CIDSR
Centrul de Instruire în Domeniul Sănătății Reproductive

Grand Challenges Canada®
Grands Défis Canada

REPORT

Findings of Formative Research to Assess the Feasibility of Extending Medical Abortion via Telemedicine Services in Five Countries of EECA Region

Authors:

Rodica Comendant[a] MD, PhD.,
Meri Khachikyan[b] MD,
Gulnara Rzayeva[c] MD,
Galina Grebennikova[d] MD, PhD.,
Baktigul Bozgorpoeva[e] MD,
Dilfuza Kurbanbekova[f] MD, PhD.,
Tamar Tsereteli[g] MD, MSc., PhD.

[a] Reproductive Health Training Center, Chisinau, Moldova

[b] National Institute of Public Health of the MoH, Yerevan, Armenia

[c] Scientific-Research Institute of Obstetrics and Gynecology, Baku, Azerbaijan

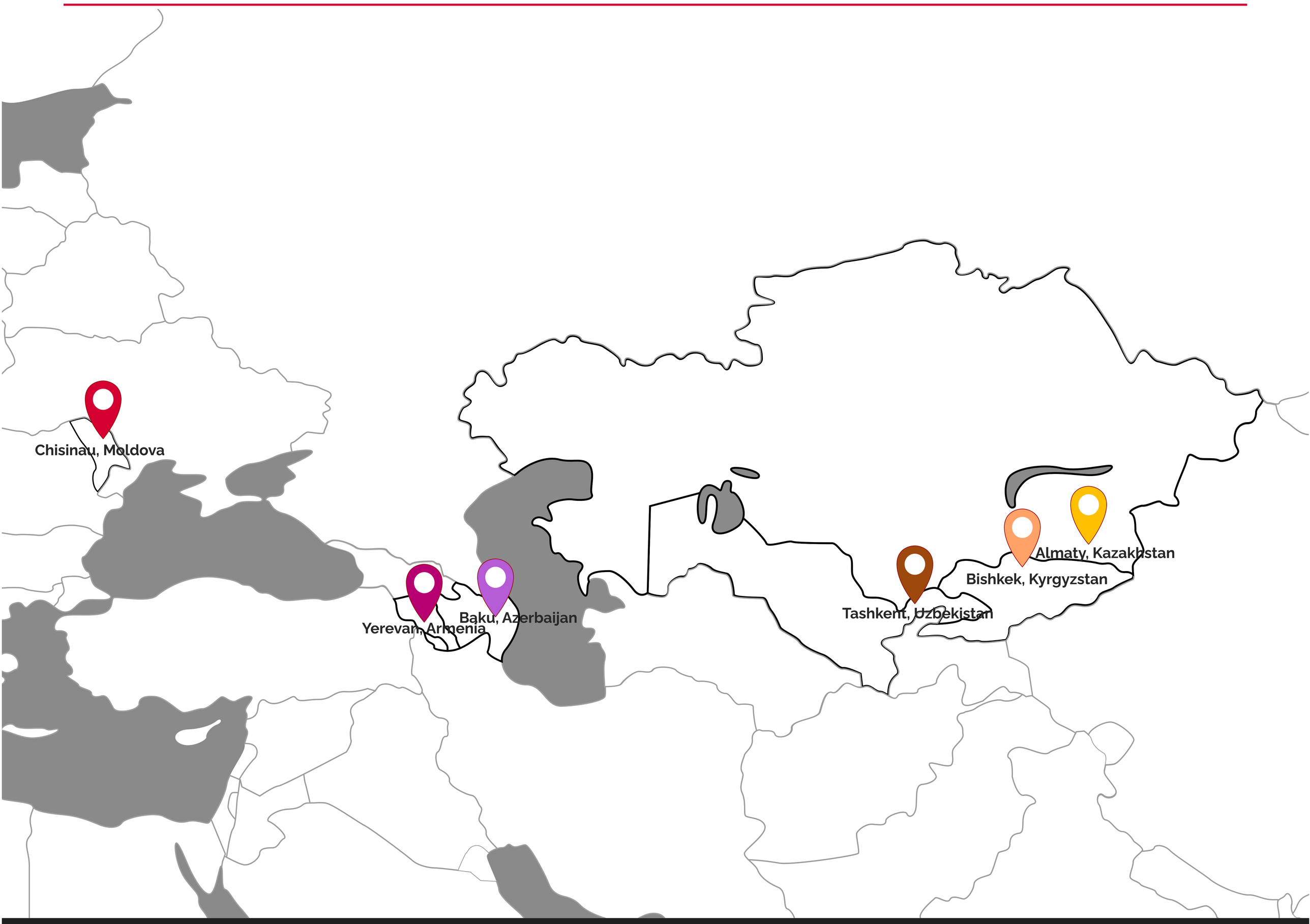
[d] Kazakhstan Association on Sexual and Reproductive Health, Almaty, Kazakhstan

[e] Kyrghyz Family Planning Association, Bishkek, Kyrgyzstan

[f] Women's Wellness Center, Tashkent, Uzbekistan

[g] Gynuity Health Projects, Tbilisi, Georgia

CIDSR
Centrul de Instruire
în Domeniul Sănătății Reproductive



- Chisinau, Moldova
- Yerevan, Armenia
- Baku, Azerbaijan
- Almaty, Kazakhstan
- Bishkek, Kyrgyzstan
- Tashkent, Uzbekistan

Who we are

The Reproductive Health Training Center (RHTC) of Moldova, in Romanian - Centrul de Instruire in Domeniul Sanatatii Reproductive (CIDSR), founded in 1998, is a non-profit organization dedicated to promoting reproductive and sexual health and rights. RHTC aims to ensure equal access to quality reproductive health services for all women, including adolescents and marginalized groups. We provide educational training on sexual and reproductive health and rights to medical professionals and community members. Key activities include training providers, conducting evidence-based research, and developing cost-effective, patient-centered technologies.

CIDSR
Centrul de Instruire
în Domeniul Sănătății Reproductive

CONTENTS

Acknowledgments.....2

Introduction.....3

Findings of formative research in

- Armenia.....4
- Azerbaijan.....11
- Kazakhstan.....17
- Kyrgyzstan.....24
- Uzbekistan.....30

Annex I. Findings of introductory clinical research pilot study on telemedicine medical abortion in Kyrgyzstan.....I

CIDSR
Centrul de Instruire
în Domeniul Sănătății Reproductive

Acknowlegments

We are grateful to our local interviewers in Armenia, Azerbaijan, Kazakhstan, Kyrgyzstan, and Uzbekistan for conducting face-to-face interviews and recording data. We would like to thank the women, providers, pharmacists, drug distributors, NGO representatives and policy makers who participated in this formative research study. Special thanks to the sociologist Ecaterina Grigoras for data analysis and to Catalina Comendant for her assistance in formatting the report.
We would like to express deepest gratitude for the financial support provided by the Grand Challenges Canada for our formative research study. GCC funding enabled us to undertake this important research, which aims to improve women access to safe abortion services in EECA region.

Introduction

Medical abortion (MA) is one of the options for pregnancy termination for women in Eastern Europe and Central Asia (EECA); however, MA services are significantly underutilized. Inconvenience and costs associated with two or more mandatory in-person visits for MA likely contribute to reduced uptake. Telemedicine MA (TMA) is uniquely positioned to address barriers to the service. Recent analyses have shown MA via telemedicine services to be highly effective, safe, and acceptable in Moldova[1] and Georgia[2], and given similar findings in other countries where telemedicine MA is available[3–5] the service is expected to be equally successful across EECA region.

We conducted formative research to assess the feasibility of medical abortion service via telemedicine in five EECA countries: Armenia, Azerbaijan, Kazakhstan, Kyrgyzstan, and Uzbekistan. Our goal was to collect data from relevant stakeholders related to MA service delivery barriers and the potential for MA via telemedicine provision. This study aimed at collecting information that could be used to guide a comprehensive initiative leading to the introduction of telemedicine medical abortion in EECA region.

Structured questionnaires for women, providers, pharmacists/drug distributors, NGOs and policy makers were developed in English and translated into local languages in early 2022. Data collection was started after pre-testing and revision of the instruments. Interviewers were recruited and trained in each country to administer the questionnaire. Formative research participants who were interested and who consented participated in a face-to-face structured interview. Interviews took approximately 30 minutes to complete, and were conducted in local languages in each country. Interviewers asked participants about their knowledge on medical abortion, medical abortion service delivery barriers and the potential for medical abortion via telemedicine provision in their respective countries. All participants were assigned an identification number, and no names or other identifying information were recorded. Data from completed questionnaires were entered into Excel and analysis was conducted in SPSS version 29.0.

After completing the analysis of formative research study data in five countries of the EECA region, Kyrgyzstan was selected as the location for conducting a telemedicine medical abortion introductory clinical study.

[1] Comendant R, Cook C, Hodorogea S, Sagaidac I, Bubulici C, Platais I. Medical abortion via telemedicine for women and adolescents: Experience from Moldova. Reproductive, female and child health, 2022:1-8

[2] Tsereteli N, Mamatsashvili L, Tsertsvadze G, Tsereteli T, Platais I. Telemedicine medical abortion service in Georgia: an evaluation of a strategy with reduced number of in-clinic visits. Eur J Contracept Reprod Health Care 2023 Apr; 28(2):141-146. 3

[3] Aiken A, Lohr PA, Lord J, Ghosh N, Starling J. Effectiveness, safety and acceptability of no-test medical abortion (termination of pregnancy) provided via telemedicine: a national cohort study. BJOG 2021 Aug; (9):1464-1474

[4] Erlank CP, Lord J, Church K. Acceptability of no-test medical abortion provided via telemedicine during Covid-19: analysis of patient-reported outcomes. BMJ Sex Reprod Health 2021; Oct; 47(4):261-268

[5] Chong E, Shochet T, Raymond E, et al. Expansion of a direct-to-patient telemedicine abortion service in the United States and experience during the COVID-19 pandemic. Contraception 2021; 104(1):43-48

Findings of formative research in Armenia

Fifty-seven women were interviewed, out of them 42 (74%) women from the capital city of Yerevan and 15 (26%) women from the regions. Women from all reproductive ages were fairly evenly represented, and 80% of participants had a university degree. Seventy percent of women surveyed were married, and 56% had one or more children. All participants reported that they are aware about medical abortion of which less than one-fifth (18%) had an experience of medical abortion (Table 1). More than two-third (77%) of participants are aware about the pre-procedure tests for assessing MA eligibility, and majority of women (84%) know that drugs could be obtained either from a service provider and/or at a pharmacy with a doctor's prescription. More than half of participants (57%) believe that access to MA is good or very good. Only five percent of women are aware that there is no need to stay in clinic for the duration of the procedure.

Table 1. Participant characteristics

N=57 Women	n	%
Residency		
Urban	42	74
Rural	15	26
Education		
High school	11	20
University	46	80
Marital status		
Single	13	23
Married	40	70
Divorced	4	7
Family composition*		
No children	24	44
Children 1≤	32	56
Had MA previously	10	18

*N=56, one participant was pregnant

Two percent of women either could not get abortion service or bought abortion pills at black market during pandemic. Slightly more than one-third (36%) of participants received MA consultation from the provider either by phone or through internet during COVID-19 restrictions (Fig. 1).

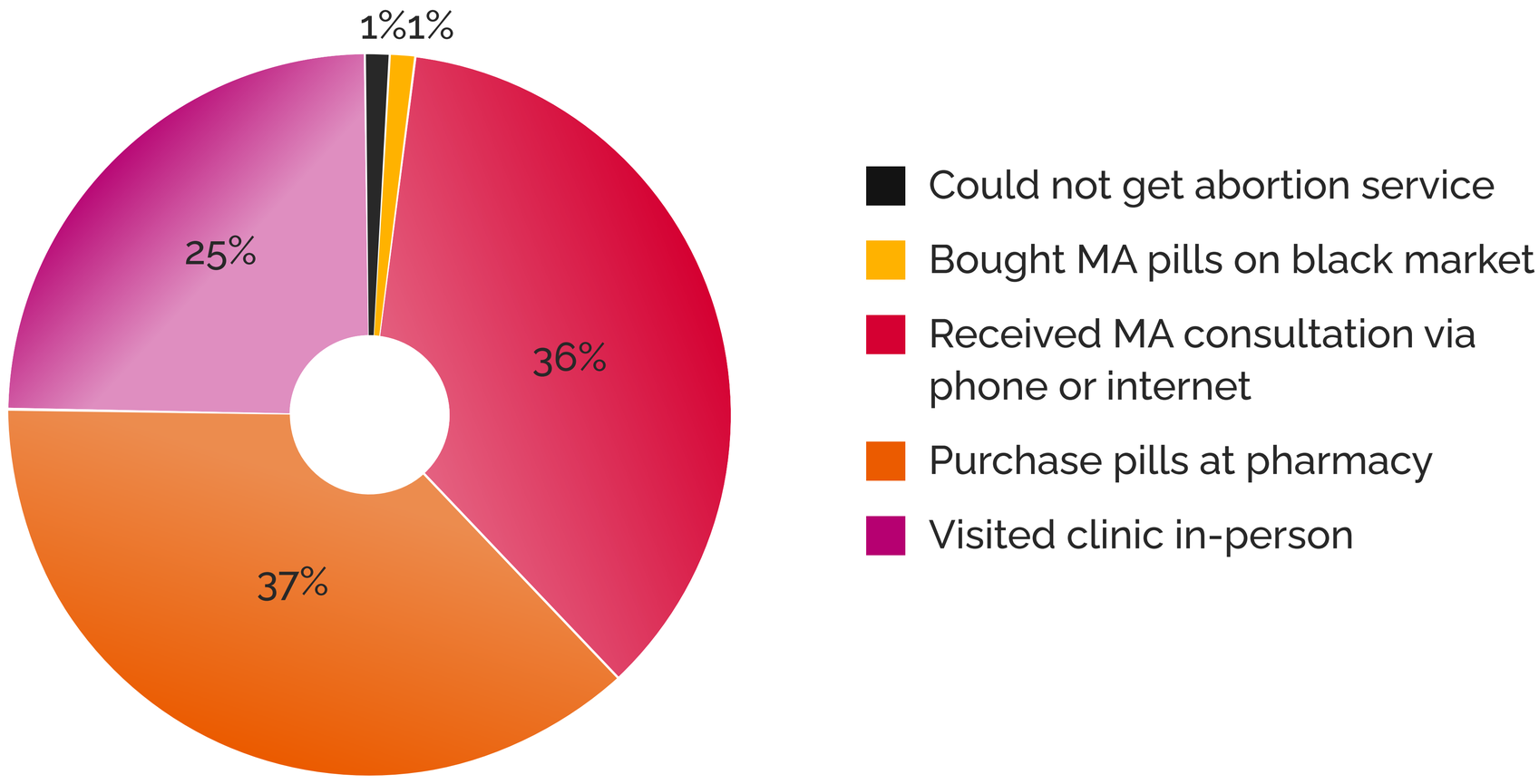


Table 1. Access to abortion services during COVID-19 pandemic

All participants believe that women will be interested in telemedicine MA, majority (93%) are aware about TMA and almost all (95%) reported that TMA is advantageous for women (Fig 2). Slightly more than half of participants (52%) reported that women could self-administer medicines without the direct supervision of a health worker as well as self-manage one or more steps of entire MA process (Fig 3).

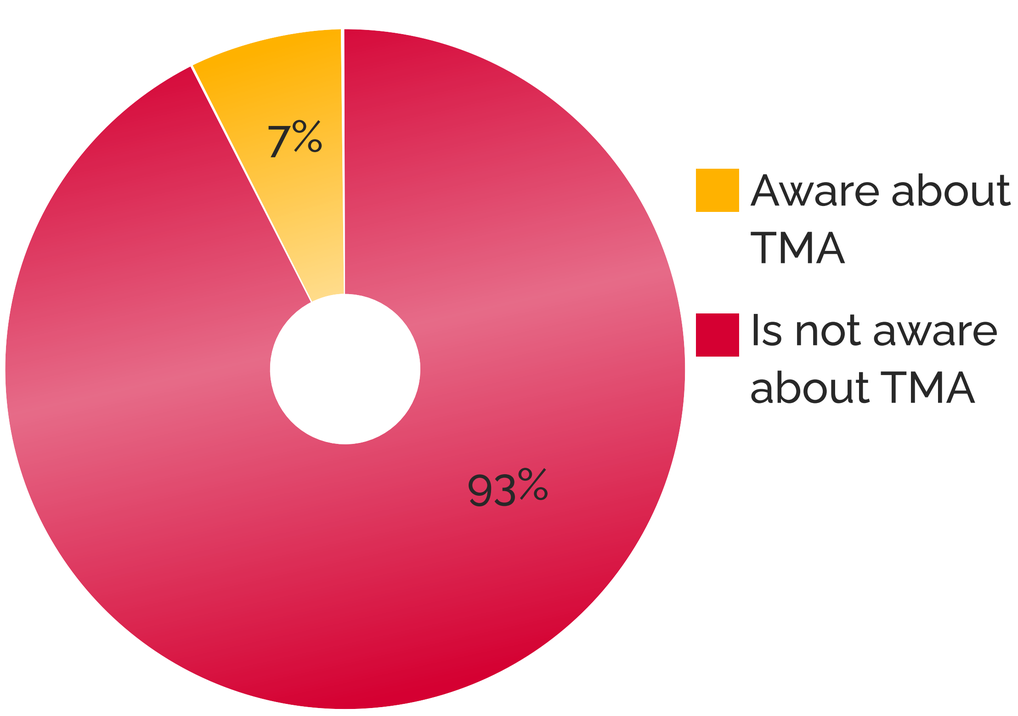


Fig 2. Women's awareness on TMA

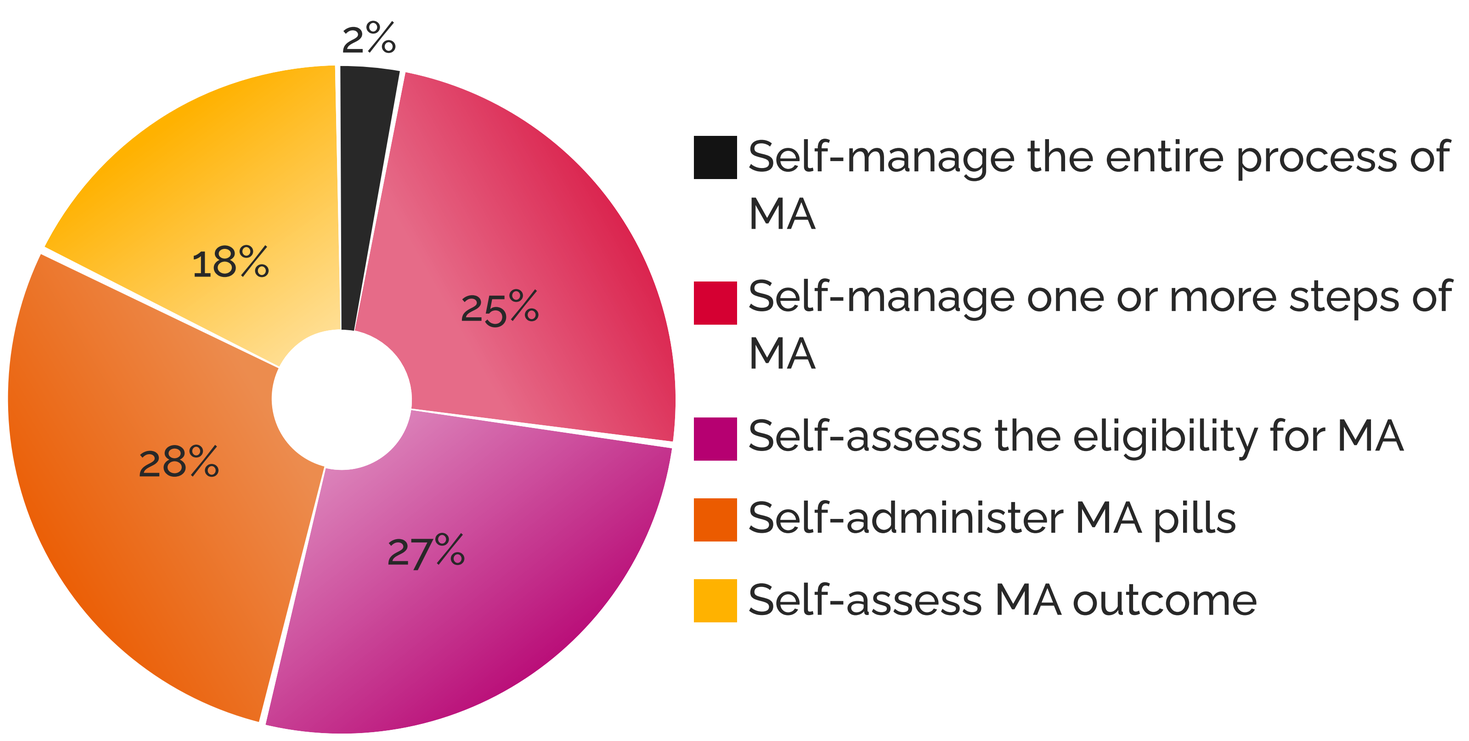


Fig.3 Women's opinion on self-managed MA

From June to December 2022, 5 interviewers interviewed **60 providers** from the capital city of Yerevan and other regions of Armenia. Seventy-five percent of the respondents were female and 67% represented the age group 36-55 years (Table 2). One-fourth of the providers (26%) were from rural areas. More than half of the participants (54%) reported that they do not know when national abortion guideline was revised.

Table 2. Participant characteristics

N=60 Provides	n	%
Residency		
Urban	44	73
Rural	16	27
Sex of respondent		
Male	15	25
Female	45	75
Age group		
18-35	7	12
36-55	40	67
56≤	13	21

All providers think that women face financial and logistical barriers to access MA services. Majority of research participants (88%) think that limited number of clinics and transportation to the clinic create additional barrier for women. More than two-third of providers (78%) reported that they are not aware any existing regulation for improving access to MA services in the country.

Providers have information about telemedicine and almost all (98%) believes that existing telecommunication infrastructure supports its implementation in the country. Vast majority of the providers (98%) think that women could self-manage entire process of MA. More than half of the participants (57%) believe that both women and providers will be interested in TMA. The vast majority of providers (97%) reported that TMA is advantageous for women. More than half of the providers (62%) listed regulatory changes, inclusion of telemedicine medical abortion into national protocol, and training of providers as the necessary steps for implementing TMA services in the country (Fig 4).

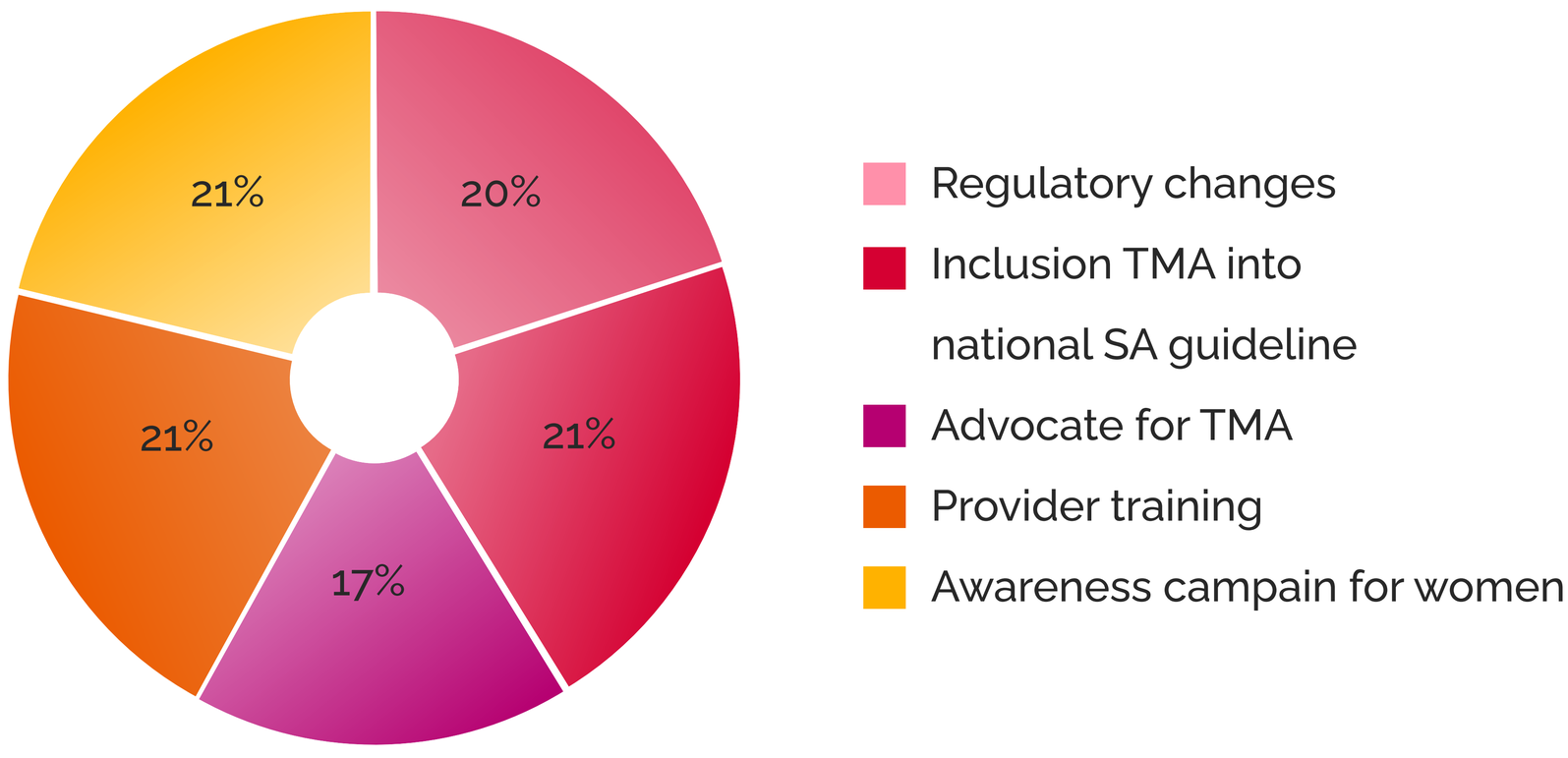


Fig. 4 Providers' opinion on implementing TMA at the national level

From October to December 2022, **twenty-five pharmacists** and **MA pills distributors** with average age 35 years participated in the formative research. Eighty percent of the respondents were female and 20 percent were male. Less than half of the participants (40%) are aware of national guidelines. Eighty-four present of pharmacists believe that the following exams/tests are required to obtain abortion services: clinical examination (80%), ultrasound (68%), urine pregnancy test (64%), and lab.tests (60%) (Fig. 5). Only 12 percent of respondents are aware that women could choose mifepristone home administration, and slightly more than half (52%) reported that women are allowed to take misoprostol at home. Pharmacists are aware that women are counseled by ob/gyn, and they get the medications either directly from provider or at pharmacies. They noted that prices ranges from 20,000 to 50,000 AMD. Vast majority of the participants (96%) reported that MA fee does not include the expenses for ultrasound and lab.tests. All pharmacist indicated that MA expenses are covered by women.

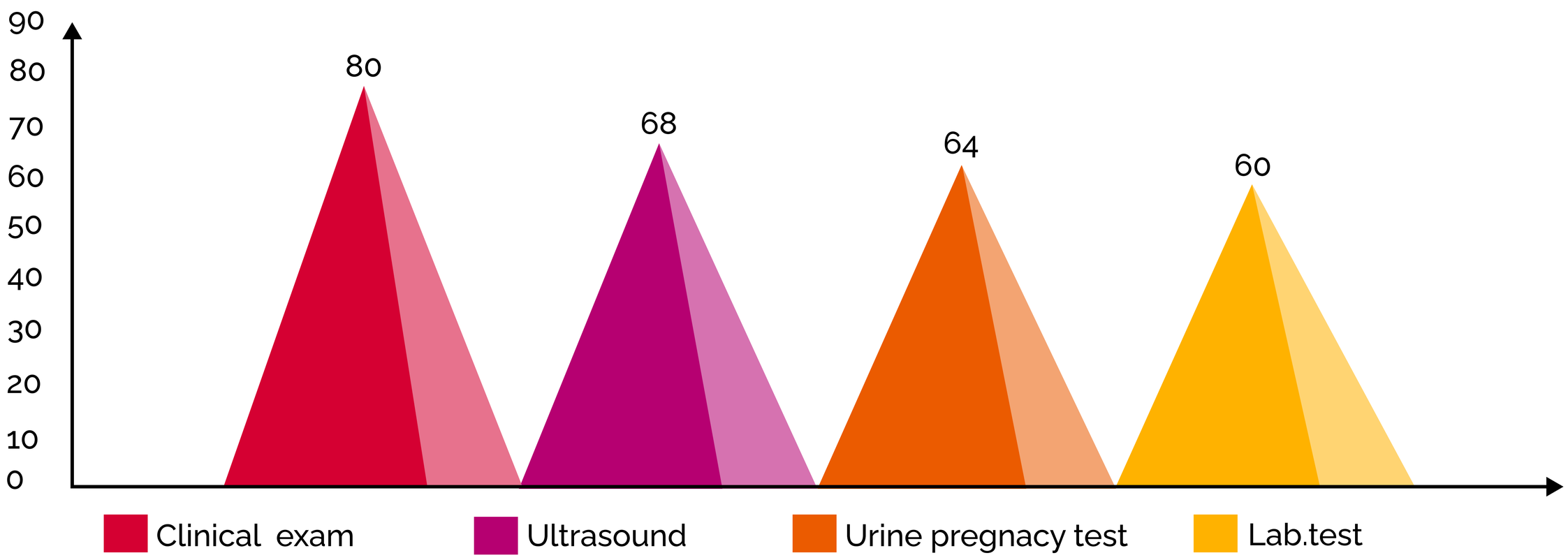


Fig.5 Pharmacists/distributors' reported requirements* for women obtaining medical abortion

*Respondent could report multiple requirements

Ninety-six percent of the pharmacist/distributors think that women face financial barriers to access MA services, and 92% reported that logistical barrier limits women's access to the procedure (Fig. 6). In addition, lack of awareness on MA among women (88%), GA limit (88%), and limited number of clinics providing abortion services (72%) creates additional barrier for women.

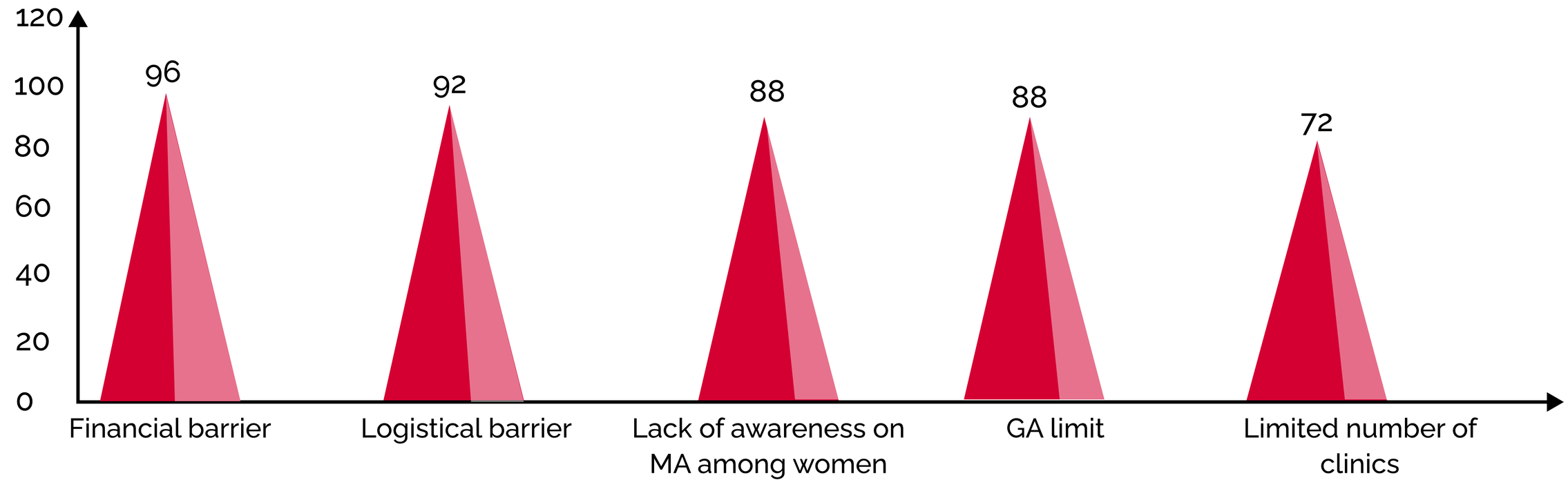


Fig 6. Pharmacists/distributors' reported barriers for women seeking medical abortion services

Vast majority of pharmacist (92%) reported that access to abortion services were limited due to travel restrictions during pandemic, and more than two-third (72%) indicated limited number of clinics providing abortion services. Less than half of the participants (44%) listed the changes in regulation for improving access to abortion services in Armenia during COVID-19 restrictions: MA eligibility assessment by phone, remote counseling, mailing the pills, and abortion outcome assessment by phone. In addition, one-fifth (20%) pharmacist reported that purchase of medication without prescription was allowed for overcoming barriers to abortion services during pandemic.

All research participants are aware about telemedicine, and almost all (95%) think that women could self-manage abortion process. Less than half of the pharmacist (44%) reported that existing regulation as indicated in the Republic of Armenia Law "On Medical Assistance and Services to the Population" (updated on 05/06/2020) allow remote service provision. National telemedicine service is in the process of being introduced into the e-health system of the country.

All participants believes that existing communication technology infrastructure as well as high access to internet and phone services of both women and providers support introducing telemedicine services in Armenia. Less than half (48%) of the participants think that both women and providers will be interested in telemedicine services, and all of them believe that it is feasible to introduce telemedicine service in the country. Ninety-two percent of the participants reported the following advantages of TMA: more comfortable, more private, less financial burden for women, better access for women from rural areas, less burden on a clinic and protecting women's safety during pandemic.

Ninety-two percent of the participants reported the following steps for implementing the telemedicine medical abortion in the country: including TMA in the national guideline, training of providers, advocacy campaign, and information campaign for women.

Eight representatives from local NGOs, seven female and one male participated into the formative research. All participants were from Yerevan. All participants were well aware of medical abortion services as well as about telemedicine services. Majority of NGO representatives (83%) reported that women would be interested in telemedicine services. Half of the participants believe that logistical and transportation barriers creates enormous burden on women especially women from rural areas to access abortion services.

NGO representatives think that the following steps should be taken to ensure access to TMA in the country: changes in legislation (20%), inclusion of TMA into in the national guidelines (20%), advocacy for TMA services (20%), training of providers (20%), and conducting an information campaign for women (20%) (Fig 7).

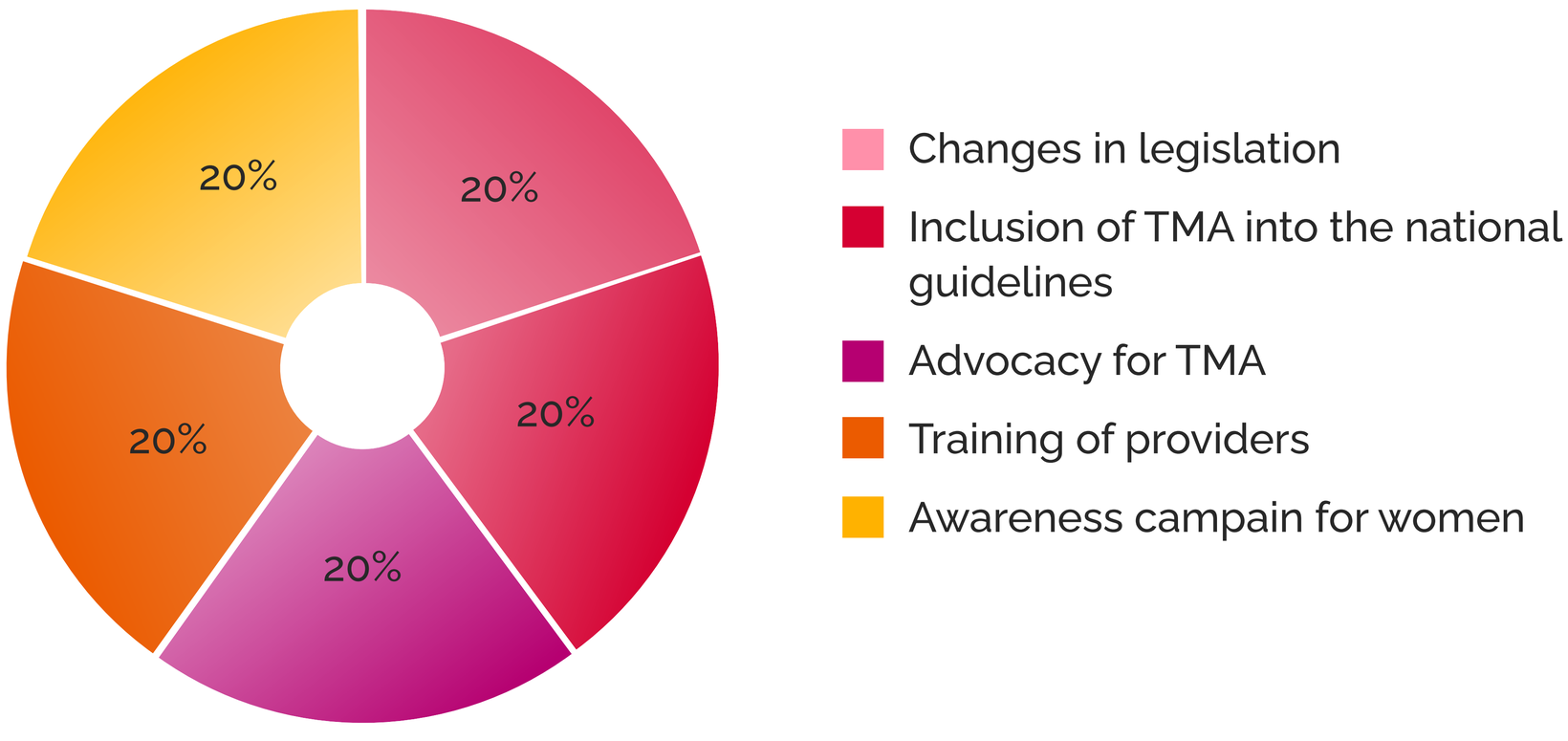


Fig. 7 NGO representatives' opinion on implementing TMA at the national level

Twelve policy makers with average age 56 years participated in the formative research. Eighty percent of the respondents were female and 20 percent were male. Majority of the participants (82%) are aware of national guidelines. All are aware about the gestational age limit (9 weeks) for medical abortion as well as exams/tests are required to obtain abortion services. More than half of respondents (67%) reported that women could choose mifepristone home administration, and about one-third (33%) reported that women are allowed to take misoprostol at home. Vast majority of the participants (93%) are informed that women are required to visit clinic for abortion status assessment according to national abortion guideline.

All participants are aware that women are counseled by ob/gyn, and they get the medications either directly from provider or at pharmacies. They noted that prices ranges from 15,000 to 30,000 AMD. Almost all participants (96%) believe that MA fee includes the expenses for ultrasound and lab.tests. All policy makers indicated that MA expenses are covered by women.

All policy makers think that women face financial as well as logistical barriers to access MA services. In addition, lack of awareness on MA among women (92%), GA limit (100%), lack of trained providers (33%) and limited number of clinics providing abortion services (67%) creates additional barrier for women (Fig.8). All participants reported that access to abortion services were limited due to travel restrictions and limited number of the clinics during pandemic.

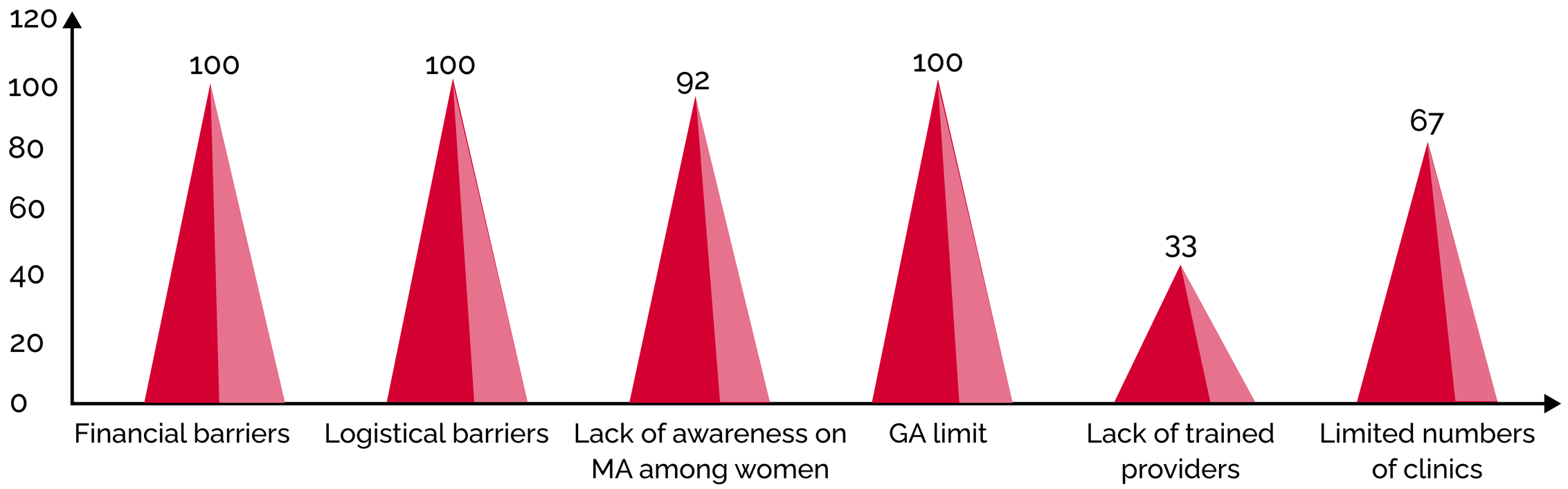


Fig.8 Policy makers' opinion on barriers for women seeking medical abortion services

All participant listed the changes in regulation for improving access to abortion services in Armenia during COVID-19 restrictions: MA eligibility assessment by phone, remote counseling, mailing the pills or purchasing medication without prescription at pharmacies, and abortion outcome assessment by phone.

All research participants are aware about telemedicine as well as think that women could self-manage abortion process, and all of them reported that existing regulation as indicated in the Republic of Armenia Law "On Medical Assistance and Services to the Population" (updated on 05/06/2020) allow remote service provision. National telemedicine service is in the process of being introduced into the e-health system of the country.

All participants believes that existing communication technology infrastructure as well as high access to internet and phone services of both women and providers support introducing telemedicine services in Armenia. More than half (67%) of the participants think that both women and providers will be interested in telemedicine services, and all of them believe that it is feasible to introduce telemedicine service in the country. Ninety-two percent of participants reported the following advantages of TMA: more comfortable, more private, less financial burden for women, better access for women from rural areas, no need for women to arrange childcare, less burden on clinic and protecting women's safety during pandemic.

Policy makers envisioned two main barriers for implementing TMA services in the country: lack of team of telemedicine leaders/trained providers (67%) and abortion opposition (42%) (Fig. 9). All policy makers reported the following steps for implementing the telemedicine medical abortion in the country: policy/regulatory changes, including TMA in the national guideline, training of providers, advocacy campaign, and information campaign for women.

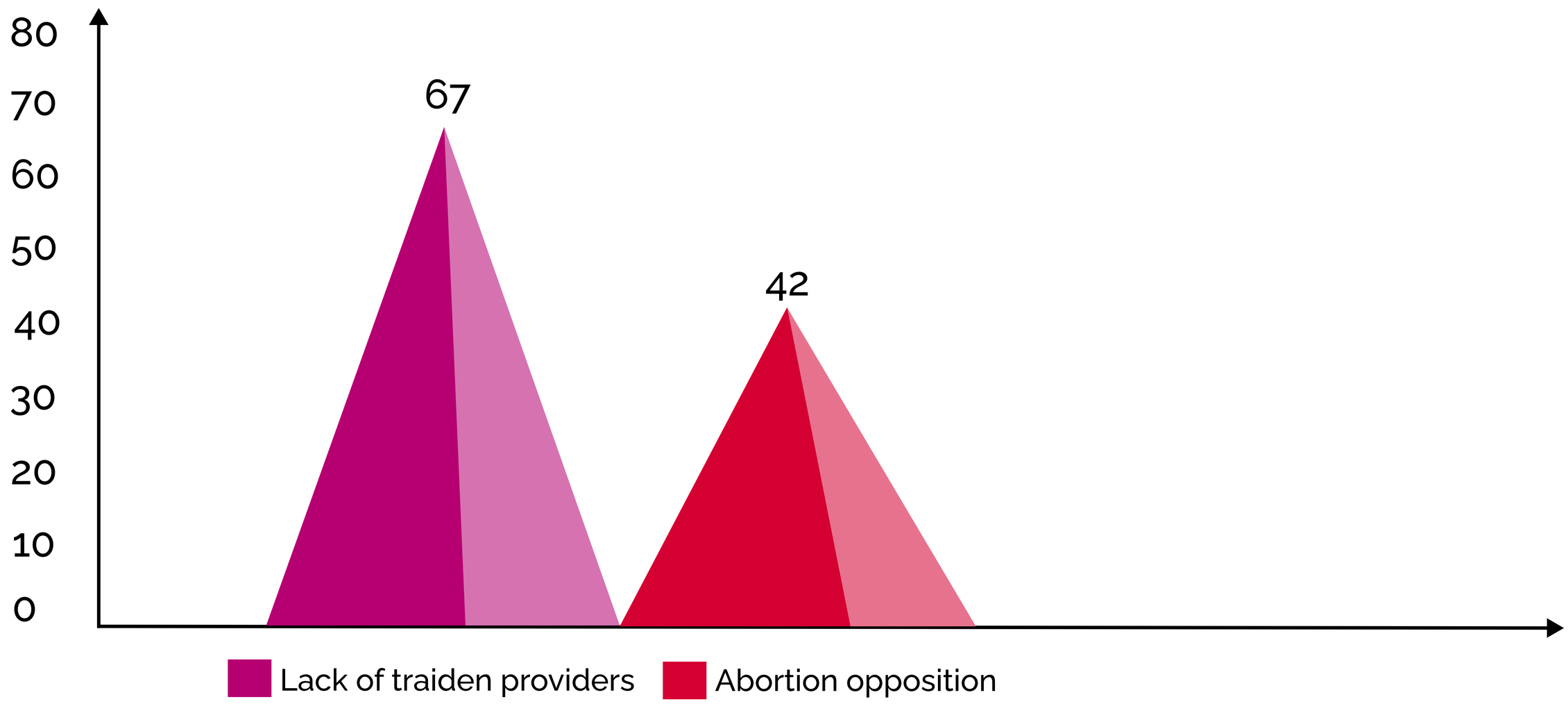


Fig.9 Policy makers' opinion on barriers for women seeking medical abortion services

Conclusion

The findings of the formative research illustrates that woman seeking abortion services face logistical and financial barriers to access the procedure. From talking with representatives of all groups, it is apparent that there is a huge interest in implementing telemedicine services in the country. The number of regulatory changes conducted in Armenia during COVID-19 pandemic should be further implemented beyond the crises to ensure women's access to the procedure. Current positive political climate and telecommunication infrastructure allows implementing telemedicine services in Armenia.

The findings of this formative research suggests that right now is a particularly opportune time to taking the following steps for implementing telemedicine services in Armenia: comprehensive training programs for providers in provision of telemedicine medical abortion services, inclusion telemedicine in national abortion guideline and educational campaign for women on TMA.

Findings of formative research in Azerbaijan

Fifty women were interviewed in the capital city of Baku and in the regions. Women form all reproductive ages were represented, and 60% of respondents were 35 years or younger (Table 1). Vast majority had a university degree. Seventy-four percent of women surveyed were married, and 80% had one or more children. More than half (76%) of the participants reported that they are aware about medical abortion of which 40% had an experience of medical abortion. Only 42% of participants were aware that a women can choose to take mifepristone at home, and slightly more than half (58%) knew that a woman is allowed misoprostol home administration.

Table 1. Participant characteristics

N=50 Women	n	%
Age group		
18-35	30	60
36-55	19	38
56≤	1	2
Education		
High school	18	36
University	32	64
Marital status		
Single	13	26
Married	37	74
Family composition		
No children	10	20
Children 1-3	39	78
Children 3<	1	2
Had MA previously	15	30

The main barriers to medical abortion services reported by women were cost of the service (49%), and number of in-person visits to the clinic (35%) (Fig 1). Vast majority (96%) of women reported that MA counseling is provided by ob/gyn, and MA drugs are mainly obtained either from a service provider (52%) and/or at a pharmacy with a doctor's prescription (44%). Women who had medical abortion experience were aware that they do not need to stay in the clinic for the duration of the procedure. Almost all women (96%) reported that abortion services are paid by women, and state insurance does not cover the cost. Fee for MA varies across the clinics from 30 to 200 USD. MA cost does not include the expenses for pre- and post-procedure ultrasound and tests.

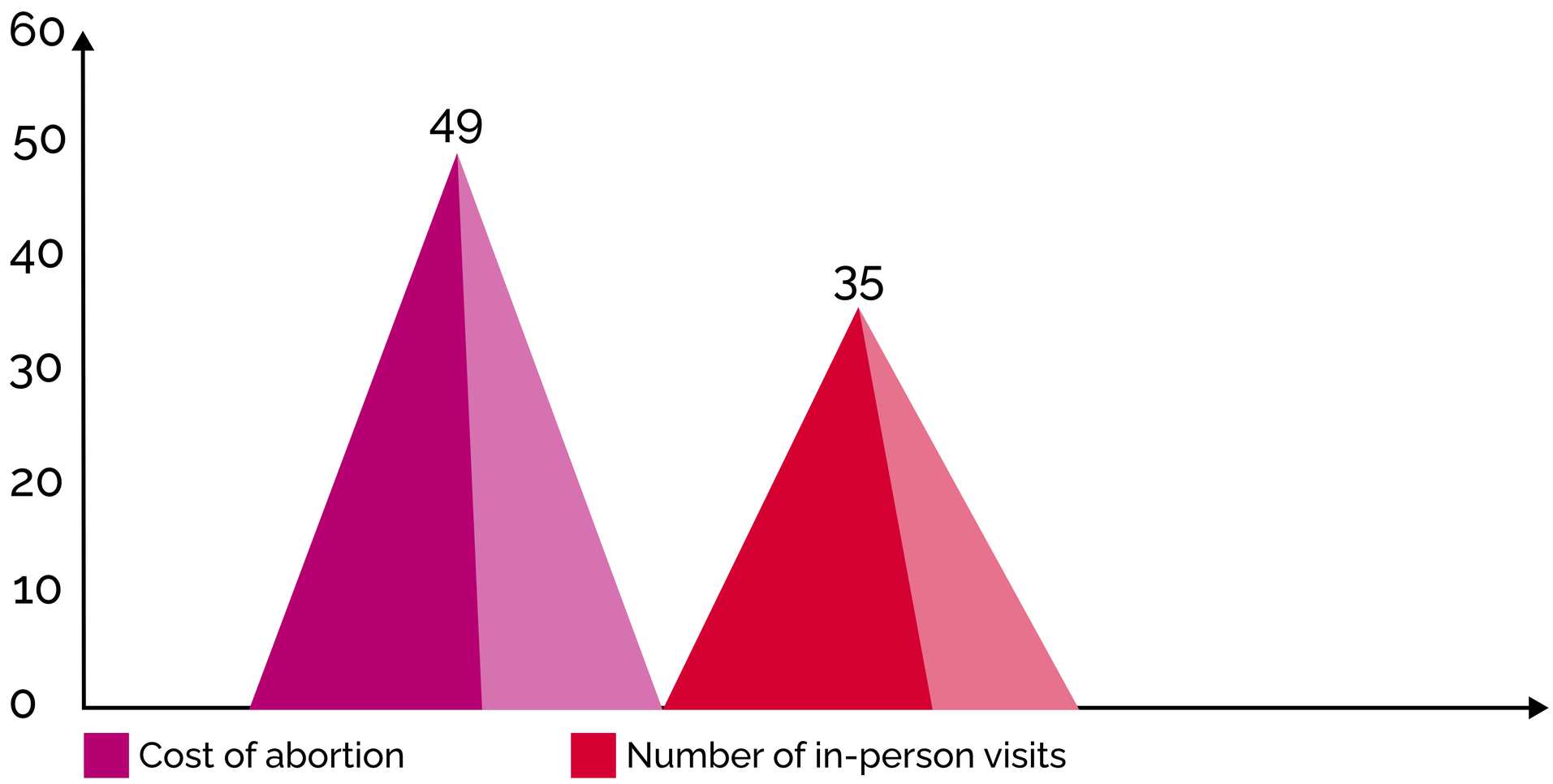


Fig 1. Main barriers for women seeking abortion services

4% of participants reported that they could not access abortion services and 6% of women received online consultation during pandemic restrictions (Fig.2).

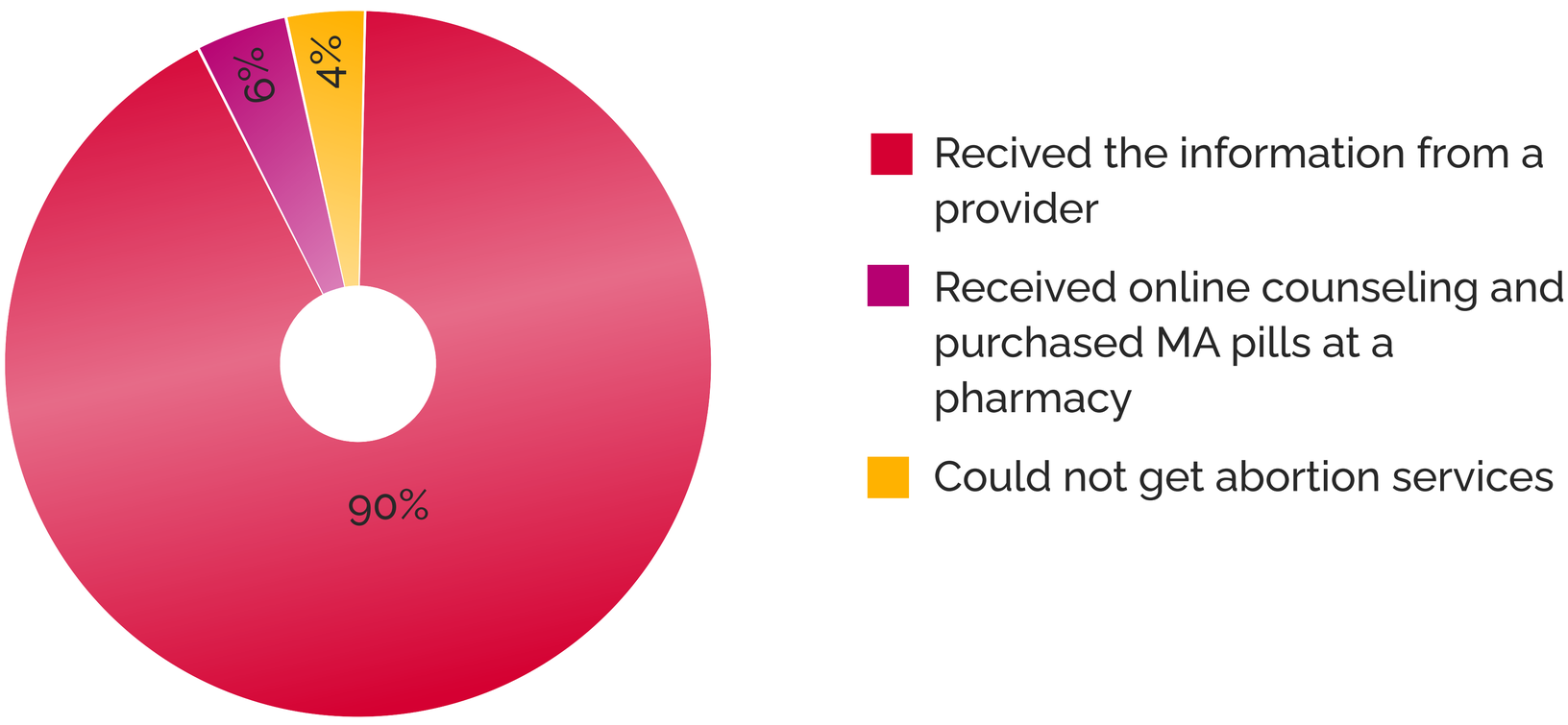


Fig 2. Access to abortion services during COVID-19 pandemic

The most common method of communication among women is a smartphone (88%) and/or a mobile phone (92%). Majority of women (86%) have no information about telemedicine. After providing a short description of telemedicine medical abortion by the interviewer, women were asked to assess the feasibility, advantages and disadvantages of the TMA, and to report if they can self-manage the process of her medical abortion. Seventy percent of women believe that TMA is feasible in their country, and 76% of women reported convenience (34%), confidentially (20%), less expensive (24%) as the main advantages of medical abortion through telemedicine (Fig. 3). Participants believe that following steps should be taken to insure access to telemedicine MA in the country: information campaign for women (34%) and advocacy for introduction of telemedicine (22%).

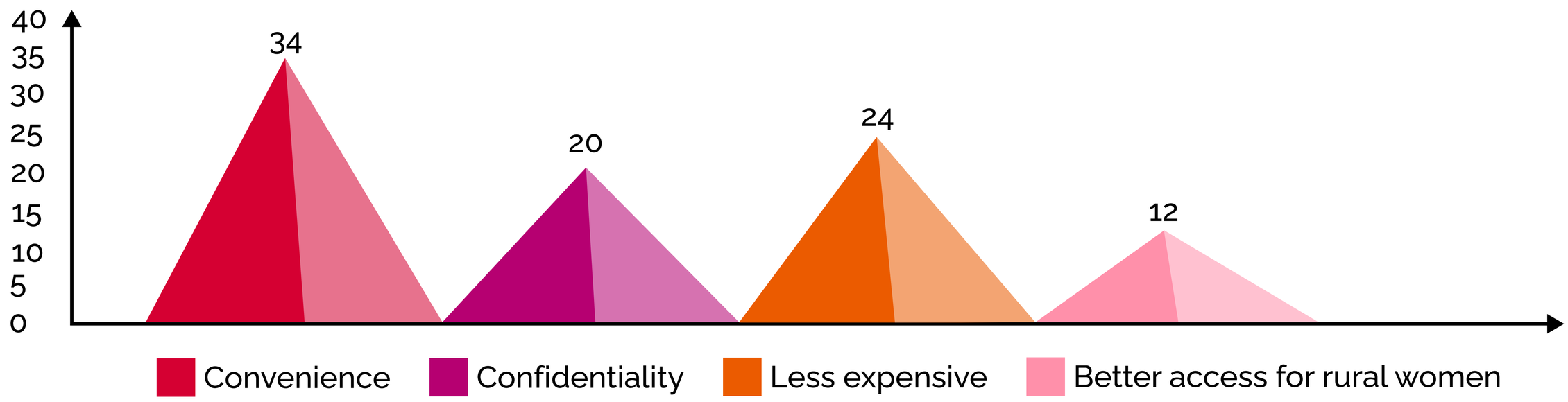


Fig 3. Women's reported advantages of medical abortion via telemedicine

From July to November 2022, 6 interviewers interviewed **46 providers** from Baku, Sumgait and Ganja. Vast majority of the respondents (98%) were female and most of them were 36 years or older. Less than half (39%) of the providers reported having experience with medical abortion, and only 22% of providers were aware that a women can choose to take mifepristone at home according to the national abortion guideline, and slightly more than half (31%) knew that a woman is allowed misoprostol home administration. Seventy-four percent of providers reported that women obtain MA pills at pharmacy by prescription. All participants were well informed that MA counseling is provided by ob/gyn. Most of the providers (96%) were aware about required examinations prior MA, and more than half (71%) reported that expenses related to abortion are paid by women. Fee for provider consultation is paid by state insurance in public clinics though women should cover the cost of MA pills. Cost for medical abortion varies AZN 29-200.

Seventy percent of the participants think that number of in-person clinic visits is one of the main barriers for accessing MA services that could be reduced using telemedicine. Participants listed the following barriers to medical abortion services: high cost (47%), expenses for pre-procedure exams (16%), post-abortion costs (14%), transportation costs (4%), lack of full insurance coverage (9%). Forty-two percent of the providers reported that lack of awareness about MA procedure among women is additional barrier to the procedure (Fig.4)

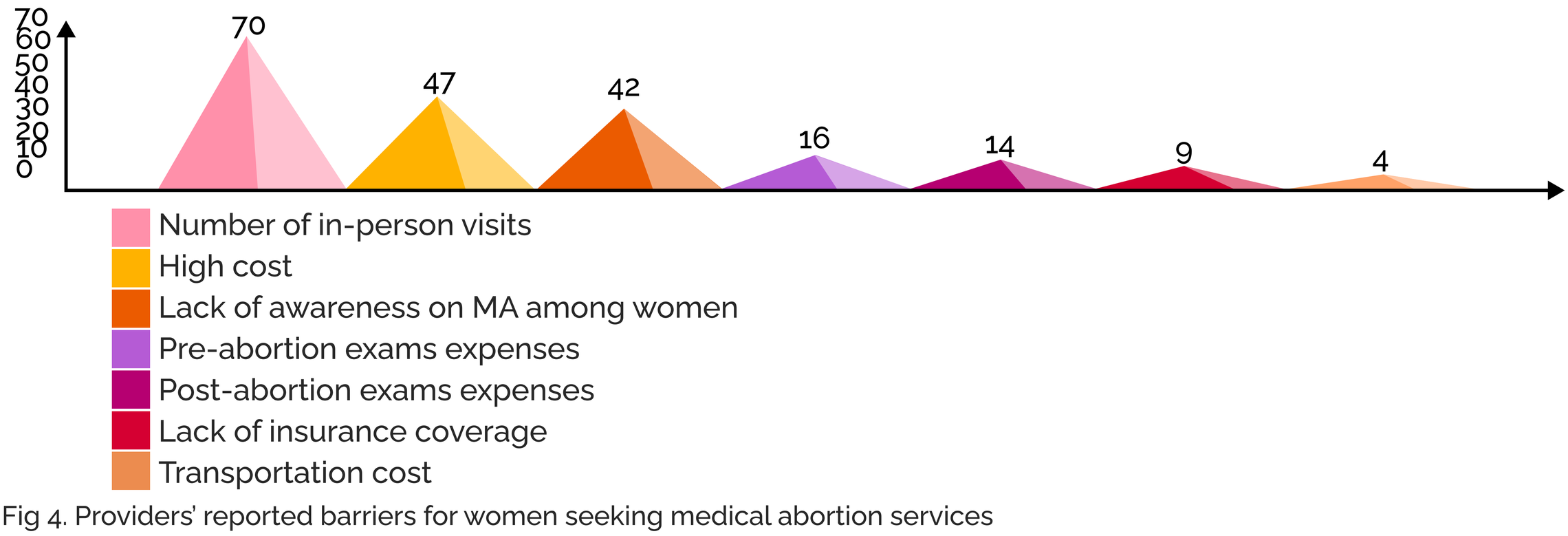


Fig 4. Providers' reported barriers for women seeking medical abortion services

Access to MA services were limited due to travel restrictions during the pandemic according to 42% of the providers.

More than one-fifth of the providers (22%) have an information about telemedicine. Most of the providers (91%) are aware about self-managed abortion, and one-third (29%) reported that a woman could independently manage the entire abortion process.

All research participants reported that the most accessible means of communication among women is cell phone. All participants believe that introduction of telemedicine services in the country is realistic, and more than half of them (52%) noted that women will be interested in telemedicine services as TMA has the following advantages: improved access for women from rural areas (11%), less cost for women (24%), more convenient for women (33%), more privacy for women (15%). Not meeting with the provider (61%), risk of bleeding (17%), risk of ectopic pregnancy (8%), and loss of contact with the woman (3%) were listed as the main disadvantages of the TMA.

Providers reported following barriers for implementing of telemedicine in the country: lack of a legal framework (31%), lack of information and communication technology infrastructure (31%), lack of a team of leaders / providers (23%), and political/regulatory barriers (15%). About half of the providers responded positively about the potential of MA through telemedicine (46%). Half of the providers think that medical abortion via telemedicine is advantageous for women (Fig 5).

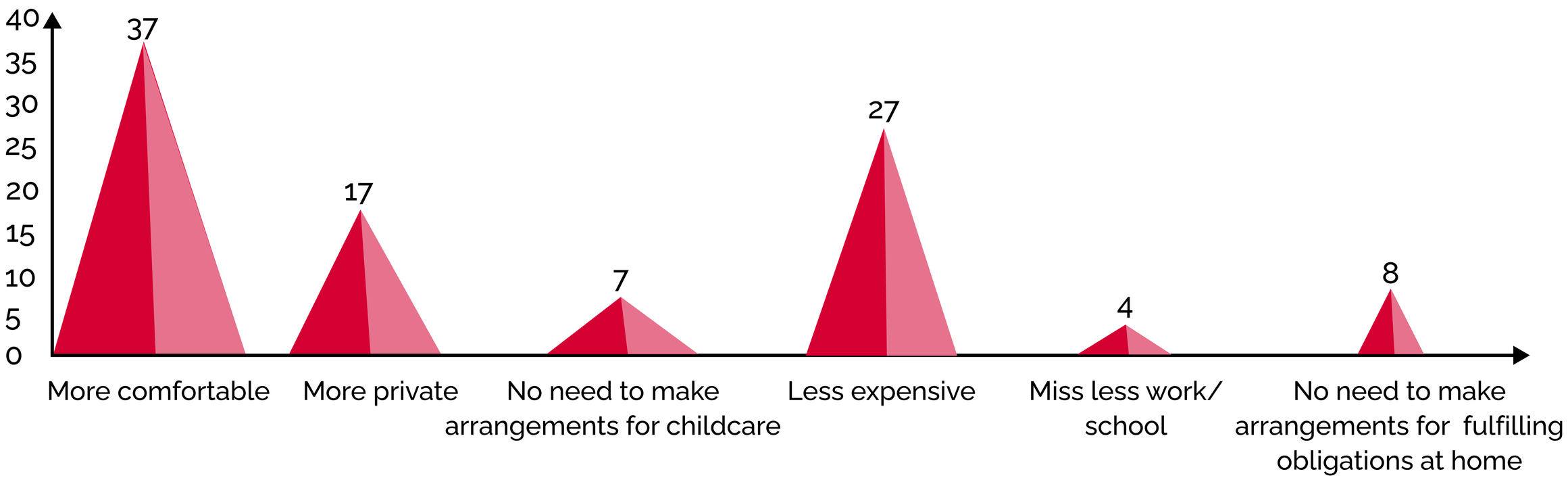


Fig 5. Providers' reported advantages of TMA for women

Two local NGO leaders, women with age more than 56 years, participated into the formative research. Both were well aware of medical abortion services as well as requirements of national abortion guidelines like gestational age limit, pre- and post-abortion requirements, where women obtain MA drugs and place of pills administration. All abortion expenses are paid by women except MA counseling at state clinics. NGO leaders are aware about telemedicine and self- managed abortion; and believe that women are able to manage one or more components of the entire abortion process. Participants reported that convenience for women, less expensive, no need to organize childcare and household duties are the main advantages of TMA.

NGO leaders think that the following steps should be taken to ensure access to TMA in the country: implement telemedicine at the national level, changes in legislation, inclusion of TMA in the national guidelines, advocacy for TMA services, training of providers, and conducting an information campaign for women.

From October to November 2022, **twenty pharmacists** with average age 35 years participated in the formative research. Seventy percent of the respondents were female and 30% were male. Study participants were from Baku, Astara, Lankaran, Yardimli and Lerik. Few than one-third of the participants (28%) are aware of national guidelines. Seventy-five present of pharmacists believe that the following exams/tests are required to obtain abortion services: ultrasound (52%), clinical examination (17%), and a urine pregnancy test (24%). More than two-third of respondents (70%) are aware that women could choose mifepristone home administration, and half of them reported that women are allowed to take misoprostol at home. Pharmacists are aware that women are counseled by ob/gyn, and they get the medications at pharmacies. They noted that prices ranges from 14 to 50 USD.

Fifteen percent of participants are aware of telemedicine. More than half (60%) believes that women will not be able to manage abortion procedure, though fifty-seven percent think that women can manage some of the abortion process components.

Pharmacists reported cell phone as the main mode of communication between women and service providers. They believe that most of the women (85%) will be interested in telemedicine services, as they consider it convenient for a woman (17%), private (2%), and women will miss less work and other duties. More than half of the respondents (55%) think, that introduction of telemedicine in the country is feasible with the following steps: changes in legal framework, training for providers, and information campaign for the population (Fig 6).

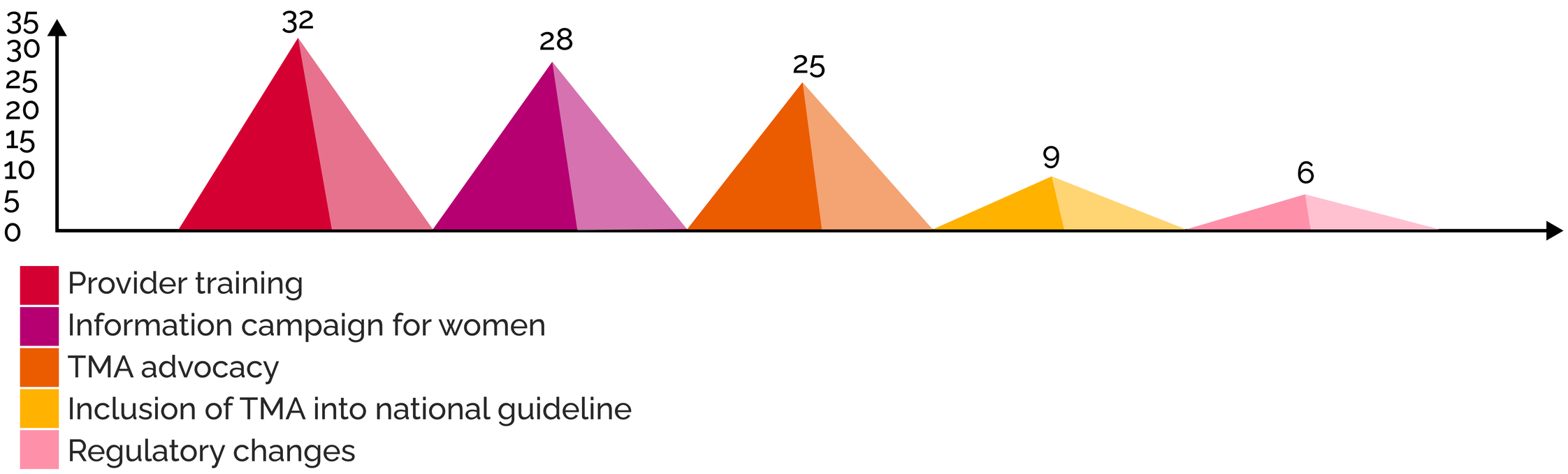


Fig 6. Pharmacists' opinion on implementing TMA at the national level

Five policy makers, all female, with an average age of 53 years participated in the formative research. All respondents were fairly well informed about the national protocol revision in 2021 and the gestational age limit for outpatient MA (9 weeks). All of them believe that pre-abortion exams such as ultrasound (41%), laboratory tests (41%), and clinical examination (18%) are required according to national norms. All policy-makers are aware that mifepristone and misoprostol that are purchased by women at pharmacies with a prescription after ob/gyn's consultation are allowed to be taken at home. All of them reported that abortion status assessment by ultrasound is obligatory. Policy makers believe that the main barrier for women to obtain MA services is logistic related to the number of in clinic visits. Respondents listed limited number of trained providers as well as clinics, and lack of public awareness as the additional barriers for women seeking abortion service**s.**

Policy makers reported that restrictions (50%) and lack of transport services (50%) created significant barriers to access abortion services during pandemic. All policy makers are aware of telemedicine, and reported that cell phone is the main communication mode between women and providers. Policy makers believe that both providers and women will be interested in TMA services, and therefore, the introduction of telemedicine is necessary at the national level (Fig 7).

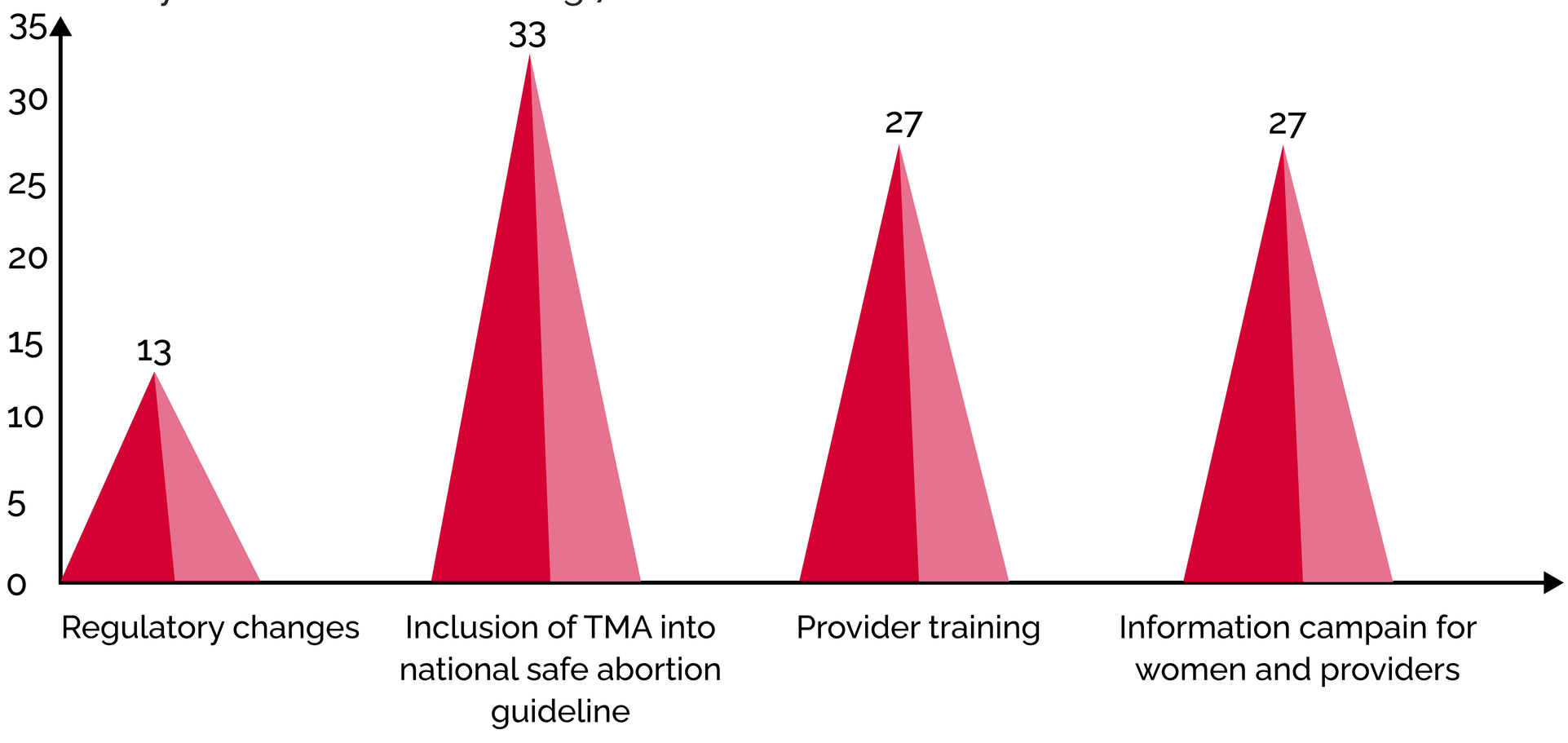


Fig 7. Policy makers' opinion on implementing TMA at the national level

Conclusion

The findings of the formative research illustrates that multiple in-person visits to the health facilities, limited number of clinics as well as pre- and post- MA procedure exams/lab.tests create logistical and financial barriers for women seeking abortion services. Access to abortion services was further limited during COVID-19 restrictions. Gaps in the knowledge of providers on existing MA national norms indicates that existing post-graduate training strategies are insufficient, and need to be amended. Substantial proportion of respondents from all participants group placed high degree of importance on introducing telemedicine in the country, as it will contribute to better access to the procedure. Current telecommunication infrastructure allows implementing telemedicine services in Azerbaijan. Supportive policy makers on necessity of introducing telemedicine services and group of providers who became pioneers in TMA from recent experience of medical abortion through telemedicine introductory study in Baku could speed up implementing TMA services in the country.

The findings of this formative research highlights the need for conducting three main activities for implementing telemedicine services in Azerbaijan: first, a comprehensive information, education and communication (IEC) campaign for women on medical abortion in general and the details of the telemedicine procedure, second, a widespread effort to train more providers in medical abortion as well as provision of remote services, and third, regulatory changes for implementing telemedicine services throughout the country.

Findings of formative research in Kazakhstan

In November-December, 2022, **fifty-one women** with average age 36.5 yearsfrom Almaty, Astana, Karaganda, Shimkent, Semey and Taldycorgan were interviewed. The majority of respondents (94%) were from urban areas. Vast majority of participants (96%) had a university degree, more than two-thirds (73%) were married, and 79% had one or more children. Ninety-two percent of women reported that they are aware about medical abortion of which less than half (41%) had an experience of medical abortion (Table 1). Slightly less than half of women (47%) think that access to MA is either good or very good.

Table 1. Participant characteristics

N=51 Women	n	%
Age group		
16-25	7	14
26-35	20	39
36-50	19	37
51≤	5	10
Residency		
Urban	48	94
Rural	3	6
Education		
High school	2	4
University	2	96
Marital status		
Single	27	14
Married	73	37
Family Composition		
No children	11	21
Children 1-2	31	61
Children 3≤	9	18
Had MA previously	21	41%

The main barriers to obtain MA services listed by women were the following: too expensive (42%), too many visits to the doctor (37%), too far to travel (11%), and too many lab test (10%) (Fig.1). Majority of participants are aware that MA counseling is provided by ob/gyn, less than half of women (44%) reported that drugs could be obtained at a pharmacy with a doctor's prescription and about one third (30%) responded that MA pills are provided by medical doctor. About half of the participants (43%) think that a woman need to stay in a clinic for the duration of the procedure. Fee for medical abortion reported by women varies from $10 to $100. More than two-third of women (78%) reported that fee for MA procedure is covered by women, and about one-third (30%) believe that the cost for MA procedure does not include the expenses for pre- and post-abortion procedure tests.

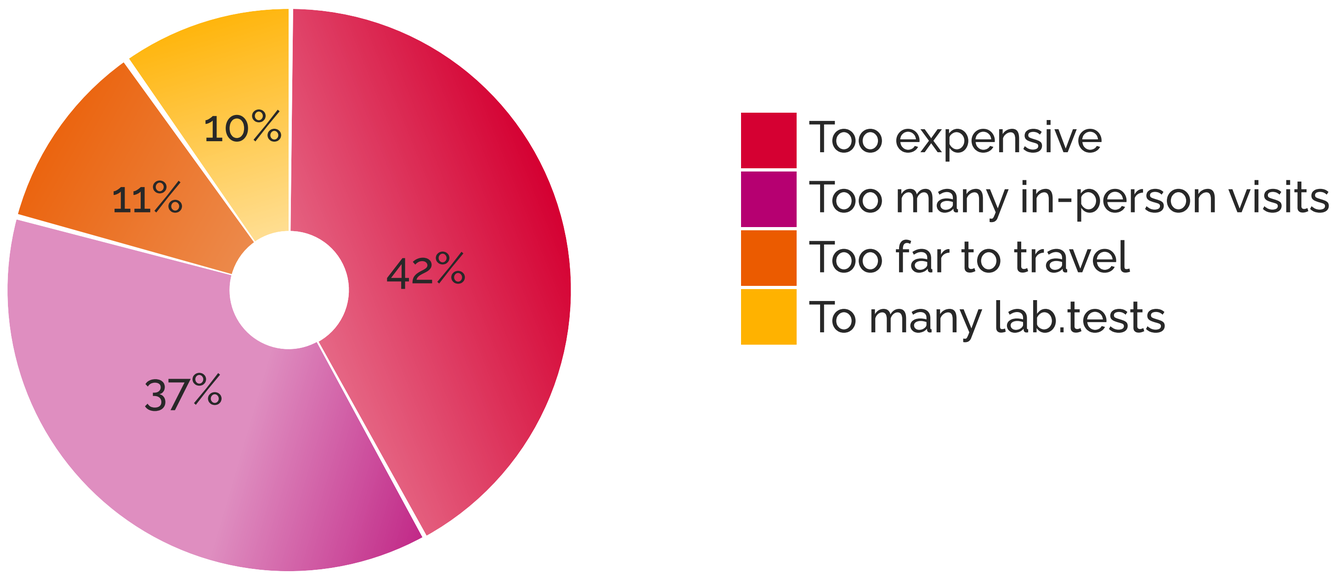


Fig 1. Women's reported barriers for accessing abortion services

More than half of the respondents (56%) were not aware about the access to abortion services during pandemic and fifteen percent of women either could not get abortion service or bought abortion pills at black market during crises period. About one-fifth (22%) of participants received MA consultation from the provider by phone and purchased the pills at a pharmacy during COVID-19 restrictions.

One-third of participants (27%) are aware about the telemedicine services, and thirty-nine percent of women think that women can self-manage one or more steps of abortion procedure (Fig 2). More than half of women (57%) reported that women would be interested in telemedicine services as well as think that TMA is advantageous for women (Fig 3). Almost all participants (98%) reported that women have an access to cell phone services, and more than two-third of the respondents (78%) believe that it is feasible to introduce TMA services in their country.

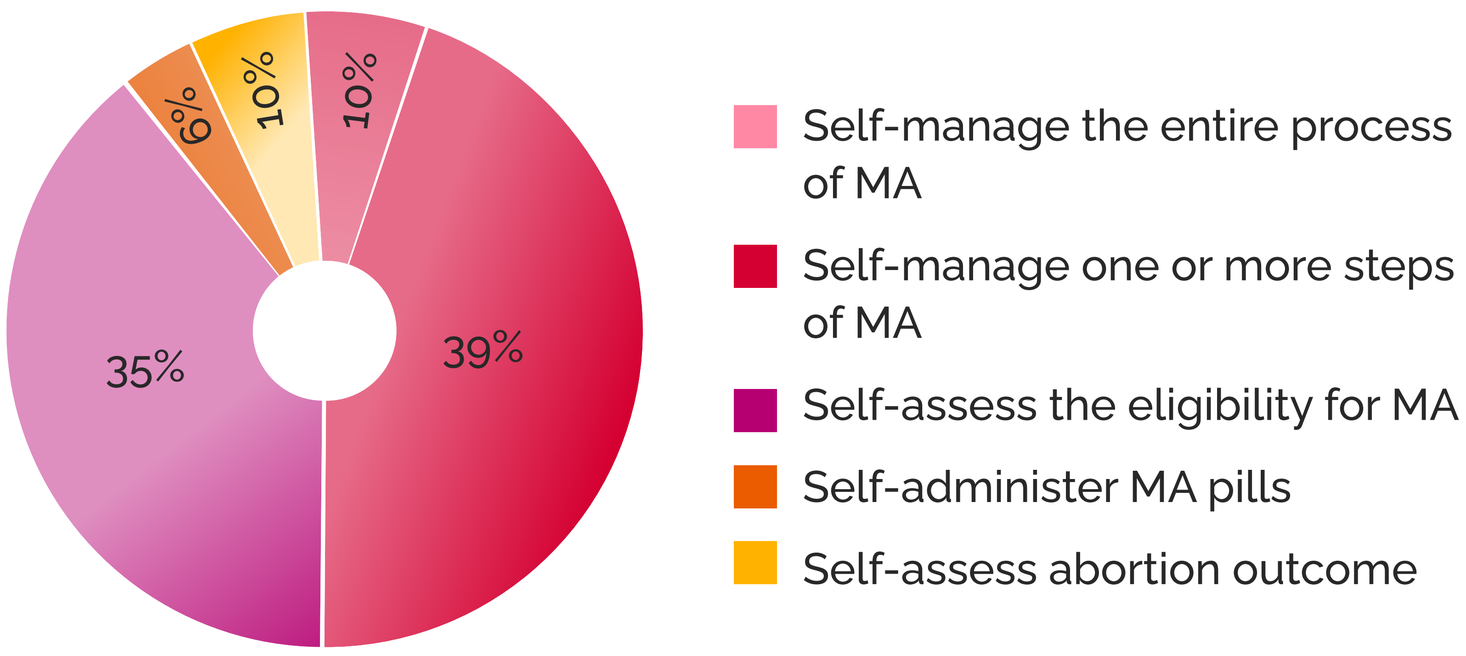


Fig 2. Women's opinion on self-managed abortion

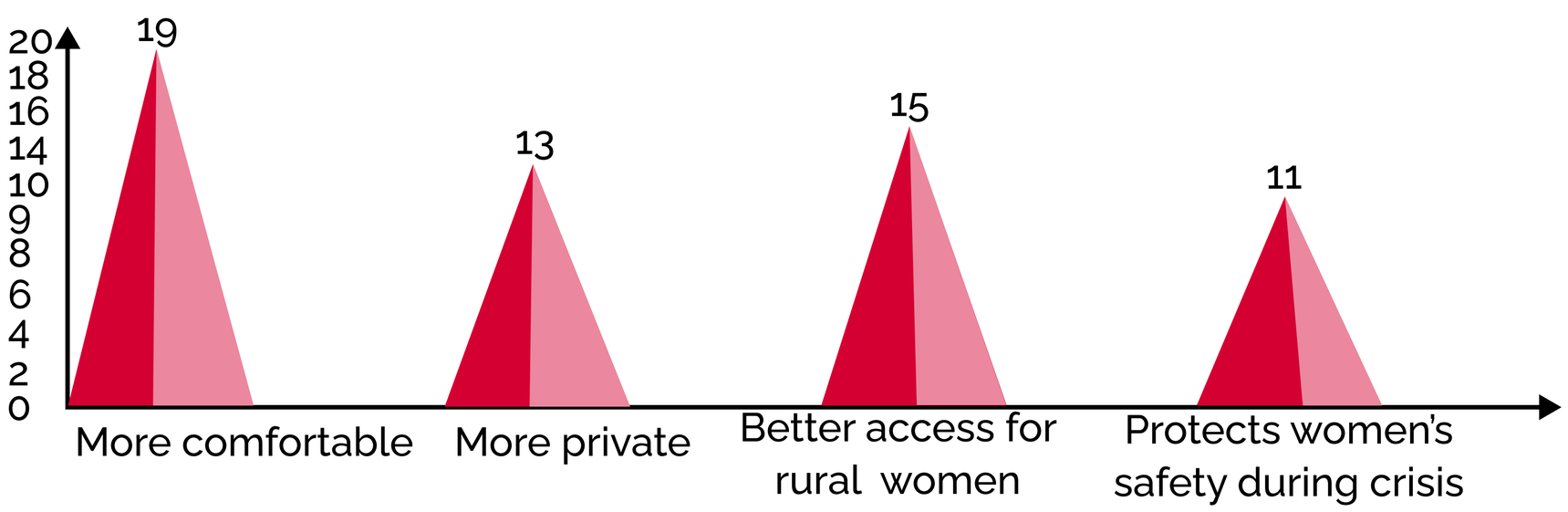


Fig. 3 Women's reported advantages of medical abortion via telemedicine

In November- December 2022, **35 providers** with average age 45.5 years from Almaty, Astana, Karaganda and Shimkent were interviewed. All respondents were female. More than two-third of participants (71%) are aware about when national abortion guideline was revised and about half of them (49%) know MA gestational age limit (9 weeks). Vast majority of the providers (94%) reported that following pre-procedure tests: ultrasound (41%), clinical exam (27%), lab.tests (27%) are required to get the MA procedure. About two-third of participants (63%) were aware that women are allowed to administer mifepristone and misoprostol pills at home. Seventy six percent of respondents indicated that women are counseled by ob/gyn, less than half of providers reported that drugs could be obtained at a pharmacy with a doctor's prescription (49%) as well as provided by medical doctor (47%). Majority of participants (86%) indicated that national norms require in-person follow up, and ninety percent believe that ultrasound should be performed to assess abortion status (Fig 4). Fee for MA varies from $32 to $128, and more than two-third of providers (69%) think that fee includes expenses for pre- and post-abortion tests/exams. Sixty percent of providers indicated that MA expenses are paid by women while 40% reported that medical insurance covers MA procedure fee.

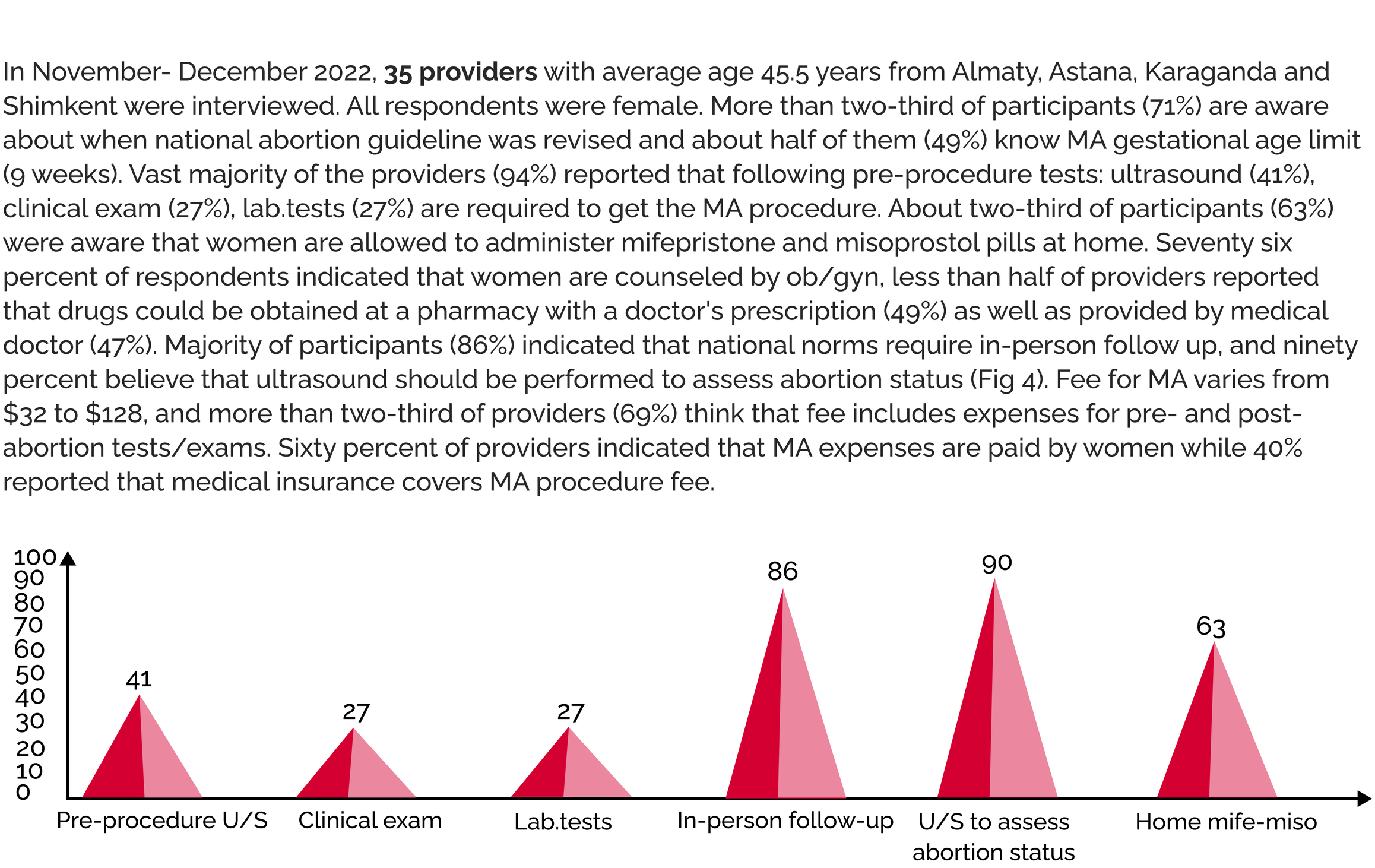


Fig. 4 Providers' reported requirements for women seeking abortion services

Providers think that women face financial (77%) and logistical (49%) barriers to access MA services. The most frequently cited financial barriers were abortion fee (48%) and pre-procedure exams/tests (31%). Logistical barriers included number of in-person clinic visits (53%) and arrangements to miss the work/school for visiting the clinic (41%). The additional barriers to access MA services reported by more than half of the participants were lack of knowledge on MA among women (46%), lack of clinics and trained providers (26%).

Less than one-fifth of providers reported that there were changes in regulations during pandemic restrictions. Less than half (39%) indicted that it was allowed to make MA eligibility assessment by phone as well as provide remote counseling during COVID-19 pandemic.

All providers have information about telemedicine, majority of participants (86%) are aware about self-managed abortion and more than half of respondents (60%) think that women could self-manage entire process of MA. All participants indicated high access to cell phone as well as to internet services of both women and providers. More than one-third of providers (32%) believe that existing telecommunication infrastructure supports implementation of telemedicine services in the country. Most of participants (94%) think that telemedicine medical abortion is feasible in Kazakhstan as well as TMA is advantageous for women. More than half of the providers listed regulatory changes, inclusion of telemedicine medical abortion into national protocol, and training of providers as the necessary steps for implementing TMA services in the country (Fig 5).

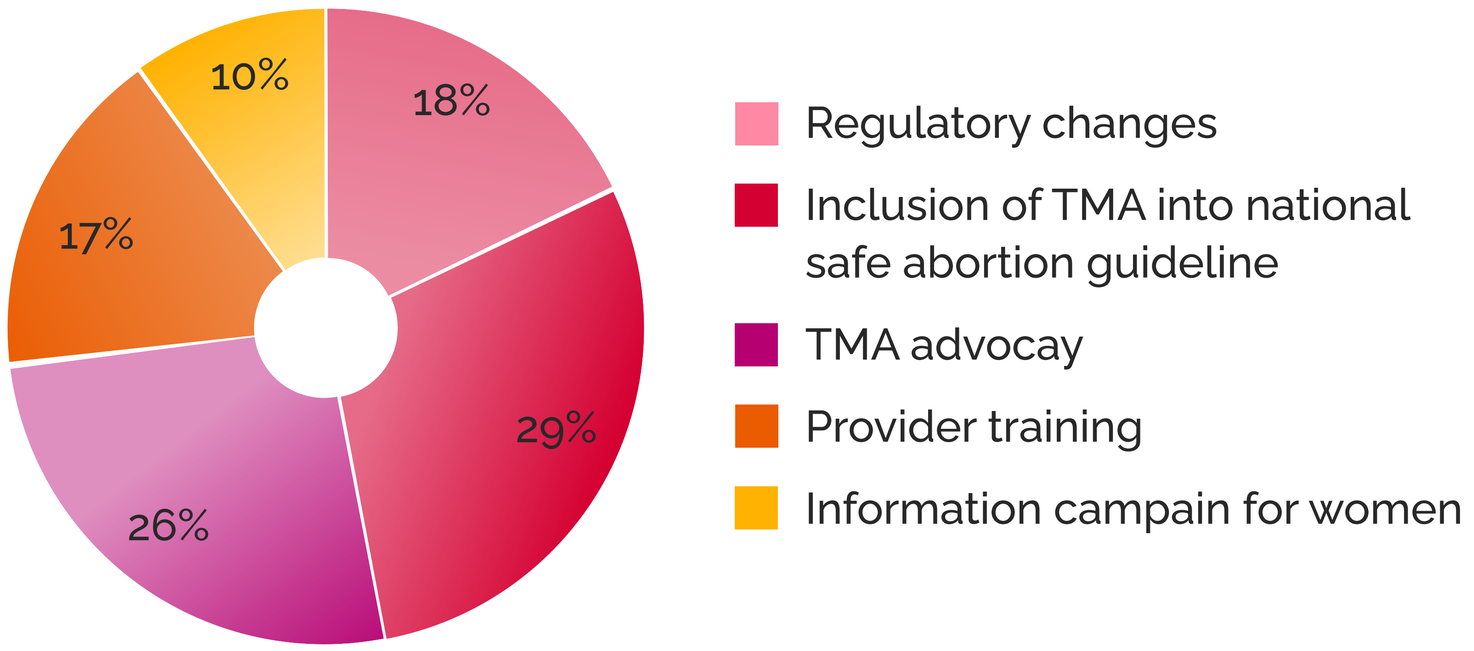


Fig. 5 Providers' opinion on implementing TMA at the national level

In November-December 2022, **sixteen pharmacists** with average age 40.7 years from Almaty, Astana, Karaganda and Taraz participated in the formative research. All respondents were female. About one-fifth of the participants (19%) are aware of national guidelines and one-third (31%) are aware of MA gestational age limit (9 weeks). Majority of pharmacists (81%) reported that the following exams/tests are required to obtain abortion services: ultrasound (52%), clinical exam (18%), urine pregnancy test (11%), and lab.tests (15%) (Fig 6). Only 31 percent of respondents are aware that women could choose mifepristone home administration, and one-fourth of them (25%) reported that women are allowed to take misoprostol at home. Vast majority of pharmacists (94%) are aware that women are counseled by ob/gyn, seventy-five percent noted that women get the medications at a pharmacy with a doctor's prescription and one-fourth said that women get MA pills directly from a provide. Almost all participants (94%) believe that women are required to visit clinic in-person for MA follow up assessment according to national guideline. Pharmacist could not indicate the fee of MA procedure though mentioned that MA pills cost at pharmacies is $25. More than half (56%) are not aware if the fee of MA procedure includes the expenses for pre- and post-procedure exams, and 69% participants reported that MA expenses are covered by women.

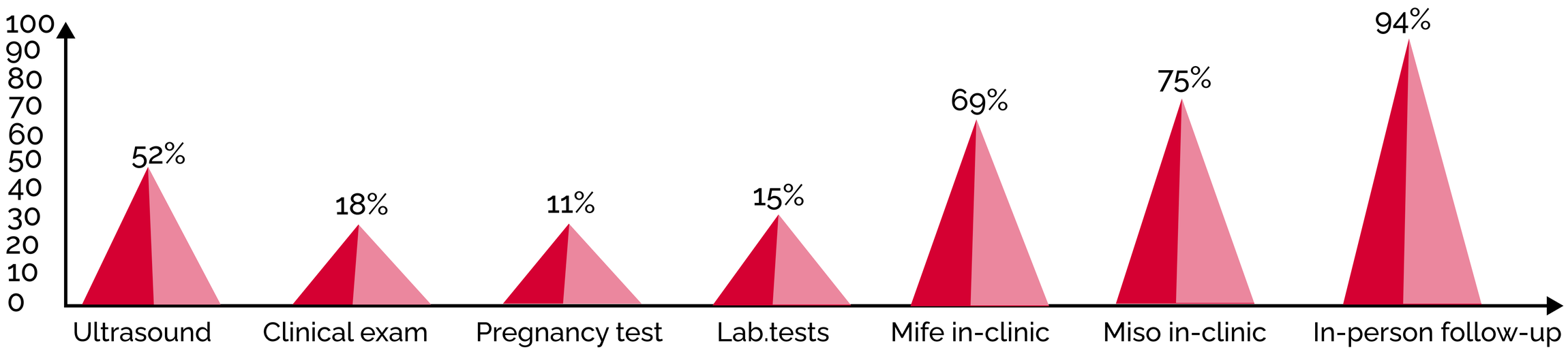


Fig.6 Pharmacists' reported requirements for women obtaining abortion services

Less than half of the pharmacist (44%) think that women face financial barriers to access MA services, and about one-third (33%) reported that logistical barrier limits women's access to the procedure. Travel restrictions (25%) and limited number of clinics (31%) providing abortion services during pandemic created significant barriers for women to access abortion services. One-fourth of the participants listed MA eligibility assessment by phone, remote counseling, and abortion outcome assessment by phone as the main regulatory changes for improving access to abortion services in Kazakhstan during COVID-19 restrictions.

Half of the research participants are aware about telemedicine, less than half (37%) are aware of self-managed abortion and about one-fourth think that women could self-manage abortion process. Twenty-five percent of pharmacist reported that they are aware about existing regulation on telemedicine, forty percent of which reported that provision of counseling by phone is allowed.

More than one-third of participants believe that existing telecommunication technology supports introducing telemedicine services in Kazakhstan. Participants noted women's and providers' high access to cell phone as well as internet services. Less than half (44%) of the participants think that both women and providers will be interested in remote services, and fifty-six percent believe that it is feasible to introduce telemedicine services in the country.

About one-third of participants indicated regulatory changes as well as inclusion of TMA in the national abortion guideline as the main steps for introducing telemedicine services in the country.

In November-December, 2022, **ten representatives from local NGOs** with an average age 49.7 participated into the formative research. All participants had a university degree and were from Almaty and Astana. Majority were married (80%) and more than two-third were from urban areas. All participants were well aware of medical abortion services and more than half (60%) believe that access to MA services is poor or very pure in the country. About one –third of the participants (30%) believe that MA procedure fee, too many lab.tests as well as too many in-clinic visits limit women's access to MA services. All NGO representatives are aware that a woman is counseled by ob/gyn, and MA pills are obtained either from medical provider (30%) or at a pharmacy with doctor's prescription (60%). MA procedure fee varies from $25 - $110, and more than half of the participants reported that MA fee does not include expenses for lab.tests/exams and a woman covers MA procedure expenses.

Seventy percent of participants are aware about telemedicine as well as self-managed abortion. All representatives reported that women have high access to cell phone and internet services, and eighty percent think that women will be interested in telemedicine medical abortion. All respondents believe that it is feasible to introduce TMA in Kazakhstan as well as MA through telemedicine is advantageous for women.

NGO representatives think that the following are the main steps for ensuring access to TMA services in the country: TMA advocacy campaign (90%); TMA training for providers (60%); information campaign for women (50%), inclusion of TMA in the national guidelines (40%), and regulatory changes (30%) (Fig 7).

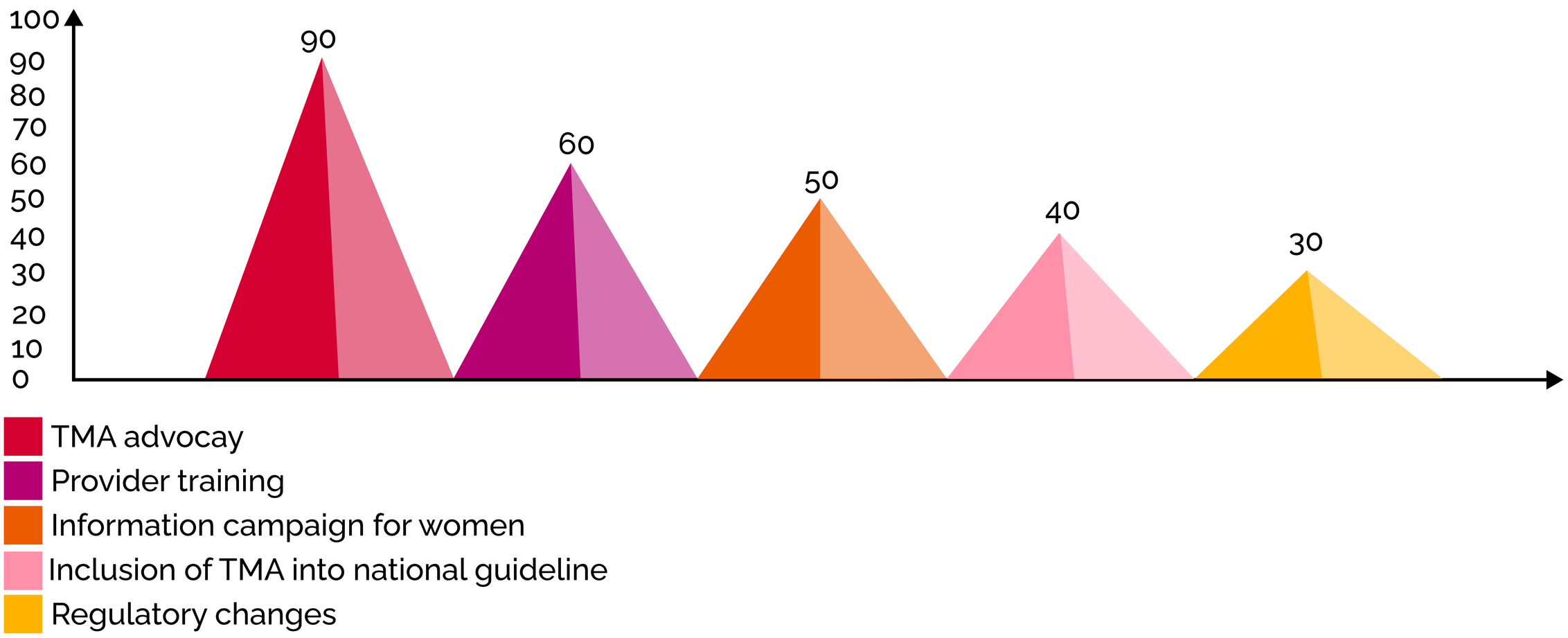


Fig.7 NGO representatives' opinion on implementing TMA at the national level

In November-December, 2022, **four policy makers** from Astana and Almaty with the age 35 years and more participated in the formative research. All respondents were female. Majority of the participants (N=3) are aware of national guidelines and two of the respondents are aware about MA gestational age limit (9 weeks). Three respondents (75%) reported that national MA guideline require pre- and post-procedure tests and exams, and women could choose mifepristone and misoprostol home administration. All respondents are aware that ob/gyns provide MA counseling. Two of the policy-makers noted that women could obtain medications from the provider while two indicated that women obtain MA pills at a pharmacy with doctor's prescription. Three policy makers believe that women cover the cost for MA and MA fee includes expenses for pre and post-procedure lab.tests and exams.

All policy-makers think that women face financial as well as logistical barriers to access MA services. In addition, two respondents think that lack of awareness on MA among women, lack of trained providers, limited number of clinics providing abortion services and GA limit create additional barriers for women (Fig. 8). All participants reported that access to abortion services were limited due to travel restrictions and limited number of clinics providing abortion services during pandemic. Three participants indicated that there were no regulatory changes for ensuring access to abortion services during COVID-19 restrictions in Kazakhstan.

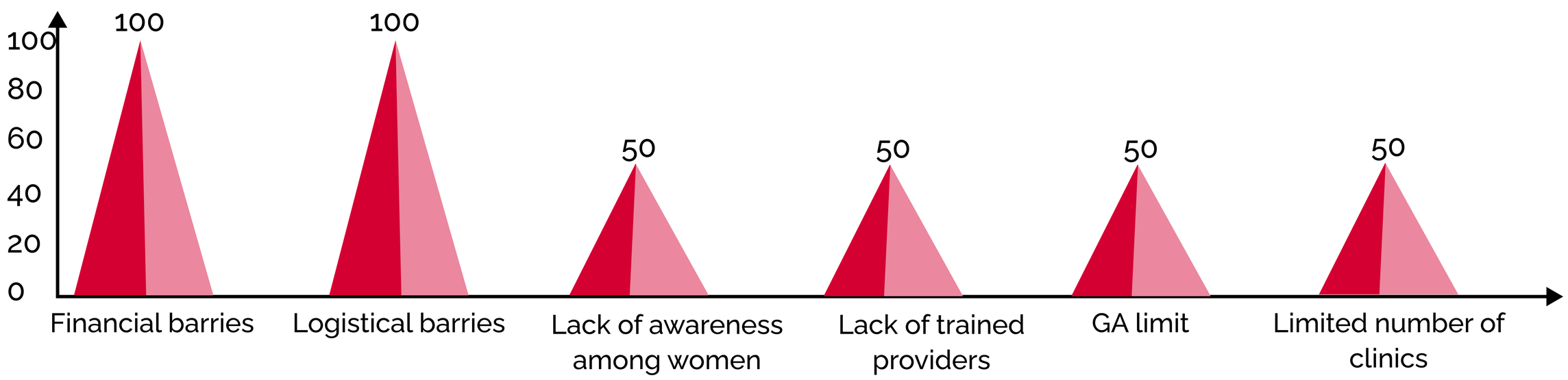


Fig 8. Policy makers' reported barriers for women seeking medical abortion services

All research participants are aware about telemedicine, and three of them believe that women could self-manage entire process of abortion. Two respondents indicated MoH of Kazakhstan order in February 2021, №22151; that allows providing counseling by phone. Two policy makers think that existing telecommunication infrastructure is supportive for implementing TMA services in the country. All respondents believe that both women and providers have an access to cell phone and internet services. Three of the policy-makers think that both women and providers will be interested in remote services as well as TMA is advantageous for women. All of them believe that it is feasible to introduce telemedicine service in the country. Three policy-makers named inclusion of TMA into the national guideline and advocacy campaign as the main steps for implementing TMA services in the country (Fig 9). One respondent indicated that regulatory changes should be done for implementing telemedicine services at the national level.

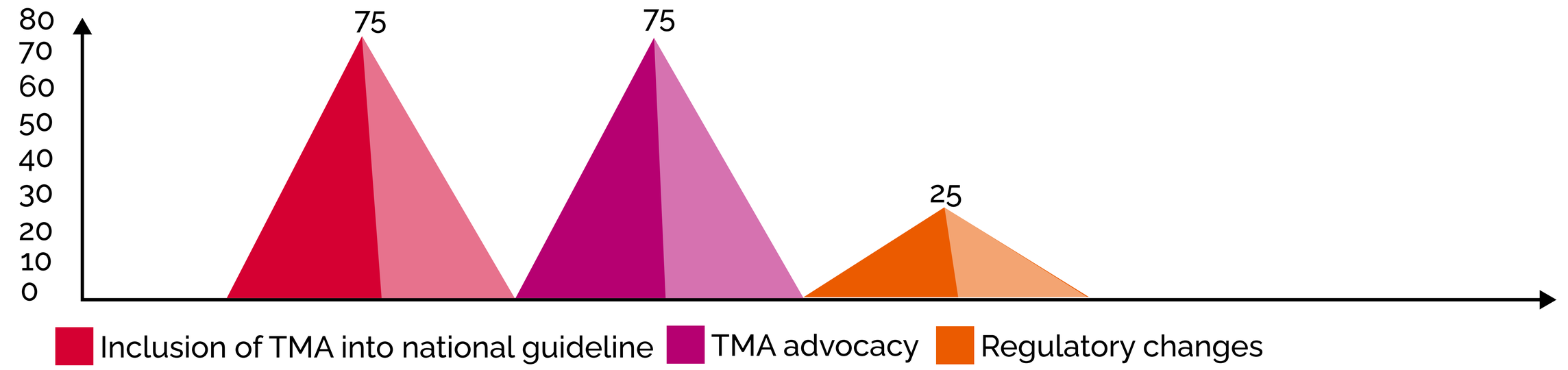


Fig. 9. Policy makers' opinion on implementing TMA at the national level

Conclusion

The findings of the formative research shows that access to abortion services are limited due to financial and logistical barriers in Kazakhstan. Medically unnecessary pre- and post- abortion exams, lab.tests, and too many in-clinic visits worsen women's access to abortion services. Travel restrictions along with unchanged national norms in provision of abortion services created significant barriers for women seeking abortion services during the crises period.

The formative research illustrates that current telecommunication infrastructure, supportive policy-makers and high interest in remote services from all research groups makes positive environment for implementing telemedicine services in Kazakhstan. The most important supportive steps that would assist to implement the medical abortion services through telemedicine at national level includes regulatory changes, inclusion of TMA into national abortion guideline, training of providers and TMA advocacy.

Findings of formative research in Kyrgyzstan

In August-October, 2022, **50 women** from Bishkek, Osh, and the regions of Jalalabad, Osh, Issyk-kul and Chuy were interviewed. More than two-third of participants represented women of age group more than 35 years (Table 1). Majority of respondents (80%) were from rural areas, one-quarter had more than high school education, and vast majority (90%) were married. Eighty-two percent of women reported that they are aware about medical abortion of which about half (49%) had an experience of medical abortion.

Table 1. Participant characteristics

N=50 Women	n	%
Age group		
20-34	12	24
35≤	38	76
Residency		
Urban	10	20
Rural	40	80
Marital status		
Single	5	10
Married	45	90
Family composition*		
No children	4	8
Children 1-2	30	59
Children 3≤	16	33
Had MA previously*	24	49%

*n=49, missing response from one woman

More than half of women (53%) think that access to MA is poor or very poor in the country. The main barriers to obtain MA services listed by women were too expensive (30%), too many lab. test (26%), too many visits to the doctor (22%), and too far to travel (22%) (Fig.1). Majority of participants (82%) indicated that MA counseling is provided by ob/gyn, more than half of women (52%) reported that drugs could be obtained at a pharmacy with a doctor's prescription and forty-five percent responded that MA pills are provided by medical doctor. About one-third of the participants (31%) think that a woman need to stay in clinic for the duration of the procedure. Fee for medical abortion reported by women varies from $1.5 to $25. Majority of women (90%) reported that fee for MA procedure is covered by women, and about two-third (61%) noted that the cost for MA procedure does not include the expenses for pre- and post-abortion procedure tests.

Thirty-seven of respondents reported that access to abortion services was very poor during pandemic, and indicated that it was almost impossible to get abortion service (Fig 2). Less than one-fifth (15%) of women received MA consultation from the provider by phone and purchased the pills at a pharmacy during COVID-19 restrictions. Eight percent of respondents reported that they obtained MA drugs at black market during the restrictions period.

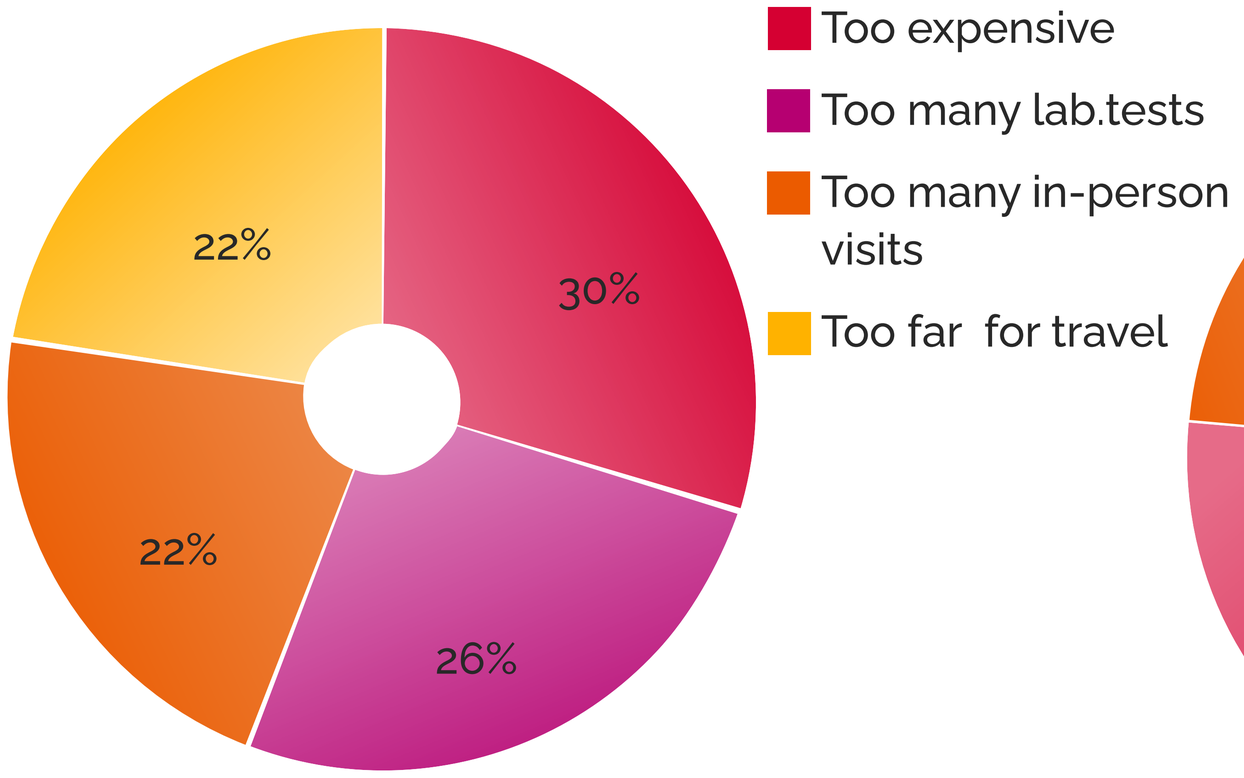


Fig.1 Women's reported barriers for accessing abortion services

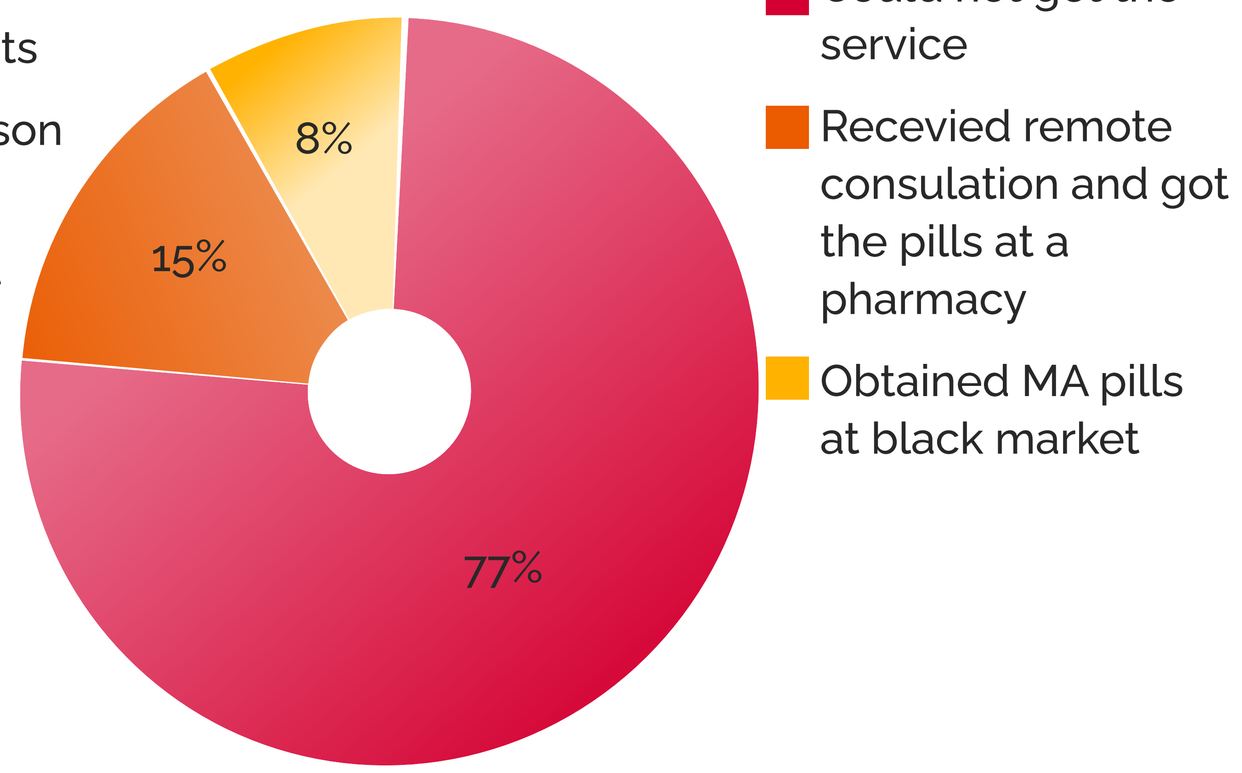


Fig.2 Access to abortion services during COVID-19 pandemic

One-third of participants (29%) are aware about the telemedicine services, and almost half of women (47%) think that women can self-manage one or more steps of abortion procedure. Majority of women (71%) reported that that it is feasible to introduce TMA services in their country, and about two-third of the respondents (61%) think that TMA is advantageous for women (Fig. 3). Women think that the main steps to introduce the TMA services in Kyrgyzstan are awareness campaign for women about TMA (25%), inclusion of TMA into national guideline (24%), TMA advocacy (19%), regulatory changes (16%) and training for medical providers (16%).

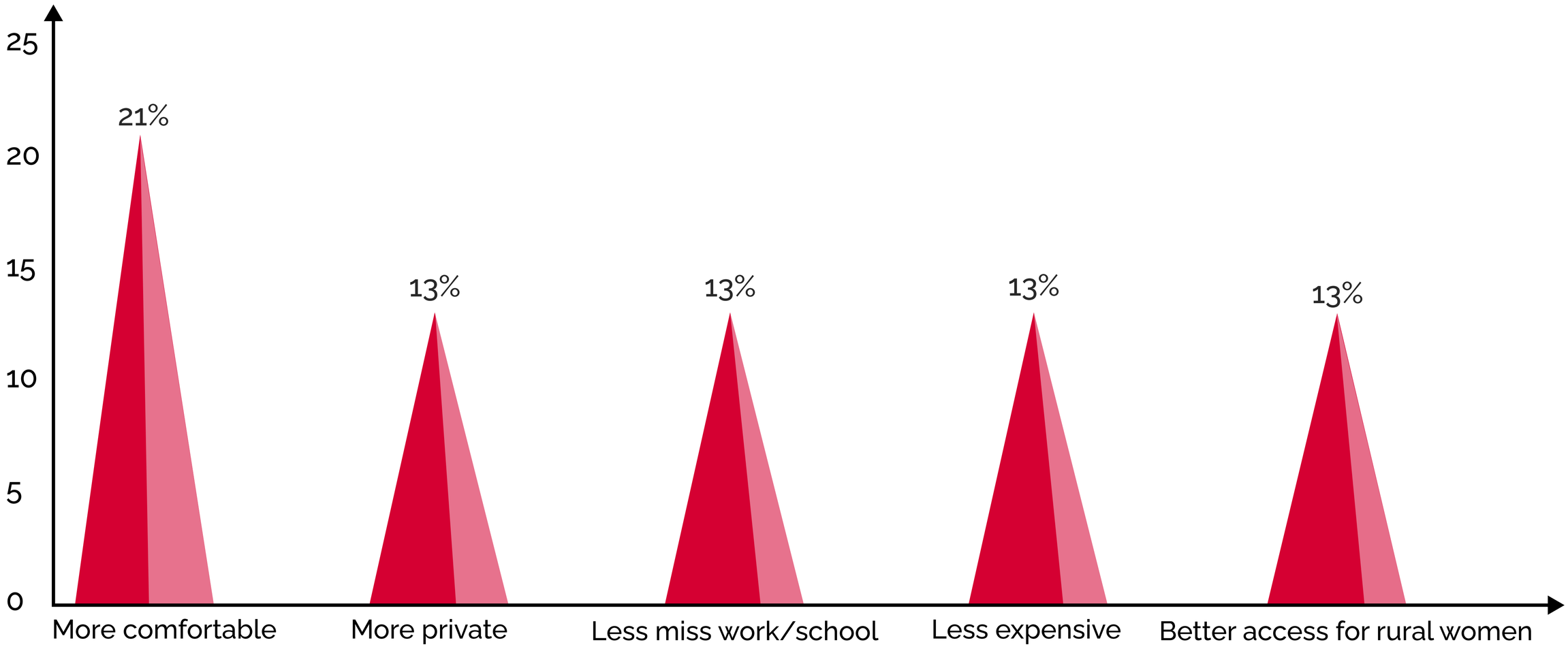


Fig. 3 Women's reported advantages of medical abortion via telemedicine

In August- October 2022, **40 providers** from Bishkek, Osh, Jalalabad and Karakol were interviewed. Vast majority of the participants (95%) were female, and sixty one percent of them were more than 35 years old. Less than half of the providers (42%) are aware about when national abortion guideline was revised and slightly more than half (51%) know MA gestational age limit. Majority of the providers (93%) reported that pre-procedure lab. tests and ultrasound are required to get the MA procedure. Seventy six percent of participants were aware that women are allowed to administer both mifepristone and misoprostol pills at home, and about half of the respondents indicated that women are counseled by ob/gyn. More than one-third of the providers (35%) reported that women receive MA counseling from GP. Slightly less than half of providers (47%) reported that drugs could be obtained at a pharmacy with a doctor's prescription and more than one-third of participants (36%) told that women get MA pills from the provider. Majority of participants (83%) indicated that national norms require in-person follow up assessment of abortion status. Ninety percent of providers reported that MA procedure expenses are paid by women, and more than half (60%) think that MA fee does not include the expenses for pre- and post-abortion tests and exams.

Providers think that women face financial (56%) and logistical (49%) barriers as well as barriers related to limited options available in the country to access MA services (Fig 4). The most frequently cited barriers to accessing medical abortion services due to insubstantial options were limited number of clinics providing abortion services (42%), lack of trained providers (28%) and lack of knowledge on MA among women (25%). Barriers remained the same during COVID-19 restrictions. Only one-fourth of the providers believe that there were regulatory changes in order to improve women's access to abortion services during the pandemic restrictions.

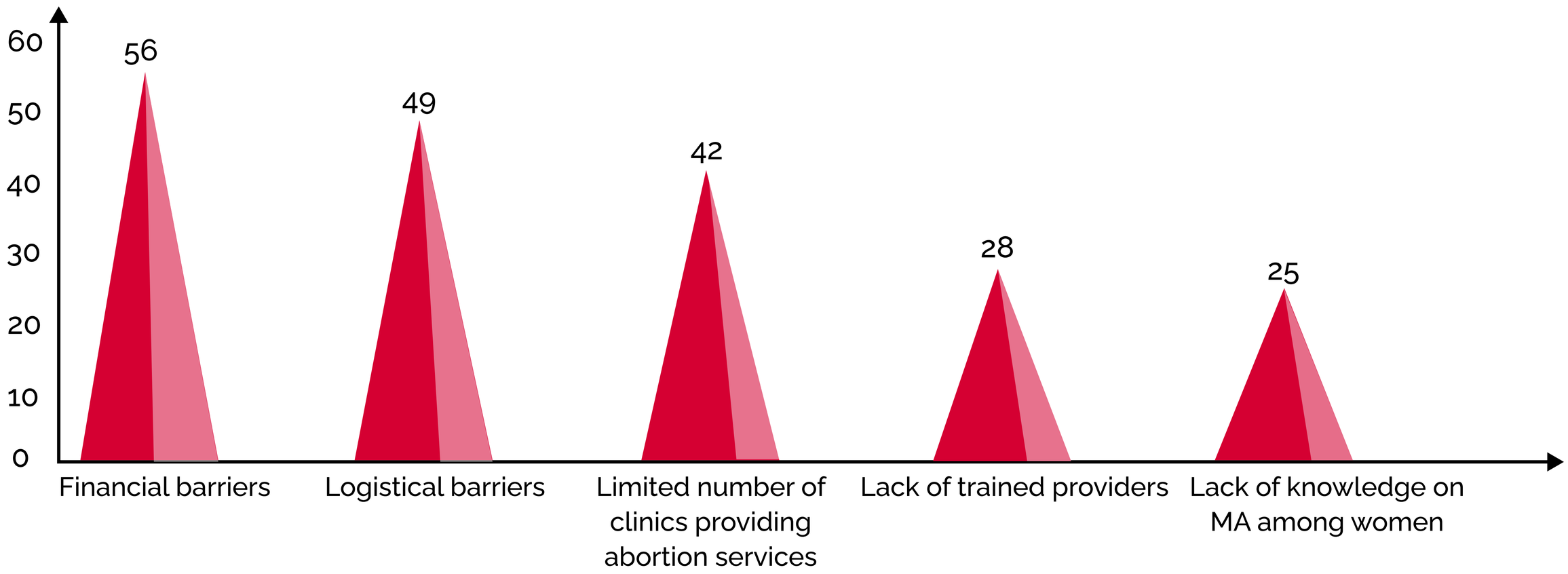


Fig.4 Providers' reported barriers for women seeking abortion services

More than half of the providers (69%) have information about telemedicine, and sixty-six percent of participants are aware about self-managed abortion. Majority of respondents (75%) believe that women can self-manage entire process of MA.

Slightly Less than half of providers (44%) believe that existing telecommunication infrastructure supports implementation of telemedicine services in the country. Majority of participants (85%) think that telemedicine medical abortion is feasible in Kyrgyzstan as well as service delivery through telemedicine has several advantages. About one-third of the providers reported awareness campaign for women about telemedicine, MA trainings for medical providers and inclusion TMA into national abortion guideline as the main steps for implementing telemedicine medical abortion services in the country (Fig 5). More than two-third of the respondents believe that medical abortion via telemedicine has the high potential in their country.

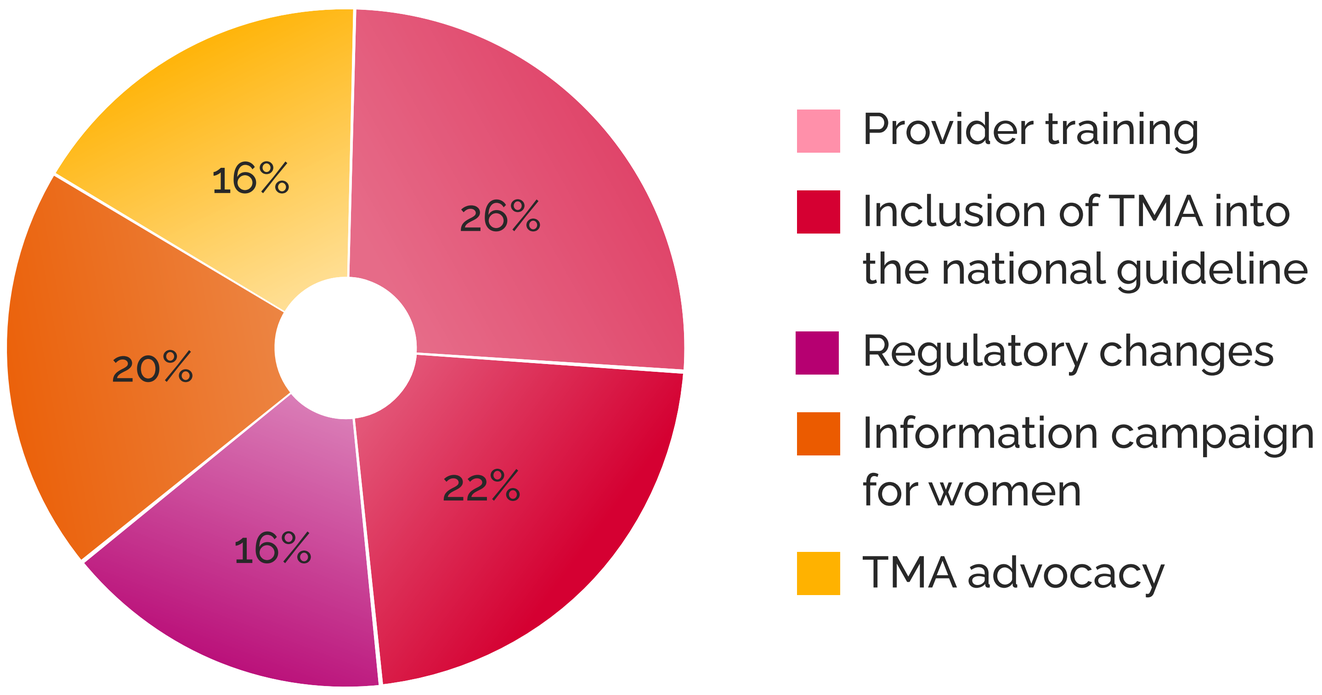


Fig. 5 Providers' opinion on implementing TMA at the national level

In August- October 2022, **6 pharmacist and 22 drug distributors** from Bishkek, Osh, Jalalabad and Karakol were interviewed. Majority of the participants (86%) were female, and almost the same percentage (85%) represented the 20-34 years age group. Only few number of pharmacist and drug distributors (3%) are aware about when national abortion guideline was revised and less than half (43%) know MA gestational age limit. More than two-third of the respondents (71%) reported that pre-procedure lab.tests and ultrasound are required to get the MA procedure and about one-third of participants believe that women are allowed to administer pills of mifepristone (32%) and misoprostol (29%) at home. Less than one-fifth of pharmacist and drug distributors (18%) indicated that women are counseled by GP while 71% believe that ob/gyn provide MA counseling to women. More than two-third of the respondents (68%) reported that drugs could be obtained at a pharmacy with a doctor's prescription and eleven percent of the participants told that women get MA pills from a provider. Majority of participants indicated that national norms require in-person follow up assessment of abortion status (79%) as well as MA procedure expenses are paid by women (90%). About one-fifth (21%) of the participants think that MA fee includes expenses for pre- and post-abortion tests and exams.

Majority of pharmacist and drug distributors reported that women face financial (82%) and logistical (75%) barriers, and barriers due to limited options (75%) to access MA services (Fig 6). Slightly more than half of the respondents (54%) believe that there were regulatory changes in order to improve women's access to abortion services during pandemic restrictions. The most frequently reported barriers for women to assess abortion services during the COVID-19 restrictions were transportation barriers (35%), travel restrictions (31%) and limited number of clinics providing abortion services (28%).

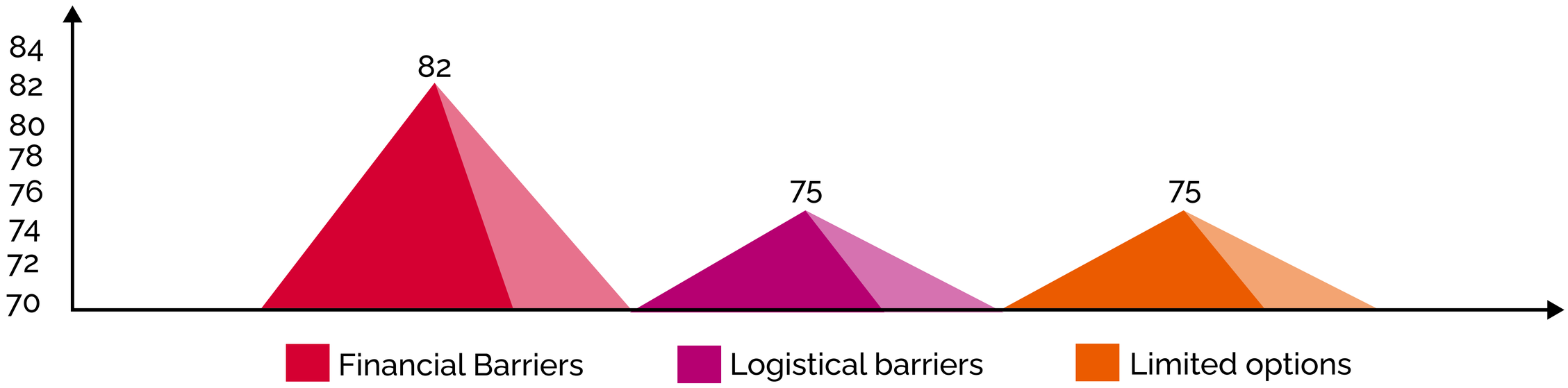


Fig. 6 Pharmacists/drug distributors' reported barriers for women seeking abortion services

Thirty-nine percent of the participants have information about telemedicine as well as believe that women can self-manage entire process of medical abortion. Less than one-fifth (14%) of the respondents are aware about current regulations on telemedicine. Twenty-one percent of pharmacist and drug distributors believe that existing telecommunication infrastructure supports implementation of telemedicine services in the country. More than one-third of the respondents (31%) indicated that women would be interested in remote provision of abortion services. Majority of participants (86%) think that telemedicine medical abortion is feasible in Kyrgyzstan. Seventy-one percent of participants believe that TMA has the following advantageous: more comfortable for women (20%), better access for rural women (18%) and women would not need to make an arrangements to fulfill their obligations at home (18%). Pharmacist and drug distributors reported the following as the main steps for implementing TMA services in Kyrgyzstan: awareness campaign for women about telemedicine (27%), inclusion of TMA into the national abortion guideline (21%), regulatory changes (18%) and TMA training for providers (18%) (Fig 7). About two-third (57%) of the respondents believe that medical abortion via telemedicine has the high potential in their country.

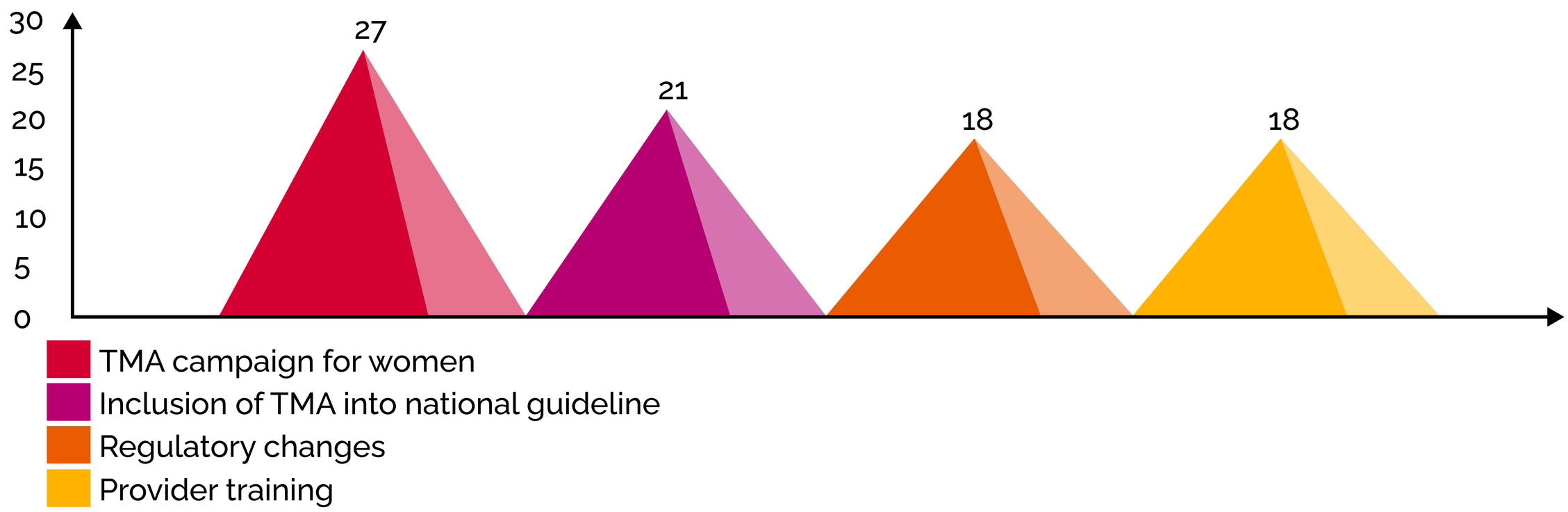


Fig 7. Pharmacists/drug distributors' opinion on implementing TMA at the national level

In September 2022, **6 policy makers** from Bishkek participated in the formative research. Five participants were female and majority (83%) represented the age group of 20-34 years. More than one-third of policy makers (33%) are aware about when national abortion guideline was revised and less than half (44%) know MA gestational age limit. All respondents reported that pre-procedure lab. tests and ultrasound are required to get the MA procedure as well as believe that women are not allowed to administer mifepristone and misoprostol pills at home. Majority of the participants (83%) noted that ob/gyn provide MA counseling to women and half of them (50%) indicated that women obtain drugs at a pharmacy with a prescription. About one-third of policy makers (33%) believe that national norms require in-person follow up assessment of abortion status. Sixty-seven percent of the respondents think that women cover expenses for MA procedure and MA cost includes expenses for pre- and post-abortion tests and exams.

More than half of participants (67%) reported that women face financial barriers and barriers related to limited options to access MA services (Fig 8). In addition, half of the respondents (50%) think that women face logistical barriers to access abortion services. Only one policy maker indicated that there were regulatory changes in order to improve women's access to abortion services during pandemic restrictions. Transportation barriers (20%) and travel restrictions (40%) limited women's access to abortion services during the COVID-19 restrictions according to respondents.

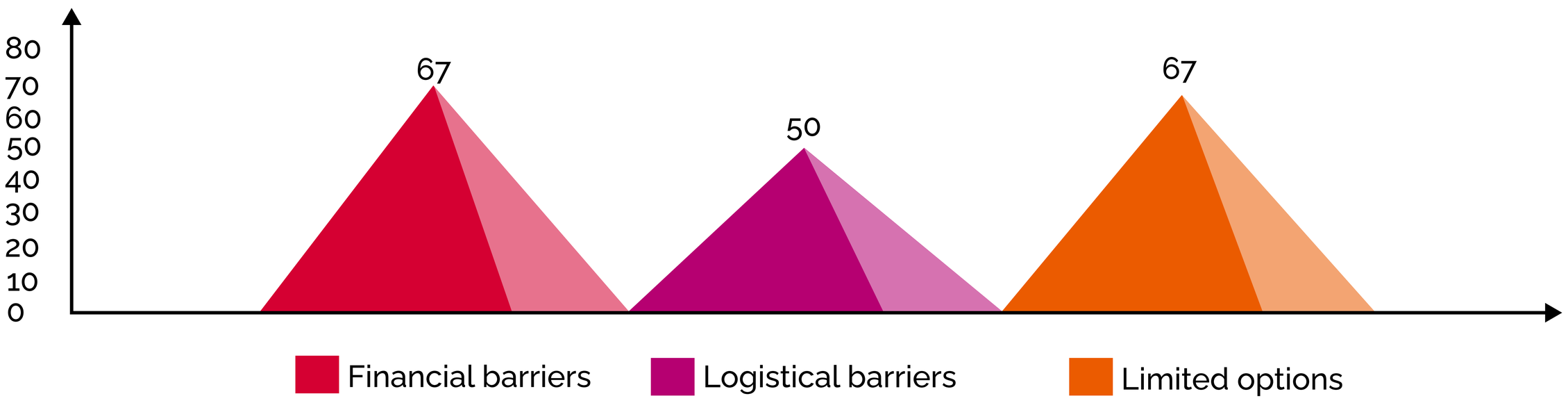


Fig 8. Policy makers' reported barriers for women seeking abortion services

Only one policy maker is aware about telemedicine and self-managed abortion though majority of participants (83%) believe that both women and providers will be interested in remote provision of abortion services as well as telemedicine MA has a high potential in Kyrgyzstan. Half of the respondents think that TMA is advantageous for women, and think that training for providers (29%), advocacy campaign (29%), inclusion of TMA into the national norms (28%), regulatory changes (14%) and awareness campaign for women about telemedicine (14%) are the main steps for implementing remote services in Kyrgyzstan (Fig. 9).

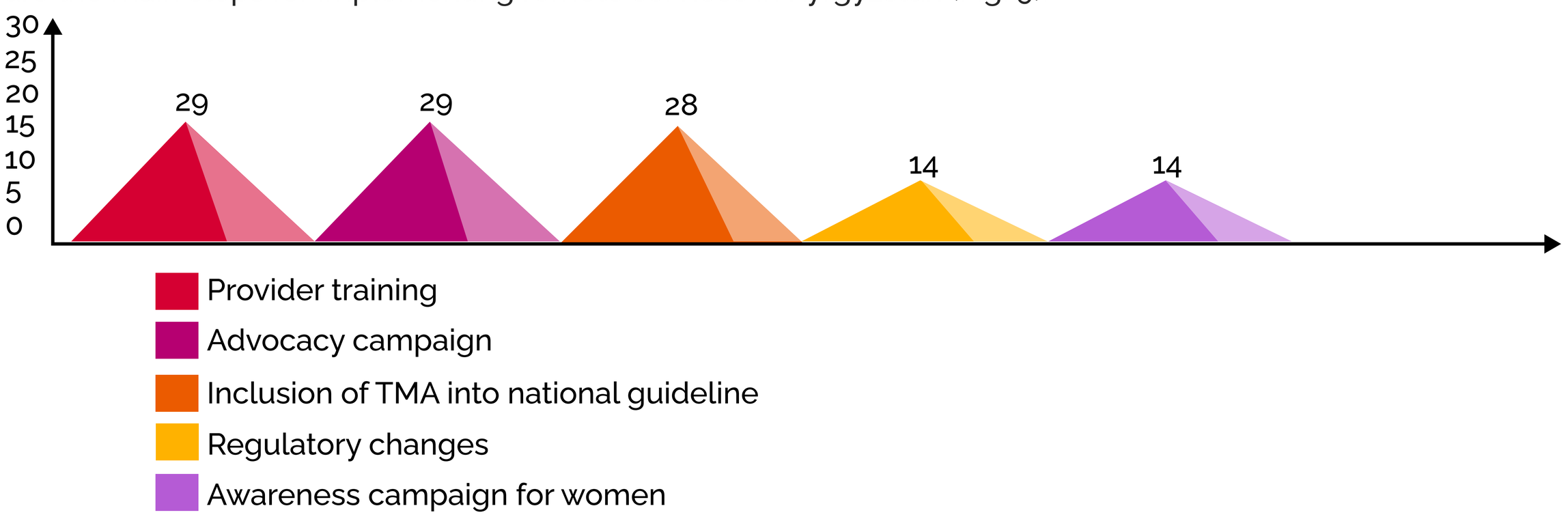


Fig. 9. Policy makers' opinion on implementing TMA at the national level

Conclusion

The findings of the formative research illustrates that woman seeking abortion services face significant barriers to fulfil their reproductive rights in Kyrgyzstan. Medically unnecessary in-person visits, lack of trained providers and clinics providing abortion services, too long distances to the facilities offering women safe pregnancy termination result in limited options for women seeking abortion services. It is apparent from the formative research that access to abortion services was further worsened during crises period due to unchanged regulations and restrictions.

The findings of this formative research suggests that there is an urgent need to improve women's access to safe abortion services in Kyrgyzstan. All groups of formative research expressed huge interest in implementing telemedicine services in the country. Telemedicine medical abortion gives an opportunity to provide remote services to women in rural areas, hard to reach population, and other vulnerable groups. Supportive climate makes it realistic to implement the medical abortion services through telemedicine at national level by conducting trainings for providers, conducting awareness campaign for women, advocating telemedicine, making regulatory changes and including TMA into national abortion guideline.

After completing the analysis of formative research study data from five countries in the EECA region, Kyrgyzstan was selected as the location for conducting an introductory clinical pilot study on telemedicine medical abortion (please see Annex 1, Results of the TMA Pilot study in Kyrgyzstan).

Findings of formative research in Uzbekistan

From November 2022 through February 2023, **fifty women** with average age 29.5 years from Tashkent and Bukhara were interviewed (Table 1). The majority of respondents were from urban areas (84%) and had more than high school education (90%). More than half of the respondents (54%) were married, and ninety percent had one or more children. Almost all women (98%) reported that they are aware about medical abortion of which more than half (64%) had an experience of medical abortion.

Table 1. Participant characteristics

N=50 Women	n	%
Residency		
Urban	42	84
Rural	8	16
Age group		
16-30	29	58
31-35	19	38
36≤	2	4
Education		
High school	5	10
Higher than high school	45	90
Marital status		
Single	23	46
Married	27	54
Family composition*		
No children	5	10
Children 1-2	24	48
Children 3≤	21	42
Had MA previously	32	64

All except one participant (98%) think that access to MA is either good or very good in the country. Thirty-seven out of 50 participants shared their thoughts on the barriers to obtain medical abortion services; respondents listed the following barriers: too many lab test (35%), too many visits to the provider (32%), too expensive (22%), and too far to travel (11%) (Fig 1). Majority of participants (90%) noted that a ob/gyn provides MA counseling, and more than half (54%) reported that a woman does not need to stay in a clinic for the duration of the procedure. Less than half of women (41%) reported that drugs could be obtained at a pharmacy with a doctor's prescription, about one-third (28%) responded that MA pills are provided by medical doctor and one-quarter (25%) indicated that women get abortion pills from a drug distributor. Fee for medical abortion reported by women varies from $10 to $50. More than half of the respondents (54%) noted that MA fee does not include expenses for pre- and post-abortion procedure exams and lab.tests, and majority of participants (87%) indicated that women cover the cost of MA procedure.

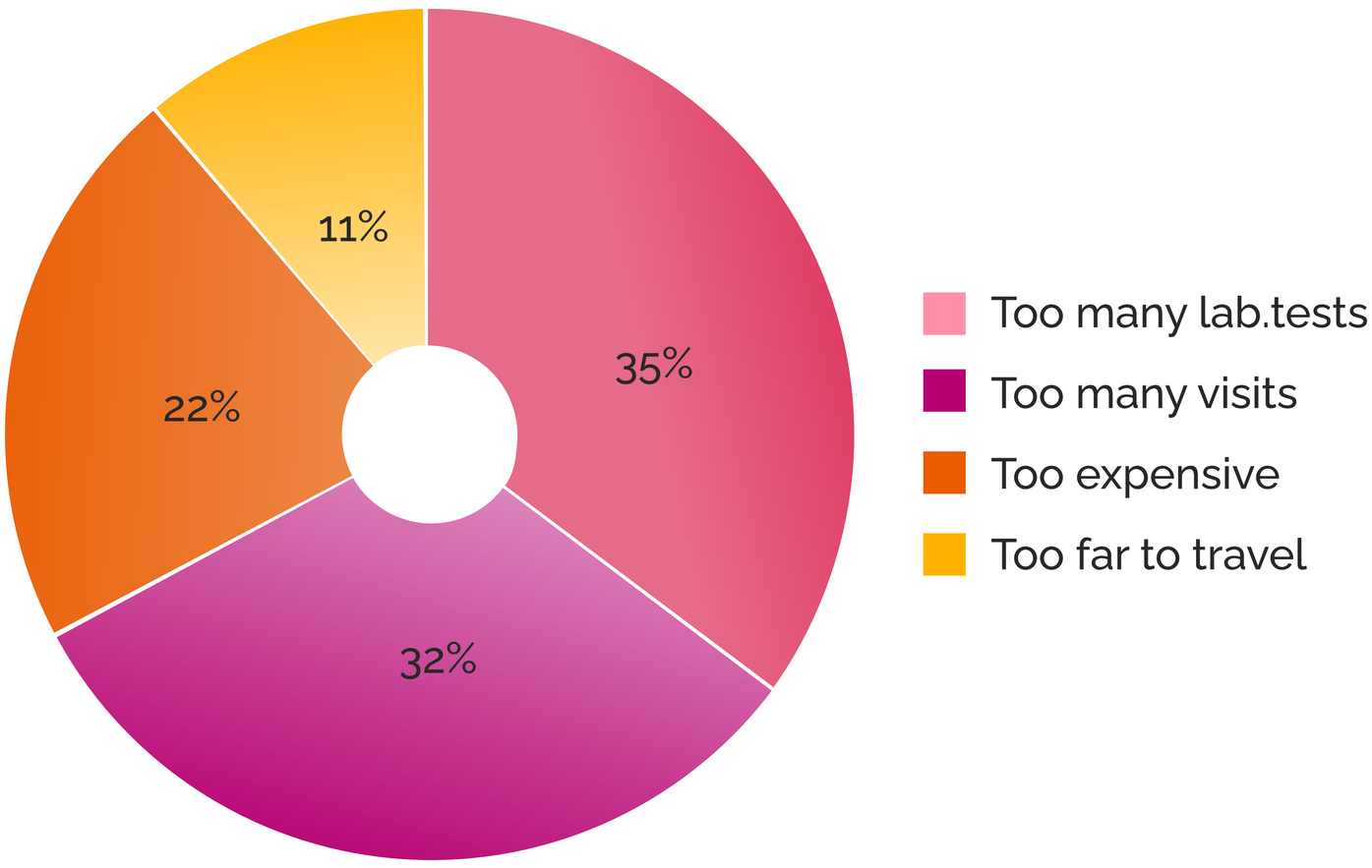


Fig 1. Main barriers for women seeking abortion services

Slightly more than half of the participants (51%) noted remote counseling as the main regulatory change for improving access to abortion services in Uzbekistan during COVID-19 restrictions. About one-third of women (29%) got the abortion pills at a pharmacy during crises period.

Majority of participants are aware about the telemedicine services (80%) as well as believe that women can self-manage entire process of abortion procedure (92%) (Fig 2). All respondents indicated that women have a high access to modern communication tools and reported that women would be interested in telemedicine services.

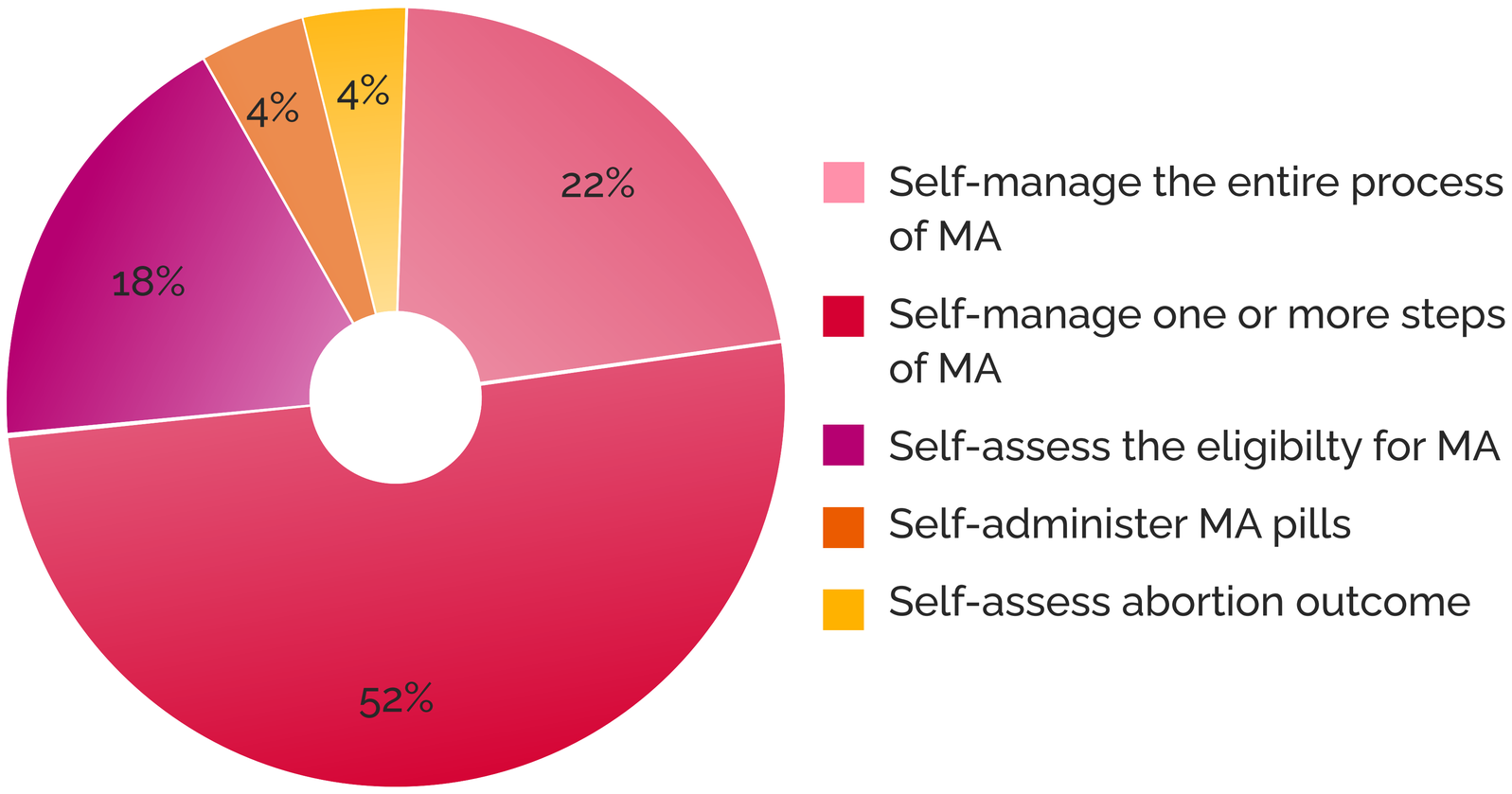


Fig 2. Women's opinion on self-managed abortion

All research participants believe that it is feasible to introduce TMA services in their country and they think that TMA is advantageous for women. Women listed the following actions as the main steps for implementing TMA services in Uzbekistan: inclusion of telemedicine services in the national safe abortion norms (32%), TMA advocacy (26%), training for providers (21%), information campaign for women about telemedicine (17%) and regulatory changes (4%) (Fig. 3).

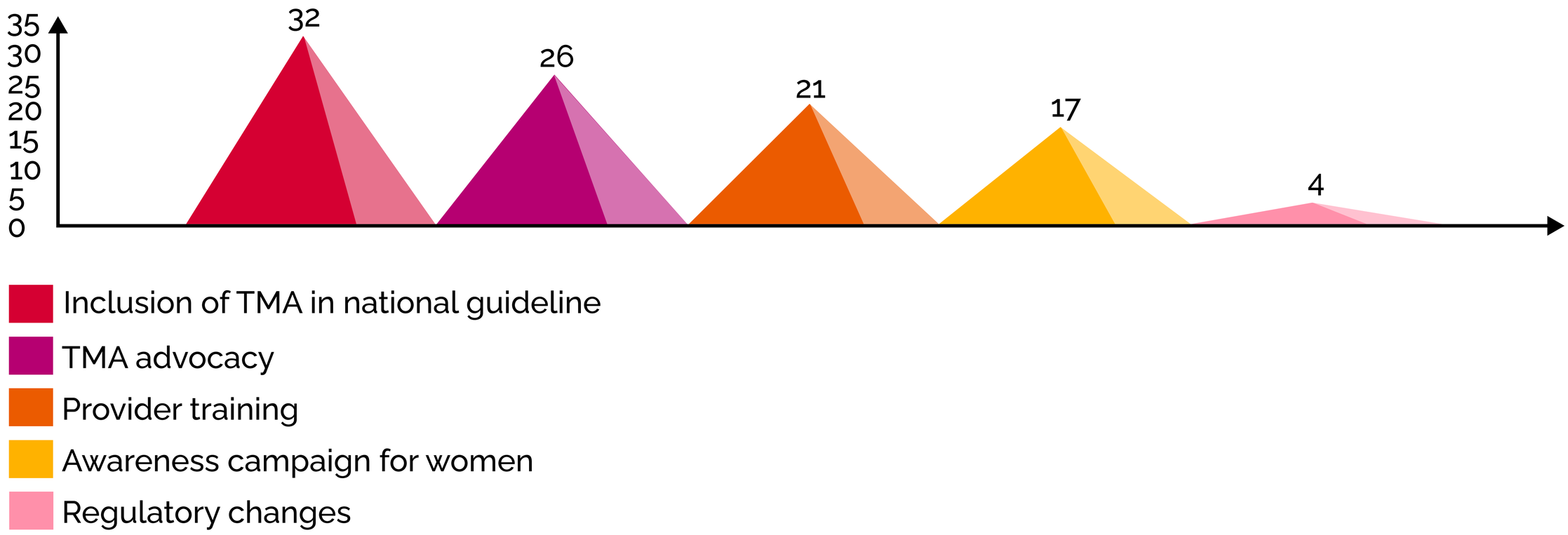


Fig 3. Women's opinion on implementing TMA at the national level

From October to June 2022, 3 interviewers interviewed **thirty-eight providers** from Tashkent, Bukhara and Surkhandara region (Table 2). Majority of research participants (92%) were female, fifty-three percent represented the age group 20-34 years and slightly less than half (47%) were 35 years or older.

Table 2. Participant characteristics

N=38 Provides	n	%
Age group		
20-34	20	53
35≤	18	47
Sex		
Female	35	92
Male	3	8

Forty-two percent of providers are aware about when national abortion guideline was revised and majority (81%) reported the MA gestational age limit as 12 weeks. All providers (100%) indicated that pre-procedure lab. tests and ultrasound are required to get the MA procedure. Majority of research participants (79%) noted that women are allowed to administer both mifepristone and misoprostol pills at home. Almost all (97%) providers reported that women are counseled by ob/gyn. Half of respondents (50%) noted that women get MA pills from the provider and slightly less than half (48%) indicated that women obtain drugs at a pharmacy with a doctor's prescription. More than two-third of the providers (66%) indicated that national norms require in-person follow up assessment of abortion status. Vast majority of participants (95%) reported that MA procedure expenses are paid by women, and more than half (53%) think that cost of MA procedure includes the expenses for pre- and post-abortion tests and exams. Medical abortion cost varies from $17 to $100 according to research participants' responses.

More than half of the providers (55%) think that women face financial barriers like cost of the procedure (50%), pre-abortion tests/exams (29%) and post abortion test/exams (21%) to obtain MA (Fig 4). Almost half of the participants (49%) believe that number of in clinic visits (72%) and need for arranging to take time off from school/work creates logistical barriers for women. About two-third of the participants (63%) listed limited number of clinics providing abortion services (40%) and lack of knowledge on MA among women (34%) as barriers related to limited options available in the country to access MA services.

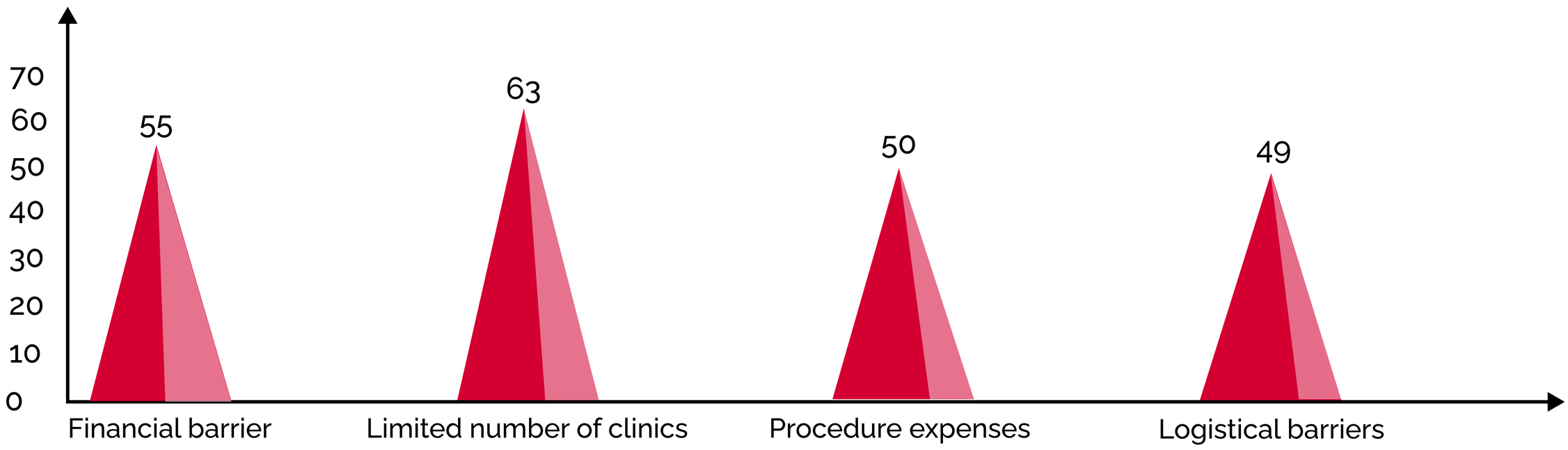


Fig 4. Providers' reported barriers for women seeking abortion services

Research participants reported that travel restrictions (47%), transportation barriers (39%), and limited number of clinics providing abortion services (14%) crated barriers for women to assess abortion services during the COVID-19 restrictions. More than one-third (37%) indicated regulatory changes during crises period for improving access to safe pregnancy termination services. Regulatory changes included MA eligibility assessment by phone (29%), remote consultation (41%), providing the pills to women by mail or currier services (24%) and abortion status assessment by phone (6%).

Majority of providers have information about telemedicine (71%) and are aware about self-managed abortion (74%). Eighty-one percent of respondents think that women could self-manage entire process of MA. Almost all (97%) think that women have high access to modern communication tools (97%), and all indicated that medical providers have high access to cell phone as well as to internet services. Vast majority of providers (92%) believe that existing telecommunication infrastructure supports implementation of telemedicine services in the country. More than two-third of the research participants (63%) reported that both women and providers would be interested in telemedicine services. Most of participants think that telemedicine medical abortion has a high potential (84%) as well as is feasible in Uzbekistan (95%) and believe that TMA is advantageous for women (92%). Research participants listed following actions for implementing telemedicine services in their country: inclusion of telemedicine medical abortion into national protocol (37%), TMA advocacy (25%), training of providers (21%), information campaign for women (13%), and changes in regulations (4%) (Fig. 5).

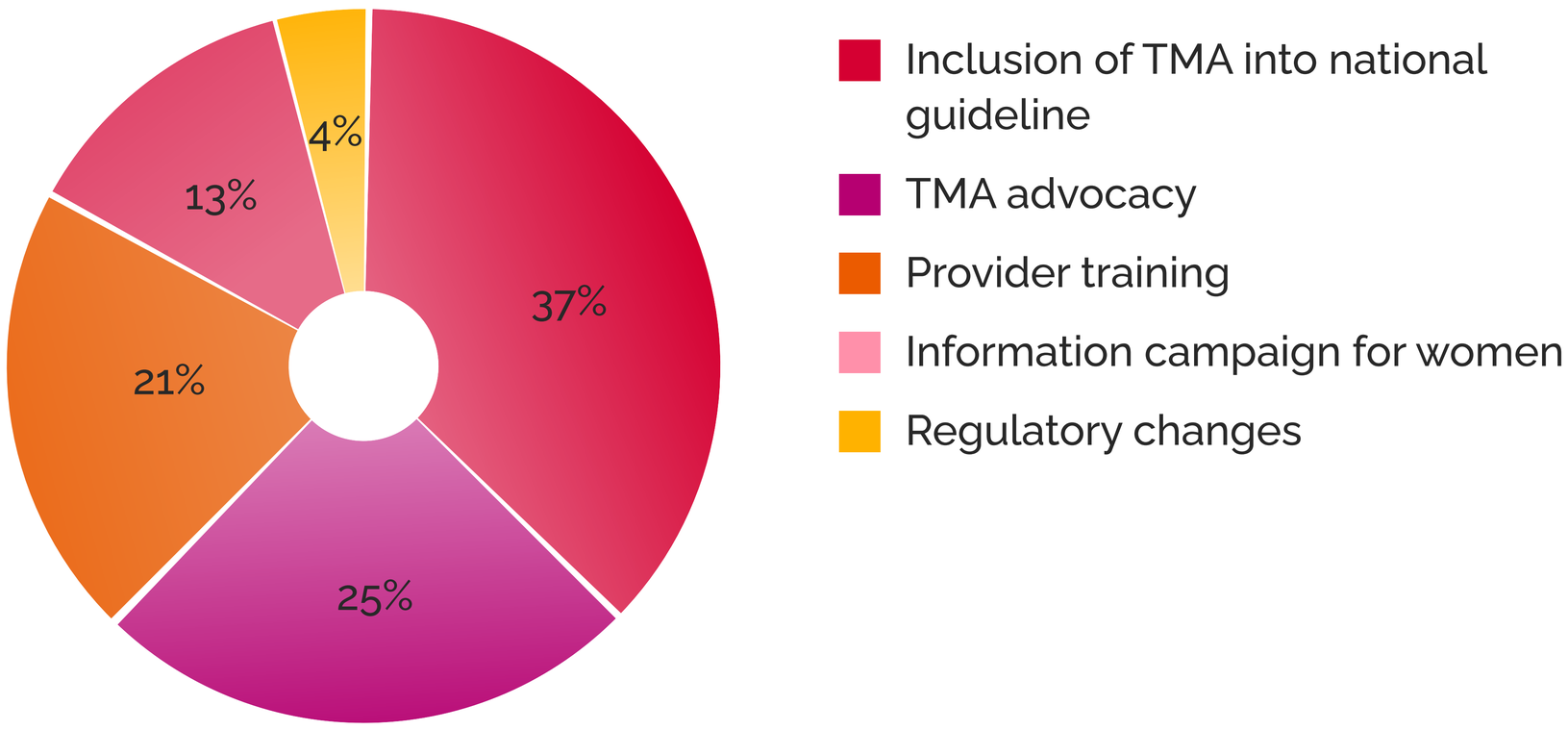


Fig 5. Provider's opinion on implementing TMA at the national level

In November 2022, **33 pharmacists** from Tashkent were interviewed. Majority of the participants (73%) were female, less than half (42%) represented the 20-34 years age group and fifty-eight percent were 35 years or older. None of the pharmacist were aware about when national abortion guideline was revised and more than two-third (73%) believe that MA gestational age limit is 4 weeks. Vast majority of the respondents (97%) reported that pre-procedure lab.tests and ultrasound are required to get the MA procedure and more than two-third believe that women are not allowed to administer pills of mifepristone (64%) and misoprostol (67%) at home. All pharmacist (100%) indicated that women are counseled by ob/gyn and eighty-four percent reported that drugs could be obtained at a pharmacy with a doctor's prescription. Majority of participants (82%) indicated that national norms require in-person follow up assessment of abortion status as well as women cover MA procedure expenses. More than half of the pharmacists (58%) think that MA fee includes expenses for pre- and post-abortion tests and exams. MA cost varies from $100 to $125 according to research participants.

Majority of pharmacists reported that women face financial (88%) and logistical (62%) barriers, and barriers due to limited options (67%) to access MA services (Fig. 6). Less than half of the respondents (45%) reported that there were regulatory changes in order to improve women's access to abortion services during pandemic restrictions. Regulatory changes included remote MA eligibility assessment (38%), providing the pills to women via mail or currier services (31%), and remote counseling (23%). The most frequently reported barriers for women to assess abortion services during the COVID-19 restrictions were travel restrictions (56%), limited number of clinics providing abortion services (23%) and transportation barriers (21%).

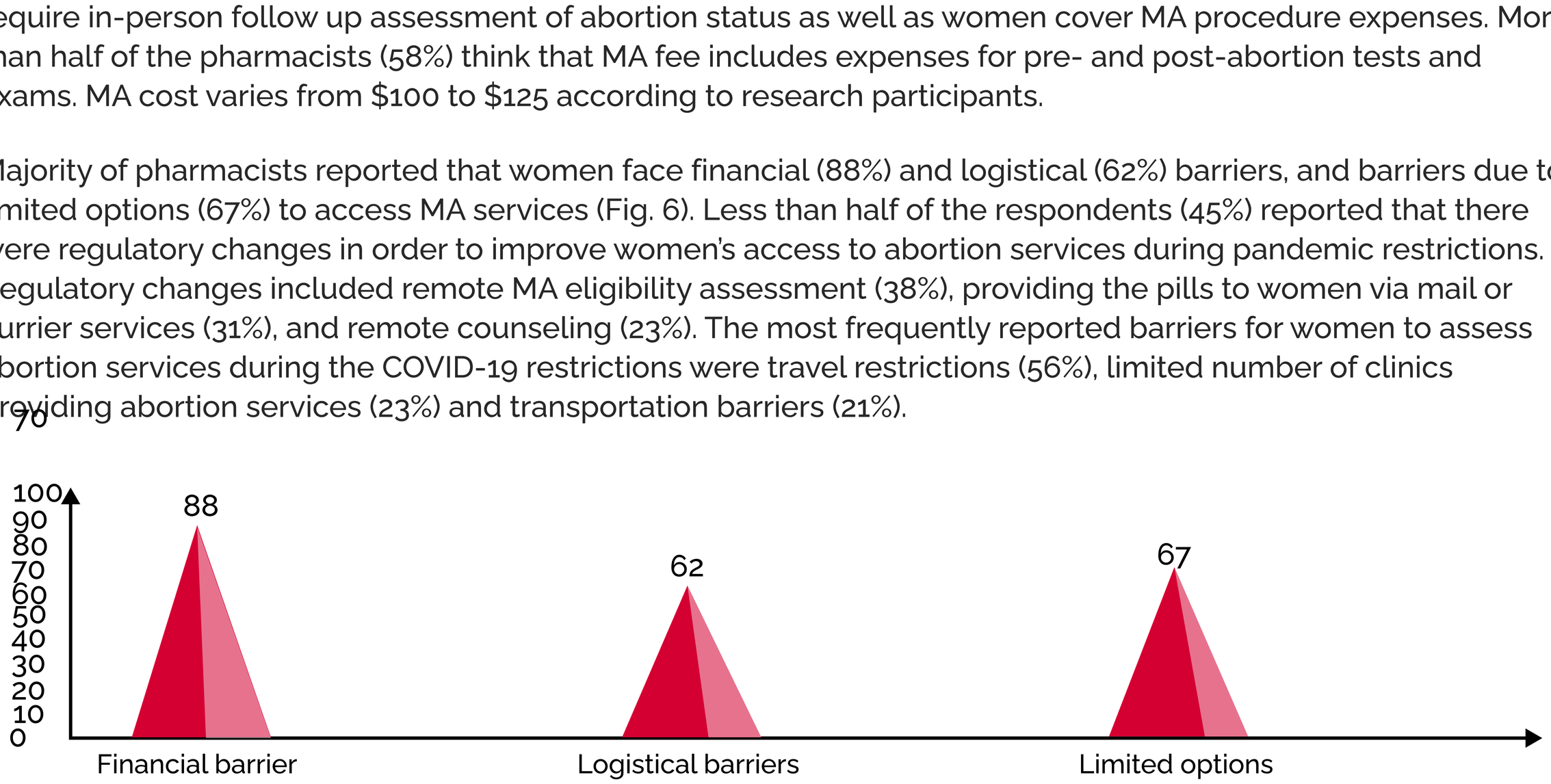


Fig 6. Pharmacists' reported barriers for women seeking abortion services

About one-quarter of the pharmacists (24%) have information about telemedicine and less than half (45%) are aware about self-managed abortion. More than one-third of the participants (36%) believe that women can self-manage entire process of medical abortion. One-third of the respondents (33%) are aware about current regulations on telemedicine. Forty-two percent of pharmacist believe that existing telecommunication infrastructure supports implementation of telemedicine services in the country. Majority of the respondents indicated that both women and providers would be interested in remote provision of abortion services (85%). Most of participants (82%) think that telemedicine medical abortion is feasible in Uzbekistan (82%) and has several advantages (82%) as TMA is more comfortable for women (56%); more private (29%) and women will miss less school/work (12%).

Pharmacist reported the following as the main steps for implementing TMA services in Uzbekistan: TMA training for providers (27%); inclusion of TMA into national abortion guideline (23%); TMA advocacy (21%); awareness campaign for women about telemedicine (18%), and regulatory changes (11%) (Fig 7).

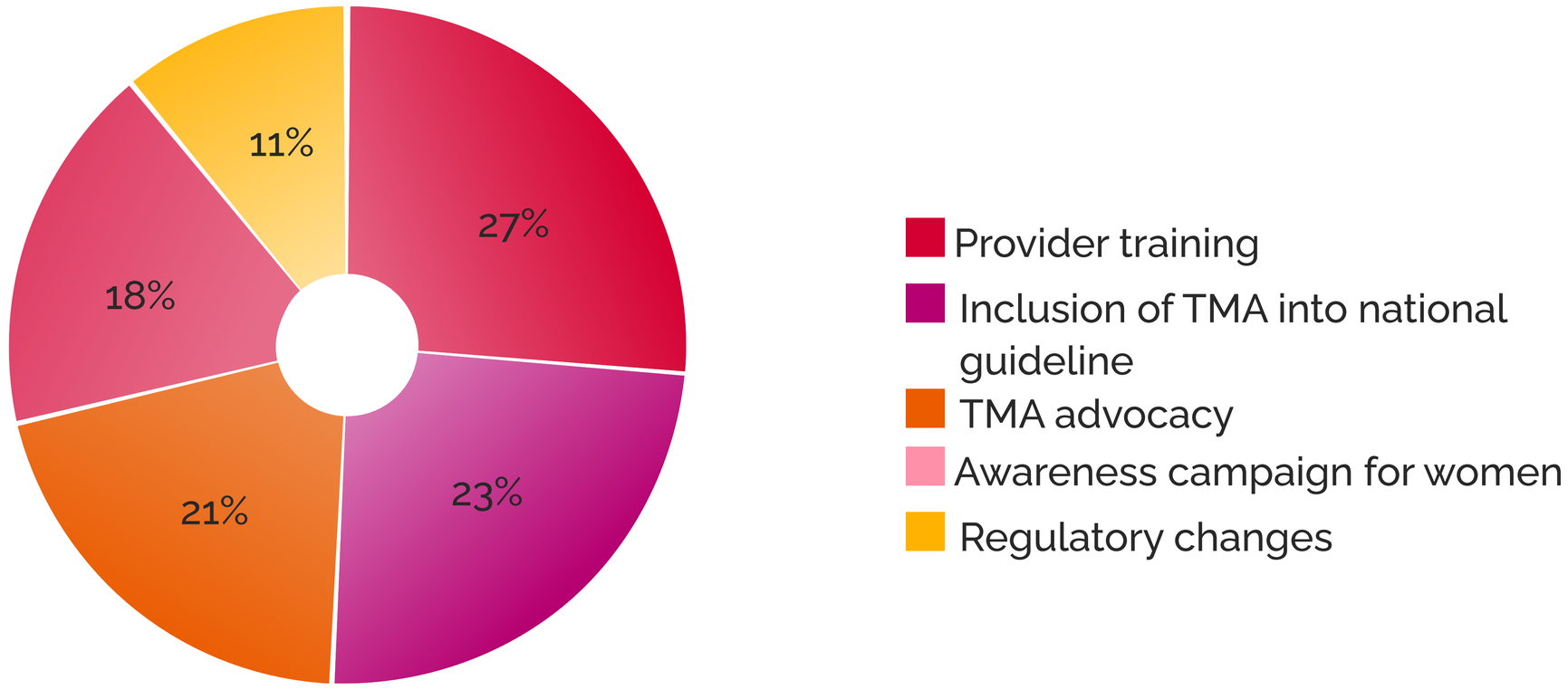


Fig 7. Pharmacists' opinion on implementing TMA at the national level

Third-sector, especially **NGOs** working in the field of RHSH, is not well developed and present in Uzbekistan. Formative research team members were unable to reach the NGO representatives for inviting them to participate in the research.

Five policy makers, all from the capital city of Tashkent, four females and one male, representing age group 36-55 years participated in the formative research. None of the respondents was aware about when the national safe abortion guideline was revised. Four policy makers believe that 12 weeks is the gestational age limit for outpatient MA. All respondents noted that pre-abortion tests/exams are required to obtain abortion services according to national norms as well as believe that women are allowed to take mifepristone and misoprostol at home. Three policy makers indicated that women get MA pills directly from a provider while two reported that women purchase drugs at pharmacies with a prescription.

All policy-makers reported that women face logistical and financial barriers as well as barriers associated to limited option in accessing abortion services. All participants noted that travel restrictions, transportation barriers and limited number of clinics created significant barriers for women assessing abortion services during COVID-19 restrictions.

All respondents indicated that there were regulatory changes during crises period for improving women's access to MA services. All are well aware about telemedicine, and believe that woman could independently manage the entire abortion process.

All research participants reported that current telecommunication infrastructure supports implementation of telemedicine services in their country. All policy-makers believe that it is feasible to implement TMA in Uzbekistan and remote services will be beneficial for women (Fig 8). Policy makers listed the following steps for implementing the services at the country level: regulatory changes, inclusion of TMA in the national safe abortion guideline, provider trainings, TMA advocacy, and awareness campaign for women (Fig 9).

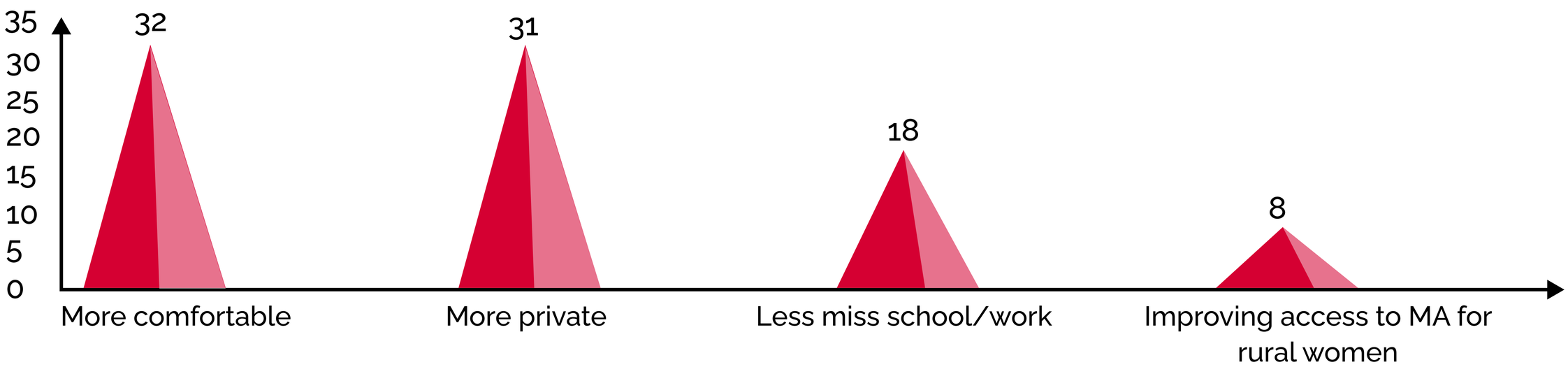


Fig. 8 Policy makers' reported advantages of medical abortion via telemedicine for women

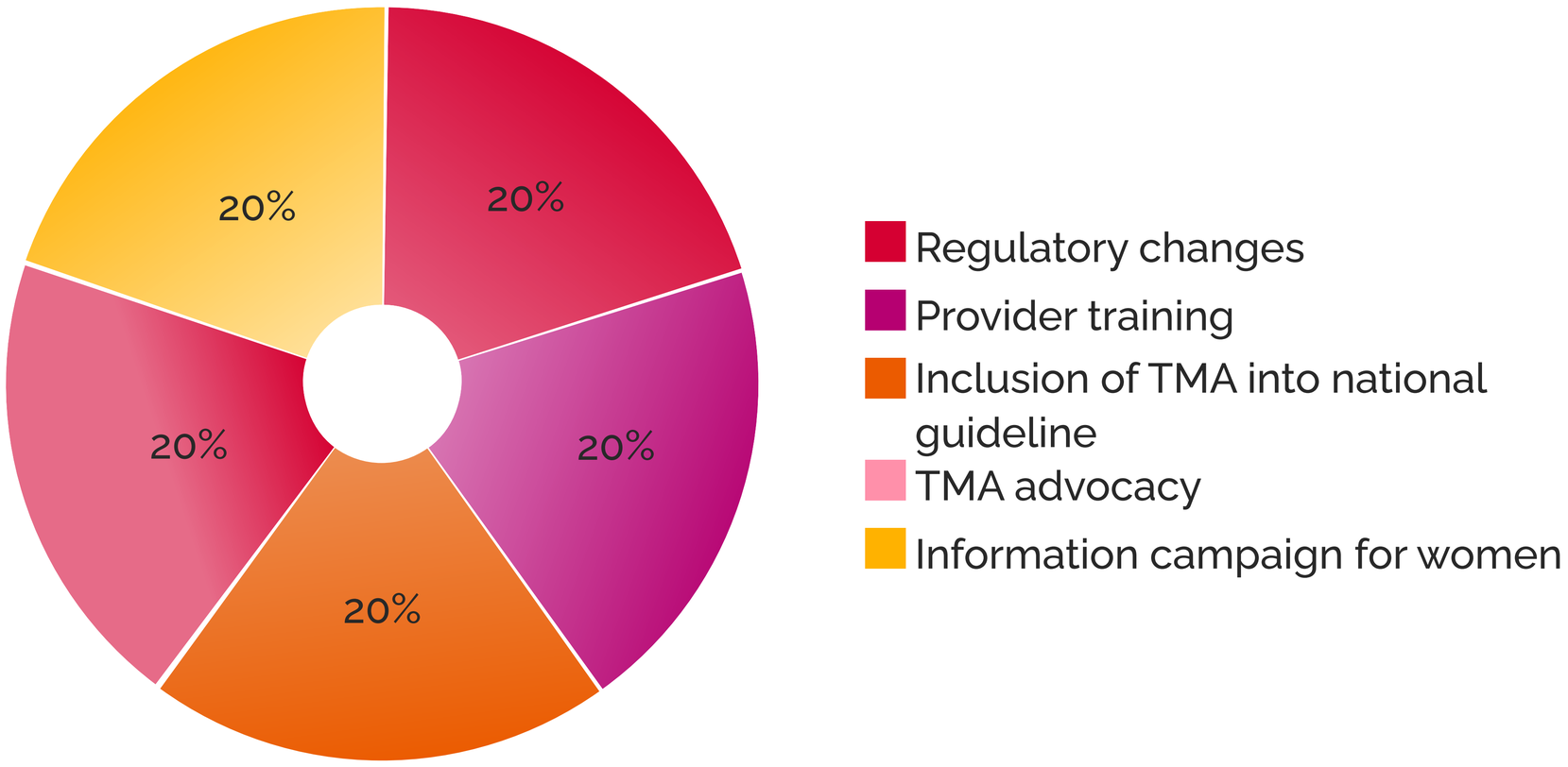


Fig 9. Policy makers' opinion on implementing TMA at the national level

Conclusion

The findings of the formative research illustrates that pre- and post- MA procedure exams/lab.tests, medically unnecessary multiple in-person visits to a clinic, limited number of health facilities providing MA services create significant logistical and financial barriers for women seeking abortion services in Uzbekistan. Substantial proportion of participants from all research groups noted high degree of importance on introducing telemedicine in country level, as this service delivery model has the potential to improve women's access to abortion services, especially women from rural areas. Current telecommunication infrastructure allows implementing telemedicine in Uzbekistan. Policy-makers who are supportive to introduce telemedicine services, group of providers who became pioneers in provision of TMA from recent experience of medical abortion through telemedicine introductory study in Tashkent and Bukhara, and women who participated in the introductory study and have an experience of MA via telemedicine could speed up implementing TMA services in Uzbekistan.

The findings of this formative research suggests that inclusion of TMA services in the national abortion guideline, provider trainings, regulatory changes, TMA advocacy and informational campaign for women are the essential actions for implementing telemedicine services in Uzbekistan.

CIDSR
Centrul de Instruire
în Domeniul Sănătății Reproductive

ANNEX I

Analytical Report of the Study
"Introduction of Medical Abortion via Telemedicine in Kyrgyzstan, One of the Developing Countries of Eastern Europe and Central Asia"

Prepared by the Reproductive Health Training Center
of the Republic of Moldova

Chișinău, 2024

CONTENTS

Introduction, Objectives, and Methods of the Study.....III

Results Obtained.....VI

Provider Satisfaction.....XIII

Conclusion.....XV

Bibliography.....XVI

DATA AND METHODS

Introduction

Medical abortion (MA) with mifepristone and misoprostol is safe and highly effective for the first-trimester outpatient abortion [1]. Medical abortion is one of the abortion methods used by women in Eastern Europe and Central Asia (EECA); however, MA services are largely used insufficiently. Inconveniences and expenses caused by two or more required in-person visits for MA are likely to contribute to decreased coverage. Several strategies have been tested and assessed to eliminate medically unnecessary in-person visits to abortion care providers. These are such models as counseling women by telephone or online, mailing MA pills, and using urine pregnancy tests at home in order to self-assess abortion outcomes. Research has demonstrated that remote counseling instead of in-person counseling is highly acceptable to women [2-6]. Mailing MA pills is feasible and satisfactory for women, whereas telemedicine has increased access to MA during the COVID-19 pandemic [7–12]. The WHO guideline reviewed recently recommends using telemedicine as an alternative to in-person communication with a professional healthcare provider for obtaining all or part of MA services [13].

This study was aimed at piloting telemedicine medical abortion (TMA) services which enable remote communication between women and healthcare providers and reduce the number of medically unnecessary in-person visits to clinics in Kyrgyzstan.

This pilot project was implemented by the RHTC in partnership with the Kyrgyz Family Planning Alliance (KFPA), Kyrgyzstan.

Goals

This pilot study was aimed at obtaining the data regarding feasibility and acceptability of medical abortion via telemedicine in Kyrgyzstan. The results to be assessed included the following information:

- reasons for women's interest in TMA services;
- abortion outcomes in women who have used TMA services;
- adverse reactions reported during TMA;
- participants' preferences for the types of abortion services in the future, if necessary;
- advantages and disadvantages of using the TMA approach as listed by women and providers.

Sample Size and Study Location

It was planned to obtain 100 cases at two study centers:

1. Institution "Family Medicine Center No 1," Bishkek, Kyrgyzstan: 60 women;
2. "Jalal-Abad Regional Center of Human Reproductive Health Protection," Jalal-Abad, Kyrgyzstan: 40 women.

The sampling was based on the number of abortions at each study clinic and financial limitations.

Population Studied

The participants who addressed the study clinics asking for first trimester abortion services were offered an opportunity to take part in the study.

To join in the study, a participant had to comply with the following criteria:

-to be pregnant, which had to be confirmed by a pregnancy test or ultrasound results (if the results were obtained before contacting the study clinic);

-to have no contraindications to medical abortion;

-to intend to use medical abortion services via telemedicine;

-to have access to a telephone;

-to be able to take mifepristone on or before the 63rd day of gestation;

-together with the researcher, to be able to make a plan for confirming complete abortion or, in case if medical abortion fails, to follow the researcher's recommendations;

-to have the desire and possibility to provide informed written consent to take part in the study.

Study Procedures

The study protocol obtained ethical approval from the Ministry of Health of Kyrgyzstan (Order of the Ministry of Health No 355; March 30, 2023). Clinicians and nurses from the two study centers were instructed regarding TMA using the test-free protocol and the study procedures.

The women who addressed the clinics participating in the study by telephone or in person demanding a first-trimester abortion were informed about the study. Those who were interested in the TMA service scheme were checked to confirm their eligibility criteria. The final decision on eligibility for participation was made by the study provider on the basis of the obtained information and test results. The participants who visited the clinic, were interested in TMA, and were found eligible for the study were issued MA pills, and a telemedicine consultation with the study provider was scheduled. The participants who contacted the study clinics on the phone, were interested in TMA, and were found eligible for the study were registered for a scheduled telemedicine consultation with the study provider and were mailed MA pills. All the participants presented signed informed consent forms.

During the remote consultation, the study staff offered comprehensive information about the MA process, expected side effects, and instructions on when and where to address for additional assistance if necessary. The participants who contacted the clinic by phone could choose to receive their medication by mail, courier service, or to get it from a drugstore or the study clinic. Together with the study organizer, the participants chose the method of delivery and dates and times of follow-up calls. All the participants were recommended to take 200 mg of mifepristone orally and 800 μg of misoprostol sublingually 24-48 hours after using mifepristone.

Remote monitoring lasted for a month. The study providers contacted the participants one week after taking the medication to find out whether the participant had addressed elsewhere for assistance, whether any procedures had taken place during the visit, and to examine indicators requiring in-person assessment if any. If the participants needed personal assistance, they were asked to pay a visit to the study site or referred to another healthcare institution. During the calls one week later, the researchers interviewed the women. The interviews included questions about the women's satisfaction with TMA and their preferences regarding future abortion services. Three weeks later, the study providers contacted the women to obtain results of urine pregnancy tests made at home, to examine any indicators requiring in-person assessment, and to assess the abortion status.

After the participant recruitment was completed, the RHTC collected the data from the study staff about the approaches which had turned out to be successful or unsuccessful, the way the process could be improved, and if the service had to be continued after the study was over.

To prepare well-grounded conclusions and to ensure reliability of the information collected at the research centers, the sociological questionnaire method which allows analyzing quantitative variations of the subjects presented for the study was applied.

The data collected during the counseling sessions with the participants is confidential, and their replies were analyzed together with those provided by the other participants. The blanks completed by the healthcare staff conducting the study were included in the database designed for such quantitative studies. SPSS version 22.0 (IBM SPSS) statistical data analysis package was used for generating a database and conducting a quantitative analysis of the study data. A total of 172 variables were created based on a sample size of 100 persons and used for descriptive data analysis (frequency analysis).

RESULTS OBTAINED

From May to November 2023, a study on introducing medical abortion via telemedicine was conducted in Kyrgyzstan, one of the developing countries in Eastern Europe and Central Asia; it involved 100 women aged 20-44.

Out of the 101 cases analyzed, 100 persons met the eligibility criteria; one woman refused to participate. Therefore, the study included 100 participants. Most participants learned about the study after calling the clinic (n=65, 65%); over a third of the participants paid a personal visit to the clinic (n=34, 34%); there is no information regarding one participant (Fig. 1).

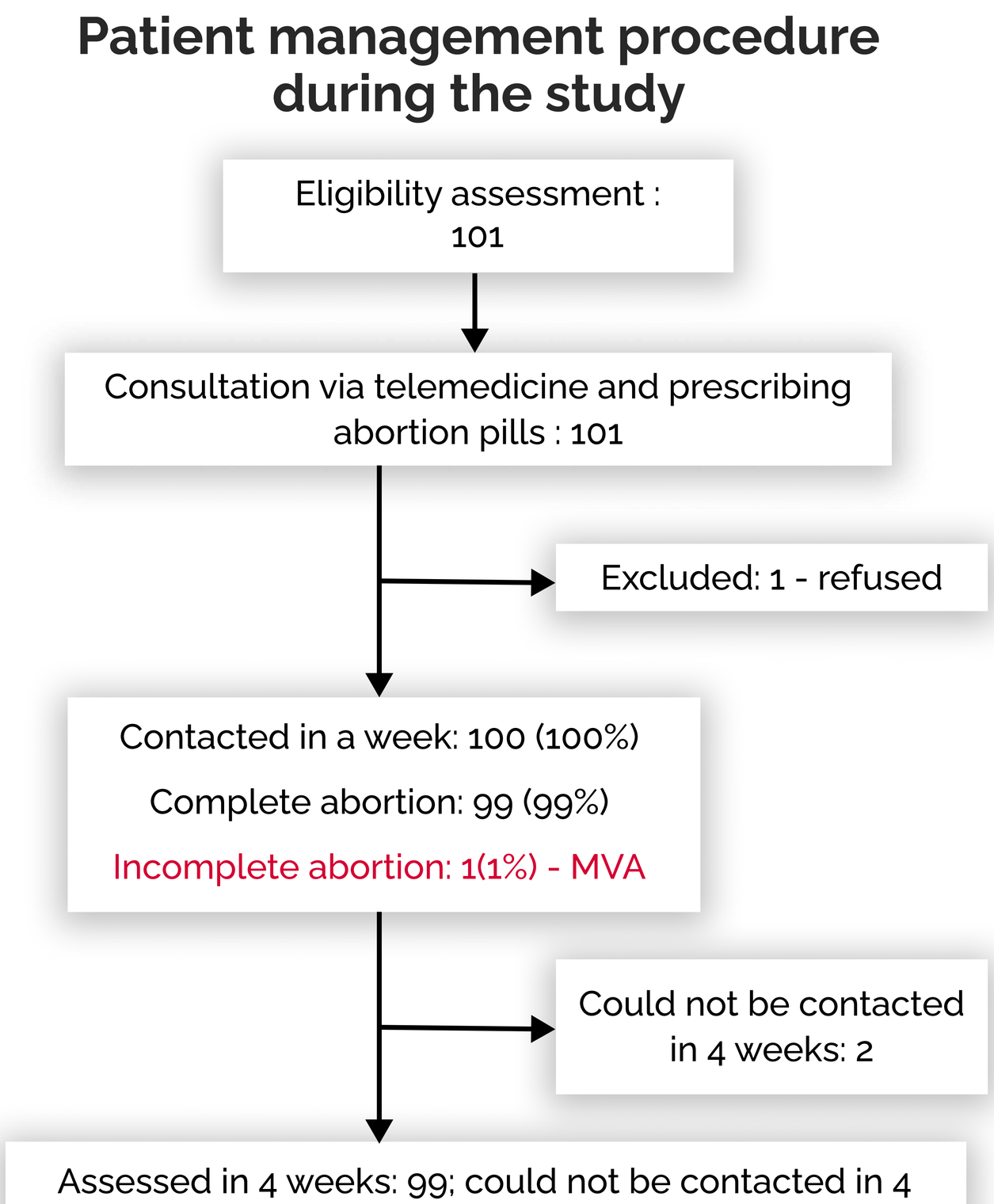


Fig. 1. Patient management procedure during the study

Most participants mentioned convenience (55%) and privacy (39%) as reasons for their interest in obtaining medical abortion services via telemedicine. Such a reason as inability to provide child care was mentioned by 35% of the participants, and other frequently cited reasons such as fewer days of absence from work or studies and avoiding visits to the clinic were mentioned by 19% of the participants (Fig. 2).

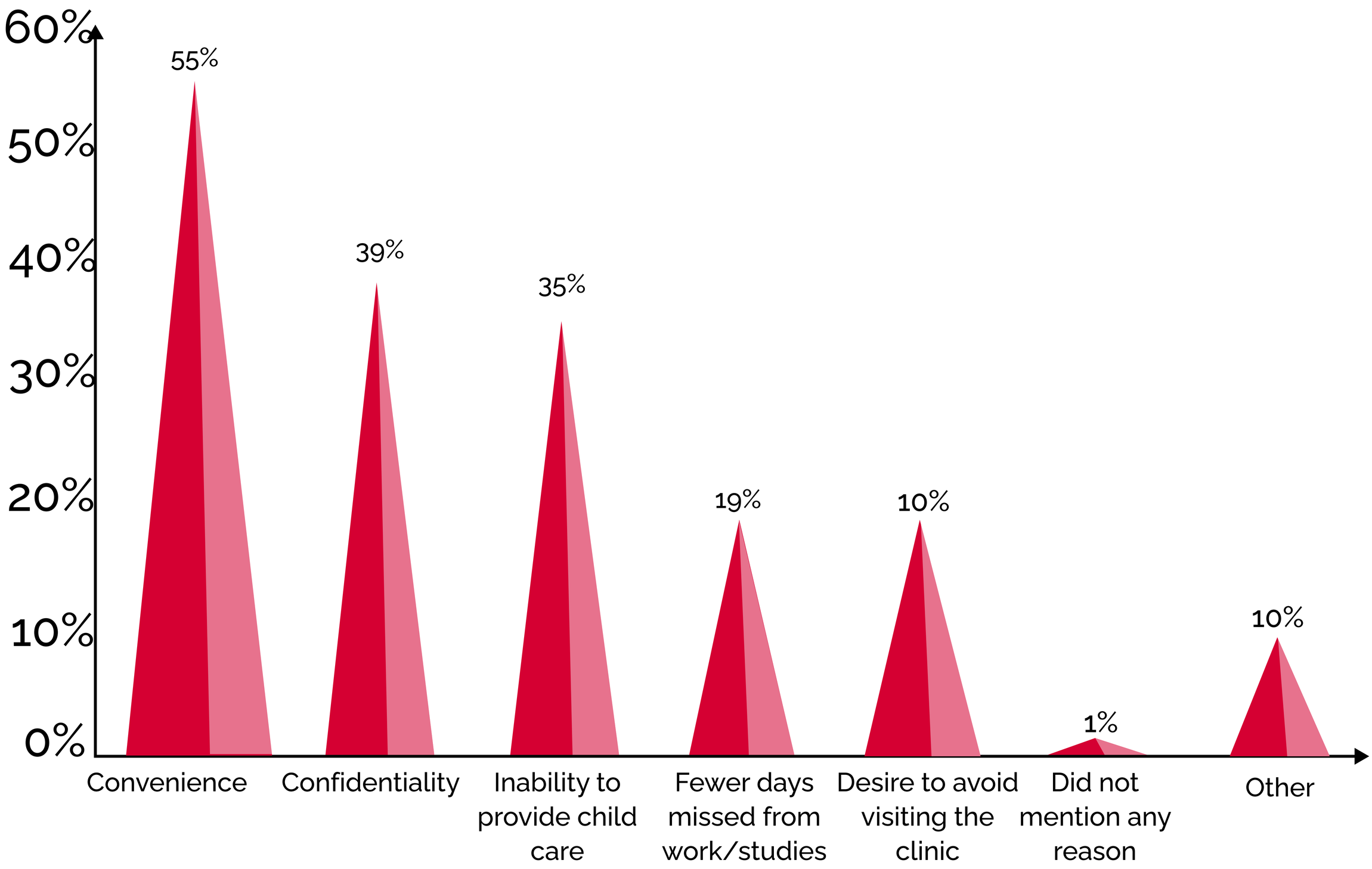


Fig. 2. Reasons for motivation to participate in TMA

A woman could provide several responses

Characteristics of the Study Participants

The distribution of the respondents by age categories demonstrates a higher percentage of women aged 30-39, who account for 49% (49) of the total sample. Women aged 20-29 account for 35% (35), while 16% (16) of women were aged 40-44 (Table 1). The average age of the participants was 32.3.

As to the differences in gestational age at the moment of the study, most participants (70; 70%) were <7 weeks pregnant, and the remaining participants (30; 30%) were 7-9 weeks pregnant. The majority of women had previously given birth at least twice before the study (88 women; 89.8%), nine women had given birth once, and two women had never given birth before. 43 women aged 24-44 (43%) had previously had surgical abortion, and over a third of participants (32 women; 32%) reported they had had medical abortion (Table 1).

Table 1. Characteristics of the Study Participants

Characteristic	Telemedicine consultations and prescribing abortion pills (n=100)	
Place of the study	**n**	**%**
Bishkek	60	60
Jalal-Abad	40	40
Characteristic of the patient's place of residence		
Urban	56	56
Rural	42	42
No reply	2	2
Education*		
Below secondary school level	6	6.1
Secondary	54	54.5
Higher	39	39.4
Age		
20-29	35	35
30-39	49	49
40-44	16	16
Childbirths*		
0	2	2.1
1	9	9.1
2≤	88	89.8
Previous surgical abortions		
0	57	57
1	30	30
2≤	13	13
Previous medcal abortions*		
0	67	67
1	27	27
2≤	5	5
Gestational age according to LMP (in days)		
30-39	35	35
40-49	35	35
50-59	24	24
60-63	6	6

*N=99, data regarding one woman is missing

Most participants were registered as residing in the Bishkek district, their number was 60% (60 women), and 40% of women resided in Jalal-Abad (40 women). More than half of the women (n=56, 56%) resided in urban areas, and women from the countryside were fewer (n=42, 42.9%). The level of education of the participants differs: most of the sample includes women with secondary education who account for 54.5% (54 women), followed by women with higher education who account for 39.4% (39 women); women with a lower level of education are the least numerous and account for 6.1% (6 women). An analysis of the distribution of respondents according to their employment demonstrates that the majority of study participants are unemployed (n=65; 65%), 25% of women (25 women) are employed full-time, and 7% (7 women) work part-time.

Approximate time required to get to the clinic

The average distance women have to travel from their place of residence to the clinic is 20.2 km. Less than half of the women, 44% (n=44), resided at the distance of less than 10 km from the study clinic. The participants residing at the distance of 14-30 km accounted for 38% (n=38). 18% (n=18) of women resided at the distance of 35-100 km from the clinic (Fig. 3). The average time required to get to the clinic was 33.6 minutes. More than one third of women (34% n=34) could reach the clinic in 5-15 minutes. 41% of women (41) had to travel for half an hour or more (20-40 minutes), and 25% of women (25) had to travel for more than 45 minutes to get to the clinic (Fig. 4).

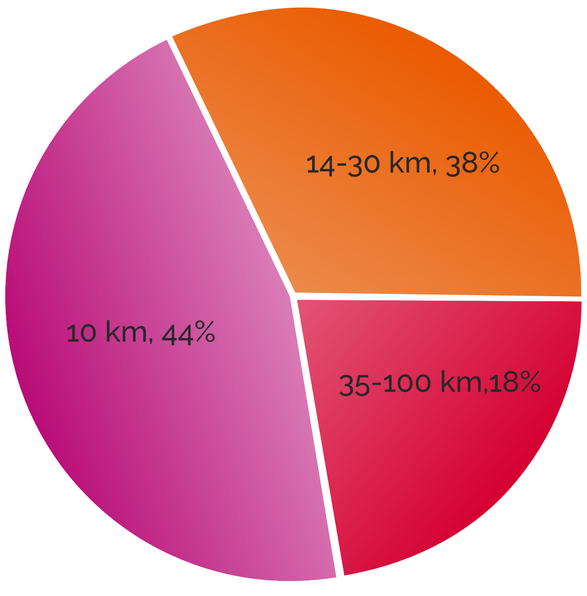


Fig. 3. Approximate distance from the place of residence to the clinic

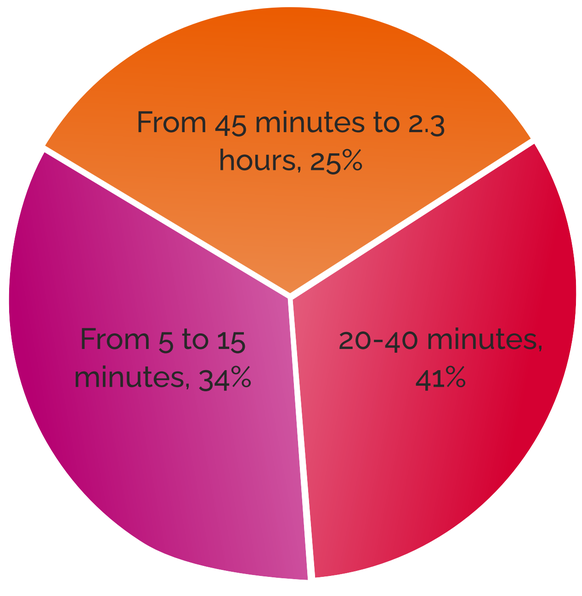


Fig. 4. Approximate time required to get to the clinic

Communication channels used for TMA

The telephone is the most frequently used type of communication for conducting a medical abortion via telemedicine; it was chosen by the majority of participants, i.e. 52.6% (51 replies). WhatsApp was chosen by 51.5% (50 replies), and Viber was chosen by only 1% (one reply) (Fig. 5).



Fig. 5. Communication channels used for TMA

Women could choose several communication channels

Ways of obtaining medications for medical abortion

Most of the 100 participants received their medications via courier delivery (n=51.51%); in their comments, they described this method as desirable and convenient in their situation. A third of them received the medicines during their visit to the clinic where they addressed for an abortion (n=16.16%). 10% (n=10) of the participants received their medications via the delivery organized by the staff from the clinic. Only 7% (n=7) of the patients received their medications personally, and 16% (n=16) received medications with their husbands', sisters', or friends' assistance.

Effectiveness of medical abortion via telemedicine

During the study, all the participants (100 women) had to take one mifepristone pill and four misoprostol pills. None of the participants reported any difficulties obtaining their medications. One week after the telemedicine medical abortion consultation, all the participants replied to the calls/messages from the study provider. The study provider successfully contacted all the participants after one week during the follow-up (n=100; 100%). All the 100 participants took 200 mg of mifepristone, followed by 80 mcg of misoprostol sublingually 24–48 hours later.

Due to telemedicine, positive abortion results were reported by 99 study participants a week after taking the medications; one woman was diagnosed with an incomplete abortion and was referred for MVA. Four weeks later, it was stated that 97 (97%) women had complete abortion which did not require any surgery (Table 3).

Table 3. Effectiveness of medical abortion via telemedicine

Result	n	%
Complete abortion	97	97
Incomplete abortion requiring MVA	3	3

X

After taking a pregnancy test, 93 women had negative results, 6 women did not answer the question, and one woman had an uncertain result (Fig. 1). Of the 6 women who did not provide an answer to the question regarding the pregnancy test result, two visited the clinic and had an ultrasound test, two had incomplete abortions which required aspiration, and two did not answer the phone calls from the healthcare worker taking part in the study. In the above context, three of the 100 participants had to undergo the aspiration procedure.

Acceptability of medical abortion via telemedicine

Most of the study participants confirmed that they were very satisfied (n=68; 68%) or satisfied (n=32; 32%) with the medical abortion service via telemedicine. The participants also confirmed high levels of satisfaction with the telemedicine service providers' work: 72 women (72%) were very satisfied, and 28 women (28%) were satisfied (Table 4).

Table 4. Acceptabillity of medical abortion via telemedicine

	Joined the final interview (n=100)	
	n	%
Level of satisfaction with the service		
Very satisfied	68	68
Satisfied	32	32
Level of satisfaction with the service providers		
Very satisfied	72	72
Satisfied	28	28
Preferences for the future		
Abortion with a specialist's personal participation	1	1
Abortion via telemedicine	95	95
No preferences	1	1
I do not know	3	3
Would the participants recommend the service to others?		
Yes	99	99
Probably	1	1

If the participants had to terminate their pregnancy again, 95 out of 100 women said they would prefer a medical abortion procedure via telemedicine, and only one participant mentioned she would prefer to have an abortion performed by a specialist. In addition, the absolute majority of women (99%) said they would recommend a medical abortion via telemedicine to a friend if she had to terminate her pregnancy.

According to the participants, the main advantages of medical abortion are convenience – 74%, organization of child care – 28%, and fewer visits to the clinic – 26%. Confidentiality was mentioned by a quarter of the participants (25%), and shorter absence from work/studies by 16% (Fig. 6).

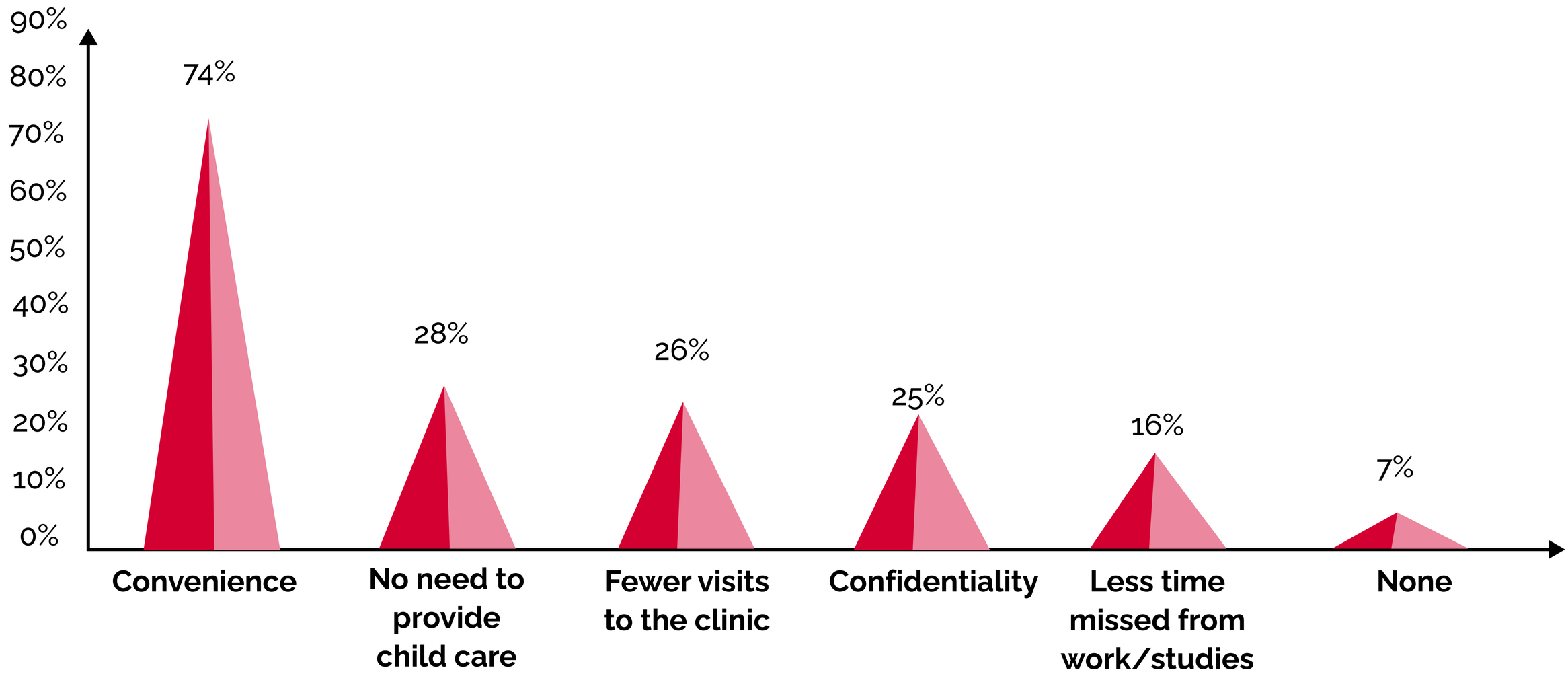


Fig. 6. Main advantages of telemedicine medical abortion services

A woman could provide up to two responses

97% (n=97) of the participants did not mention any disadvantages of medical abortion services via telemedicine. The lack of personal consultations with a specialist was mentioned by two women (2%), and only one woman cited inconvenience (1%) (Fig. 7).

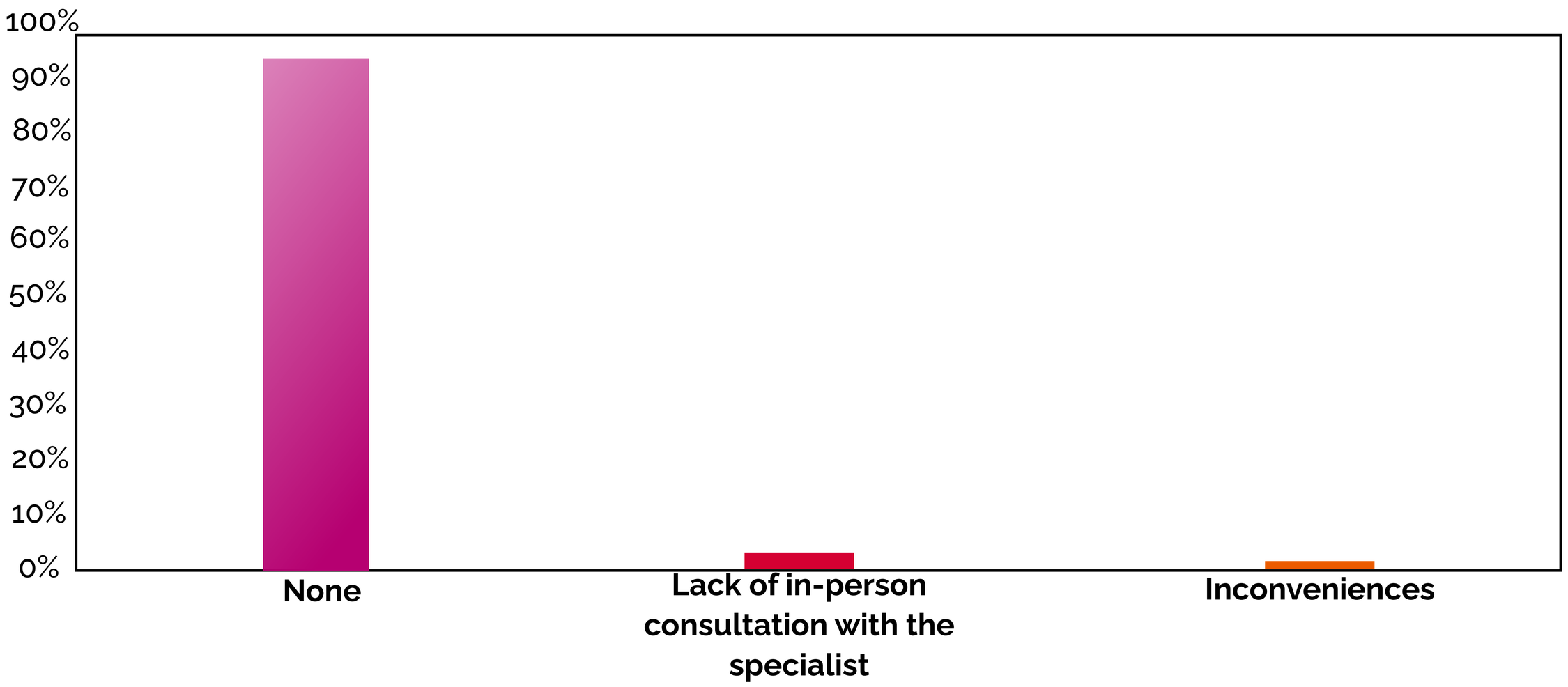


Fig. 7. Main disadvantages of the TMA service

N=100

Provider Satisfaction

After the clinical trial was completed, the RHTC collected the data on the medical abortion service via telemedicine from the study staff at the two clinical centers in Bishkek (Family Medicine Center No 1) and Jalal-Abad (Jalal-Abad Regional Center of Human Reproductive Health Protection) and discussed the way the process could be improved and whether the service was worth continuing after the study was over.

The study staff said they were very satisfied or satisfied with the study, and all of them indicated they would prefer providing abortion services via telemedicine in the future (Table 5).

Table 5. Levels of Satisfaction with the Service Provider

	n	%
Provider Satisfaction		
Very satisfied	4	80
Satisfied	1	20
Preferences for the future	**n**	**%**
Abortion via telemedicine	5	20
No preferences	0	0
Abortion during a personal visit	0	0
How likely are you to recommend this service to other service providers?		
Very likely	2	40
Likely	3	60

The research staff also listed the advantages and limitations of medical abortion via telemedicine.

Advantages of medical abortion via telemedicine

- Convenience (e.g. you do not have to consult your patients in person).
- Confidentiality (e.g. remote communicating with a patient).
- Consultation is provided at a convenient time.
- The woman may avoid visiting the clinic.

Disadvantages of medical abortion via telemedicine

- It is hard to convince a woman that her abortion is complete and to persuade her to wait if she has bleeding and spotting after her abortion.
- To have abortion services provided via TM, healthcare staff has to be motivated (raising salaries), because it deprives them of getting additional informal payments, and TM may turn out not to be effective.

CONCLUSION

The results demonstrate that medical abortion via telemedicine based on a no-test protocol is safe and effective in Kyrgyzstan. Women can follow instructions received remotely in a safe way, and TMA is feasible and acceptable for women in Kyrgyzstan.

Our study confirms the conclusion that medical abortion via telemedicine based on a no-test protocol is safe, feasible, and acceptable for women in Kyrgyzstan. This service model is a promising tool for ensuring women's reproductive health and rights. We hope that the results of our study will inspire the Ministry of Health of Kyrgyzstan, decision-makers, and local experts to reconsider the current recommendations regarding safe abortion services to make safe abortion methods more focused on women by offering an option of using services via telemedicine, thus reducing logistical and financial burden on women and improving acceptability of this method in the country.

Bibliography

[1] Raymond EG, Shannon C, Weaver MA, et al. First-trimester medical abortion with mifepristone 200mg and misoprostol: a systematic review. Contraception. 2013; 87:26–37.

[2] Ehrenreich K, Kaller S, Raifman S, et al. Women's Experiences using telemedicine to attend abortion information visits in Utah: a qualitative study. Womens Health Issues. 2019 29(5):407–413.

[3] Kaller S, Daniel S, Raifman S, et al. Pre-Abortion informed consent through telemedicine vs. in person: differences in patient demographics and visit satisfaction. Womens Health Issues. 2021;31(3):227–235.

[4] Hyland P, Raymond EG, Chong E. A direct-to-patient telemedicine abortion service in Australia: retrospective analysis of the first 18 months. Aust N Z J Obstet Gynaecol. 2018 58(3): 335–340.

[5] Raymond E, Chong E, Winikoff B, et al. TelAbortion: evaluation of a direct to patient telemedicine abortion service in the United States. Contraception. 2019; 100(3):173–177.

[6] Endler M, Lavelanet A, Cleeve A, et al. Telemedicine for medical abortion: a systematic review. BJOG. 2019;126(9):1094–1102.

[7] Aiken ARA, Lohr PA, Lord J, et al. Effectiveness, safety and acceptability of no-test medical abortion (termination of pregnancy) provided via telemedicine: a national cohort study. BJOG 2021; 128(9):1464–1474.

[8] Chong E, et al. Expansion of a direct-to-patient telemedicine abortion service in the United States and experience during the COVID-19 pandemic. Contraception. 2021; 104(1):43–48.

[9] Gambir K, Kim C, Necastro KA, et al. Self-administered versus provider-administered medical abortion. Coch Database Syst Rev. 2020; 3(3):CD013181.

[10] Pe~na M, et al. Telemedicine for medical abortion service provision in Mexico: a safety, feasibility, and acceptability study. Contraception. 2022; 114:67–73.

[11] Comendant R, Cook C, Hodorogea S, et al. Medical abortion via telemedicine for women and adolescents: experience from Moldova. Repro Female Child Health. 2022; 1:80–87.

[12] Tsereteli N, Mamatsashvili L, Tsertsvadze G, Tsereteli T, Platais T. Telemedicine medical abortion service in Georgia: an evaluation of a strategy with reduced number of in-Clinic visits. The European Journal of Contraception & RH Care, 2023. DOI: 10.1080/13625187.2023.2170710

[13] WHO, Abortion care guideline, 2022