EDITORIAL

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REFUSAL OF MEDICAL CONTRACEPTION IN HYPERMODERN AGE: DOES SEXUALITY WANT TO EMANCIPATE ITSELF FROM SCIENCE?

In Luxembourg, since April 1st, 2023, all means of medical contraception have been fully covered by health insurance for all women. In 2024, according to the European Contraception Policy Atlas, Luxembourg has been declared the best-performing country in terms of online information, funding and counselling. According to mainstream medias, with free contraception for all, Luxembourg has become the champion of contraception in Europe.

Family Planning Luxembourg, a feminist non-profit organization whose primary mission is women's sexual and reproductive health regardless of age, published its activity report on April 25, 2024. The report revealed that the number of voluntary terminations of pregnancy nearly doubled in 2023 compared to the previous year. In 2022, 706 abortion requests were made to Family Planning, whereas in 2023, the number rose to 1,034. The prevention of unwanted pregnancy has failed. Can we conclude that cost-free contraception is not enough to convince women to use it?

To benefit from the exemption from advance payment for contraception, a medical prescription is required, which can be an obstacle for some contraceptive users. According to the American College of Obstetricians and Gynecologists (ACOG), obtaining a medical prescription involves time, financial costs, and sometimes long-distance travel, all of which present considerable obstacles [1]. Due to the prevalent misconception that Family Planning services are exclusively for young women or pregnant girls seeking termination of pregnancy, many patients remain unaware that contraceptive prescriptions can be obtained at no cost through these services. The promotion of cost-free contraception was not complemented by adequate information regarding the availability of these services at Family Planning centers. *Quod Erat Demonstrandum*.

This ineffective social marketing strategy may reflect a broader disenchantment toward contraceptive medical techniques, that extends far beyond Luxembourg's current spatial and temporal boundaries.

Over the counter oral contraception: reconsidering prescription requirements for contraception

Is it justifiable to impose a prescription requirement based on the assumption that women would otherwise have no medical follow-up? I have observed that women frequently seek clinical examination voluntarily for various reasons, including sexually transmitted infection (STI) screening, cervical cancer screening, or pelvic examination for reassurance regarding their sexual and reproductive health, without the demand of any kind of prescription. This indicates a recognition of the importance of a periodical clinical examination or a mammogram.

Do you think that women are unable to use self-screening tools to know if they can or not take hormonal contraception? Women typically possess knowledge about their own family medical history, including conditions such as hypercholesterolemia, thrombosis, or cancer. If they are unaware of these conditions, it is unlikely that physicians would have additional insights.

Furthermore, do you really think that pharmacists are unable to use self-screening tools to know if women can or not take hormonal contraception? Over the counter (OTC) access to oral contraceptives may provide pharmacists a unique opportunity to provide contraceptive care for women without access to a primary care provider [2]. The American College of Obstetricians and Gynecologists supports OTC access to hormonal contraception without age restrictions [1].

This Committee Opinion has been updated to *"expand the focus of OTC contraception to include oral contraceptive pills, vaginal rings, the contraceptive patch, and depot medroxyprogesterone acetate, to address the role of pharmacist-provided contraception, and to provide recommendations for individuals younger than 18 years. Pharmacist-provided contraception may be a necessary intermediate step to increase access to contraception, but OTC access to hormonal contraception should be the ultimate goal"* [1].

Why are physicians so reluctant about improving women's access to contraception? Physicians often assert that women do not adequately understand the precautions and contraindications for use. However, these are legally required to be included in the medication leaflets and OTC oral contraceptives are already available in numerous countries (Brazil and other South American nations, Bulgaria, Portugal, Turkey, Greece, South Korea, several Asian countries, Mexico, and many African nations).

Have there been reports of increased incidence of thrombosis or other adverse effects in these countries? A growing body of evidence supports OTC access to oral contraceptives in the United States. A comprehension study conducted in the United States on an OTC combined oral contraceptive pill found that a high proportion of consumers understood the key label

information [3]. This supports patients' ability to properly use the drug when it is available as an OTC product. OTC access to oral contraceptives could help reduce unintended pregnancy by increasing the number of pill users, improve continuation and reduce gaps in use. It is critical that a future OTC pill be made available at an accessible price, and it should be covered by insurance without a prescription. Research suggests that common concerns about the safety of OTC oral contraceptives and a potential negative effect on women's use of preventive services are largely unsupported [4]. Women can safely self-screen for contraindications to oral contraceptives - especially progestin-only pills - without the aid of a clinician" [4]. This does not preclude patients who have questions or need further clarification from consulting their physician.

What's new?

According to the Center of Disease Control and Prevention (CDC), contraception is considered to be one of the 10 greatest public achievements of the 20th century. Contraception has been a decisive tool in advancing gender equality by empowering women with the ability to control their fertility, an aspect of reproductive control that was previously predominantly held by men through methods such as condoms or withdrawal. However, what is the benefit of medical advancements if they are available only under restrictive conditions? Historical patriarchal resistance to contraception seems to have insidiously shifted towards resistance to OTC oral contraception.

But this is now history, clinical examination is no longer used as a barrier to access contraception, at least in the USA and some other countries. On July 13 2023, the US Food and Drug Administration (FDA) approved Opill (norgestrel) for nonprescription use to prevent pregnancy [5]. With this decision, the FDA seems to be acknowledging that the medical prescription of contraception is an obstacle to its use.

Patients understand. But what do physicians not understand?

Do you need a prescription to drink alcohol? No, yet alcohol can cause more deaths compared to oral contraception and unintended pregnancies, that can cause greater individual and societal harm compared to the availability of OTC hormonal contraception in countries where such options are accessible. While this comparison might seem facetious, it is a serious concern for women who face barriers when obtaining a medical prescription, such as lack of time, financial constraints, or personal factors such as shyness, embarrassment, age, body size, or sexual orientation.

The issue is that while alcohol is commonly not classified as a drug, substances such as aspirin, paracetamol, and non-steroidal anti-inflammatory drugs are. When used repeatedly, these medications can lead to severe adverse effects, including dangerous bleeding or life-threatening liver or cardiovascular complications. Nevertheless, these drugs are available as OTC. This disparity suggests that the regulation and accessibility of non-gender-specific medications differ significantly from those of gender-specific ones. **Could the requirement for a medical prescription for contraception be a form of patriarchal resistance?**

Hypermodern age: desire for autonomy in reaction to acceleration

In 2012, France was struck by a contraceptive crisis, with media coverage of a lawsuit from a patient who suffered a stroke while using an oral contraceptive pill. This incident alone may not have fully accounted for the growing skepticism of medical contraception, especially in France [6], a trend that has intensified since then. The socio-historical context plays a crucial role in understanding this issue.

Modernity, which began in Europe around 1650, introduced scientific thought, industrialization and technical advancements that challenged and rendered obsolete many traditional beliefs and ways of life. Trust in science has since become the underpinning of modern thought and behaviors.

Wars, climatic injustice, social discrimination based on gender, race and class, laid the foundations for the post-modern disillusionment of the latter half of the 20th century. This trend has continued with the emergence of hypermodernity. Hypermodernity is defined in part by a suspicious attitude among the public and a systematic questioning of all information [7]. The first signs of this new era were already visible during the emergence of the HIV epidemic, when patients began to organize themselves into communities to manage the disease independently. They formed strong affiliations to tackle the problem collectively, often seeking the best supportive care and exploring treatment possibilities in other countries. This movement was inaugural, marking a shift where patients actively sought solutions and treatment options without relying solely on physicians which were struggling to manage this novel disease.

The rapid pace of technological change has led to a situation where individuals, unable to fully comprehend or analyze complex situations, often rely on personal beliefs or place their trust in individuals they perceive as familiar. Consequently, virtual communities, led by commercial influencers, have emerged with their opinions frequently regarded as more trustworthy than those of established experts. As a result, patients may reject medical contraception during consultations based on advice from friends, relatives, or acquaintances rather than medical guidance.

The contraceptive crisis can be viewed as part of the broader anthropological shift associated with hypermodernity. The hypermodern individual often feels empowered by questioning experts, yet typically lacks the same depth of knowledge.

Nowadays, physicians frequently encounter refusals to the use of contraceptive methods. This issue is underscored by the fact that in 2022, France faced the highest number of abortions in thirty years [8]. Historical evidence indicates that "natural" contraception has been ineffective for 2000 years or more, as demonstrated by the number of women who died from unsafe abortions. It is possible that hypermodern patients are compelled to make their own experiential mistakes—mistakes that we ideally would prefer them to avoid.

You will never talk again about hormonophobia

The understanding of hormones among the general public appears to be minimal. Despite widespread aversion to sex hormones and infrequent questioning of thyroid hormone prescriptions, approximately 2.2 million morning-after pills are

sold annually in France, according to HRA Pharma. Notably, two-thirds of these are levonorgestrel (LNG) 1.5 mg, which contains fifty times more LNG than the daily pill (LNG 0.03 mg). The morning-after pill is sometimes the only option for women and girls who cannot afford or find time for a medical consultation for daily contraception.

Can we ensure the safety of LNG 1.5 mg when taken repeatedly, considering it is sold OTC? In France and Luxembourg, insured individuals benefit from an exemption from advance payment for these costs. The French Agence Nationale de Sécurité des Médicaments et des Produits de Santé (ANSM) has recommended restrictions on prescribing macroprogestins due to the risk of meningioma, as highlighted by the nearly 20,000-case Epi-Phare study published in March 2024 in the BMJ [9]. This study specifically addresses the LNG intra-uterine device, which contains 52 mg of LNG for five years of use (approximately 0.028 mg per day). However, the high-dose LNG, 50 times more than the daily pill, appears to be overlooked in these recommendations, and there is no conclusive evidence that high-dose LNG does not pose a risk for meningiomas [10,11]. The FDA has not issued specific recommendations regarding progestins, and the BMJ study seems to be considered controversial by experts beyond Atlantic [12].

The perception that an OTC product is somehow "less hormonal" is prevalent among the general public. When requesting the morning-after pill from a pharmacist, this misconception is evident. The ease of access to the morning-after pill contrasts sharply with the barriers to daily contraception. The requirement for a medical prescription for daily contraception may unintentionally increase fear, leading to the misconception that daily contraception is more dangerous.

This is evident from the higher incidence of sexually transmitted infections (STIs) compared to serious side effects of hormonal contraception. In 2022, France reported 53,000 cases of chlamydia (all genders) [13], compared to approximately 2,500 cases of thrombosis due to hormonal contraception [14]. Given that about 5,000 new HIV infections occur each year in France, it is puzzling why there is not a similar level of concern regarding sexual activity. This disparity reflects a broader trend: people often do not use logic when making decisions regarding health, as advertisers well understand [15]. Maybe you have heard about "sexual recession", but it seems incongruent with the rise in STIs [16], sex toy sales, pornography consumption, minor prostitution, and sex app downloads [17].

In an era characterized by instant access to goods and services, including food, clothing, and even sex through dating apps, the perception of risk associated with contraception seems disproportionately high. For daily contraception pill, a physician's consultation is required to obtain a prescription, and the potential serious side effects of hormonal contraception (2,500 cases of thrombosis annually in France) are only permissible with a medical prescription. Ultimately, it is the patient who informs the physician of personal risks, such as family history and lifestyle factors. Thus, one might question whether physicians have missed the digitalization boat. Digitalization reshapes brains: anything that is not immediately available with the finger on the screen is instantly perceived as suspicious and dangerous [18].

Hormones are dangerous or is it about sex hormones, or is it all about sex?

In the field of sports, hormones remain widely used, to the extent that anti-doping controls are becoming increasingly sophisticated. Erythropoietin and other substances no longer frighten anyone when it comes to winning a cycling or a body-building competition. Stakes justify all risks.

Moreover, the risks associated with alcohol consumption—such as an increased risk of breast cancer—seems to be widely known in many cultures, as are the risks of consuming ultra-processed foods, smoking, and engaging in hazardous sports. People knowingly accept these risks.

Despite these considerations, women increasingly express reluctance to use hormonal contraception and accept the rare iatrogenic risks of hormonal contraception. They tend to often attribute adverse outcomes to the contraceptive method rather than broader lifestyle factors. This hesitation is notable given that similar concerns are not observed with other hormone-based treatments, such as those for thyroid insufficiency.

This discrepancy may arise because the immediate gratification provided by substances like alcohol contrasts with the more abstract benefits of contraception. While medical contraception enables sexual freedom by eliminating the risk of unintended pregnancy, it does not inherently enhance sexual pleasure. The expectation that sexual pleasure will automatically accompany the use of contraception, as frequently portrayed in media narratives, does not align with reality. These distinct concepts are often incorrectly associated [19].

Although many people think of sexual pleasure as an automatic response to stimulation, it is a learning process, particularly for women. Similar to mastering a sport, music, or a foreign language, achieving sexual pleasure requires effective communication between partners. Male genitals are external, and boys begin to explore them very early in life. For girls, the situation is different both anatomically and culturally. Female sexuality has long been overlooked in all cultures, with women being kept away from their sexual pleasure to ensure their purity'.

The orgasmic gap between genders bears witness to this [20]. Some women may not experience the anticipated pleasure during intercourse. Consequently, the perceived lack of immediate gratification from contraception may lead to reluctance in adhering to contraceptive methods.

Given these dynamics, the reluctance to use contraception may stem from a perceived lack of direct benefit, as women do not experience the immediate pleasure that other substances provide. Gender equality in contraception often emphasizes female responsibility, yet men are frequently the primary providers of contraception within couples.

This raises questions about whether the issue lies in unmet needs for gender equality in contraception or in addressing the broader aspects of sexual pleasure. In light of these considerations, it may be essential to explore the underlying motivations behind contraceptive refusal, including a deeper examination of sexual pleasure.

Ecology matters

Some findings regarding ecology support arguments for a return to "natural" contraception. Exogenous sex hormones are micropollutants that contaminate water worldwide and pose

a significant threat to human health and the environment even at low concentrations [21]. Common wastewater treatment plants fail to fully remove these chemicals [22]. Numerous scientific papers confirm their negative health consequences, particularly in terms of carcinogenicity [23].

However, when questioned, women often reveal that they manage their "natural" contraception with the help of menstruation apps, some of which are even FDA-approved and labeled as digital contraception. These menstruation apps collect data stored in data centers with significant environmental impacts, including high water consumption, energy use, toxic and electronic waste production, land use, CO2 emissions, and biodiversity loss.

While technological progress offers solutions, it often comes with environmental costs. It is imperative to address these issues, and achieving a clean and sustainable planet is a challenge we must work on continuously.

Conclusion

Forget hormonophobia as a simple explanation for contraceptive refusal. This issue is complex and multifaceted. To truly understand it, we must listen attentively to our patients—both to what they say and to what remains unsaid. Consider the broader historical context, with its doubts, fears, failures, and progress. What may be labeled as hormonophobia might reflect deeper desires for gender equality, comprehensive sex education, and climate action. By addressing these underlying concerns, we can better support our patients and work towards a more equitable and informed approach to contraception.

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