, used by women and health professionals to consider CHC risks before CHC use or prescribing.

Research has suggested that 20% of women stop using CHC due to the burden of their daily intake.<sup>10</sup> It has also been reported that women may hold negative views about CHC but are unable to identify associated severe health risks or even non-contraceptive benefits.<sup>11–14</sup> Women also report experiencing anxiety about trying CHCs.<sup>15</sup> Misconceptions about its risks<sup>16</sup> and how it works<sup>17</sup> have also been reported. This indicates it may be beneficial to reflect on how women are informed about CHC and its risks and benefits.

Obtaining information about contraception is key to supporting women in their decision-making process. For instance, women tend to change their method following contraceptive counselling.<sup>18–20</sup> However, some women report feeling uncomfortable discussing their concerns with health professionals who prescribed the CHC, while health professionals assume that women are adherent and have enough levels of literacy to understand resources such as leaflets.<sup>21</sup>

Health professionals, particularly general practitioners (GPs), tend to be more familiar with CHC than other methods due to their training<sup>21</sup> which may impact on the level of information they provide at their practice. Other barriers preventing health professionals from providing contraceptive counselling include limited consultation time, competing medical priorities, limited communication between general, primary care providers and specialists, and feeling uncomfortable discussing pregnancy risk and contraception.<sup>22</sup>

In 2014, Dehlendorf, Krajewski and Borrero<sup>23</sup> referred to best practices for health professionals when communicating about contraception. Key recommendations were promoting a good relational communication built on trust; communicating about risks, side effects and effective use; anticipating/addressing barriers to consistent and correct contraceptive use; addressing misconceptions; advice on

dual protection to prevent sexually transmitted infections and screening for potential coercion (eg, when a partner interferes with contraception). However, we know little about how these recommendations have been adopted in practice and whether these topics are being addressed by women and health professionals when discussing the use, or future use, of CHC. Our study aimed to explore the experiences of women and health professionals while discussing CHC and its risks, particularly VTE. We also wanted to investigate the information sources used by women and health professionals in contraception-related consultations.

## METHODS

The study derived from a mixed-methods project across six European countries (the UK, Denmark, Spain, the Netherlands, Germany and Slovakia) as part of a consortium between Aarhus University Hospital, University College London and London School of Hygiene of Tropical Medicine funded by the EMA (EMA/2015/24/PH).

The aforementioned mixed-methods project included three studies: an internet search to understand the sources of web-based information available to women about CHC<sup>24</sup>; an online cross-sectional survey to consider the findings of the qualitative work in a wider group of women and health professionals; and a qualitative interview study to understand women's and health professionals' perceptions of seeking and providing information about CHC. This article reports the findings of the latter study.

## DESIGN

An international research team designed a qualitative phenomenological study using face-to-face semistructured interviews with women and health professionals. The phenomenology approach 'is a form of qualitative research that focuses on the study of an individual's lived experiences within the world',<sup>25</sup> which in this case corresponded to the experiences of women using CHC and that of health professionals prescribing such contraceptive method.

## Setting and participants

Women from three countries participated in the study: the UK, Denmark and Slovakia, which were the countries among the consortium, where there were partnerships with local health services to collect data. We focused on a cross-national sample to gather diverse experiences from women and health professionals who, despite coming from different countries, had access to similar recommendations from agencies such as the EMA. In each country, we aimed to collect until saturation was reached, which we estimated to be approximately eight women (aged between 16 and 49 years old and users of CHC) per country, and eight health professionals who were prescribers of CHC across countries as well. In

qualitative research, recruiting by saturation means to recruit and collect data until participants in the sample are no longer sharing new information or adding new points. In other words, when we are confident that the topic has been discussed until exhaustion by interviewees. Potential participants were identified through convenience sampling through local researchers in sexual health clinics, mailing lists (eg, university departments) and workshops about research in sexual health.

## Procedure

Semistructured interview protocols (see online supplemental file) were constructed in English and translated into Danish and Slovak by local researchers. Local lay advisors were recruited to provide feedback about the clarity and appropriateness of the language used. The interviewers' team comprised three local female interviewers with experience in qualitative research. This team was led by the first author (PCGA, PhD in psychology with specialism in qualitative methods), who was also the local interviewer in the UK. Even though the nature of this methodology (semistructured interviews) implies that no interview is the same due to the subjectivity of the process, the three interviewers were instructed to keep to the protocol as much as possible to ensure the interviewees discussed their experiences about the same topic. None of the interviewers had any prior relationship with the individuals recruited for the study as participants.

All interviews were audio-recorded, transcribed verbatim by the research team and, for data collected from Denmark and Slovakia, translated into English for analysis. In Slovakia, data were initially translated by research assistants fluent in English and then reviewed by two senior researchers. In Denmark, the translations were performed by an employee of the participating research department with a degree in English and International Studies.

Participants received an information sheet about the study and were asked to sign a consent form prior to the interview. Participants were offered a £20 voucher (or equivalent in local currency) in the UK and Slovakia. Local rules meant we were unable to provide vouchers in Denmark. Interview locations varied across the country (eg, health clinic rooms, university facilities) but they took place in a private room to ensure confidentiality.

The interviews with women focused on processes of decision-making in relation to contraception; experience of consulting information sources about CHC; communication with health professionals about CHC; perceptions concerning the reliability of information sources; knowledge and experience of health regulators as an information source and preferences for information provision about CHC. Interviews with health professionals focused on information sources and formats used to advise women about CHC; awareness of information sources; experience of training and continuing professional development on CHC prescribing; experience of communication with and usage of guidelines from health regulators and

preferences for information provision by health regulators about CHC. Sociodemographic data were collected at the end of the interview.

## Patient and public involvement

Local lay advisors were recruited to provide feedback about the clarity and appropriateness of the language used in the interview protocols. These were recruited conveniently through the network of the local researchers and provided with a complimentary £20 voucher (or equivalent in local currency) in the UK and Slovakia (but not Denmark, due to the local policies mentioned earlier).

## Data analysis

Framework analysis<sup>26</sup> was used to summarise the key topics relating to the experiences of women and health professionals when considering and discussing CHC. Combining data for analysis in this way was appropriate as our interview protocols covered similar topics. MS Excel was used for data management purposes.

To ensure comparability, the analysis was conducted by a single researcher (PCGA, first author), based in the UK, as follows: interviews were transcribed, translated (when relevant) and read repeatedly to gain familiarity with the content of each interview. Then, the researcher coded the interview text iteratively and deductively according to (for women) "information sources", "concerns about risks/side-effects" and "communication with health professionals; (for health professionals) "information sources", "professional training", "regulatory bodies" and "challenges". The categorisation was discussed with a senior researcher with expertise in qualitative research methods to ensure rigour (FAS, coauthor).

## RESULTS

### Sample characteristics

In total, we interviewed 24 women across the three countries until saturation was reached. We aimed to recruit a similar sample size between countries to ensure we had a balanced number contributing to the study. No individuals approached or invited for the study refused participation. Among women from the three countries, the average interview length was 6.8 min (SD=4.1), ranging from a minimum of 2.1 min to 18.4 min (Denmark: M=7.5 min, SD=1.6 min; Slovakia: M=2.8 min, SD=0.1 min; the UK: M=9.9 min; SD=4.6 min). As for health professionals, the average length across countries for the interview was 10.3 min (SD=5.3), ranging from a minimum of 5 min to a maximum of 26 min (Denmark: M=9.3 min, SD=3.5 min; the UK: M=11.6 min, SD=6.7 min).

Across our sample, most women were between 18 and 34 years of age (n=16). On education, most women had a higher education or postgraduate diploma (n=18). Furthermore, half of the women interviewed (n=12) were in full-time employment. Table 1 provides a breakdown of sample characteristics per country.



**Table 1** Sociodemographics of the women interviewed (n=24)

	Norway	Slovakia	The UK	Total
Age (years)				
<18	1	0	4	5
18–24	3	1	3	7
25–34	2	6	1	9
35–44	1	0	0	1
45–54	1	1	0	2
Education				
No qualification(s)	4	0	0	4
Secondary education/high school diploma	2	0	0	2
Higher education diploma/degree	2	4	6	12
Postgraduate education	0	4	2	6
Employment				
Full-time	2	6	4	12
Part-time/casual	3	1	0	4
Student	3	0	4	7
Unemployed/unavailable for work	0	1	0	1

16 CHC health professionals were recruited across Denmark and the UK. Due to local constraints, the Slovak team was unable to recruit for this part of the study. There was a widespread variation in terms of age, as well as type of practice, though the majority had a medical degree (n=12). Most professionals were working in urban areas (n=10). See [table 2](#) for a breakdown of characteristics per country.

### Women's experiences when choosing CHCs

#### Type of information sources used

Women reported their decisions to take CHC were based on the experience of family and friends, and information provided by health professionals, schools, as well as the internet. As a CHC user from Denmark put it, 'I talked to my mother, and she took the pill when she was young. (...) [I] listened to my mother and her suggestions'. For a Slovakian woman, however, '[The decision was] based on my doctor's recommendation, I fully trust my doctor'.

#### Personal reasons

When it comes to the reasoning behind the use of CHC, women mentioned being in a relationship; only method known; 'pill' as a modern thing to do; to improve a medical condition; to avoid pregnancy; most convenient contraceptive method; an effective form of contraception; friends were using it; visibility of the 'pill'; 'pill' as widely accepted; method that was reversible; easy to access and not wanting anything 'inside' the body, as would be the

**Table 2** Sociodemographics and profile of the health professionals interviewed (n=16)

	Norway	The UK	Total
Gender			
Female	3	7	10
Male	5	1	6
Age (years)			
25–34	1	3	4
35–44	1	1	2
45–54	3	2	5
55–64	2	1	3
65–74	1	1	2
Type of practitioner			
Nurse	0	4	4
Doctor	8	4	12
Type of practice			
General practice	1	1	2
Family planning clinic	1	2	3
Sexual health clinic	0	4	4
Private clinic	6	0	6
Other	0	1	1
Location of practice			
Urban	4	6	10
Suburban	1	2	3
Rural	3	0	3

case with an implant. For instance, according to a UK user of CHC, 'It is easy to take every day and I don't like injections or anything else, so ... yeah, it was the easiest', and for another Danish woman, (she) 'made the choice that everyone else did. I have not heard of any other, so that is why I made this choice. I know there are other options, but I have not familiarised myself with the options'. In the UK, one woman also mentioned using CHC for cosmetic reasons, namely, to control acne.

#### Perception of information sources' reliability

Information about CHC was considered reliable to women when it came from a source with which they were familiar or came from individuals/institutions with a reputation in the field. Information sources which used technical language, as opposed to lay terms, were also considered important sources. Moreover, information was considered reliable if repeated across different sources and regarded as trustworthy when shared by health professionals and friends. As reported by a woman from Denmark, 'If I am online and I do not know the name of the site I am on, I always google the name and see who is behind it and find out that way whether I can trust the site', whereas for a Slovakian CHC user, '[I trust based on the fact the doctor] is an educated person'.

### Awareness of regulation agencies

When asked about the monitoring and regulation of medicine supply, including CHC, women expressed no interest and/or awareness about regulatory health bodies. Furthermore, they shared how they implicitly trust the work of regulatory bodies. A woman in the UK shared that 'if I were interested, I could have gone and just checked its standards and everything else but in a busy life you just accept that everything is at standard as it should be. So, I know there are regulatory bodies, but I don't have much interest about it'. A similar point was raised by a CHC user from Denmark, namely that 'I know that the authorities keep an eye on medicines, but I do not know which'.

### Concerns about CHC risks and side effects

Some women expressed no concerns about CHC, such as a woman in Denmark, who expressed not having 'thought about that [side effects]. To me, it has been a question of avoiding getting pregnant', while others reported having concerns over its effects on mood swings and how it could interfere with other health conditions. As one user in the UK put it, 'I wanted to understand by myself if [the pill] had any effect, if it was making me feel down, and I think I noticed that I felt a little better without taking the pill'. Women reported speaking to their doctor, searching on the internet, speaking with friends and family and reading the CHC patient information leaflet for information about risks and side effects. This is illustrated by women's experiences across countries, such as one in Denmark who reported to 'have seen the list of side effects on the pharmacy homepage', and one in Slovakia who claimed that 'after the doctor's prescription I studied the package leaflet, of course, and looked for information on the internet' to learn about the side effects of CHC.

### Communication with health professionals

Women considered consultations about CHC to be brief, insufficient and limited in number once they were taking CHC. Some were dissatisfied with the language used during consultations. A Danish woman mentioned that 'the doctor talks as if I ought to know and that is not a nice feeling to have. It makes me feel stupid and ignorant, which I don't think I am'.

In general, women expressed a wish for both greater information and discussion of issues around taking CHC. For instance, in the UK, a CHC user claimed that 'I don't really think I have had a full-on discussion with a health professional about whether this method can do this, and this method can do that ... haven't had that kind of interaction', while another one from Denmark mentioned, 'I just don't have a lot of healthcare knowledge and think my GP should inform me'.

### Health professionals' experiences consulting about CHC

#### Information sources used

Health professionals reported using various information sources when communicating with women about CHC.

This included information produced by statutory bodies (eg, National Health Service or the UK's Faculty of Sexual and Reproductive Healthcare), organisations (eg, Family Planning Association), scientific publications and conferences, peers, drug companies and personal knowledge and experience. For example, a Danish health professional stated that they 'use my many years of experience. I have been in a GP since 1990 and it is my bank of experience that counts in this regard'. Additionally, in the UK, a health professional reported that 'in terms of risks, overall, I tend to go to the NICE [National Institute for Health and Care Excellence] clinical knowledge guidelines, which has the UK guidelines about everything, so I go through the risk factors in terms of what constitutes risk or no risk'.

### Types of communication used in consultations

To communicate about CHC with women, health professionals mentioned the use of verbal discussions, leaflets, anatomic models of the pelvic area, videos, electronic applications and websites. As a health professional in the UK put it, 'Verbally, I would sort of try to ask and concentrate on their lives, with open questions, how do they feel about hormonal contraception, whatever, how important is it they don't get pregnant, things like that you know, and try to engage where they are at as far as their information, their knowledge, their interest in different methods and then we work from there'. One Danish health professional reported, for instance, 'If they are in doubt about what they want or just want to think it over once more before making a decision, I give them some written information'.

### Professional training

Some health professionals reported not receiving any training about how to communicate about CHC. Others mentioned seeking training on sexual health either by themselves, by suggestion of their employers or both. One health professional from Denmark reported not having training as such: 'I remember some education from when I was in specialist training, but not other than that'. For another health professional in the UK, they claimed that, in their institution, 'we go on update days every year. We have just been ... and that's organised by our sexual health trust, so there's a contraception update day and we all do something like that once a year and we also have appraisals with our line manager every three months'.

### Interest in receiving further training

Participants' responses were mixed regarding the possibility of future training. Some health professionals reported no interest in further courses; while others expressed that it was part of their role as consultants to gain further specialist knowledge, to keep up to date and maintain professional standards, improve patient care and share knowledge with junior peers. For instance, further training was important for a UK health professional because 'you increase your knowledge, so you

can give the right information to the patients and things are always changing in medicine and in contraception I always feel sometimes things are not changing that fast and when they do change, they change very quickly. You have to have the right information to pass on to the patients’.

### Role of regulatory bodies in prescription practice

Health professionals differed when discussing the role of regulatory bodies in influencing their practice in relation to CHC. Some health professionals from Denmark mentioned ‘I don’t believe I ever have received updates from regulatory bodies’, while others in the UK reported that they ‘receive regular emails and we can access their page to check updates if we are not sure’.

### Dissemination of information from regulatory bodies

When it comes to receiving information from regulatory bodies, health professionals mentioned a preference for this to be shared in presentations, emails, magazines, websites and professional discussion boards. For a health professional in the UK, ‘I would prefer somebody presenting it to me because I find it easier to learn (...) it can be webinars or something like that, where you can listen to the information but it’s just a personal preference. I prefer to listen to things than to read’; while for one health professional in Denmark, they ‘would like to receive information by e-mail. Then I don’t have to remember to keep papers and can always find information when I need it’.

### Challenges when prescribing CHC

In keeping with women’s views, UK health professionals reported that they felt under time constraints during their consultations. As one participant put it, ‘I have to see them, discuss with them, examine them, scan them, talk to them about their options depending on what has happened and give them their contraception in the same appointment, and I have 20 minutes so there is not time for them to think about it. I don’t think it’s appropriate at all’. On the other hand, finding time to read and digest guidance was presented as an issue. As claimed by one UK health professional, ‘I think that’s a real problem for people in practice, it’s that there is no time in your working day to ever to be able to read that [guidelines] and if you have other family and all the rest, realistically you can’t spend that time at home doing (...) it’s having the time, that space to read it properly means you can retain it rather just rushing through and it also means that it’s much easier when you remember that something’s changed to be able to go and find it in the document which is a problem when you are rushed and you have the patient sitting next to you’.

Health professionals highlighted additional challenges such as not being aware of (‘absence’) of standardised guidelines and materials, lack of information about the continuous use of CHC, lack of training on how to discuss CHC with women, lack of resources to buy information

materials, services not matching the needs of clients, difficulty in communicating about risks and the need to personalise information. For instance, in the UK, a health professional mentioned knowing that ‘many services try to inform their patients, but the problem is there is no real official guidance out there or, you know, one leaflet, because all the leaflets ... many services have their own kind of leaflets for patients’. On the other hand, one health professional from Denmark referred that the ‘material I use depends a lot on the woman’s age and her situation. (...) Using the term situation, I mean age, living conditions, education, refugee, speaking Danish, other language, no children, does the woman have the number of children she wants and many other factors that pop up during the conversation with the woman’.

## DISCUSSION

We sought to understand the experiences of women when choosing CHC and the sources they use for decision-making, with an emphasis on risks and concerns about this contraceptive. We also explored health professionals’ views about how they consult with women about contraception choices, and which guidelines, training and challenges they face during that process. Even though the sample size lacked representativeness to make conclusions about cross-country comparisons, this qualitative study included women and health professionals in three European countries with the aim of gathering a wider and more diverse range of experiences.

Various approaches to seek information about CHC were reported by women, with some citing family, friends and health professionals as the primary sources of information. This is in line with previous research,<sup>27 28</sup> which highlights the complexity of contraception choices and how people seek information and are influenced by, for example, peers, family members, professionals and even their communities. Previous research has also stated that health professionals’ opinions and advice are likely to influence women’s contraceptive choices<sup>29</sup> and that this is mainly due to confidence and trust in their knowledge and expertise.<sup>30</sup> Interestingly, in contrast with other research which discusses how important cultural beliefs and norms are for contraception choices,<sup>28</sup> women in our sample did not seem to discuss how their culture has influenced their decision, which we were expecting given that we recruited across three countries.

Our findings about the use of the internet as a complementary or additional source of information are in keeping with previous work in which authors referred to the lack of access to health professionals as one of the main reasons motivating patients to seek information online.<sup>30</sup> Our findings also echo those of Lete *et al*,<sup>31</sup> who reported that convenience, easiness of use and perceived effectiveness were the most common factors affecting women’s preferences for CHC. This is encouraging, given the rise in online tools and digital decision aids being developed worldwide.<sup>32–34</sup> These may support women

even further in making informed choices in a private and comfortable setting, using easy-to-access, low-cost (or even free), reliable and evidence-based information. Additionally, women did not express major concerns about the risks of CHC. Although some reported awareness about CHC risks such as headaches or VTE, the experiences of women with this contraceptive method were generally positive. Such findings contrast, to some degree, with previous literature reporting that women may have negative views about CHC and perceive these as potentially dangerous.<sup>12–14 28 35</sup>

Women highlighted aspects related to their consultations about CHC which they saw as suboptimal. The main issues were lack of information about CHC, the language used by health professionals to discuss CHC and the limited opportunities to engage in such discussions. These findings reinforce previous studies which show that GP consultations worldwide tend to be brief, which may impact on healthcare and patient communication.<sup>36</sup>

Our study also highlighted various aspects about CHC consultations from the perspective of healthcare professionals, such as the challenges faced when supporting women in making contraception choices. Previous literature has identified the barriers perceived by professionals when providing CHC in primary care settings, such as lack of training and comfort, reliance on patients to initiate discussions, limited communication between health professionals and specialists, limited time and competing medical priorities.<sup>22</sup> This was in line with our study, where some health professionals reported that during clinical training they received no specific guidance on how to provide information about contraception, including but not only CHC. Similarly, according to a survey with over 1000 GPs conducted by the UK Family Planning Association, only 2% offered ‘the full range of methods to patients’ and ‘more than half said there is not time in a standard contraception appointment to talk about the options’.<sup>37</sup> As previously argued by Delendorf,<sup>38</sup> the lack of knowledge and training of CHC providers is likely to affect their ability to provide quality contraceptive counselling to current and future CHC users. It was also interesting that some health professionals seemed unaware of standardised guidelines to prescribe contraception, which is debatable. It would be interesting to explore where these perceptions stem from, and to expand further on how training is provided to CHC prescribers, as well as how up-to-date information is centrally disseminated to clinicians.

Our study suggests that women’s awareness and interest in guidance from health regulators were minimal, while health professionals tend to rely on national as opposed to international guidance, with a preference for receiving information about CHC from regulators via email. Previous research has suggested that, in Europe, there is little consistency on how health professionals are regulated, with a great diversity of organisations and topics overseen by those organisations.<sup>39</sup> Even at a national level, as reported by one health professional in our study, there

is a great diversity of resources addressing the prescription of CHC and that a greater standardisation of this procedure would be beneficial.

Finally, it is noteworthy that the internet was presented as an important additional source of information by both patients and health professionals. Given that time constraints in consultations was a key issue reported in this study, the internet is likely to be a resource of increasing importance to both women and health professionals. For instance, future studies could explore the level of interest and feasibility in the cooperation between national and international health agencies towards the development of communication materials with standardised information and guidelines, which could be freely available online to both users and health professionals with prescribing responsibilities. An example of such a tool is the Contraception Choices interactive website ([www.contraceptionchoices.org/](http://www.contraceptionchoices.org/)), which, when evaluated, was considered by its users as visually appealing and a space containing trustworthy information and tools to support decision-making.<sup>40</sup>

There were strengths and limitations to this study. First, the inclusion of both women and health professionals in the same study allowed us to have a more thorough understanding about how they communicate about CHC in general, and its risks and side effects in particular. The extension of the study to three countries provided us with cross-cultural data and an insight into the situation across three European countries with respect to CHC use and prescribing. However, the small sample size, though adequate for a qualitative study, means that further work is necessary to understand the transferability of our concepts. The sample of health professionals was smaller than expected and only included two countries as data for Slovakia were not available for the current study. Even though qualitative studies seldom compare between groups, we did not look out for any differences between women and healthcare professionals’ perceptions in this study. A greater sample could have possibly allowed us to identify any divergent patterns between countries in how people decide to use CHC. There was also relevant information to contextualise the background of our sample that we failed to capture, which could have helped interpret the data. For instance, in future studies, we consider that gathering data about women’s reproductive history and previous use of other contraceptives would have been relevant.

## CONCLUSION

Overall, our study indicated that, when opting for CHC, women rely on information from family members, friends and health professionals, as well as the internet. Despite time constraints noted by both women and health professionals, the latter remain women’s preferred source of information. Health professionals themselves saw their contact with women as important in relation to decisions about the use of CHC.



Women in this study did not report major concerns about the risks of CHC when initiating its use, although they expressed the need to receive more information about the side effects and risks associated with this contraceptive method. They particularly expressed concerns about the limited opportunities to discuss these issues when renewing their prescriptions. On the other hand, health professionals reported limited training opportunities and discussed how they rely on local guidance to counsel women. Professionals also mentioned having limited opportunities to discuss contraceptive choices with women.

The process of choosing and discussing contraceptives is complex for both its users and health professionals. Even though there are various factors contributing to this process, our study has contributed to the field by focusing on how women and professionals communicate about CHC in consultations about sexual and reproductive health. Due to the limited resources such as consultation time or training opportunities, the internet seems to be increasingly becoming a valuable source to support women and professionals in this field. Therefore, in addition to websites and decision aids already mentioned, there seems to be a call to expand on the development, evaluation and implementation of reliable and easy-to-access digital tools, so that more informed choices are made when it comes to using contraceptives.

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