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ORIGINAL RESEARCH

Needs and preferences of women users of oral contraceptives in selected countries in Central and Eastern Europe

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Abstract

Background: The availability of various oral contraceptive (OC) pill formulations with different hormone compositions suggests that there is potential to align a particular product with an individual user's needs and preferences. To explore this concept further, a survey was conducted of current users of OCs to define and confirm areas of specific needs, and to gain insight into their views and preferences for OC formulations.

Methods: During November and December 2015, women users (n=615) of OCs in five Central and Eastern European countries were surveyed in face-to-face interviews conducted by experienced interviewers. The survey questionnaire comprised 34 questions about the use of and specific needs for OCs.

Results: Four basic needs of women taking OCs were identified: reliable contraception, reversibility of contraception, no effect on body weight and safety. Overall, 85% of surveyed women indicated that prevention of pregnancy was the main reason for taking OCs. Weight gain was the side effect of greatest concern with OC use (46% spontaneous answer; 65% aided answer). Independent behavioural segmentation analysis identified four groups – Solved Cycle Problems (46% of participants), Low Hormone Content (22%), Lifestyle (17%) and Beauty (14%) – which characterised the women according to needs and preferences beyond the basic needs of OCs. Each group had unique features and distinct preferences for different formulations of OCs.

Conclusions: Aligning product advantages with specific individual needs may enhance users' overall experience with OCs as a contraceptive option.

Keywords: Eastern and Central Europe, needs and preferences, oral contraceptives, survey, women users.

Citation

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Introduction

Oral contraceptives (OCs) are a popular and non-invasive method of preventing pregnancy. OCs are highly effective when taken correctly and are rapidly reversible with normal ovulation typically restored within 2–3 months after discontinuation. OCs have a well-established safety profile in healthy, non-smoking, normotensive women [1,2].

Since the first regulatory approval in 1960 in the United States of an OC pill containing mestranol and norethisterone, OCs have steadily evolved and numerous formulations are currently on the market [3]. Main developments have been a dramatic lowering of the ethinylestradiol content and introduction of 17β estradiol, both in combination with a range of new-generation progestins developed to minimise or prevent androgenic, estrogenic or glucocorticoid related side effects [3–5]. Modern-day OCs are used in some cases to treat acne, hirsutism and a range of menstrual-related conditions [2,4]. The wide array of OC formulations – in terms of hormone composition, hormone dosage and administration schedule – suggests that there is a product to suit the needs and preferences of almost every woman.

Worldwide data for 2015 estimated that two-thirds of married or in-union women of reproductive age (15–49 years) used some form of contraception, with OCs representing 9% of contraceptive prevalence globally and approximately

20% of contraceptive prevalence in regions such as Europe and Oceania [6]. However, poor compliance and high discontinuation rates are well-known issues with OC use, frequently fuelled by media alarms about associated health risks and by side effects or women's fear of side effects [4]. Continued high rates of unintended pregnancy worldwide [7–9] emphasise the need to further promote uptake of highly effective contraceptive methods such as OCs and to eliminate any real or perceived barriers to their use [3]. Aligning a product's specific advantages with a woman's individual needs and preferences may enhance user satisfaction and encourage long-term use.

Although data are collected regularly about the prevalence of OC use, comparatively little is known in some countries about the needs and preferences of women taking OCs. Accordingly, this study was undertaken of women users of OCs in selected countries in Central and Eastern Europe in order to define and confirm areas of specific needs and to gain insight into their views and preferences for different OC formulations.

Methods

In this study, women users of OCs living in large cities in the Czech Republic, Poland, Romania, Russia and Slovakia were surveyed about their use of OCs and their needs and preferences for OCs. Face-to-face interviews were conducted by professional interviewers experienced in market research studies for the healthcare industry. The interviews took place between 25 November and 16 December 2015. In the Czech Republic, Poland, Romania and Slovakia, potential survey participants were put forward by doctors to ensure that the women were OC users. In Russia, potential survey participants were put forward by doctors and pharmacists (50:50), as OCs can be purchased without a prescription in Russia.

The questionnaire, which is provided in full in the Appendix, was divided into four sections: Section A: Experience with Contraceptive Pills (10 questions); Section B: Factors behind Product Choice (10 questions); Section C: Declaration of Switching from Drug Currently Taken (10 questions); Section D: Declaration of Interest in Selected Products (4 questions); and Respondent Details. Respondents' answers were collated and stratified by country of origin.

The questionnaire was compiled by IMS Health Consulting Sp. z o.o. (now Quintiles IMS) and accepted by Gedeon Richter. It was designed using established techniques to enhance the reliability and validity of the information collected. In some instances, similar questions, although phrased somewhat differently, were asked (e.g. questions A1, B1 and B4 for features of OCs of most importance to women; questions B2 and B3 for side effects of OCs of most concern to women). The survey included open-ended questions where respondents were asked to provide a response in their own words (spontaneous answers) and closed-ended questions where respondents were asked to choose from a list of response choices (aided answers). Most questions had an opt-out option of 'hard to say' or 'none' as appropriate.

In Section D of the questionnaire, Declaration of Interest in Selected Products, five different OC products were presented and described to participants in order for them to select (hypothetically) the one that best reflected their individual needs and expectations towards a contraceptive pill. All products met the universal basic needs of women in terms of OC selection (reliable contraception, reversibility of contraceptive effect, no effect on body weight and good safety) but each provided different additional non-contraceptive features (Box 1).

The representative products were selected on the basis of their differing formulations (type of progestogen, hormone dosage and administration schedule) which confer non-contraceptive

Box 1. Oral contraceptive products presented to survey participants in Section D: Declaration of Interest in Selected Products.

Composition	Additional features	Reference
2 mg chlormadinone + 0.03 mg ethinylestradiol	Improves skin and hair condition (reduces skin redness and irritation, improves head hair boldness, reduces facial hair length and pigment); unchanged libido	[10–18]
3 mg drospirenone + 0.02 mg ethinylestradiol; 24 + 4 placebo tablets	Continuous usage with four pills without hormones (placebo); relieves the unpleasant emotional and physical symptoms associated with premenstrual syndrome (PMS)	[19–22]
0.075 mg gestodene + 0.02 mg ethinylestradiol	Contains low dose of hormones; provides ability to have natural cycles (i.e. natural number of bleeding days)	[23–25]
0.06 mg gestodene + 0.015 mg ethinylestradiol; 24 + 4 placebo tablets	Minimal dose of hormone although spotting can occur; continuous usage with four pills without hormones (placebo)	[26–28]
3 mg drospirenone + 0.03 mg ethinylestradiol	Proven low influence on body weight; provides adequate cycle control with low incidence of intermenstrual bleeding, amenorrhea and dysmenorrhea	[29–34]

benefits to a greater or lesser extent. To provide women adequate choice while avoiding possible confusion associated with too much choice, the number of selections was limited to five.

After all collected data were analysed, an independent behavioural segmentation analysis was performed to create classification groups based on responses to question B4 (see Appendix) in which the women had been asked to rank, in order (1 = most important; 20 = least important), the key attributes of contraceptive pills of greatest importance to them in selecting a particular product. The analysis excluded the four basic needs of OCs as these are standard and focussed on other features of OCs able to address more specific needs and preferences of individual users.

Results

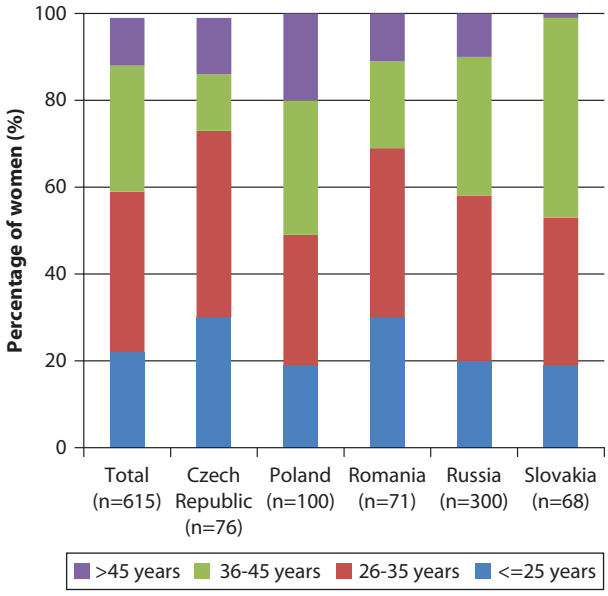
Survey population characteristics

The survey involved 615 women from large cities in five Central and Eastern European countries: the Czech Republic (n=76), Poland (n=100), Romania (n=71), Russia (n=300) and Slovakia (n=68). The age range of survey participants was ≤25 years (22%), 26–35 years (37%), 36–45 years (29%) and >45 years (11%) (Figure 1). Educational attainment among survey participants was primary (3%), vocational (14%), secondary (19%), Bachelor's degree (16%) and higher education (49%). Employment status was unemployed (10%), student (7%), specialist (48%), manager (19%), top manager (7%) and other (10%).

The mean duration of current uninterrupted use of OCs was 22.1 months across the entire survey population. Per country, mean duration of current uninterrupted use was 56.2 months in Slovakia, 36.9 months in the Czech Republic, 23.6 months in Poland, 21.5 months in Romania and 11.4 months in Russia.

The majority of surveyed women (71%) reported that their current OC had been chosen by their gynaecologist; 24% indicated that the brand choice had been made in conjunction with their gynaecologist. The primary factors influencing brand choice were doctor's recommendation, price, better adjustment to the patient and lower risk of side effects.

Figure 1. Age range of survey participants (n=615) per country. The total percentage in each group may not equal 100% owing to rounding.

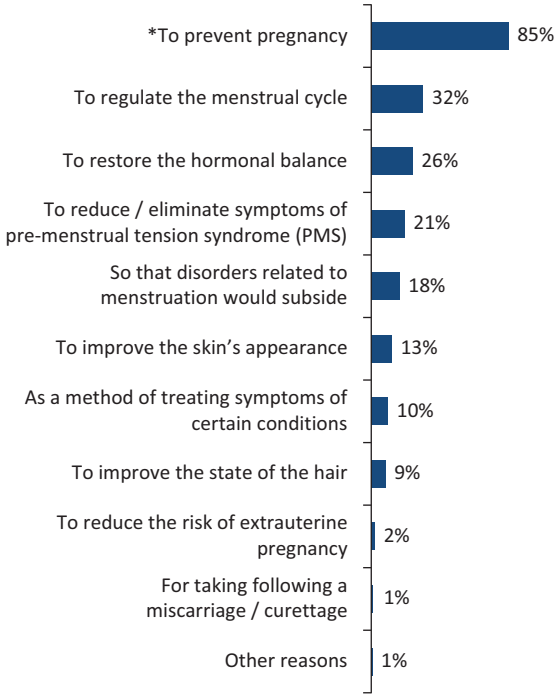


Oral contraceptives features of greatest importance and concern

Overall, women's responses to the survey reinforced that there are four basic needs with regard to OC selection: effective prevention of pregnancy, reversibility of the contraceptive effect, no effect on body weight and good safety.

Effective contraception: The most frequent response by surveyed women to question A1, '*What is the reason for you taking contraceptive pills?*', was 'to prevent pregnancy' (85% of respondents; Figure 2). This basic need was further supported by women's responses to questions about the features of OCs of greatest importance to them (questions B1 and B4). Surveyed women indicated spontaneously (36%; Figure 3) and by aided

Figure 2. Reasons for using oral contraceptive pills. Responses to question A1: *What is the reason for you taking contraceptive pills?* [Interviewers read a list of responses to survey participants. See Appendix]. Multiple answers were allowed. *Indicates basic needs of oral contraceptives.



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answers (52%; Figure 4) that effective prevention of pregnancy was the attribute of OCs of highest importance to them.

Other frequent reasons women provided for current use of OCs were to regulate the menstrual cycle (32%), restore hormonal imbalance (26%) and alleviate the symptoms of PMS (21%) (Figure 2).

Reversibility of the contraceptive effect: Although surveyed women did not spontaneously mention reversibility of the contraceptive effect as a feature of OCs of greatest importance to them (Figure 3), during prompted questioning 46% of women selected this response from the list of choices (Figure 4), affirming its position as a basic need of OCs.

Lack of effect on body weight: Although only 7% of surveyed women reported spontaneously that causing no weight gain or swelling was a feature of OCs of greatest importance to them (Figure 3), during prompted questioning 34% of women chose the response 'has no effect on body weight' as an important feature of OCs (Figure 4).

Further supporting the positioning of 'no weight gain' as a basic need of OCs, by spontaneous reporting (46% of surveyed

Figure 3. Features of oral contraceptives of greatest importance: spontaneous responses (reported by ≥2% of women). Responses to question B1: *I'd like to talk for a moment about contraceptive pill features that you consider important. Could you please tell me what you think it's worth paying attention to when choosing contraceptive pills*? Multiple answers were allowed. *Indicates basic needs of oral contraceptives.

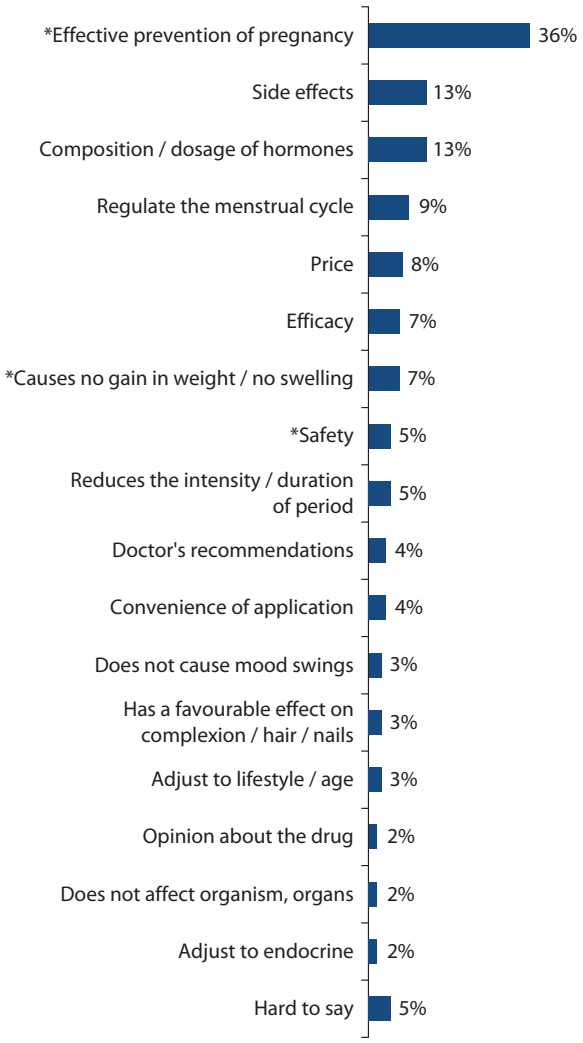


Figure 4. Features of oral contraceptives of greatest importance: aided responses (reported by ≥5% of women). Responses to question B4: *What contraceptive pill features are important to you? Please put the following features* [Provided by interviewer on a card. See Appendix] *in order of importance for you. Number 1 means that this feature is the most important for you in your assessment of contraceptive pill, and 20 – that is the least important feature. If you feel that certain features are equally as important, please give them the same number.* Top 3 box: very important (first, second and third place). *Indicates basic needs of oral contraceptives.

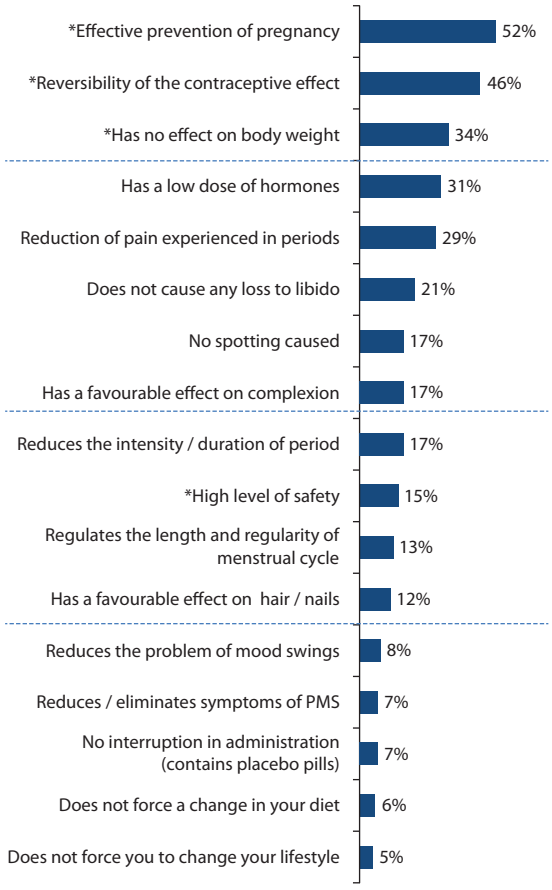


Figure 5. **Side effects of greatest concern with oral contraceptives: spontaneous responses (indicated by ≥2% of women). Responses to question B2: *Could you please say what side effects you are most concerned about when taking contraceptive pills?* Multiple answers were allowed.**

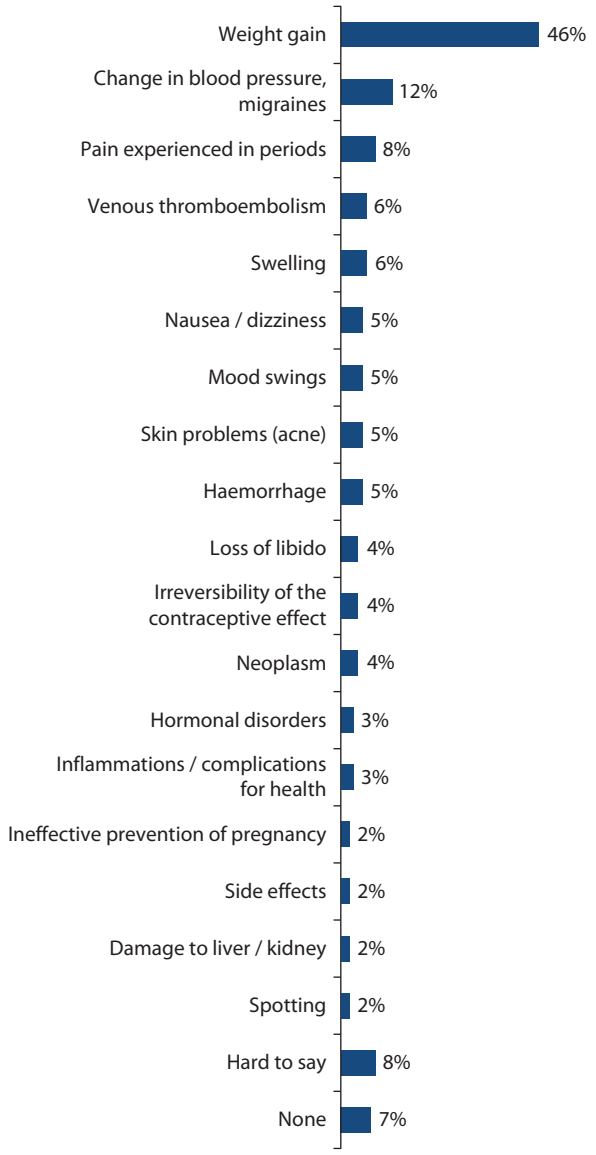
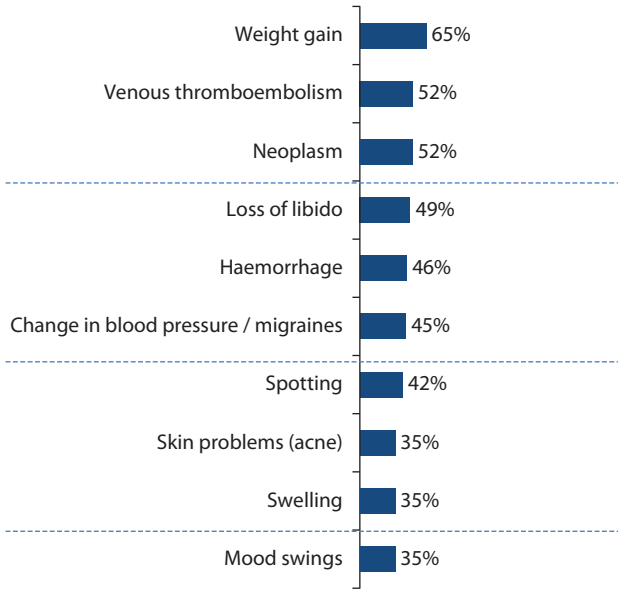


Figure 6. **Side effects of greatest concern with oral contraceptives: aided responses. Responses to question B3: *Are you worried about the following side effects? For each side effect* [Provided by interviewer on a card. See Appendix], *please say whether: 1) You are very worried about it; 2) You are quite worried about it; 3) You are not very worried about it; 4) You are not worried about it.* Top box: very worried (score = 1).**



women; Figure 5) and prompted questioning (65% of surveyed women; Figure 6), study participants indicated that weight gain was the feature of OCs of greatest concern to them. Per country, the proportion of women who indicated weight gain as the side effect of greatest concern with OCs ranged from 39% in Romania to 80% in Russia.

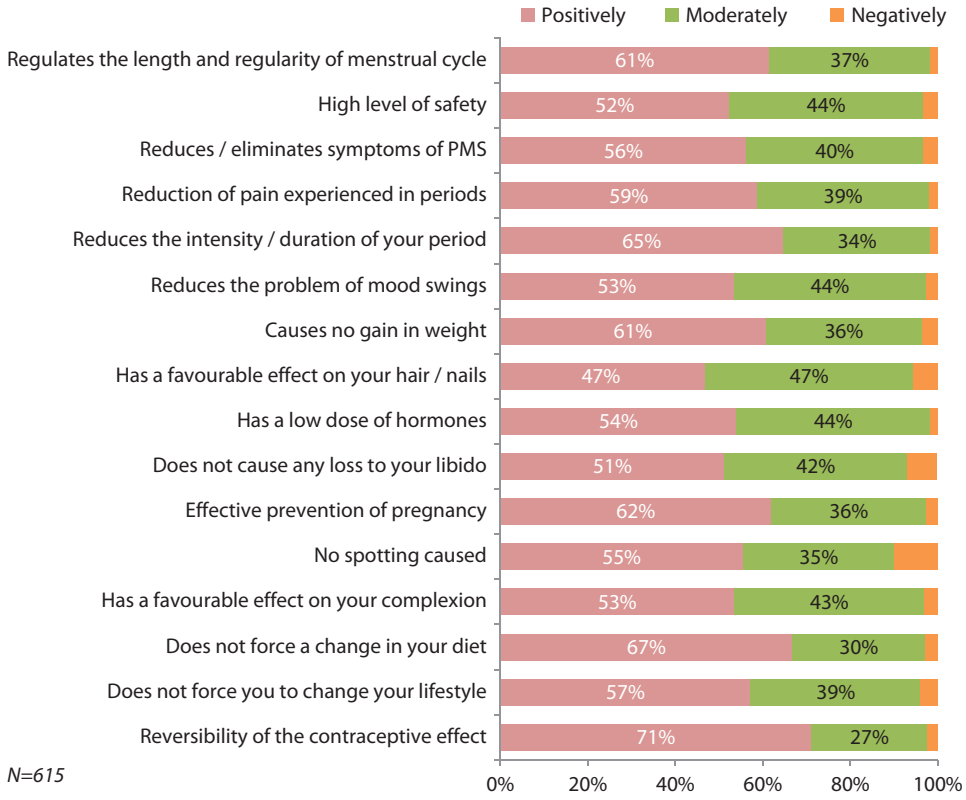
Good safety profile: Although only 5% of survey participants spontaneously mentioned safety as a feature of OCs of greatest importance to them (Figure 3), during prompted questioning the frequent selection of features strongly associated with safety such as 'no effect on body weight' (34%) and 'low hormone dose' (31%) indicated that safety of OCs was an important consideration (Figure 4). During prompted questioning, side effects apart from weight gain selected by a high proportion of respondents as being of greatest concern during OC use were venous thromboembolism (52%), neoplasm (52%), loss of libido (49%), haemorrhage (46%) and others (Figure 6).

Willingness to change OC

Overall, 82% of surveyed women indicated that they were very unlikely or rather unlikely to switch to another brand of OC in the near future. Only 57 respondents (9%) indicated a probable or definite preference to switch brands, mainly because of 'a desire to try something new' (33% of the 57 respondents). Survey participants reported a high or reasonably high level of satisfaction with the attributes of the contraceptive pills they were currently using (Figure 7).

Across participating countries, the average cost for one pack of OCs in current use by the women was USD$12, lower in Poland (USD$7) and Romania (USD$6) and higher in the Czech Republic (USD$20) and Slovakia (USD$26). Only 24% of patients indicated a willingness (definitely 6%; probably 18%) to change to a cheaper product if such an option was available to them.

Figure 7. Level of satisfaction with currently used oral contraceptive pill.



Independent behavioural segmentation analysis

Independent behavioural segmentation analysis classified survey participants into four groups: Solved Cycle Problems segment, Low Hormone Content segment, Lifestyle (Keep Balance) segment and Beauty segment according to responses to question B4 (key attributes of contraceptive pills of greatest importance in selecting a particular product). By combining women's demographic and behavioural characteristics with responses to survey questions A1, A2, B4 and D1 (see Appendix), a profile of each segment was created.

The Solved Cycle Problems group comprised the largest proportion (46%) of survey participants. The most common age range of women in this group was 26–35 years (37%). Their main reasons for using contraceptive pills were to prevent pregnancy (84%), regulate the menstrual cycle (38%), restore hormonal balance (27%), reduce symptoms of PMS (21%) and reduce menstruation disorders (21%). The features of OCs of most importance to this group were to reduce pain experienced in periods, reduce intensity/duration of period, regulate the length and regularity of menstrual cycle, reduce the problem of mood swings and reduce/eliminate symptoms of PMS. The most common OCs in current use by this group were 0.15 mg desogestrel + 0.03 mg ethinylestradiol (10%) and 2 mg cyproterone acetate + 0.035 mg ethinylestradiol (10%). Among the hypothetical product choices presented in Section D of the questionnaire, the formulations that met the expectations of the largest proportion of women in the Solved Cycle Problems group were 3 mg drospirenone + 0.03 mg ethinylestradiol (32%) and 0.075 mg gestodene + 0.02 mg ethinylestradiol (28%).

The Low Hormone Content segment comprised 22% of the surveyed population. The most common age range of women in this group was 26–35 years (41%). Their main drivers for current use of OCs were to prevent pregnancy (91%), restore hormonal balance (28%), regulate the menstrual cycle (22%) and reduce symptoms of PMS (20%). The feature of OCs of greatest importance to this group was a low dose of hormones. The most common OC in current use was 0.15 mg desogestrel + 0.03 mg ethinylestradiol (28%). Among the hypothetical product choices presented in Section D, 3 mg drospirenone + 0.03 mg ethinylestradiol (31%) and 0.075 mg gestodene + 0.02 mg ethinylestradiol (27%) met the expectations of the largest proportion of women in the Low Hormone Content segment.

The Lifestyle (Keep Balance) group included 17% of the surveyed women; the most common age range in this group was 26–35 years (40%). Main drivers for current use of OCs were to prevent pregnancy (84%), regulate the menstrual cycle (28%) and restore hormonal balance (26%). The features of OCs of greatest importance to this group were to not force a change in diet; not force a change in lifestyle, including performing more exercise; and not cause any loss to libido. The

most common OCs in current use by this group were 0.15 mg desogestrel + 0.03 mg ethinylestradiol combinations (28%). Among the hypothetical product choices presented in Section D, the formulation favoured by most women in the Lifestyle (Keep Balance) group was 3 mg drospirenone + 0.03 mg ethinylestradiol (39%).

The Beauty segment comprised 14% of survey participants and, of the four classification groups, had the largest proportion of women aged ≤25 years (32%). Women in the Beauty segment were the most physically active, practicing sport on average four times a month, compared with three times per month in the other groups. Main drivers for current use of OCs were to prevent pregnancy (83%), regulate the menstrual cycle (35%), improve skin appearance (27%) and reduce symptoms of PMS (24%). The features of OCs of greatest importance to this group were to have a favourable effect on complexion and a favourable effect on hair/nails. The most common OC brands used by women in this group were 0.15 mg desogestrel + 0.03 mg ethinylestradiol (14%) and 2 mg cyproterone acetate + 0.035 mg ethinylestradiol (14%). Among the hypothetical product choices presented in Section D, the formulations that met the expectations of the largest proportion of women were 3 mg drospirenone + 0.02 mg ethinylestradiol (31%) and 2 mg chlormadinone + 0.03 mg ethinylestradiol (26%).

Product choice

Overall, the most frequently selected product among the five hypothetical choices was 3 mg drospirenone + 0.03 mg ethinylestradiol (33% of survey participants), followed by 0.075 mg gestodene + 0.02 mg ethinylestradiol (25%) and 2 mg chlormadinone + 0.03 mg ethinylestradiol (17%). Fewer women indicated a preference for 0.06 mg gestodene + 0.015 mg ethinylestradiol 24 + 4 (11%) and 3 mg drospirenone + 0.02 mg ethinylestradiol 24 + 4 (10%).

On a per country basis, the most popular choice of product was 0.075 mg gestodene + 0.02 mg ethinylestradiol in the Czech Republic (32% of respondents), 2 mg chlormadinone + 0.03 mg ethinylestradiol in Poland (37%) and Slovakia (32%), 3 mg drospirenone + 0.03 mg ethinylestradiol in Russia (45%), and 3 mg drospirenone + 0.03 mg ethinylestradiol (30%) and 0.075 mg gestodene + 0.02 mg ethinylestradiol (30%) in Romania.

Discussion

More than 600 women users of OCs from the Czech Republic, Poland, Romania, Russia and Slovakia were surveyed about their experience with and views of OCs. Estimated usage rates of OCs in 2015 among married or in-union women aged 15–49 in these countries varied considerably, from 48.4% in the Czech Republic to 17.2% in Romania and 13.2% in Russia [6]; specific data for Poland and Slovakia were not available. All women resided in large cities and the respective cohorts were reasonably homogeneous with regard to age.

Consistent with the established universal basic needs of OC users, survey participants indicated that the features of OCs of greatest importance to them were reliable contraception, reversible contraceptive effect and no effect on body weight. Although safety was not expressed directly as an important feature of OCs, it could be inferred from women's frequent selection of features strongly associated with safety such as 'no effect on body weight' and 'low hormone dose'. Interestingly, weight gain, venous thromboembolism and neoplasm were each selected by more than half the sample as features of OCs of greatest concern to them. Despite the minimal risks of such complications with modern-day OCs, it appears that misperceptions about OCs continue to prevail. Current contraindications of OCs include hypertension, migraine, breast cancer and risk of venous thromboembolism [2,35]. There is no evidence to suggest that current or former use of OCs or that use of specific OC formulations is linked to an increased risk of breast cancer [36,37]. Indeed, use of modern-day OCs offers several health benefits including a substantial decrease in the risk of ovarian, endometrial and colorectal cancers [4]. Greater efforts to dispel the myths surrounding OCs and communicate their advantages appear warranted.

Independent behavioural segmentation analysis classified study participants into four groups based on their selection of OC features of greatest importance to them. In all segments, the main reason for current use of OCs was to prevent pregnancy (83–91% of respondents across segments). Aside from the four basic needs of OCs, 46% of surveyed women indicated a preference for OCs to stabilize their menstrual cycle and solve cycle-related problems, 22% preferred OCs with a low hormone content to ensure that their bodies remain as natural as possible, 17% expressed a preference for OCs that would maintain their body weight without them having to make changes to their diet or lifestyle (e.g. amount of exercise) and 14% favoured OCs with a positive effect on their hair/beauty. With the wide array of OC formulations available, it seems highly probable that an OC product can be matched with a user to address her specific expectations and preferences.

Among the five OC products presented and described to survey participants, the most favoured formulation irrespective of behavioural segment was 3 mg drospirenone + 0.03 mg ethinylestradiol (31–39% selection rate across segments). Described as having a proven low influence on body weight and providing adequate cycle control with low incidence of intermenstrual bleeding, amenorrhoea and dysmenorrhoea [29–34], it is likely that these attributes have broad appeal. The second-place positioning of 0.075 mg gestodene + 0.02 mg ethinylestradiol (28%) in the Low Hormone Content group and of 2 mg chlormadinone + 0.03 mg ethinylestradiol (26%) in the Beauty group, was consistent with each segment. In the Solved Cycle Problems group, only 9% of women selected the segment-consistent product, 3 mg drospirenone + 0.02 mg ethinylestradiol 24 + 4 tablets. Interest in the 24/4 regimen options was low overall despite their associated benefits such

as enhanced ovarian suppression and reduction of menstrual blood loss and cycle-related symptoms [4], suggesting once again that stronger communication of the specific therapeutic advantages of various OC formulations is necessary. Although all modern OCs provide the universal basic needs of OCs and share many non-contraceptive benefits in common [35], compositional differences mean that some formulations may be especially well suited for use in certain situations; for example, 2 mg chlormadinone + 0.03 mg ethinylestradiol to improve skin appearance and strengthen hair and nails [10–18]; 3 mg drospirenone + 0.02 mg ethinylestradiol 24+4 tablets to relieve cycle-related symptoms and reduce symptoms of PMS [19–22]; 0.075 mg gestodene + 0.02 mg ethinylestradiol in cases where low-dose estrogen is preferred [23–25]; 0.06 mg gestodene + 0.015 mg ethinylestradiol 24+4 tablets in case where an ultra-low-dose contraceptive is preferred [26–28]; 3 mg drospirenone + 0.03 mg ethinylestradiol to provide good cycle control with negligible effect on body weight [29–34].

The relative importance that women place on maintaining their libido during OC use was apparent from the relatively high proportion of surveyed women (49%) who selected 'loss of libido' among the side effects of greatest concern during OC use. Different OC formulations appear to have variable effects on libido. A systematic review of 36 studies (n=13,673 women) reported that sexual desire decreased only with OCs containing 0.015 mg ethinylestradiol; whereas, no significant changes were observed in the case of OCs containing 0.02–0.03 ethinylestradiol [38].

The study had limitations which should be mentioned. Modest sample sizes in some countries (Czech Republic, Romania and Slovakia) may have impacted on the representativeness of the results when stratified by country of origin. Conversely, the overall results may have been influenced by the proportionately larger sample of women from Russia (n=300) compared with other countries. In addition, it is possible that inter-country differences in access to OCs (e.g. brand choice, reimbursement policies) had an influence on women's responses. In terms of women's Declaration of Interest in Selected Products (Section D), the wording used to describe the non-contraceptive benefits of each product may have influenced selection. While acknowledging these limitations, the close alignment between women's responses to the questionnaire and the universal basic needs of OC users increases our level of confidence that the survey cohort is reasonably representative of the wider population of OC users in Central and Eastern Europe.

To the best of our knowledge, this is the first study of its type with the aim of defining and confirming areas of specific needs of OC users, and gaining insight into their views and preferences for various OC formulations, conducted in Central and Eastern Europe.

The decision to use OCs as the contraceptive of choice is multifactorial (e.g. social, cultural and economic) and also reflects a woman's personal attitudes towards OCs. The high proportion of women in Russia and Slovakia who perceived weight gain, venous thromboembolism and neoplasms to be major concerns of OC use suggests the need for greater awareness of the improved safety of modern-day OCs. The behavioural segmentation analysis highlighted additional features of OCs of importance to women beyond the core features of reliable contraception and reversibility of effect. Knowledge of the therapeutic advantages associated with various OC formulations might assist physicians in selecting a product best suited to the specific needs and expectations of individual patients.

This market research could be extended to other countries in Europe in order to inform awareness and educational programmes tailored to a country's specific needs.

Conclusions

All modern OCs are designed to meet the universal basic needs of users: reliable contraception, reversibility of contraceptive effect, no effect on body weight and good safety. On the basis of their hormone composition, certain OC formulations offer additional benefits that can be individualized per patient. Greater promotion of these benefits, and careful alignment of a product's advantages with specific individual needs, may enhance users' overall experience with OCs as a contraceptive option and encourage long-term compliance, although this remains to be demonstrated conclusively, and in the absence of confounding factors such as cost. Our research highlights that considerable efforts are required to dispel lingering misperceptions about OCs, especially with regard to side effects, in order to increase the uptake of OCs as the contraceptive method of choice.

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Appendix

Questionnaire used in the study by IMS Health (now Quintiles IMS).

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INTELLIGENCE APPLIED.

Usage of oral hormonal contraception *QN 162*

Study design

Sample					
Country:	**Poland**	**Czech Republic**	**Romania**	**Russia**	**Slovakia**
	Large cities	Large cities	Large cities	Large cities	Large cities
Sample size:	N=100	N=70	N=70	N=300	N=70
Method:	F2F	F2F	F2F	F2F	F2F

Questionnaire duration: up to 25 minutes
Respondents: oral contraception users

Introduction

Hello, my name is ..... and I represent the "IMS Health" Centre of Medical and Pharmaceutical Information. Our company conducts research into the opinions and experiences of health care staff and patients. We are currently conducting a survey with women who take oral hormonal contraceptives. The interview will take no more than 25 minutes. As a participant in a survey conducted by the company IMS the confidentiality of your answers is guaranteed.

Would you agree to spare some of your time and answer a few questions?

SCREENER

R1. Are you currently taking contraceptive pills?	1. Yes 2. No → **terminate interview** 88. Refusal to answer → **terminate interview**

A. CURRENTLY TAKING BRAND OF CONTRACEPTIVE PILLS

A1. What is the reason for you taking contraceptive pills? INT.: read out, multiple answers allowed	1. To prevent pregnancy 2. To restore the hormonal balance 3. To reduce / eliminate symptoms of pre-menstrual tension syndrome (PMS) 4. To regulate the menstrual cycle 5. So that disorders related to menstruation would subside (e.g. heavy menstrual bleeding, prolonged menstruation) 6. To improve the skin's appearance 7. To improve the state of the hair 8. As a method of treating symptoms of certain conditions, e.g. myomas, cysts, etc. 9. For taking following a miscarriage / curettage 10. To reduce the risk of extrauterine pregnancy 96. Other reasons: what?.....

A2. What brand of contraceptive pill are you currently taking? INT.: Write clearly using capitals.	.....

A3. How long have you been taking these pills without a break? Please give the number of months. INT.: If necessary emphasise that you want the respondent's estimate.	..... months

A4. Could you please tell me who chose these pills? INT.: read the options	1. Chosen by my gynaecologist 2. Brand chosen together with my gynaecologist 3. It was my suggestion 96. Other person. Who?.....

A5. When choosing the pills you are currently taking, did you consider taking any other brand?	1. Yes 2. No 99. Hard to say

INT.: Ask if A5 = 1 **A6. What other brands did you consider?**	Product 1..... Product 2..... Product 3..... 99. Hard to say

INT.: Ask if A5 = 1 **A7. What was the main reason (benefits of the product) which ultimately resulted in you choosing this product and not another that you had also been considering?**	..... 99. Hard to say

A8. Were you taking other contraceptive pills beforehand?	1. Yes 2. No

A9. What was the name of the contraceptive pills you were taking before the ones you're currently taking? INT.: Write clearly using capitals.	..... 99. Hard to say

A10. Why did you stop using the pills [INT.: enter name given in Q. A9]?
..... 99. Hard to say

B. FACTORS BEHIND PRODUCT CHOICE

B1. Now, I'd like to talk for a moment about contractive pill features that you consider important. Could you please tell me what you think it's worth paying attention to when choosing contraceptive pills?
..... 99. Hard to say

B2. And could you please say what side effects you are most concerned about when taking contraceptive pills?
..... 99. Hard to say 88. none

B3. And are you worried about the following side effects? For each side effect, please say whether: **1. You are very worried about it** **2. You are quite worried about it** **3. You are not very worried about it** **4. You are not worried about it at all**	
a) Weight gain	1 2 3 4 99 – hard to say
b) Loss of libido	1 2 3 4 99 – hard to say
c) Change in blood pressure, migraines	1 2 3 4 99 – hard to say
d) Mood swings	1 2 3 4 99 – hard to say
e) Spotting	1 2 3 4 99 – hard to say
f) Haemorrhage	1 2 3 4 99 – hard to say
g) Skin problems (acne)	1 2 3 4 99 – hard to say
h) Swelling	1 2 3 4 99 – hard to say
i) Neoplasm	1 2 3 4 99 – hard to say
j) Venous thromboembolism	1 2 3 4 99 – hard to say
k) Others: what?.....	1 2 3 4 99 – hard to say

B4. What contraceptive pill features are important to you? Please put the following features [INT.: give card] **in order of importance for you. 1 means that this feature is the most important for you in your assessment of contraceptive pills, and 20 – that it is the least important feature. If you feel that certain features are equally as important, please give them the same number.**

		Order
1	**Reversibility of the contraceptive effect – you can become pregnant after discontinuing usage of the pills**	.....
2	**Causes no gain in weight / has no effect on your bodyshape**	.....
3	**Reduction of the pain experienced in periods**	.....
4	**No interruption in their administration (contains placebo pills)**	.....
5	**No spotting caused**	.....
7	**Has a favourable effect on your complexion**	.....
8	**Has a favourable effect on your hair / nails**	.....
9	**Does not cause any loss to your libido**	.....
10	**Has a low dose of hormones**	.....
12	**Effective prevention of pregnancy**	.....
13	**Reduces the intensity / duration of your period**	.....
14	**Regulates the length and regularity of your menstrual cycle**	.....
15	**Does not force a change in your diet**	.....
16	**Does not force you to change your lifestyle, including doing more exercise, etc.**	.....
18	**High level of safety (low risk of breast cancer, thromboembolism)**	.....
19	**Reduces the problem of mood swings**	.....
20	**Reduces / eliminates symptoms of the pre-menstrual tension syndrome**	.....

C. DECLARATION OF SWITCHING FROM DRUG CURRENTLY TAKEN

C1. Are you considering switching your contraceptive pills for others within the near future?	1. Yes, definitely 2. Yes, probably 3. Probably not 4. Definitely not 5. Hard to say

C2. Why are you considering changing the pills?	

	…… 99. Hard to say

C3. I am going to show you once again the list of various features that contraceptive pills have. Please rate the contraceptive pills you are currently taking – positively, moderately, or negatively – for each feature.
INT.: Show card

C4. And now please think about whether you would consider switching from the contraceptive pills you are currently taking if another product were to function or perform significantly better in regard to the features: [INT.: ask about each feature from 1-20]

		C3. **1 – positively,** **2 – moderately, or** **3 – negatively**	**C4** **1-Yes** **2-No**
1	**Reversibility of the contraceptive effect – you can become pregnant after discontinuing usage of the pills**	1 2 3	1-Yes 2-No
2	**Causes no gain in weight / has no effect on your bodyshape**	1 2 3	1-Yes 2-No
3	**Reduction of the pain experienced in periods**	1 2 3	1-Yes 2-No
4	**No interruption in their administration (contains placebo pills)**	1 2 3	1-Yes 2-No
5	**No spotting caused**	1 2 3	1-Yes 2-No
7	**Has a favourable effect on your complexion**	1 2 3	1-Yes 2-No
8	**Has a favourable effect on your hair / nails**	1 2 3	1-Yes 2-No
9	**Does not cause any loss to your libido**	1 2 3	1-Yes 2-No
10	**Has a low dose of hormones**	1 2 3	1-Yes 2-No
12	**Effective prevention of pregnancy**	1 2 3	1-Yes 2-No
13	**Reduces the intensity / duration of your period**	1 2 3	1-Yes 2-No
14	**Regulates the length and regularity of your menstrual cycle**	1 2 3	1-Yes 2-No
15	**Does not force a change in your diet**	1 2 3	1-Yes 2-No
16	**Does not force you to change your lifestyle, including doing more exercise, etc.**	1 2 3	1-Yes 2-No
18	**High level of safety (low risk of breast cancer, thromboembolism)**	1 2 3	1-Yes 2-No
19	**Reduces the problem of mood swings**	1 2 3	1-Yes 2-No
20	**Reduces / eliminates symptoms of the pre-menstrual tension syndrome**	1 2 3	1-Yes 2-No

C5. How much does 1 pack of the contraceptive pills you are currently taking cost you?	____ zł 99. Hard to say

C6. Would you change this drug for a cheaper product if there were such an option?	1. Yes, definitely 2. Yes, probably 3. Probably not 4. Definitely not 5. Hard to say

INT.: Ask if C6 =1 OR 2 **C7. By how much would the new product have to be cheaper from the one you are currently taking for you to consider switching?**	____ zł 99. Hard to say

D. DECLARATION OF INTEREST IN SELECTED PRODUCTS

I would now like to present you with a description of 5 products which besides contraception and reversibility provides additional features

Product no. 1:

1. Improved skin and hair condition (reduces skin redness and irritation, improves head hair boldness, reduces facial hair length and pigment)
2. Unchanged libido

Product no. 2:

1. Continuous usage with 4 pills without hormones (placebo)
2. Relieve the unpleasant emotional and physical symptoms associated with PMS

Product no. 3:

1. Contains low dose of hormone
2. Provides ability to have natural cycles

Product no. 4:

1. Minimal dose of hormone but spotting can occur
2. Continuous usage with 4 pills without hormones (placebo)

Product no. 5:

1. Proven low influence on bodyweight
2. Adequate cycle control with low incidence of intermenstrual bleeding amenorrhea and dysmenorrhea

D1. Which of the products best reflects your needs and expectations towards a contraceptive product?	Product no.: __ 88. none
D2. Which features of this product do you find the most attractive? MINIMUM 1 ANSWER	Feature(s) no(s).: __ , __ , ___ 88. All 99. Hard to say
D3. And do you think that if you were to consider switching contraceptive products you would consider choosing product no. …… [INT.: enter the chosen product]?	1. Yes, definitely 2. Yes, probably 3. Probably not 4. Definitely not 99. Hard to say

INT.: Ask if D3=3 or 4

D4. Why would you not consider this product?

……

99. Hard to say

RESPONDENT DETAILS

Finally I would like to ask you a few questions about you and your lifestyle.

M1. Do you use the internet to get medical information about the contraception in general and about currently taken product?	1. YES 2. NO
M2. Do you use the mobile application for the contraception?	2. YES 2. NO
INT.: skip if respondent does not use mob application (M2=2) **M3. What is the main reason for using this mobile application?**	……
M4. How many times per YEAR do you see a gynaecologist?	_____/year
M5. What is the main reason for you going to see a gynaecologist?	1. Prescription of contraceptive pills 2. Check-up visits 3. Medical problem / condition 4. Other reason: what?...
M6. How many times in an average month do you practise sport?	_____/month. 88. I don't practise sport
M7. What is the main reason for you practising sport? **Please only give one answer, the one that best suits your case.**	1. To get more energy 2. To keep a good, fit bodyshape 3. To slim / lose weight 4. To relax / rest 5. A way of spending time with the family 6. Other reason: what?...
M8. What year were you born in?	19_ _ 88. Refusal to answer
M9. Are you married?	1. Yes 2. No 88. Refusal to answer
M10. Do you have children? If yes, please tell me how many.	No. of children: I_ _ _I 88. I have no children
INT.: skip if respondent has no children (M10=88) **M11. Have you given birth within the past year?**	1. Yes 2. No
M12. Are you planning to have a (another) child in the future?	1. Yes 2. No 3. Hard to say
M13. What is your level of education?	1. Primary 2. Vocational 3. Secondary 4. Bachelor's degree 5. Higher
M14. What kind of job position do you have? Int.: read out if necessary	1. I'm currently not working 2. I'm a student 3. Specialist 4. Manager 5. Top Manager 6. Other: what?.....
M15. What is your net monthly income? INT.: Read out	1. Up to 100 USD 2. 101-200 USD 3. 201-300 USD 4. 301-500 USD 5. 501-1000 USD 6. Over 1000 USD