The Efficacy and Accessibility of Plan B Emergency Contraception: Medical and Public Health Perspectives

Adinarayana Andy

Pharmacy Manager, Weatherwax Family Pharmacies Inc, Spring Arbor, Michigan, USA adi.ramesh@gmail.com

Abstract

This article explores the efficacy and accessibility of Plan B, a widely used emergency contraceptive pill containing levonorgestrel. Plan B primarily functions by delaying ovulation, offering a critical option for preventing pregnancy after unprotected intercourse. Its over-the-counter availability makes it a popular choice, yet several factors affect its accessibility, including cost, pharmacy regulations, and regional disparities. The article compares Plan B with other emergency contraceptives, such as Ella (ulipristal acetate) and copper intrauterine devices (IUDs), highlighting the variations in effectiveness and usage time frames. Despite its benefits in reducing unintended pregnancies and promoting reproductive autonomy, barriers like limited availability in rural areas and inconsistent pharmacy practices hinder widespread access. Addressing these challenges is crucial to ensuring equitable access to emergency contraception and supporting public health goals. This comprehensive review provides insights into the role of Plan B in reproductive healthcare, emphasizing the need for improved accessibility and informed usage.

Keywords: Plan B, emergency contraception, levonorgestrel, reproductive health, over-the-counter availability, pregnancy prevention, ulipristal acetate (Ella), copper IUD, accessibility barriers, public health policy.

1. Introduction

Emergency contraception (EC) has become a crucial component of reproductive health, offering a last line of defense against unintended pregnancies. Designed for use after unprotected intercourse or contraceptive failure, EC methods provide an option for individuals to prevent pregnancy within a short time frame [1]. There are different types of emergency contraceptives, including copper intrauterine devices (IUDs) and hormonal pills. Among these, Plan B, also known as the "morning-after pill," is one of the most well-known and widely used options [2]. Available as OTC in most countries, Plan B is a progestin-only pill containing levonorgestrel, which works primarily by delaying ovulation, thereby reducing the chance of fertilization [3]. Its accessibility and user-friendly nature make it popular for those seeking prompt intervention. The development and increased availability of emergency contraceptives like Plan B have marked a significant shift in reproductive healthcare, providing individuals with greater control over their reproductive choices [4]. Plan B is most effective when taken within 72 hours of unprotected intercourse, though its efficacy decreases over time. Its convenience of use and OTC availability without a prescription have made it a vital resource, especially in situations where other contraceptive methods fail or are not used. For many, Plan B offers peace of mind, knowing that there is an option to prevent unintended pregnancy even after unprotected sex or contraceptive mishaps [5].

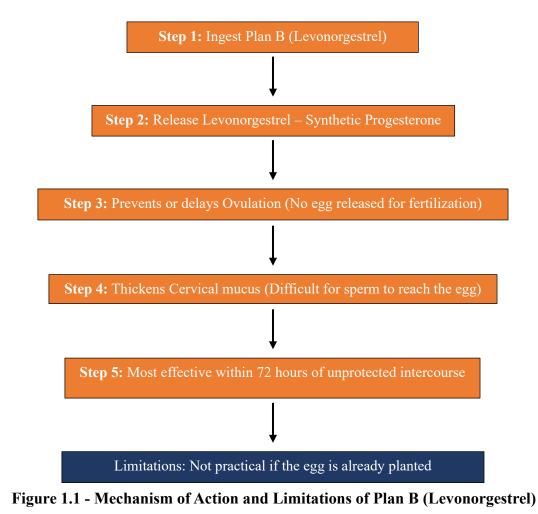
1

The importance of Plan B in reproductive health extends beyond individual choice, contributing significantly to public health goals aimed at reducing unintended pregnancies. It provides a critical safety net, helping to prevent situations that could lead to more complex decisions, such as abortion or unplanned childbearing. By offering an additional layer of contraceptive security, Plan B empowers individuals, particularly those in vulnerable situations or with limited access to regular contraceptive methods. Its role in expanding reproductive autonomy has made it a focal point in discussions surrounding reproductive rights and healthcare access [6, 7].

2. Mechanism of Action of Plan B

2.1 How Plan B Works in the Body

Also, the so-called Plan B, which is used as an emergency contraceptive pill, includes levonorgestrel as a synthetic progestogen. The method through which non-center-bearing pills mainly work is to avoid or postpone ovulation, which is the procedure by which an ovary releases an egg. Instead of stimulating ovulation, as other contraceptives do, Plan B alters the hormonal signals so that no egg is available for sperm to fertilize [8, 9]. When taken after ovulation, Plan B is not very effective as it depends on the timing of using this contraceptive. Also, levonorgestrel reduces the monthly cycle by changing the thickness of the cervical mucus, making it difficult for sperm to travel to the egg. In addition, it should be pointed out that Plan B does not work in case of pregnancy interruption and if the fertilized egg has already implanted itself in the uterus [10]. Contraceptive pills are used daily to keep hormone levels in the body stable, while Plan B is a single-dose emergency contraceptive. This is best taken as soon after unprotected intercourse as possible, but there are up to 72 hours anyway. Knowing the time it takes before it starts to inhibit ovulation will help to minimize the chances of pregnancy if the tablet is taken early, as shown [11] in **Fig 1.1**



2.2 Comparison with Other Emergency Contraceptives

Nonetheless, Plan B is only one type of emergency contraceptive, though it is one of the most common. Another strategy includes the use of copper-bearing IUDs like copper T380A. Unlike Plan B, which effectively works by releasing hormones into the body, a copper intra-uterine device, also known as a copper IUD, actually kills sperm and eggs in the uterus, making conception very hard to occur and may also interfere with an already fertilized egg from implanting itself on the wall of the uterus [12]. Copper IUDs can be used for up to five days after unprotected intercourse, making Copper IUDs a more proven long-term method of emergency contraception than pills. However, their insertion requires a medical procedure performed by a healthcare provider, making them less immediately accessible than Plan B [13].

The second method is the ulipristal acetate (UPA) pill, or Ella. UPA acts as a progesterone receptor antagonist, which is longer acting and more effective at delaying ovulation than Plan B, incredibly shortly before ovulation. Since Plan B does not require a prescription, it can be bought over the counter, while with Ella, this is impossible, which can delay its use. Ella works within five days, or up to 120 hours, after unprotected intercourse, making it slightly more effective than Plan B. Nonetheless, Plan B is accessible without a prescription, which is an imperative advantage when it comes to the rapid administration of the medication by people who plan to avoid pregnancy [14, 15] (see Table 1).

S.no	Emergency	Active	Time	Efficacy	Notes
	Contraceptive	Ingredient	Frame of	Rate	
	Method		Use Post-	(%)	
			Intercourse		
1.	Plan B One-	Levonorgestrel	Within 72	87-89%	Most effective within 24
	Step		hours		hours; over-the-counter
					availability
2.	Ella (Ulipristal	Ulipristal	Within 120	85-95%	Requires prescription;
	Acetate)	Acetate	hours		more effective closer to
					ovulation
3.	Copper IUD	Copper	Within five	>99%	Requires insertion by a
	(Paragard)		days		healthcare provider; long-
					term protection

Table 1: Comparison of Efficacy Rates for Different Emergency Contraceptive Methods

2.3 Efficacy Rates and Factors Affecting Success

The efficacy of Plan B entirely depends on the time or period after unprotected sexual intercourse that this pill is consumed. Plan B is known to be 95% effective if it is taken within the first day since the intercourse was had. However, it loses this effectiveness with time; if taken between 48 to 72 hours after unprotected intercourse, it only boasts a 61% success rate. After 72 hours, it hardly has any effect in preventing conception; hence, before its effectiveness can be considered, people who use Plan B as an emergency method of birth control should act as soon as possible [16]. The effectiveness of Plan B depends on a few things; the major one is weight since studies like the largest analysis of emergency contraceptives concluded that levonorgestrel condoms might work less in women of weight over 25BMI. It is considered that these changes are associated with variations in the pharmacokinetics of drugs within the human body. If the BMI is greater than 30, other birth control options, such as the ulipristal acetate pill or the copper intrauterine device, may be suggested because of their effectiveness [17].

The other consideration is the time of ovulation. The more eggs produced by the female are available for fertilization by sperm, the better the chances of conception by sperm produced by the male are. This is because

4

Plan B acts mostly through postponing ovulation, and since ovulation has occurred, the chance of an unfertilized egg being present for the drug to take effect is low. Also, deaths have been reported in patients when Plan B is taken along with some other drugs that alter the metabolism of the former; for instance, preparations that induce liver enzymes including some antiepileptic drugs as well as herbal supplements like St John's Wort [18].

3. Medical Perspective on Plan B

3.1 Side Effects and Safety Profile

The levonorgestrel-contained Plan B is considered safe for the majority of women, should it be taken as prescribed. However, similar to any drug out there, it is capable of causing specific side effects despite the fact that they are usually light and of short duration. The side effects include digestive upsets such as nausea, fatigue, dizziness, and headache [19]. It is essential to know that some patients can have abdominal pain, breast sensitivity, changes in the early menstrual period onset, delay in the onset of the next period, and more profuse or scanty menstruation. Most side effects are mild and only last for a few days. Hence, no medical attention is needed [20].

At times, women will note changes in their menstruation cycle or even seemingly weird details like getting to experience spotting, a cycle that increases or decreases in duration compared to what was previous. Even though these changes may be alarming, they are often temporary and do not signify that a woman has hormone problems [21]. Any period that was delayed to more than one week after the expected date should call for a pregnancy test, as this may be evidence that Plan B did not work. While Plan B does come with side effects, severe ones are very unlikely, and there is evidence that it harms reproductive health or fertility in the future. It is important to note that Plan B does not contain estrogen, which reduces the risk of some side effects seen with combined hormonal contraceptives, such as blood clots. This makes it a safer option for those who may have contraindications to estrogen-containing products [22, 23].

3.2 Contraindications and Risk Factors

Despite the fact that Plan B is safe for almost everyone, there are certain conditions that need precautions. People who have an allergy to any of the ingredients found in the pill, including levonorgestrel or any component of this pill, should not take Plan B Advance. Even though Plan B Advance does not contain estrogen, it is safer for the general public because it can be used by more people despite its lower potency in women with a high BMI – body mass index [24, 25]. Studies state that those with a BMI of 25 or greater may have significantly lower effectiveness of levonorgestrel-based emergency contraception, but it is still an option in cases where the woman does not have access to any other method. According to BMI, different contraceptives may be used; copper IUD or ulipristal acetate (Ella) may be more effective for persons with a BMI greater than 30 [1].

Plan B has also been found to interact with other chemical components, such as some medications and herbs used for treatment and seasoning. Certain drugs like anticonvulsants, including phenytoin, carbamazepine, antituberculosis including rifampin, and herbs such as St. John's Wort can speed up the metabolism of levonorgestrel [26]. This may lower the concentration of the drug that is needed in order to prevent ovulation from occurring. Individuals using such drugs may have to seek advice from a doctor regarding other available emergency contraceptives. Another factor with regard to Plan B is awareness about when one should take it. If a woman has ovulated, the effectiveness of Plan B is reduced since it does not work if ovulation has occurred already, but only to prevent it. In such circumstances, other types of emergency contraception, namely, the copper IUD, are more effective [27].

3.3 Misconceptions and Myths about Plan B

The overall misconceptions and myths about Plan B, in certain cases, have even been proven to be safe and effective but have caused many people to be in the dark and dubious when it comes to considering the method.

Volume 7 Issue 3

Perhaps the most common fable is that of Plan B as an abortifacient or an abortive agent. But this is not true [28]. Plan B is used to prevent an egg from being fertilized, which therefore means that it prevents ovulation. It does not interfere with a recognized pregnancy or harm the embryo that has already been implanted on the uterine wall. This is a significant differentiation, mainly when it comes to Plan B because it is a backup method used in cases of failure. Probably the most widespread misconception is that Plan B causes fertility complications in the long run [29]. Some people think that when they use emergency contraception often, then, their body reduces the chances of conception. In fact, Plan B does not affect the fertility of a person, and the ability to get pregnant becomes normal before using it. That being stated, emergency conception control like Plan B is conversely different because it's used only once, and studies indicate various uses have harmed the reproductive system [30].

It also has been said that Plan B is not suitable for people who have had unprotected intercourse several times within a period of time. Although the means of protection – Plan B must be consumed as soon as possible after each instance of having unprotected intercourse for it to work most efficiently, it was developed in order to counter the probability of pregnancy arising from one incident. Daily use within a menstrual cycle is not toxic, but it might not be as protective against pregnancy as daily use or other ongoing methods of birth control like pills or IUDs [31]. Plan B is intended as a backup method rather than a primary form of Contraception, and individuals with frequent needs for emergency contraception should consult a healthcare provider about more reliable long-term options. Additionally, concerns about side effects can lead to unnecessary worry. For example, some users fear that experiencing side effects such as nausea or changes in menstrual cycles may indicate that the pill is not working correctly. However, these side effects are typically related to the body's response to the sudden dose of hormones rather than an indication of reduced efficacy [32].

4. Public Health Impact of Plan B

4.1 Role in Reducing Unintended Pregnancies

The reason why Plan B is useful is that it contributes toward a decrease in the number of unwanted pregnancies, making it a major asset in health interventions geared toward enhancing reproductive success. Unwanted pregnancies are also likely to impact people economically, educationally, and health-wise, depending on their status [33]. With Plan B bringing a safe contraceptive measure to use in cases of unprotected intercourse or contraceptive failure, it plays an important role in a safety net for anyone at risk of getting pregnant. The fact that the product can be bought over the counter means that clients can take charge without having to wait for a prescription, which can be decisive in some emergency circumstances [34].

They also stated that some literature indicates that excessive use of products such as Plan B reduces cases of unintended pregnancies. For instance, some authors have noted that when women are given information about Plan B and when they get hold of a pill, they are likely to use it at times of technical failure or when they have not been religious about using their traditional contraceptive methods. This helps in eliminating the cases of unwanted pregnancies, particularly for populations that may not easily access other modes of birth control, like the youths and those in rural areas [35]. Plan B is hugely beneficial to individuals who may not be able to access health practitioners because of things such as geographical location, financial prowess, or cultural differences. Plan B can be very useful in places where access to contraceptives is relatively fixed and in cases of contraceptive failure or sexual assault. On this note, Plan B stands to help mitigate the occurrence of such unwanted pregnancies, which would ultimately reduce negative impacts not only on the economy but also on the health dimension within affected communities and population groups[36].

4.2 Plan B's Impact on Abortion Rates

This is evident in the case of Plan B, which has been responsible for the reduction of abortions because it has been able to help lower incidences of abortions due to measures that discourage pregnancies that are accidental. Since Plan B can be used to prevent pregnancy after a contraceptive malfunction or without safe

sex, it assists several people in preventing having to go for an abortion. It cannot take the place of conventional birth control, but as a backup, it furnishes an important contribution to closing gaps in birth control check-ups and thus lowering the chances of unwanted pregnancies that are likely to end in abortion [37, 38].

Scientific evidence has confirmed that women who are able to obtain drugs, such as Plan B, have reduced the likelihood of seeking an abortion. Some investigations carried out in countries where EC pills have been readily and easily accessible without prescription find that the trends of abortion have been declining as people embrace the use of EC pills as a backup method. For instance, a cross-sectional study conducted in the United States of America demonstrated that states that had more access to Plan B recorded a decreased prevalence of abortion than states that had restricted access to the method [39]. These findings are the reason why emergency contraception is viewed as a preventive means that can help to level down the rates of unwanted pregnancies and, therefore, abortions. It should be noted, however, that Plan B as a method does help decrease the abortion rate for the given person; on the national level, however, there are other factors at play in making the decision about the specificity of Plan B, including the availability of effective reproductive health education and services [40]. It can be seen that Plan B on its own can go a long way to help drastically cut the number of abortions without trying to widen the knowledge of other contraceptives available in the market. However, it forms an important component of strategies that aim to minimize the number of unwanted pregnancies that would otherwise lead to an abortion, thus empowering people with more control over their fertility [41].

4.3 Cost-Effectiveness and Healthcare Savings

Besides being efficient, Plan B is also cheap in terms of implying effort, money, and other public health resources. Another benefit of timely Plan B use is fewer unintended pregnancies, which results in every health system losing financially since prenatal care, childbirth, and possible complications cost a lot of money. When women and men are enabled to avoid unwanted pregnancies, some of the more costly health procedures, such as surgical or medical abortions, and the social c effects of these unintended births, more so in terms of socioeconomic development, can be curbed [42, 43].

Previous research has indicated that efforts to make emergency contraception, including Plan B, available can reduce the cost for the public health care system in the long run. For instance, a survey in the American Journal of Public Health discovered that several cents were got from every dollar that was spent on the provision of emergency contraceptives, with other several cents saved on expenses linked with unwanted pregnancies, expenses of health services, social services, and productivity losses [44]. These gains encompass a wider context of impacts, such as better education attainment among people who can reschedule childbearing due to costs, as well as eased pressure on households and societies. While the price of Plan B is not very expensive, compared to the total expense of an unplanned pregnancy, it is inexpensive. Ease of purchase means people are able to access the products easily; they are not encumbered by explicit doctor's prescriptions distinct other medicinal products, hence avoiding costly nurse treatment procedures in the future. Even though Plan B may cost between \$30 and \$50 for some people, it is generally possible to include it in programs financed with public money or subsidize it for the target groups, as the full-range perspective gives clear economic and social efficiency [45, 46].

Moreover, the cost-effectiveness of Plan B is particularly obvious in addressing disparities in reproductive healthcare access. For individuals who may lack access to regular contraceptive methods due to financial or geographical barriers, the availability of Plan B provides a crucial stopgap measure that can prevent unplanned pregnancies. This can be especially beneficial in communities where access to regular contraceptive services is limited or where healthcare facilities are scarce. By preventing pregnancies that might otherwise contribute to cycles of poverty and health disparities, Plan B helps support the broader goals of equity and access to public health [47, 48].

6

5. Accessibility and Availability

5.1 Over-the-Counter Status and Regulations

Plan B has over-the-counter status in many countries, making it easier to access, as users can buy it without a prescription. Levonergestron, containing Plan B One-Step, has been available as an OTC product for all ages since 2013 in the United States after the series of amendments. This decision was taken to enable those requiring emergency contraception to obtain it within the shortest time possible, which is important if the method is to deliver the optimum results [49]. Preliminary evidence shows that removing prescription access barriers has made Plan B less delayed in terms of providing protection against pregnancy when taken immediately after unprotected intercourse or contraceptive breakdown. The OTC status of Plan B ensures that it is available in retail stores like pharmacies, supermarkets, and other online markets, which makes it easily accessible to persons in need of emergency contraceptives. Compared to some of the other emergency contraceptive options like ulipristal acetate (Ella), which is available on prescription, and copper-bearing IUDs that require the attaining of a clinical appointment, taking Plan B OTC guarantees that those at risk can access it without delay, at least if they cannot get to a doctor [50, 51].

There is only one definite barrier; however, although Plan B does not require a prescription, it is found behind pharmacy counters or locked cases and usually requires a conversation with pharmacy clerks to obtain it. This policy has been put in place to ensure that the product is not stolen, but it hinders the actualization of this policy because some customers feel embarrassed or judged whenever they ask for the product; nevertheless, due to certain retail practices, which, although not mandated by law, the intended ease of access to Plan B can sometimes be impaired [52, 53].

5.2 Barriers to Access (e.g., Cost, Pharmacy Policies)

Price is still a major factor that limits the use of Plan B by many people despite being sold without a prescription. The price of Plan B may vary from \$ 30 to \$ 50, depending on place and store. Indeed, costs are prohibitive for those with no disposable income or no insurance that covers the cost of the Emergency Contraceptive Pills. Consequently, emergency contraceptives may be inaccessible to many people since not all community clinics and non-profit organizations regularly provide free or substandard products for these services [54].

Moreover, pharmacy practices and related beliefs of the workers can pose other barriers. Some pharmacists may opt to decline the sale of Plan B due to the OC nature of the product, even if this has legal implications that may be especially disadvantageous in areas where the option of other pharmacies is limited. For instance, some individual states in the United States allow pharmacists to refuse to stock and dispense ECPs on the basis of rights to freedom of religion and conscience. These refusals can lead to serious delays for people who are trying to access Plan B, particularly in rural settings where getting to another pharmacy to obtain the medication may be challenging. Some states tried to offset this by passing laws that state that a pharmacy must have another employee available to deliver the medication, but such protection is not present in all states [55, 56].

However, false or conflicting information originating from the pharmacy staff regarding its age requirements or availability will also pose a problem. There have been cases where pharmacies ignore the federal regulations, which allow OTC sale to persons of all ages; they put in place an age limit, making it difficult for young persons. Even the inconsistent pattern of dispensing practices, as illustrated in this case, demands the improvement of training and awareness of the staff in the Pharmacy, which Plan B should be made available in line with the recommended standard [57, 58] (see Table 2).

8

S.no	Region	Prescription	Cost Availability in		Availability in	Barriers to Access
		Requirement	Range	Pharmacies	Online	
			(USD)		Platforms	
1.	United	No	\$30-\$50	High	Available varies	Age verification,
	States				by state	regional legislation
2.	European	Varies by	€20-€35	Moderate to	Available in	Prescription in
	Union	Country		High	most countries	some countries
3.	Latin	Often Required	\$15-\$40	Low to	Limited, varies	Prescription
	America			Moderate	widely	requirement,
						limited pharmacy
						availability
4.	Sub-	Required in	\$5-\$15	Low	Very limited	Availability in rural
	Saharan	most areas				areas, cultural
	Africa					stigma

Table 2: Factors Affecting Accessibility of Plan B in Different Regions

5.3 Disparities in Access: Rural vs. Urban Areas

Currently, Plan B can be accessed either easily or with great difficulty, depending on the extent of healthcare access in a given rural or urban area. This means that in urbanized states, where there is a greater density of pharmacies and stores, people have more opportunities to buy Plan B [59]. These areas are likely to specify better access to public health clinics and services that advocate for appropriate emergency contraceptive use. There can also be times when competition among retailers in the urban environment will lead to low-priced products plus the easy availability of some offers like coupons, thus further cutting down on costs. Plan B is very useful for women who have unprotected intercourse, and it is easy to obtain if you live in the city. However, Plan B is not easily available in most rural areas because there are few pharmacies and healthcare facilities that stock the medication [60, 61]. This distance can be a real issue, especially about the temporal aspect of the efficiency of Plan B. This is so because the effectiveness of pills such as the Saheli reduces when one has to spend a lot of time on the road to access it. Hence, the unintended pregnancies persist. The rural population does not have access to many pharmacies, and those close by may be located miles away from their home or may open only till late in the night or remain closed on weekends or holidays [62, 63].

Furthermore, the number of pharmacies in rural areas is restrained, and it complicates the experience of pharmacy refusals because of moral and religious convictions. If a pharmacist decides not to fill a prescription for Plan B, the closest store may likewise not fill it, and they may be stranded without the medication. It may compel individuals to travel to urban areas or forgo relatively expensive emergency contraceptions-barely reducing the rate of unwanted pregnancies [61, 64]. This case is a clear example of why there should be laws that mandate that pharmacies in any region must be in possession of and dispense Plan B. This is so especially true when considering socioeconomic inequalities. Taken together with the fact that average rural incomes are lower and the levels of uninsured higher, the cost of Plan B becomes more of an issue [65]. Another contributing factor could be that such information may be less available in rural settings, hence making people unaware that Plan B is an option in emergency contraception. Effective intervention to these disparities involves a number of measures as they intersect with transport, Pharmacy, and general public awareness and information on Plan B availability in the US [66].

6. Ethical and Social Considerations

6.1 Controversies Surrounding Plan B

Plan B has received considerable ethical and social attention, mainly due to the effects it has on reproductive

9

rights and liberties as well as personal freedom. Certainly, one of the major controversies can be discussed under the question of whether or not emergency contraception can be considered an abortion-inducing medication. Critics of Plan B claim that it disrupts a fertilized egg's ability to insert itself into the uterus, making it an abortive agent [67]. This perspective poses various socio-ethical issues regarding the definition of when a human being starts as well as the value of the embryo. Medical science, on the other hand, supports this claim because it has revealed that Plan B acts mainly by inhibiting ovulation, and it does not interrupt an existing pregnancy, thus so many supporters of this contraceptive pill claim that Plan B is a contraceptive pill and not an abortive agent[68].

These controversies always come hand in hand with political and religious beliefs, hence creating two extremes regarding the use of EC. In some of those areas, this leads to the enactment of rather rigid rules that may bind the use of Plan B while categorizing it as immoral [69]. Further, when public awareness regarding the modes of operation of Plan B is distorted, these controversies are even intensified, making the public react in ways that generate controversies in shaping policies [70]. For instance, myths surrounding Plan B's mechanism of action, such as the belief that it causes abortion, can lead to legislative efforts aimed at restricting access despite scientific evidence supporting its safety and efficacy[22].

6.2 Role of Education and Awareness Campaigns

However, in the context of ethical and social controversies related to Plan B, education and increasing awareness are highly important. The reproductive health education to which students are exposed must contain the right information about emergency contraceptive pills. Potential pro-choice campaigns include targeting schools, communities, and health centers in order to help people feel competent in making decisions about fertility choices [71]. Teaching activities should include information to help clients understand the role of emergency contraceptive pills in performing a wider sexual health strategy. In this sense, access to accurate information about how Plan B works, how it is effective, and how it needs to be taken, such as educational campaigns, can help dispel misconceptions about emergency contraception and bring a harder-headed perspective to women's contraception options [72]. Moreover, the use of case success stories from individuals who have taken Plan B can play a role in demystifying its use so as to discourage people from feeling embarrassed for seeking emergency contraception [73].

Moreover, campaigns aimed at increasing awareness should consider doing it in relation to the availability of Plan B, especially in areas mostly affected by fake news. For this reason, offering information concerning the place to access Plan B, both in stores and Internet shops, is crucial in making sure people are aware of their choices in case of a contraceptive failure [74]. These messages should be supported by healthcare providers, schools, and other community agencies that can assist a person who needs help with decisions about reproductive health[75].

6.3 Impact on Societal Attitudes Towards Contraception

Such arrangements, as well as mere access to Plan B, have pushed forward societal accepted changes in attitudes towards birth control and other related matters concerning reproductive health. Since emergency contraception is gradually gaining much-needed publicity, there will be encouragement for normal people to come out, sit down, and discuss reproductive responsibilities [76]. Such a shift can lead to a more embracing kind of conversation on contraceptives, hence providing equality to reproductive rights without prejudice. The process of normalization, in which the use of an emergency contraceptive has become quite common, will also help those living in communities where access to contraceptives has never been great to expand their view and think about other means of birth control as well [77]. Expanded use of Plan B might result in better awareness of the need for preventive actions in cases of unwanted pregnancies and high levels of intelligent, rational decision-making on issues related to family planning [78].

Nonetheless, societal attitudes can be very diverse and sometimes subjected to change due to cultural, social, religious, and economic factors. Old-fashioned beliefs about Contraception may remain prevalent in some

societies, denying effective use of Plan B and other contraceptives [79]. This means that education and advocacy should be culturally appropriate while simultaneously emphasizing the need to make informed decisions on issues to do with reproduction [80].

7. Future Directions and Recommendations

7.1 Improving Access and Affordability

In order to improve the availability and the price of Plan B emergency contraception, a combination of strategies is required. First, the policymakers must strive to conduct legislation that would make the EC easily accessible to everyone in every pharmacy and healthcare facility, irrespective of the region [81]. This consists of following measures that call for an association's prohibitive or discriminative attitude towards people with certain beliefs and making sure that the buyers find it possible to receive Plan B swiftly and without any problems [82]. Increasing access in nonambulatory care settings like CHCs, schools, and internet-linked sites can also be helpful, particularly for those rural populations that are particularly disadvantaged [83].

Also, actions to lower the cost of Plan B are also desirable. These can include providing public Healthcare programs that make Emergency contraception affordable or passing laws that require insurance providers to fully cover emergency contraception without the need for co-payment [84]. It will reduce the chances of the increased rate of unintended pregnancies as all people, irrespective of their economic class, will be able to afford Plan B[85].

7.2 Research Gaps and Areas for Further Study

Although there has been a lot of improvement in the case of Get, Plan B, there are still areas in research that still need to be considered. A lot more work needs to be done on the impact of improved access to emergency contraception, particularly on pregnancy and abortion rates in the future [86]. Subsequent extensive analyses of the causal connection between Plan B access and the overall utilization of Contraception can contribute to the formulation of future policies and programs [87]. In addition, further studies should be conducted on the various factors that make it difficult for various groups within the population to access Plan B, including socioeconomic factors, cultural beliefs, and geographical constraints. Opinions and experiences of women who seek emergency contraception may be valuable in enhancing the effectiveness of the information provided to the public through education and increasing access to these services[71].

Last, the results and outcomes of all educational and/or informative campaigns should be evaluated in terms of defining which of the interventions is most effective in increasing the knowledge about Plan B and the overall attitude of society toward the possibility of using emergency contraception[88]. By filling these gaps, it will be possible to offer stakeholders a solid pattern for increasing accessibility, availability, and acceptance of Plan B by improving reproductive health for everyone[89].

8. Conclusion

Plan B emergency contraception is an important component of women's reproductive health as it provides a safe method for averting accidental pregnancies after contraceptive strategies have failed or in cases of no usage of contraceptives. Plan B differs from other types of emergency contraceptives mainly due to its mode of action, the first of which is the inhibition of ovulation[90]. However, there are still existing challenges to its purchase, namely cost, policies of pharmacies, and differences in access between the rural and urban settings. Moreover, ethical and social issues surrounding Plan B uncontrollably develop the public attitude towards its availability, hence the need to embark on awareness creation [91]. Having said this, the need to make Plan B available cannot be overemphasized. This way, we help people to have better control over their reproductive health and be able to make the necessary decisions on the issue of families. Lack of cost when implementing and ensuring women can gain access to these contraceptives across settings can help reduce unwanted pregnancies, hence benefiting the health of the public and society [92].

Furthermore, it will also discuss the research questions that exist regarding the consequences of Plan B on contraceptive health and discoveries regarding the obstacles of various populations to optimize policy and enhance schooling[93]. Making emergency contraception as accessible and popular as possible is less than an option for women; it is a matter of public health concern. What we can do is facilitate conditions that will allow people to make decisions about reproduction on their own and based on available knowledge, which can also lead to better overall health [94]. Since access to Plan B is key in protecting reproductive autonomy and reproductive justice, it is necessary to have the availability of Plan B for everyone [95].

References

- 1. K. O. Haeger, J. Lamme, and K. Cleland, "State of emergency contraception in the US, 2018," *Contraception and reproductive medicine*, vol. 3, pp. 1-12, 2018.
- 2. C. Edwards, D. Panjwani, C. Pendrith, A. Ly, and S. Dunn, "Knowledge of and interest in the copper intrauterine device among women seeking emergency contraception," *Journal of Obstetrics and Gynaecology Canada*, vol. 40, no. 1, pp. 41-47, 2018.
- 3. R. Peck, W. Rella, J. Tudela, J. Aznar, and B. Mozzanega, "Does levonorgestrel emergency contraceptive have a post-fertilization effect? A review of its mechanism of action," *The Linacre Quarterly*, vol. 83, no. 1, pp. 35-51, 2016.
- 4. M. G. Nyambura, J. N. Kiarie, E. Omenge, and O. T. Okube, "Knowledge and utilisation of emergency contraception pills among female undergraduate students at the University of Nairobi, Kenya," 2017.
- 5. G. N. Fink, G. Dean, A. Nucci-Sack, M. Arden, and B. Lunde, "Emergency contraception use in schoolbased health centers: a qualitative study," *Journal of Pediatric and Adolescent Gynecology*, vol. 32, no. 2, pp. 175-181, 2019.
- 6. M. F. Fathalla, "Safe abortion: The public health rationale," *Best Practice & Research Clinical Obstetrics & Gynaecology*, vol. 63, pp. 2-12, 2020.
- 7. K. Broadhurst *et al.*, "Vulnerable birth mothers and repeat losses of infants to public care: is targeted reproductive health care ethically defensible?," *Journal of Social Welfare and Family Law*, vol. 37, no. 1, pp. 84-98, 2015.
- 8. C. Kahlenborn, R. Peck, and W. B. Severs, "Mechanism of action of levonorgestrel emergency contraception," *The Linacre Quarterly*, vol. 82, no. 1, pp. 18-33, 2015.
- 9. T. J. Davis, "Evaluation of the mechanism of action of anti-fertility treatment in cases of sexual assault: Moral certitude and human acts," *Contemporary controversies in Catholic bioethics*, pp. 223-254, 2017.
- 10. L. G. Moraes *et al.*, "Assessment of the quality of cervical mucus among users of the levonorgestrelreleasing intrauterine system at different times of use," *The European Journal of Contraception & Reproductive Health Care*, vol. 21, no. 4, pp. 318-322, 2016.
- 11. B. Mozzanega and G. B. Nardelli, "UPA and LNG in emergency contraception: the information by EMA and the scientific evidences indicate a prevalent anti-implantation effect," *The European Journal of Contraception & Reproductive Health Care*, vol. 24, no. 1, pp. 4-10, 2019.
- A. Ekiz, B. Ozkose, B. Yucel, M. E. Avci, A. Adanur, and G. Yildirim, "Contraceptive failure with Copper T380A intrauterine device (IUD): A single tertiary center experience," *Pakistan Journal of Medical Sciences*, vol. 32, no. 5, p. 1087, 2016.
- 13. K. M. Curtis and J. F. Peipert, "Long-acting reversible contraception," *New England Journal of Medicine*, vol. 376, no. 5, pp. 461-468, 2017.
- 14. G. Kaur, T. Fontanilla, H. Bullock, and M. Tschann, "The difference between Plan B and ella®? They're basically the same thing": results from a mystery client study," *Pharmacy*, vol. 8, no. 2, p. 77, 2020.
- 15. M. J. Munuce, M. D. Gómez-Elías, A. M. Caille, L. Bahamondes, P. S. Cuasnicú, and D. J. Cohen, "Mechanisms involved in the contraceptive effects of ulipristal acetate," *Reproduction*, vol. 159, no. 3, pp.

R139-R149, 2020.

- 16. C. Asiedu, "Sexual behaviour among senior high school students in the Cape Coast Metropolis," University of Cape Coast, 2016.
- 17. J. E. Kohn, P. M. Lopez, and H. R. Simons, "Weight and body mass index among female contraceptive clients," *Contraception*, vol. 91, no. 6, pp. 470-473, 2015.
- 18. A. Teasdale, K. Gale, and D. Holloway, "Menstrual and hormonal dysfunction," *Nursing Management of Women's Health: A Guide for Nurse Specialists and Practitioners*, pp. 7-47, 2019.
- 19. S. Yen, D. D. Parmar, E. L. Lin, and S. Ammerman, "Emergency contraception pill awareness and knowledge in uninsured adolescents: high rates of misconceptions concerning indications for use, side effects, and access," *Journal of pediatric and adolescent gynecology*, vol. 28, no. 5, pp. 337-342, 2015.
- 20. A. I. Ajayi, E. E. Nwokocha, O. V. Adeniyi, D. Ter Goon, and W. Akpan, "Unplanned pregnancy-risks and use of emergency contraception: a survey of two Nigerian Universities," *BMC health services research*, vol. 17, pp. 1-8, 2017.
- 21. R. S. Raghunath, Z. Venables, and G. Millington, "The menstrual cycle and the skin," *Clinical and experimental dermatology*, vol. 40, no. 2, pp. 111-115, 2015.
- M. T. Hickey and J. White, "Female college students' experiences with and perceptions of over-the-counter emergency contraception in the United States," *Sexual & Reproductive Healthcare*, vol. 6, no. 1, pp. 28-32, 2015.
- 23. J. R. Lauring, E. B. Lehman, T. A. Deimling, R. S. Legro, and C. H. Chuang, "Combined hormonal contraception use in reproductive-age women with contraindications to estrogen use," *American Journal of Obstetrics and gynecology*, vol. 215, no. 3, pp. 330. e1-330. e7, 2016.
- 24. B. I. Nwaru and A. Sheikh, "Hormonal contraceptives and asthma in women of reproductive age: analysis of data from serial national Scottish Health Surveys," *Journal of the Royal Society of Medicine*, vol. 108, no. 9, pp. 358-371, 2015.
- 25. M. De Martinis, M. M. Sirufo, M. Suppa, D. Di Silvestre, and L. Ginaldi, "Sex and gender aspects for patient stratification in allergy prevention and treatment," *International Journal of molecular sciences*, vol. 21, no. 4, p. 1535, 2020.
- 26. D. Ekstein, "Issues and promise in clinical studies of botanicals with anticonvulsant potential," *Epilepsy* & *Behavior*, vol. 52, pp. 329-332, 2015.
- 27. N. D. Goldstuck and D. Wildemeersch, "Practical advice for emergency IUD contraception in young women," *Obstetrics and Gynecology International*, vol. 2015, no. 1, p. 986439, 2015.
- 28. F. Pavone, *Abolishing Abortion: How You Can Play a Part in Ending the Greatest Evil of Our Day*. Thomas Nelson, 2015.
- 29. K. Panos, "Generations of Fertility: A Bioethical and Evolutionary Analysis," 2019.
- B. Hartmann, "Reproductive rights and wrongs," in *Living With Contradictions*: Routledge, 2018, pp. 330-340.
- 31. S. P. den Braver-Sewradj, R. van Spronsen, and E. V. Hessel, "Substitution of bisphenol A: a review of the carcinogenicity, reproductive toxicity, and endocrine disruption potential of alternative substances," *Critical reviews in toxicology*, vol. 50, no. 2, pp. 128-147, 2020.
- 32. J. J. Virro, K. Besinque, C. E. Carney, D. Gross, B. Bernick, and S. Mirkin, "Long-lasting, patientcontrolled, procedure-free contraception: A review of Annovera with a pharmacist perspective," *Pharmacy*, vol. 8, no. 3, p. 156, 2020.
- 33. A. Wise, A. T. Geronimus, and P. J. Smock, "The best of intentions: a structural analysis of the association between socioeconomic disadvantage and unintended pregnancy in a sample of mothers from the National Longitudinal Survey of youth (1979)," *Women's Health Issues*, vol. 27, no. 1, pp. 5-13, 2017.
- 34. B. Anderson, "Emergency/everyday," Time: A vocabulary of the present, pp. 177-91, 2016.

- 35. A. R. Bado, H. Badolo, and L. R. Zoma, "Use of modern contraceptive methods in Burkina Faso: what are the obstacles to male involvement in improving indicators in the centre-east and centre-north regions?," *Open Access Journal of Contraception*, pp. 147-156, 2020.
- 36. C. Betsch *et al.*, "Improving medical decision making and health promotion through culture-sensitive health communication: an agenda for science and practice," *Medical Decision Making*, vol. 36, no. 7, pp. 811-833, 2016.
- 37. B. Ganatra and A. Faundes, "Role of birth spacing, family planning services, safe abortion services and post-abortion care in reducing maternal mortality," *Best Practice & Research Clinical Obstetrics & Gynaecology*, vol. 36, pp. 145-155, 2016.
- 38. C. Marshall, "Women's Contraceptive Method Choice in the United States: The Role of the Health Care System, the Importance of Contraceptive Attributes, and Exploring the Potential for a Decision Support Intervention in the Clinical Setting," UC Berkeley, 2015.
- 39. K. M. Curtis, "US medical eligibility criteria for contraceptive use, 2016," *MMWR. Recommendations and Reports*, vol. 65, 2016.
- 40. K. Mulligan, "Access to emergency contraception and its impact on fertility and sexual behavior," *Health economics*, vol. 25, no. 4, pp. 455-469, 2016.
- 41. D. Huber, C. Curtis, L. Irani, S. Pappa, and L. Arrington, "Postabortion care: 20 years of strong evidence on emergency treatment, family planning, and other programming components," *Global Health: Science and Practice*, vol. 4, no. 3, pp. 481-494, 2016.
- 42. D. S. Nakirijja, X. Xuili, and M. I. Kayiso, "Socioeconomic determinants of access to and utilization of contraception among rural women in Uganda: The case of Wakiso District," *Health Science Journal*, vol. 12, no. 6, pp. 1-20, 2018.
- 43. S. Hillcoat-Nalletamby, "The Failure of Family Planning in Mauritian "Cités," *Population Studies and Development from Theory to Fieldwork*, pp. 193-204, 2018.
- 44. B. K. Bellows, C. R. Tak, J. N. Sanders, D. K. Turok, and E. B. Schwarz, "Cost-effectiveness of emergency contraception options over 1 year," *American Journal of Obstetrics and Gynecology*, vol. 218, no. 5, pp. 508. e1-508. e9, 2018.
- 45. C. Parks and J. F. Peipert, "Eliminating health disparities in unintended pregnancy with long-acting reversible contraception (LARC)," *American Journal of Obstetrics and Gynecology*, vol. 214, no. 6, pp. 681-688, 2016.
- 46. E. Swenningson, "When plan A fails, what is Plan B?."
- 47. A. T. Campbell, "What Hope for Health in All Policies' Addition and Multiplication of Equity in an Age of Subtraction and Division at the Federal Level: The Memphis Experience,". *Louis UJ Health L. & Pol'y*, vol. 12, p. 59, 2018.
- 48. A. S. Katz, B. Brisbois, S. Zerger, and S. W. Hwang, "Social impact bonds as a funding method for health and social programs: Potential areas of concern," *American Journal of Public Health*, vol. 108, no. 2, pp. 210-215, 2018.
- 49. A. Moore, S. Ryan, and C. Stamm, "Seeking emergency contraception in the United States: a review of access and barriers," *Women & health,* vol. 59, no. 4, pp. 364-374, 2019.
- 50. W. Hall, "Emergency Contraception: A Last Chance to Prevent Unintended Pregnancy," 2015.
- 51. E. A. Bell, "Emergency contraception decoded: discussing cost, efficacy and access," *Infectious Diseases in Children*, vol. 30, no. 9, p. 14, 2017.
- 52. B. J. Steele and K. Layman, "Ectopic pregnancy after plan b emergency contraceptive use," *The Journal of Emergency Medicine*, vol. 50, no. 4, pp. 663-666, 2016.
- 53. A. H. Ritter, C. R. Isaacs, S. M. Lee, and A. J. Lee, "Single-dose levonorgestrel emergency contraception and silent barriers to its access: Is it really just one step?," *Journal of Women's Health*, vol. 27, no. 5, pp.

646-650, 2018.

- 54. J. Uysal, P. Tavrow, R. Hsu, and A. Alterman, "Availability and accessibility of emergency contraception to adolescent callers in pharmacies in four southwestern states," *Journal of Adolescent Health*, vol. 64, no. 2, pp. 219-225, 2019.
- 55. M. Shigesato *et al.*, "Pharmacy access to Ulipristal acetate in major cities throughout the United States," *Contraception*, vol. 97, no. 3, pp. 264-269, 2018.
- 56. K. K. Upadhya et al., "Emergency contraception," Pediatrics, vol. 144, no. 6, 2019.
- 57. S. A. Belachew, D. K. Yimenu, and B. M. Gebresillassie, "Pharmacy Professionals' Dispensing Practice, Knowledge, and Attitude towards Emergency Contraceptives in Gondar Town, Northwestern Ethiopia: A Cross-Sectional Study," *International Journal of reproductive medicine*, vol. 2017, no. 1, p. 8754126, 2017.
- 58. S. Shakya, S. Shrestha, R. K. Shrestha, U. Giri, and S. Shrestha, "Knowledge, attitude and practice of emergency contraceptive pills among community pharmacy practitioners working in Kathmandu Valley: a cross-sectional study," *BMC Health Services Research*, vol. 20, pp. 1-18, 2020.
- 59. C. A. Stamm *et al.*, "Barriers to single-dose levonorgestrel-only emergency contraception access in retail pharmacies," *Women's Health Issues*, vol. 27, no. 5, pp. 518-522, 2017.
- 60. L. Han *et al.*, "Emergency contraception in Mexico: Trends in knowledge and ever-use 2006–2014," *Maternal and Child Health Journal*, vol. 21, pp. 2132-2139, 2017.
- 61. C. Yang, "The inequity of conscientious objection: refusal of emergency contraception," *Nursing ethics,* vol. 27, no. 6, pp. 1408-1417, 2020.
- 62. S. R. Atre, A. M. Kudale, and H. M. Howard, "Addressing family planning needs among the low-literate population in peri-urban areas of Delhi, India: a qualitative inquiry," *International Journal of Reproduction, Contraception, Obstetrics, and Gynecology*, vol. 6, no. 10, pp. 4500-4508, 2017.
- 63. J. Satia, K. Chauhan, J. Satia, and K. Chauhan, "Steps Taken by the Government of India to Improve Quality of Care," *Improving Quality of Care in Family Planning: A Research and Advocacy Agenda for India*, pp. 33-52, 2018.
- 64. C. L. Satterwhite, V. French, M. Allison, T. Hendrick, and M. Ramaswamy, "Access to contraception in local health departments, four Midwest states, 2017–2018," *Contraception*, vol. 99, no. 6, pp. 363-367, 2019.
- 65. S. K. Aslam, S. Zaheer, M. S. Qureshi, S. N. Aslam, and K. Shafique, "Socioeconomic disparities in use of family planning methods among Pakistani women: findings from Pakistan demographic and health surveys," *PloS one*, vol. 11, no. 4, p. e0153313, 2016.
- 66. M. Chersich *et al.*, "Contraception coverage and methods used among women in South Africa: A national household survey," *South African Medical Journal*, vol. 107, no. 4, pp. 307-314, 2017.
- 67. A. Black *et al.*, "Canadian contraception consensus (part 1 of 4)," *Journal of Obstetrics and Gynaecology Canada*, vol. 37, no. 10, pp. 936-938, 2015.
- 68. I. Weiner, "The Corporately Produced Conscience: Emergency Contraception and the Politics of Workplace Accommodations," *Journal of the American Academy of Religion*, vol. 85, no. 1, pp. 31-63, 2017.
- 69. S. Willetts, M. MacDougall, and S. Cameron, "A survey regarding acceptability of oral emergency contraception according to the posited mechanism of action," *Contraception*, vol. 96, no. 2, pp. 81-88, 2017.
- 70. S. I. Karim, F. Irfan, N. Al Rowais, B. Al Zahrani, R. Qureshi, and B. H. Al Qadrah, "Emergency contraception: Awareness, attitudes, and barriers of Saudi Arabian Women," *Pakistan Journal of Medical Sciences*, vol. 31, no. 6, p. 1500, 2015.
- 71. F. T. von Rosen, A. J. von Rosen, F. Müller-Riemenschneider, and P. Tinnemann, "Awareness and

knowledge regarding emergency contraception in Berlin adolescents," *The European Journal of Contraception & Reproductive Health Care*, vol. 22, no. 1, pp. 45-52, 2017.

- 72. F. Gure, M. K. Dahir, M. Yusuf, and A. M. Foster, "Emergency contraception in post-conflict Somalia: An assessment of awareness and perceptions of need," *Studies in family planning*, vol. 47, no. 1, pp. 69-81, 2016.
- 73. O. A. Babatunde *et al.*, "Knowledge and use of emergency contraception among students of public secondary schools in Ilorin, Nigeria," *Pan African Medical Journal*, vol. 23, no. 1, 2016.
- 74. M. Lehan Mackin, M. K. Clark, A. M. McCarthy, and K. Farris, "Knowledge and use of emergency contraception in college women," *Western Journal of Nursing Research*, vol. 37, no. 4, pp. 462-480, 2015.
- 75. B. Kgosiemang and J. Blitz, "Emergency contraceptive knowledge, attitudes and practices among female students at the University of Botswana: A descriptive survey," *African Journal of Primary Health Care and Family Medicine,* vol. 10, no. 1, pp. 1-6, 2018.
- 76. A. Hellström, K. Gemzell Danielsson, and H. Kopp Kallner, "Trends in use and attitudes towards contraception in Sweden: results of a nationwide survey," *The European Journal of Contraception & reproductive health care*, vol. 24, no. 2, pp. 154-160, 2019.
- 77. R. Ochako *et al.*, "Barriers to modern contraceptive methods uptake among young women in Kenya: a qualitative study," *BMC Public Health*, vol. 15, pp. 1-9, 2015.
- 78. K. Levy, A. M. Minnis, M. Lahiff, J. Schmittdiel, and C. Dehlendorf, "Bringing patients' social context into the examination room: An investigation of the discussion of social influence during contraceptive counseling," *Women's Health Issues*, vol. 25, no. 1, pp. 13-21, 2015.
- 79. E. E. Ezeanolue *et al.*, "Impact of male partner's awareness and support for contraceptives on female intent to use contraceptives in southeast Nigeria," *BMC Public Health*, vol. 15, pp. 1-6, 2015.
- 80. K. Machiyama *et al.*, "Women's attitudes and beliefs towards specific contraceptive methods in Bangladesh and Kenya," *Reproductive health*, vol. 15, pp. 1-15, 2018.
- 81. L. W. Rice, E. Espey, D. E. Fenner, K. D. Gregory, J. Askins, and C. J. Lockwood, "Universal access to contraception: women, families, and communities benefit," *American Journal of Obstetrics and Gynecology*, vol. 222, no. 2, pp. 150. e1-150. e5, 2020.
- 82. O. A. Savage-Oyekunle and A. Nienaber, "Adolescents' access to emergency contraception in Africa: An empty promise?," *African Human Rights Law Journal*, vol. 17, no. 2, pp. 475-526, 2017.
- 83. C. Riley *et al.*, "Getting to FP2020: Harnessing the private sector to increase modern contraceptive access and choice in Ethiopia, Nigeria, and DRC," *PloS one*, vol. 13, no. 2, p. e0192522, 2018.
- 84. A. Dixit, M. Khan, and I. Bhatnagar, "Mainstreaming of emergency contraception pill in India: challenges and opportunities," *Indian Journal of Community Medicine*, vol. 40, no. 1, pp. 49-55, 2015.
- 85. S. T. Cameron *et al.*, "Use of effective contraception following provision of the progestogen-only pill for women presenting to community pharmacies for emergency contraception (Bridge-It): a pragmatic cluster-randomised crossover trial," *The Lancet*, vol. 396, no. 10262, pp. 1585-1594, 2020.
- 86. A. Dawson, N.-T. Tran, E. Westley, V. Mangiaterra, and M. Festin, "Workforce interventions to improve access to emergency contraception pills: a systematic review of current evidence in low-and middleincome countries and recommendations for improving performance," *BMC Health Services Research*, vol. 15, pp. 1-23, 2015.
- L. G. Horton, S. G. Folger, E. Berry-Bibee, T. C. Jatlaoui, N. K. Tepper, and K. M. Curtis, "Research gaps from evidence-based contraception guidance: the US Medical Eligibility Criteria for Contraceptive Use, 2016, and the US Selected Practice Recommendations for Contraceptive Use, 2016," *Contraception*, vol. 94, no. 6, pp. 582-589, 2016.
- 88. R. Nara, A. Banura, and A. M. Foster, "Assessing the availability and accessibility of emergency contraceptive pills in Uganda: A multi-methods study with Congolese refugees," *Contraception*, vol. 101,

no. 2, pp. 112-116, 2020.

- 89. M. Hobstetter, C. Sietstra, M. Walsh, J. Leigh, and A. M. Foster, "In rape cases, we can use this pill": A multimethod assessment of emergency contraception knowledge, access, and needs on the Thailand–Burma border," *International Journal of Gynecology & Obstetrics,* vol. 130, pp. E37-E41, 2015.
- 90. K. Black *et al.*, "Trends in the use of emergency contraception in Britain: evidence from the second and third National Surveys of Sexual Attitudes and Lifestyles," *BJOG: An International Journal of Obstetrics & Gynaecology*, vol. 123, no. 10, pp. 1600-1607, 2016.
- 91. M. Bauzà, M. Esteva, J. Molina, I. Pereiró, M. Ingla, and S. March, "Emergency contraception and risk habits in a university population," *The European Journal of Contraception & Reproductive Health Care*, vol. 23, no. 6, pp. 427-433, 2018.
- 92. K. Cleland, J. Bass, and A. M. Foster, "Access to emergency contraception in the over-the-counter era," *Women's Health Issues*, vol. 26, no. 6, pp. 622-627, 2016.
- 93. C. Cwiak, B. Howard, J. Hsieh, N. Ricciotti, and G. S. Sucato, "Sexual and contraceptive behaviors among adolescents requesting emergency contraception," *Journal of Pediatric and Adolescent Gynecology*, vol. 29, no. 6, pp. 643-647, 2016.
- 94. N. K. Smith, K. Cleland, B. Wagner, and J. Trussell, "I don't know what I would have done." Women's experiences acquiring ulipristal acetate emergency contraception online from 2011 to 2015," *Contraception*, vol. 95, no. 4, pp. 414-418, 2017.
- 95. S. K. Mody, S. Rafie, M. Hildebrand, and L. P. Oakley, "Exploring emergency contraception prescribing by pharmacists in California," *Contraception*, vol. 100, no. 6, pp. 464-467, 2019.