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Internet Discussions of Uncertainties and Risks of Contraceptive Pills in the Czech Republic

Abstract: The article deals with social discussions concerning the risks and benefits of using combined oral contraceptive pills (COCP). The discussions reflect sociological theories of risk, loss of trust in biomedicine, and active lay participation in health choices. The main goal of the qualitative content analysis of six internet discussions from 2006 to 2015 is to identify how former, current, and future users of COCP in the Czech Republic deal with the risks and benefits of this method, the possible alternatives being considered, and how information from these internet discussions influences the choice of method. The main narratives showing reflection of risk in internet discussions about hormonal contraceptives were called: Weighing the risk of taking or not taking COCP, Risk of side effects when using COCP, Risk of "post-pill syndrome," Sharing information and experience.

Keywords: hormonal contraceptives, COCP, internet discussions, risk, lay health beliefs

Introduction

Countries of the former Eastern bloc share a specific characteristic that is not seen in Western countries: a high, almost universal fertility at a young age, such as was typical in the era under Communism. Early family formation and childbearing was a social norm at that time, and reliable contraceptive methods were not widely available. When modern contraceptive methods became available in the 1960s, they did not reach the eastern European countries. Although most countries of Europe had total fertility rates of under 2 children even before 1989, low rates were achieved in western and northern Europe primarily through widespread contraceptive usage with abortion serving as a backup, while in eastern Europe abortion played the primary role (Hassoun, Jourdain 1995). This situation was recognized as big social and medical problem which was addressed at a conference called "From Abortion to Contraception: Public Health Approaches to Reducing Unwanted Pregnancy and Abortion Through Improved Family Planning Services," held in Tbilisi, Georgia, USSR in October 1990 (David 1992). The situation changed dramatically after the revolutions in 1989. In the 1990s, the life course was de-standardized, parenting became just one of many options, and the postponement of the first birth was typical. This value shift was accompanied by the availability of modern contraceptives. Both in the Czech Republic and Poland, hormonal contraceptives are issued by prescription from a gynecologist. Statistics in the Czech Republic show that availability of COCPs is the effective way how to lower abortion rates (Fait 2014).

The contraceptive behavior of Czech women has not yet been a topic for broader sociological debate. Researchers in sexuality and sexual health have thus far considered only the number of women who use reliable modern contraceptive methods. As this number grew over the last three decades, research reported a positive trend towards responsible family planning. Weiss and Zvěřina (2001: 131) stated that the steep rise in the number of women taking combined oral contraceptive pills (COCP) was unique even in comparison to other former Eastern-bloc countries. The rising proportion of women on COCP was associated with massive changes in Czech society during the 1990s.

Research in specific subgroups suggests that up to 69 percent of women use COCP. Even more women consider it to be a potential acceptable method for themselves; however, a large number of women experience negative side effects when using COCP (Kikalová et al., 2014). The book *Život bez hormonální antikoncepce* (Life Without Birth Control Pills) (Nováková 2017) tells stories of women who experienced serious side effects when using COCP; some of these women were even at risk of dying. The stories also show that women are not always satisfied with their chosen method; their choice is a result of compromise and risk calculation as well as belief in medical advice and limited knowledge of any alternative options.

Since the 1960s when COCP was introduced in the United States, extensive developments have been made towards the safety of the method. Millions of women around the world take COCP daily. On the other hand, ever since its introduction, there have also been extensive debates and fears about the side effects and possible dangers to women's health. During the 1990s, controversies arose related to the risk of venous thrombosis in new generations of COCP (WHO 1995; Barnett and Breakwell 2003). This led to a significant decrease in the number of users in some countries (e.g. Furedi 1999; de Jong-van den Berg et al. 2003; Hester 2005; Farmer et al. 1997). In the Czech Republic, the debate did not reach the lay public and no declining trend in the number of users was noticed (Fait 2014). However, a decline happened around 2008–2009, and the number of COCP users has decreased each year since then (Czech Statistical Office 2015). The reasons are not clear and have not been examined by a representative study.

This article is an empirical study covering the peak period of COCP users, around 2008, and the subsequent declining trend. It uses internet discussions from period 2006 to 2015 about hormonal contraception to explore the problems and issues women deal with when choosing or using the method. As the main controversies connected with relate to its safety, the interest of the analysis is especially directed towards the concept of risk and how the risk and safety dilemma is addressed in the discussions. Since side effects and safety and risk concerns (Rosenberg and Waugh 1998) are common reasons for discontinuing, changing, or rejecting COCP in other countries (Ali, Cleland, and Shah 2012), the author believes that the study is relevant even outside the Czech Republic, for countries that either have a low percent of women using hormonal contraceptives, or that, like the Czech Republic, face a declining trend in COCP usage.

Sociological Concepts of Risk

The concept of risk in terms of the probability of side effects of COCP comes from epidemiology. Debates in the lay public about the safety of COCP are inspired by and derived from this expert knowledge. At the same time, however, risk perception is influenced by the broad social context around the individual. Menon et al. (2008) stated that the perception of health risk is subjective; it differs from the actual probability of experiencing serious side effects. Each individual has their own perception of risk. This perception may be influenced by the incidence of side effects in the individual's family, by previous experiences, by health anxiety, or by exposure to information about possible danger. The lay public has complex theories about health and illness, health maintenance, and mechanisms of illness. The knowledge, perceptions, and theories influence real health behavior, willingness to consult or visit practitioners and the intent to seek alternative medical help (Nettleton 2013).

Risk perception and reflection by both the lay public and experts are characteristic features of a risk society (Beck 2011). Different kinds of risks are continually reconsidered and recalculated, with some being neglected and others elevated. Trust in biomedicine and science is decreasing. In contrast to the modern science of the industrial era, today's postmodern science is perceived not only as a problem solver, e.g. the inventor of a reliable contraceptive method that helped to meet the needs of millions of women, but also as a troublemaker that brought new health problems in the form of the side effects of COCP.

Beck (2011) wrote about universal risk produced by human action and inbuilt into the society. Novas and Rose (2000) stated that in the current era, risk concepts should be reconsidered along a genetic axis. In the era of enormous progress in the knowledge of genes and their meaning for developing different conditions, a new category of individual was produced: the individual who is genetically at risk. In contrast to biological determinism, being genetically at risk involves an active attitude with new life strategies oriented toward actively shaping life trajectories. This is also in accord with an active patient role that has been adapted in biomedicine. Every individual is responsible for their own health, and indeed their own life in a broader perspective. Scott et al. (2005) noted that genetic risks apply not only to people who have been tested for them; all individuals are potentially genetically prone to some illness. Given the vast and continuous progress in this research area, everyone needs to be concerned (Crawford 1980). Even a negative result is negative only in terms of the current state of knowledge; it could be reconsidered any time in the future. This situation of ever-present (genetic) risk for health issues produces a population of anxious hypochondriacs constantly striving to find more and better information and adopt more effective strategies to fight uncertainty and risk.

The Internet as a Source of Health Information

In risk society, the interpretation of information and advice from a broad range of experts form part of a wider reflectiveness (Beck 2011). Hardey (2001) showed that the reflective construction and publication of health narratives forms part of the reconfiguration of the health expertise that is available to internet users. Even though the relationship between doctors as experts and lay people as passive individuals seeking medical help started to change sometime before the internet (Tuckett et al. 1985), the massive availability of the internet granted people access to unprecedented amounts of information. Health information is among the most widely searched topics. For some people, searching for this kind of information and taking part in on-line discussions have become a hobby, sometimes even an obsession. Broadly speaking, the internet has an influence on people's everyday decision making. This includes

all kinds of internet activities related to health—it could be on-line consultation with practitioners, purchasing drugs and medications on-line, blogging about health, and participating in health-related forums (Hardey 2001; Segal 2009). In terms of active blogging and taking part in forums, internet users oscillate between consuming and producing health information and co-creating contemporary medical pluralism (Cant and Sharma 1999).

Internet forums are good places for seeking advice because they connect large groups of diverse people and thus make advice and opinions from a heterogenous sample of people easily accessible. However, it is also possible that people get contradictory information or overwhelming amounts of advice and the final decision could be complicated (Eysenbach and Köhler 2002; Boase et al. 2006).

Existing studies have not reached an agreement on whether using the internet to understand health leads to patient empowerment. To feel empowered, health literacy and a feeling of self-control over life is crucial (Crondahl and Karlsson 2016). However, the information on the internet is not always reliable, searching is not always systematic, and the findings do not always lead to higher health literacy. Segal (2009) stated that to barriers to empowerment are a part of medicine as a system of expert knowledge, with doctors sharing only limited amounts of information in limited timeframes. Patients do not have the same information as medical experts, and even if they did, they would not understand all the consequences and the context because they do not have the key expert knowledge. Thus, patient's health decisions and health choices are always subjective. Similarly, Prior (2003) doubted the ability of lay people to understand complex health-related problems. Lay people pay more attention to other people as well as to their own experiences than to scientific information. Their health beliefs and health choices often do not reflect scientific findings. Despite this, even this limited stock of knowledge and understanding is a basis for decisions and choices.

The concept of an internet patient has been developed (Henwood et al. 2003). The typical internet patient is described as a responsible, reflective individual who wants to be part of the decision-making process concerning their own health. This definition presupposes a rational individual. Existing research, however, shows that excessive health-related internet searching produces a new kind of hypochondria-prone patient. Eastin and Guinsler (2006) call this kind of patient "cyberchondriacs". They are trapped in never-ending searches for more accurate and more convincing information; they tend to perceive the most serious scenarios as the most probable ones.

Flowers-Coulson et al. (2000) discovered that people sometimes consult the internet to fix emergency situations that need to be solved by medical experts. Some people also confer over professional diagnoses. For young people, the internet can be the only way to get information without their parents knowing. Young people may also use the internet to assure themselves that some conditions are normal in a way that meets the standards of a desired state (Harvey et al. 2007).

Data and Methods

Using the internet for research purposes has both advantages and disadvantages. There is a large amount of information and data to analyze and the amount grows constantly.

Moloney et al. (2003) describe internet discussions as virtual focus groups in which the interactions take place without a researcher's intervention. As people post and react to previous posts, the discussion flows fluently, and more information and data is produced than each individual could produce on his own (Holtz 2012). However, the anonymity is a limitation for the researcher, who gets a limited amount of information about the population that produced the data. The information deficit can be partly compensated by the analysis of the forum as a whole. This way, the researcher gets at least some general idea about the population (Holtz 2012). Data collection through discussions is an unobtrusive method.

Earlier articles using data from the internet include Soussan and Kjellgren (2014) and Kjellgren et al. (2013), who explored experiences with drugs and other substances. In terms of contraception behavior, Gainer et al. (2003) explored the motives and reasons for visiting internet pages about emergency contraception.

In this empirical study, the method for the discussion selection was inspired by Meyer et al. (2011). They used the three most common internet browsers. They typed in keywords in different combinations and chose the first few suggested links on each browser. They also considered other characteristics for the links, such as the target audience of the page and its relevance (Meyer et al. 2011: e17). In this study, we used the three most widely used browsers (google.cz, seznam.cz, and centrum.cz) to search for relevant discussions using the keywords "hormonal contraception discussion". The search was performed on August 2, 2016. The first five links suggested by each browser were chosen if they met the inclusion criteria: the discussion should be autonomous, not a reaction under an article, as discussions under articles presumably tend to be influenced by the content that initiated them. Six discussions met the criteria; they came from six different servers: doktorka.cz, mezoterapie.cz, modrykonik.cz, omlazeni.cz, vitalion.cz, and emimino.cz. All discussions were visible without any restrictions or registration requirements. The discussions cover a ten-year period from 2006 to 2015.

Only meaningful posts were included in the analysis, all the off-topic and short reactions without added value were excluded. The final sample consists of 930 contributions from 395 users. All the content was copied into a text editor, converted into pdf format, and analyzed using Atlas.ti program. Qualitative content analysis (Krippendorff 2013) was used. The unit of analysis is an individual contribution to the discussion. Each contribution was open coded for emerging themes and topics. Only manifest content was considered. For every code, keywords were selected. With every new emerging theme, a new code was created. Codes were compared and contrasted against each other.

The typical contribution mentioned multiple topics and responded to more than one user; it asked questions at the same time. Therefore, multiple codes were assigned to each such contribution.

Reflection of Risk in Internet Discussions about Hormonal Contraceptives

Weighing the Risks of Taking or not Taking COCP

The topic of risk in many possible forms was present in all discussions. The basic dividing line is between using and not using contraception. For using COCP, women were mostly

concerned about its side effects. For not using it, the major concern was about the risk of unintended pregnancy. COCP is connected to a low probability of unintended pregnancy; women spoke about it in terms of reliability and comfort. On the other hand, some women who were not sure about the safety of COCP but needed a reliable contraceptive method wrote about compromising and balancing pros and cons:

I don't want to have a baby yet, because I'm only 20 and don't want to risk pregnancy. The Pill is the best option, I think. However, there are just few pros and the cons are even terrifying. If I was not afraid of getting pregnant, I would never take it (omlazeni.cz, 2010).

Women who are more afraid of unintended pregnancy than of possible side effects continue to use COCP. Their decisions are connected to a perceived low age for having a child, unfinished education, unstable partnership, or an unsatisfactory housing situation. Some of them have also a clear vision of their desired life course trajectory and they do not want to have their first child before they get married.

Besides the possible risks and side effects, non-contraceptive benefits that should lead to higher life satisfaction are considered. The most cited include improved skin quality, regulated menstruation, the possibility of prolonging the menstrual cycle, and postponing menstruation or even skipping it for a month or two in order to participate in leisure activities, sport events, or holidays. The Pill is also mentioned as a way to manage menstrual pain, severe cramps, and heavy bleeding. In contrast to women needing reliable contraception, women with health troubles connected with menstruation consider taking COCP mainly for this reason:

Am I the only one who is thinking of taking the Pill? Don't want to suffer every month anymore (modrykonik.cz, 2015).

Some younger women consider taking COCP, or admit already taking it, for treating acne-prone skin. In the discussions, this reason is considered irresponsible and these users feel pressure to justify their decision:

Sometimes even very young girls take the Pill, like I do, and it's only because of the skin. I needed to start; my skin was in such a bad condition that I would have had little scars all over my face for the rest of my life if I hadn't started (modrykonik.cz, 2006).

Using COCP mainly for non-contraceptive benefits reclassifies it as lifestyle drug (Watkins 2012). This category of medication was introduced not to treat serious medical conditions or deficits, but mainly to improve the quality of life and life satisfaction of individuals by treating unpleasant bodily conditions. As far as skin quality is concerned, COCP Diane-35, which is most often used for this purpose, is mentioned as potentially risky due to a high-level dose of hormones. COCP that contain lower hormone doses are considered to be safer. The lower-hormone COCP are also perceived as modern. Some of the women also associate higher prices with quality and implicitly associate quality with lower risk.

Risk of Side Effects when Using COCP

The risks of using COCP are mentioned in two contexts. The dominant context concerns side effects while taking COCP. The other context concerns the risk of long-term use of

COCP, with effects that appear after COCP discontinuation; this condition is called postpill syndrome.

When talking about potential side effects, alternatives to COCP are discussed. Throughout the discussions, all the available methods are mentioned, and women talk about their experiences with these methods, their availability, their financial costs, the effectiveness or difficulties with using the methods, and obstacles to using them. For hormonal contraceptives in general, the amount of hormones and mechanism of function are important—thus, hormonal injections are considered to be dangerous because large doses are administered to the body at once. Some previous users also reported gaining weight after these injections, which is also attributed to the larger doses of hormones. On the other hand, contraceptive patches are recommended as a mild, economical, and user-friendly option. As far as non-hormonal methods are concerned, the discussions concern the availability of the method, the financial costs, and the risk of unintended pregnancy. IUDs (both hormonal and non-hormonal) are discussed in connection with risks to future pregnancy and the risk of gynecological conditions.

Fear of side effects can lead to a COCP discontinuation:

I have decided to discontinue before any troubles appear. Maybe it works for some people for several years without any difficulty; however, I've met many people who regret that they ever started on the Pill (modrykonik.cz, 2012).

Similarly, as Menon et al. (2008) observed, other people and their experiences influence the way people perceive risk. This perceived subjective risk is an impulse for action; in this case, the perceived subjective risk is an impulse for discontinuing COCP. The biggest concerns are serious life-threatening conditions such as stroke, venous thrombosis, and pulmonary embolism. A few women reported such experiences:

...and then I had a stroke. My vision is affected, and I also have some other troubles. The Pill was immediately prohibited to me and they [doctors] told me that the Pill causes heart attack and strokes quite frequently (doktorka.cz, 2008.)

Even though the number of women who suffer from these serious side effects is objectively low, the discussion participants spoke about this experience as frequent. Some women supported their statements by citing alleged medical authorities:

One neurosurgeon told me that they deal with these complications very often at their clinics (modrykonik.cz, 2011).

This information contradicts the information leaflet that present these side effect as extremely rare.¹

Some of the contributions to the discussion are meant to be a warning for other women. Their general message is "Be careful, this happened to me, so it could happen to you or anybody else." Such warnings can be expressed as in this statement:

I used to take a combined contraceptive pill for 12 years, then I suffered a stroke. The reasons were the Pill and a hereditary heart defect (girls, be careful, the majority of us don't know about this condition, but about 20% of

¹ Information leaflet to Diane35 states that less than one in one thousand women suffers venous thrombosis during using Diane35.

the population have this defect; it is called an aneurysm). They tested me for thrombosis in hospital (so it is not true that your gynecologist would take care of these tests); it is a very expensive test, so it is almost never applied as prevention. However, even without this genetic mutation, I would probably suffer these health difficulties, so I'm not touching the Pill. The Pill is forbidden for me by my cardiologist, hematologist, and neurologist (doktorka.cz, 2013).

This contribution is not only a warning, but at the same time, it opens another topic, that of testing for genetic factors and thrombophilia. There is some awareness about genetic factors and thrombophilia among the women in discussion. However, the methods for testing these conditions are not always understood and described correctly. Some women confuse these complex tests with regular blood checkups.

Preventive blood tests and potential genetic testing are popular topics and women conclude that these tests should be covered by health insurance and done automatically before prescribing COCP. However, other women point out that stroke or thrombosis can happen even without genetic factors. Similarly with Scott's (2005) findings, features of genetic individuals appear. Women are aware that genetic testing is possible, and that at the same time these tests do not ensure that thrombosis will not happen. However, preventive check-ups are a mechanism for dealing with risk.

While using COCP, regular checkups are perceived to lower the risk of side effects. Also, practitioners who perform regular blood tests and other examinations are considered more responsible and more patient oriented. One woman calls attention to the fact that:

...since I don't know which year, it has not been obligatory for the doctors to do a blood test before prescribing the Pill or during its use. Only a responsible doctor will do it and most likely only by request (modrykonik.cz, 2006).

This contribution describes a special category of doctors: responsible doctors. It implicitly states that these responsible doctors care about the patient more than the other doctors who are not responsible. It also emphasizes a need for active patient involvement. As Smith et al. (1999) stated, the belief that health problems are preventable is a key precondition for an active attitude to health. The opinions presented in these discussions suggest that a certain (regular) set of tests should be enough guarantee that no serious side effects will appear. Parusniková (2000) stated that prevention and strategies to manage health threats are embedded in the current dominant medical discourse. As far as prevention strategies in these discussions are concerned, only strategies connected with medical practice are mentioned. Lifestyle factors, such as getting enough physical activity, not smoking, and eating a healthy diet, are not mentioned. Also, in connection with the role of medical practitioners, some women state that contemporary medicine is mainly a big business and profit is the most important thing for some practitioners who prescribe COCP as a "universal good". Women share their perceptions that practitioners benefit from the amount of COCP they prescribe, and this fact is the reason why they only tell patients the positive aspects of the method:

I used to be on the Pill for 10 years, and like many others, I was convinced that it is not that bad. Now I just say it's a big NO for me. Contraceptives are first of all big business for many companies and that's why we only hear about benefits and pros (doktorka.cz, 2007).

Connected to this is also the perception that other practitioners outside this business (e.g. alternative healers, homeopathists, or neurologists who deal with women having

a stroke) are honest and inform patients objectively about the side effects and contraindications for using COCP. In line with this opinion, the Fécond Survey in France showed that the choice of contraceptive method is strongly linked to the interests of medical and financial stakeholders (Bajos et al. 2012). Women with this opinion share at the same a negative attitude towards COCP. Often, they support their statements with examples from their own experience:

I had gynecological problems for 7 years and I used to hear "do not discontinue the Pill" all the time. Finally, when I was having serious pains, I didn't consult anybody and just stopped using it. It's been a year and I'm absolutely OK now. All problems solved all of a sudden as if by magic (modrykonik.cz, 2011).

Risk of "Post-pill Syndrome"

Throughout the discussions, concerns appear about infertility connected with long-term use of COCP. Many women reported irregular cycles for several months after COCP discontinuation. Some of them also reported problems with conception. On the other hand, other women shared contradictory experience:

I used to be on the Pill for 11 years and I got pregnant immediately in the first month after discontinuation (modrykonik.cz, 2007).

A typical contradictory experience describes the long-term using of COCP for an irregular cycle and then serious issues with menstrual loss after discontinuation:

I had been taking the Pill since I was 16. When the doctor prescribed it, she spoke highly of it, she said that my period would be regular and light, and I would be free from unintended pregnancy concerns. When I discontinued the pill and wanted to conceive, I started to have enormous period pains, hormonal acne, an irregular cycle, and so on. Simply said, my body wasn't able to function properly without the Pill and it took a long time to make it work properly (mezoterapie.cz, 2015).

The previous citation also adds another meaning to the fear of post-pill syndrome and generally how the body would work without COCP. Some women are afraid of acne, hair loss, and weight gain; this is a reason for them to continue with COCP:

I'm really scared that once I discontinue due to planning pregnancy, I would get a terrible rash all over my face, shoulders and back and I would be unable to treat it because of the pregnancy (modrykonik.cz, 2006).

Sharing Information and Experience

The participants of the discussion use forums for basic general information about different contraceptive methods and options and their advantages and disadvantages. For some, the forums are probably starting points in their search for information. Others come with more specific questions based on their previous research and methods they are considering. They also share sources of other information—they link to popular newspaper or magazines articles and webpages. Scientific information is studied only through popular sources.

The internet users who took part in the analyzed discussions were former COCP users, current users, and women who were thinking of using it at the time that they were searching for information in discussions. Some of the women contributed to the discussion only once, by replying to a question or by writing about their experience or opinion. More active participants were trying to find solution for their problem, they came to the forum repeatedly, asking other participants questions or replying to similar posts with the intention of sharing their experience and acquiring some knowledge. Women who are in the process of searching for a contraceptive method ask others. A typical post asks about the experiences of other users:

I'd like to know your opinions on hormonal contraception and your experience with it. If you use it, what is your experience etc. Please share (modrykonik.cz, 2006).

Thanks to this kind of contribution, many women share their positive or negative experiences and they also write about their friend's experiences. Women mention a range of possible side effects, including less-serious issues such as gynecological problems, headaches, or dizziness, and some psychological effects such as depression, mood swings, hypersensitiveness, and lower libido.

Psychological side effects are reported to develop slowly over years, so that the women did not notice them immediately. Often, they noticed an effect retrospectively after COCP discontinuation, when the side effect disappeared. However, some women did not notice these effects when using COCP. These women retrospectively speak negatively about COCP and regret having started it. They also recommend that current users be careful about the potential side effects and to pay attention to their bodies. Women with negative experiences recommend that others choose non-hormonal methods.

Some women share their decision, based on the information from discussions, to discontinue using COCP:

I used to take the Pramino pill and everything was fine. Then I switched to Lindynette and since that time, I have experienced many side effects and health issues. This was combined with thrombosis in several of my friends and reading many internet discussions on the internet and the decision to discontinue came suddenly (modrykonik.cz, 2006).

The participants share the opinion that discontinuation is the individual decision of each woman and it is not necessary to consult a gynecologist or general practitioner, unless some health issues are presented.

Women who discontinued COCP some time ago and have already overcome problems with hormonal imbalance stated that they feel better, happier, free, and empowered, and that they are able to listen to and understand their bodies.

COCP discontinuation as a moment of freeing oneself from evil hormones is connected to the perception that COCP contains a dose of hormones and the body must somehow deal with this artificial substance. This statement is sometimes accompanied by the perception that the longer COCP is used, the larger the amount of hormones that accumulate somewhere in the body. As a strategy against accumulating hormones, temporary discontinuation for few months after six to ten years on COCP was suggested. However, not all the participants agreed with the suggestion. Some participants pointed out that a temporary discontinuation causes a drop and then a rise in the level of hormones, which is also demanding for the body to deal with it.

Subsequent discussions related to strategies of how to cleanse the body of hormones, to help it to deal with them, or to speed the process of regeneration after discontinuation; many

self-help strategies are shared. Among these, using different herbs or food supplements is popular. One woman replied to another:

Just try to enhance the healing process, use for example psyllium (very popular here), chlorella, spirulina, Yucca (I have very good experience with it), Denoxinal or just a basic nettle or some other tea. There are many options... (modrykonik.cz, 2006).

Women describe hormone cleansing as a process starting with COCP discontinuation and accompanied by unpleasant body reactions such as acne, bad skin and hair quality, hair loss, weigh gain, and irregular or even no menstruation. Regular menstruation is perceived as evidence that body is working properly. Besides the recommendations for body cleansing, tips on how to re-start menstruation are also discussed. Women want to avoid injections of hormones and discuss self-help options.

I have good experience with cinnamon, it warms up your body. So, if, just drink hot wine and pour some cinnamon in it. I used to mix it with everything, even with yoghurt, when I had a similar problem (modrykonik.cz,2006).

Irregular or no menstruation after COCP discontinuation causes uncertainty and concerns. Sharing and discussing self-help strategies shows that women feel empowered to remedy the damage caused by hormones. When sharing advice or experience, the only criterion is if the strategy is perceived as effective, if it helped the woman.

I finally got my period 48th day of the cycle, try adding some cinnamon to your yoghurt at breakfast. It worked for me (modrykonik.cz, 2006).

No scientific evidence about this mechanism is mentioned, even the correlation is unclear, however the belief is the important factor in sharing this advice as functional.

Conclusions

Former COCP users, current users, and women considering using COCP took part in the analyzed discussions. Many lay perceptions and beliefs about COCP risks and how to deal with them were identified. The choice of a method or its discontinuation is part of a broader story considering current life situation, risks connected to using a method, and risks of not using that method. When considering hormonal COCP, the amount of hormones, financial costs, and potential non-contraceptive benefits are taken into account. Non-hormonal alternatives are discussed in terms of effectiveness, particularly the risk of unintended pregnancy and ease of use. Sometimes, non-contraceptive benefits are the main reason for starting and using COCP. This kind of user defends their choice in the discussions, as some of the other women call them irresponsible, gambling with their health. According to these critics, the risks connected to high doses of hormones in COCP for treating acne are inappropriately high for the benefits they offer.

The analysis of the discussions showed that the knowledge being produced through them is not generally new. All the side effects are described in the patient information leaflets. However, it is new for the women who acquire new information by sharing facts and stories with other women. Women are asked to share their experiences that are considered authentic, and medicine as a system of expert knowledge is discredited by the accusation that the main motivation is profit. As Hardey (1999) states, discussions are to some extent a challenge to expert knowledge.

Experience with using COCP and with side effects are shared as warnings or recommendations to others. Participants in the discussions become producers of health knowledge; the knowledge is embedded in their personal experience and this is a source of information for other women who compare their own experience against the referenced one. A similar process was described by Hester (2005). Sharing experience is a new dimension of knowledge; through reading about someone else's experience, women understand their own bodies and reconstruct the effects of hormones on their bodies. Some of them may even decide to discontinue based on this embodied knowledge. Statistically described risks of side effects are abstract and impersonal; side effects shared as stories are perceived as real and common. From the point of view of the participants of the discussions, new knowledge is produced.

Women who have already discontinued COCP share self-help practices of managing post-COCP syndrome. In this sense, discussions help women to feel empowered to solve their health issues. Lay beliefs that these strategies are effective in turn affect the experiences of other women.

References

- Ali, M.M., Cleland, J., Shah, I.H. 2012. Causes and consequences of contraceptive discontinuation: evidence from 60 demographic and health surveys. World Health Organisation. Retrieved from https:// apps.who.int/iris/bitstream/handle/10665/75429/9789241504058_eng.pdf;jsessionid=A606CC607E8C 0503218319777A7E7D28?sequence=1.
- Bajos, N., Bohet, A., Le Guen, M., Moreau, C. et others. 2012. Contraception in France: new context, new practices, *Population & Societies* 492.
- Barnett, J., Break well, G. M. 2003. The social amplification of risk and the hazard sequence: the October 1995 oral contraceptive pill scare. *Health, Risk and Society* 5(3): 301–313.
- Beck, U. 2011. Riziková společnost: na cestě k jiné modernitě. Praha: Sociologické nakladatelství.
- Boase, J., Horrigan, J. B., Wellman, B., Rainie, L. 2006. The Strength of social ties: The internet and email aid users in maintaining their social networks and provide pathways to help when people face big decisions. Pew Internet & American Life Project. Retreived from http://www.pewinternet.org/files/oldmedia/Files/Reports/2006/PIP_Internet_ties.pdf.pdf
- Cant, S., Sharma, U. 1999. A New Medical Pluralism? London: UCL Press.
- Crawford, R. 1980. Healthism and the Medicalization of Everyday Life. *International Journal of Health Services 10*(3): 365–88.
- Crondahl, C., Karlsson, L. 2016. The nexus between health literacy and empowernment. SAGE Open 6: 2158244016646410.
- David, H. P. 1992. Abortion in Europe, 1920–91: a public health perspective, *Studies in Family Planning Population Council 23*(1): 1–22.
- De Jong-van den Berg, L., Tobi, H., Bijker, B., Van den Berg, P. 2003. Influence of the third generation pill controversy on prescriptions for oral contraceptives among first time users: population based study. *BMJ 326*(7383): 254.
- Eastin, M. S., Guinsler, N. M. 2006. Worried and Wired: Effects of Health Anxiety on Information-Seeking and Health Care Utilization Behaviors. *CyberPsychology & Behavior* 9(4): 494–498.
- E ys e n b a c h, G., K ö h l e r, C. 2002. How do consumers search for and appraise health information on the world wide web? Qualitative studies using focus groups, usability tests and in-depth interviews. *British Medical Journal* 324: 573–577.
- Fait, T. 2014. Může antikoncepce ovlivnit demografické ukazatele? ProLékaře.cz. retreived from http://www.pro lekare.cz/gynekologie-novinky/muze-antikoncepce-ovlivnit-demograficke-ukazatele-4112.

- Farmer, R., Newson, R., MacRae, K., Lawrenson, R., Tyrer, F. 1997. Mortality from venous thromboembolism among young women in Europe: No evidence for any effect of third generation oral contraceptives, *Journal of Epidemiology and Community Health* 51(6): 630–635.
- Flowers-Coulson, P. A., Kushner, M. A., Bankowski, S. 2000. The Information is out there, but is anyone getting it? Adolescent misconceptions about sexuality education and reproductive health and the use of the internet to get answers, *Journal of Sex Education and Therapy* 25(2–3): 178–188.
- Furedi, A. 1999. The public health implications of the 1995 'pill scare,' *Human Reproduction Update 5*(6): 621–626.
- Gainer, E., Solet, Ch., Ulman, M., Lévy, D., Ulman, D. 2003. Surfing on the morning after: analysis of an emergency contraception website. Contraception [online]. *Contraception* 67(3): 195–199.
- Hardey, M. 1999. Doctor in the house: the Internet and as a source of lay health knowledge and the challenge to expertise, *Sociology of Health and Illness* 21: 820–835.
- Hardey, M. 2001. 'E-health': the internet and the transformation of patients into consumers and producers of health knowledge, *Information, Communication & Society* 4(3): 388–405.
- Harvey, K., Churchil, D., Brown, B., Crawford, P., Macfarlane, A., McPherson, A. 2007. Am Inormal? Teenagers, sexual health and the internet, *Social Science & Medicine* 65(4): 771–781.
- Hassoun, D., Jourdain, A. 1995. Contraception and abortion in the countries of eastern Europe, *Cahiers de sociologie et de démographie médicales 35*(2): 99–123.
- Henwood, F., Wyatt, S., Hart, A., Smit, J. 2003. 'Ignorance is bliss sometimes': constraints on the emergence of the 'informed patient' in the changing landscapes of health information, *Sociology of Health & Illness* 25(6): 589–607.
- Hester, J. S. 2005. Bricolage and bodies of knowledge: Exploring consumer responses to controversy about the third generation oral contraceptive pill, *Body and Society* 11(3): 77–95.
- Holtz, P., Kronberger, N., Wagner, W. 2012. Analyzing internet forums: A practical guide, Journal of Media Psychology 24(2): 55–66.
- Kikalová, K., Kopecký, M., Tomanová, J., Charamza, J. 2014. Vybrané aspekty sexuálního chování a užívání antikoncepčních metod u studentů Pedagogické fakulty Univerzity Palackého v Olomouci, Hygiena 59(3): 104–109.
- Kjellgren, A., Henningsson, H., Soussan, C. 2013. Fascination and social togetherness—discussion about Spice smoking on a Swedish Internet forum, *Substance Abuse: Research and Treatment* (7): 191– 198.
- Krippendorff, K. 2013. Content Analysis: an Introduction to its Methodology. Los Angeles; London: SAGE.
- Menon, G., Raghubir, P., Agrawal, N. 2008. Health risk perceptions and consumer psychology, in: C. Haugtvedt, P. Herr, P. Kardes (eds.), *Handbook of Consumer Psychology*. New York: Psychology Press.
- Meyer, K. L., Ahlers-Schmidt, C. R., Harris, K. R., Seiler, S. M. 2011. STI Testing information available to teens on the internet. What's missing?, *Journal of Pediatric & Adolescent Gynecology* 24: 17–19.
- Moloney, M. F., Dietrich, A. S., Strickland, O., Myerburg, S. 2003. Using internet forums as virtual focus groups, *Advances in Nursing Science* 26(4): 274–286.
- Nettleton, S. 2013. The Sociology of Health and Illness. Cambridge: Polity Press.
- Nováková, A. 2017. Život bez hormonální antikoncepce. Praha: Kořeny.
- Novas, C., Rose, N. 2000. Genetic risk and the birth of the somatic individual, *Economy and Society 29*(4): 485–513.
- Parusniková, Z. 2000. Biomoc a kult zdraví, Sociologický časopis 36(2): 85-106.
- Prior, L. 2003. Belief, Knowledge and Expertise: The Emergence of the lay expert in medical sociology, *Sociology of Health and Illness* 25: 41–57.
- Rosenberg, M. J., Waugh, M. S. 1998. Oral contraceptive discontinuation: A prospective evaluation of frequency and reasons, *American Journal of Obstetrics and Gynecology 179* (3 Pt 1): 577–582.
- Scott, S., Prior, L., Wood, F., Gray, J. 2005. Repositioning the patient: the implications of being 'at risk,' Social Science & Medicine 60(8): 1869–1879.
- Segal, J. Z. 2009. Internet Health and the 21st-Century Patient, Written Communication 26(4): 351–369.
- Smith, B., Sullivan, E., Bauman, A., Powell-Davies, G., Mitchell, J. 1999. Lay beliefs about the preventability of major health conditions, *Health Educational Research* 14(3): 315–325.
- Soussan, Ch., Kjellgren, A. 2014. Harm reduction and knowledge exchange—a qualitative analysis of drugrelated internet discussion forums, *Harm Reduction Journal 11*(25).
- Tuckett, D., Boulton, M., Olson, C., Williams, A. 1985. Meetings between Experts. London: Tavistock.
- Watkins, E. S. 2012. How the pill became a life-style drug: Pharmaceutical industry and birth control in the United States since 1960, *American Journal of Public Health* 102(8): 1462–1472.

Weiss P., Zvěřina, J. 2001. Sexuální chování v ČR — situace a trendy. Praha: Portál.

- World Health Organization. 1995. Venous thromboembolic disease and combined oral contraceptives: results of international multicentre case-control study, *Lancet 346*(8990): 1575–1582.
- Český statistický úřad/Czech Statistical Office. 2015. [online] Vybrané demografické údaje v České republice. Retreived from https://www.czso.cz/documents/10180/33786359/32018115_0101.pdf/22674 bba-d272-43c3-b228-6f6af29550cb?version=1.1.
- Státní ústav pro kontrolo léčiv/State institute for drug control. 2018. Diane35. Retreived from http://www.sukl.eu/modules/medication/search.php

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