

## **Medical Abortion in Outpatient Settings During the COVID-19 Pandemic through Survey and Alternative Assessment Methods**

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**Abstract:** Medical abortion is a revolution of the 21st century. During the COVID-19 pandemic, there were a number of issues in the medical fields, including abortion. Since in the Republic of Uzbekistan there were a number of inconveniences with a visit and further observation by a doctor. To achieve the best result, we conducted a clinical study and optimization of medical abortion using a number of useful and methods that helped women in our country during the pandemic to conduct a confidential, safe abortion on an outpatient basis without visiting a doctor.

**Keywords:** Medical abortion, low sensitivity test, hCG.

### **Introduction**

Based on the literature data, it can be said that the frequency of complications in the post-abortion period (early, delayed and late) fluctuates between 15 and 57% [1,2,3,4]. The frequency of these complications is higher in primiparous women and exceeds the corresponding indicators in repeat pregnant women, and not only gynecological but also somatic complications are more common [5,6]. In addition, termination of an unwanted pregnancy by surgical abortion may adversely affect the course of subsequent pregnancies and future fertility. According to various studies, 40% of women who have resorted to any method of abortion, repeat it. Therefore, to preserve fertility and prevent repeated abortions, an alternative option is to provide full information about the planned method of contraception, its choice and start of use. However, according to WHO data, only 36% of married couples use highly effective methods of contraception [7,8,9,10,11,12,13].

In patients with a history of abortions, changes are observed not only in the psychological plane, but also hormonal disorders, which have a significant negative impact on their reproductive health [14,15].

This requires the woman to be fully informed about medical abortion, quality medication, and the assistance of a qualified medical specialist (if the woman needs or desires it during the procedure) [16,17].

Public policies on abortion remain a topic of ongoing political debate. The COVID-19 pandemic has shaken health systems to their core, further complicating the issue as national lockdowns and travel restrictions have impacted access to timely abortion for millions of women worldwide. [18].

During the pandemic, some countries have attempted to address the abortion problem by introducing and expanding telemedicine for early medical abortion. Others have imposed stricter bans on abortion. The situation also varied in countries where governments did not change policies or protocols [19].

In light of public health measures that restrict freedom of movement during the height of the pandemic, C. Moreau, M. Shankar and other authors wanted to find out what impact they could have on access to abortion services in Europe. They collected information on practice in 46 countries/regions. Survey information completed by national experts was collected for 31 countries, and desk research was conducted for the remaining 15 [20,21].

The data showed that European countries took different approaches in response to the pandemic, ranging from imposing restrictions to easing some requirements. [6]

### **Aim of the work**

Assessing the effectiveness of medical abortion during a pandemic COVID-19 using questionnaires and a low-sensitivity test at home.

### **Materials and methods**

We conducted our study in 2020-2021 during the COVID-19 pandemic. We examined 165 women with unwanted pregnancies who needed medical abortion. Their ages ranged from 19 to 41 years. This study was conducted at the multidisciplinary clinic of the Tashkent Medical Academy. We divided the women into three groups. The main group included 50 women who underwent only the hCG 1000 sensitivity test before and after the medical abortion. The comparison group included 55 patients who underwent plasma hCG testing, ultrasound examination, and hCG 1000 sensitivity test before the medical abortion. The control group included 60 women who underwent ultrasound examination before and after the medical abortion. The criteria for including pregnant women in the group were:

- reproductive age from 19 to 41 years,
- pregnant women with a pregnancy period of less than 9 weeks,
- women who had no contraindications to medical abortion, singleton pregnancy,
- informed consent of women for medical abortion and examination before and after it,
- termination of intrauterine pregnancy by medication within a period not exceeding 69 days of amenorrhea.

### **Results**

A total of 165 pregnant women aged 19 to 41 years (mean age  $28.4 \pm 4.2$  years) were included in the study for termination of intrauterine pregnancy up to 9 weeks of gestation or up to 69 days of amenorrhea. This pregnancy was unplanned in all examined women. To terminate the pregnancy, a medical abortion was performed using 200 mg mifepristone and 600 mcg misoprostol.

**TABLE 1. DISTRIBUTION OF PATIENTS DEPENDING ON AGE (\*- $P \geq 0.05$ )**

<b>Indicator</b>	<b>Control group, n=60</b>	<b>Comparison group, n=55</b>	<b>Main group, n=50</b>
<b>Average age</b>	28.9 $\pm$ 5.5	28.4 $\pm$ 5.4	29.8 $\pm$ 5.2

In all women seeking early intrauterine pregnancy termination, the gestation period was up to 9 weeks. The longest gestation period was observed in patients who used medical abortion at home - 8 weeks and 6 days, the shortest gestation period was 4 weeks and 3 days. The maximum gestation period in women in the control and comparison groups was 8 weeks 5 days and 8 weeks 3 days, respectively. The shortest gestation period was 4 weeks, 4 weeks and 3 days. It should be noted that in patients of all groups, the calculation of the gestational age based on the last menstrual cycle coincided with the findings of the ultrasound examination performed before the abortion (table 2).

**TABLE 2. GESTATIONAL AGE AT THE TIME OF REQUEST FOR MEDICAL ABORTION**

<b>Indicator</b>	<b>Canine group, n=60</b>	<b>Comparison group, n=55</b>	<b>Main group, n=50</b>
<b>The longest period of gestation</b>	8 weeks 5 days	8 weeks 3 days	8 weeks 6 days
<b>The shortest period of gestation</b>	4 weeks 3 days	4 weeks 3 days	4 weeks 5 days

In this group, the level of the hCG hormone in venous blood was determined in the morning on an empty stomach during the 4th control after medical abortion. The highest indicator of this hormone was 270.26 mIU / ml, the lowest - 28.25 mIU / ml

In post-abortion period, all women examined had a complete abortion. This was proven by hCG from the cubital vein. The data were compared with a low-sensitivity test, which in 100% of cases showed a negative result after an abortion on the 14th day (table 3).

**TABLE 3. LEVEL OF HCG HORMONE (mIU/ML) IN PERIPHERAL BLOOD OF PATIENTS IN THE COMPARISON GROUP BEFORE AND AFTER ABORTION**

<b>Level</b>	<b>Before a medical abortion</b>	<b>After a medical abortion</b>
<b>Maximum</b>	67000	270.26
<b>Minimal</b>	1080	28.25

In addition, the problems faced by women in this group during the COVID-19 pandemic when visiting a doctor were analyzed. According to the respondents, 105 (74.3%) women had various problems. One of the main problems in patients of both groups that arose during the pandemic was the fear of contracting COVID-19. The next place was taken by family conditions and lack of access to transport. The survey showed that women had problems during the pandemic, which are shown in table 4.

**TABLE 4. PROBLEMS WITH GETTING TO A DOCTOR'S APPOINTMENT, %**

<b>Problems</b>	<b>comparative, (n=55)</b>		<b>main, (n=50)</b>	
	<b>Abs.</b>	<b>%</b>	<b>Abs.</b>	<b>%</b>
<b>Car</b>	19	34.5±6.4	20	42±6.9
<b>Family</b>	15	27.2±6.0	19	38±6.9
<b>Fear of infection</b>	31	56.4±6.7	27	54±7.0

After the women filled out the questionnaire, the requirements of the surveyed women regarding the method of contacting a doctor for a medical abortion in the future were analyzed. According to its results, more than 96% of women in both groups preferred to contact a doctor via telemedicine.

**TABLE 5. PREFERRED FORM OF OBSERVATION IN THE FUTURE, %**

		comparative, (n=55)		main, (n=50)	
		Abs.	%	Abs.	%
1	At the clinic	18	32.7±6.3	13	26.0±6.2
2	By phone, if necessary	33	60.0±6.6	34	68.0±6.6
3	No preferences	3	5.5±3.1	2	4.0±2.8
4	I don't know			2	4.0±2.8

Based on the survey results, it can be concluded that women who had medical abortion at home remotely, with the control of hCG sensitivity tests 1000. More than half of the women who had medical abortion at home expressed their willingness to perform this procedure in the future using telemedicine.

### Conclusion.

Thus, all of the above determined the purpose and direction of our study - to develop an optimal method for performing medical abortion at home using a low-sensitivity test and monitoring post-abortion rehabilitation using a questionnaire.

The patients we observed who wanted to terminate their pregnancy with medication were divided into three groups, comparable by age, parity of pregnancy and other characteristics. There were no differences between the groups in the doses and regimens of taking medications for medical abortion. The groups differed from each other only in the conditions of implementation (inpatient or home), examinations conducted before and after medical abortion as a control.

Among the comparison group patients, who underwent medical abortion as prescribed by a physician, its effectiveness was monitored by determining the hCG level in peripheral blood and a 1000 sensitivity test, and among the women in the main group, who underwent medical abortion at home using a questionnaire and a 1000 sensitivity test, 37% and 43.6%, respectively, indicated the ease of the procedure.

A comparative analysis was conducted between the main and comparison groups, as the same tools were used in women of these groups. During the COVID-19 pandemic, the main problem faced was the fear of contracting coronavirus - 56.4% and 54%. 66.7% and 56.4% of women in both groups answered yes to the question of whether they were ready to have a medical abortion at home using IT technologies while maintaining contact with the doctor. 60 and 67.3% of these women, when asked about the methods of contacting a doctor for a medical abortion in the future, answered that it is convenient to communicate with him by phone. This once again shows the simplicity of carrying out a medical abortion at home studies

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