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ABORTION PRACTICES AMONG WOMEN IN KAZAKHSTAN: CROSS-SECTIONAL STUDY

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Abstract

Background: Abortion practices among women are a complex and sensitive topic that has been a subject of debate and controversy for many years. It involves the deliberate termination of a pregnancy and can have significant physical, emotional, and ethical implications for individuals and society as a whole. Abortion practices among women vary significantly worldwide due to cultural, legal, and social factors. Furthermore, the prevalence of abortion varies within different regions and populations, with approximately 1 million abortions performed each year on average. Abortion practices can be influenced by a variety of factors, including access to reproductive healthcare services, legal restrictions, socioeconomic status, religious beliefs, and personal values.

Objective. Determine the prevalence of abortion practices among women in Kazakhstan.

Methodology: A cross-sectional study was conducted in the period from March 14 to March 30, 2024, to assess the state of abortion practice among women. The object of the study were women aged 18 years and older living in different regions of Kazakhstan. Stratified random sampling was used to form the sample, taking into account the geographical, age and socio-economic diversity of the population of Kazakhstan. The number of respondents amounted to 237 people. Women filled out anonymous questionnaires containing questions about socio-demographic characteristics, abortion experience, factors influencing the decision to have an abortion and access to reproductive services.

Results: Abortion history was reported by 27.1% of women. The majority of women 69.0% had terminated pregnancy in the first trimester. Spontaneous abortion was reported by 25.6% of respondents, while 23.8% indicated safe induced abortion. The most frequent reason for induced abortion 41.5% was health problems (indications from the mother). In the majority of cases, 26.8% were initiated by women themselves.

Conclusion: Effective reproductive health policies and interventions should prioritize access to safe and legal abortion services, as complications from unsafe abortion procedures can result in severe health consequences and even death. To achieve their desired fertility, women use a combination of contraception and abortion, and some societies also place constraints on marriage and sexual activity.

Keywords: *abortion, induced termination of pregnancy, reproductive behavior.*

Резюме

ПРАКТИКА АБОРТОВ СРЕДИ ЖЕНЩИН В КАЗАХСТАНЕ: ПОПЕРЕЧНОЕ ИССЛЕДОВАНИЕ

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Введение. Аборты среди женщин - сложная и деликатная тема, которая на протяжении многих лет является предметом дебатов и споров. Аборт подразумевает сознательное прерывание беременности и может иметь значительные физические, эмоциональные и этические последствия для отдельных людей и общества в целом. Практика абортов среди женщин во всем мире значительно различается в силу культурных, правовых и социальных факторов. Кроме того, распространенность абортов варьируется в разных регионах и группах населения, в среднем около 1 миллиона абортов совершается ежегодно. На практику абортов может влиять целый ряд факторов, включая

доступ к услугам репродуктивного здоровья, правовые ограничения, социально-экономический статус, религиозные убеждения и личные ценности.

Цели исследования. Определить распространенность практики абортов среди женщин в Казахстане.

Материалы и методы исследования: В период с 14 по 30 марта 2024 года было проведено поперечное исследование с целью оценки состояния практики абортов среди женщин. Объектом исследования стали женщины в возрасте 18 лет и старше, проживающие в различных регионах Казахстана. Для формирования выборки использовалась стратифицированная случайная выборка, учитывающая географическое, возрастное и социально-экономическое разнообразие населения Казахстана. Количество респондентов составило 237 человек. Женщины заполнили анонимные анкеты, содержащие вопросы о социально-демографических характеристиках, опыте аборта, факторах, повлиявших на решение сделать аборт, и место проведения аборта.

Результаты: Об абортах в анамнезе сообщили 27,1% женщин. Большинство женщин - 69,0% прервали беременность в первом триместре. О самопроизвольном аборте сообщили 25,6 % респонденток, а 23,8% указали на безопасный искусственный аборт. Наиболее частой причиной искусственного аборта в 41,5% случаев были проблемы со здоровьем (по показаниям матери). В большинстве случаев, 26,8%, инициаторами абортов были сами женщины.

Вывод: Эффективная политика и мероприятия в области репродуктивного здоровья должны в первую очередь обеспечивать доступ к безопасным и легальным услугам по прерыванию беременности, поскольку осложнения после небезопасных абортов могут привести к тяжелым последствиям для здоровья и даже к смерти. Для достижения желаемой фертильности женщины используют сочетание контрацепции и абортов, а в некоторых обществах также накладывают ограничения на брак и сексуальную активность.

Ключевые слова: аборт, искусственное прерывание беременности, репродуктивное поведение.

Түйіндеме

ҚАЗАҚСТАНДАҒЫ ӘЙЕЛДЕР АРАСЫНДА ТҮСІК ЖАСАТУ ТӘЖІРИБЕСІ: КӨЛДЕНЕҢ ЗЕРТТЕУ

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Кіріспе. Әйелдер арасындағы түсік түсіру-бұл көптеген жылдар бойы пікірталастар мен пікірталастардың тақырыбы болған күрделі және нәзік тақырып. Аборт жүктіліктің саналы түрде тоқтатылуын білдіреді және жеке адамдар мен жалпы қоғам үшін айтарлықтай физикалық, эмоционалдық және этикалық салдарға әкелуі мүмкін. Дүние жүзіндегі әйелдер арасында түсік жасату тәжірибесі мәдени, құқықтық және әлеуметтік факторларға байланысты айтарлықтай өзгереді. Сонымен қатар, түсік жасатудың таралуы әр түрлі аймақтар мен популяцияларда әр түрлі болады, жыл сайын орта есеппен 1 миллионға жуық түсік жасалады. Түсік жасату тәжірибесіне репродуктивті денсаулық қызметтеріне қол жетімділік, құқықтық шектеулер, әлеуметтік-экономикалық мәртебе, діни сенімдер және жеке құндылықтар сияқты бірқатар факторлар әсер етуі мүмкін.

Зерттеу мақсаты. Қазақстанда әйелдер арасында түсік түсіру тәжірибесінің таралуын анықтау

Материалдар мен әдістер: 2024 жылдың 14-30 наурызы аралығында әйелдер арасында түсік жасату практикасының жай-күйін бағалау мақсатында көлденең зерттеу жүргізілді. Зерттеу нысаны Қазақстанның әртүрлі аймақтарында тұратын 18 жастан асқан әйелдер болды. Іріктемені қалыптастыру үшін Қазақстан халқының географиялық, жас және әлеуметтік-экономикалық әртүрлілігін ескеретін стратификацияланған кездейсоқ іріктеме пайдаланылды. Респонденттердің саны 237 адамды құрады. Әйелдер әлеуметтік-демографиялық сипаттамалары, түсік жасату тәжірибесі, түсік жасату шешіміне әсер еткен факторлар және түсік жасату орны туралы сұрақтары бар анонимді сауалнамаларды толтырды.

Нәтижелері: Әйелдердің 27,1% - ы түсік түсіру тарихы туралы хабарлады. Әйелдердің көпшілігі-69,0% бірінші триместрде жүктілікті тоқтатты. Өздігінен түсік түсіру туралы респонденттердің 25,6% - ы хабарлады, ал 23,8% - ы қауіпсіз жасанды түсік жасатуды көрсетті. Жасанды түсік жасатудың ең көп тараған себебі 41,5% жағдайда денсаулыққа байланысты проблемалар болды (ананың нұсқауы бойынша). Көп жағдайда, 26,8%, аборттың бастамашылары әйелдердің өздері болды.

Қорытынды: Тиімді репродуктивті денсаулық саясаты мен іс-шаралары, ең алдымен, қауіпсіз және заңды аборт қызметтеріне қол жеткізуді қамтамасыз етуі керек, өйткені қауіпті түсік түсіруден кейінгі асқынулар денсаулыққа ауыр зардаптарға, тіпті өлімге әкелуі мүмкін. Қажетті құнарлылыққа қол жеткізу үшін әйелдер контрацепция мен түсік түсірудің комбинациясын пайдаланады, ал кейбір қоғамдарда неке мен жыныстық белсенділікке шектеулер қойылады.

Түйінді сөздер: *аборт, жасанды түсік түсіру, репродуктивті мінез-құлық.*

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Introduction

Conscious and planned pregnancy is one of the important factors of reproductive behavior of the population. The effectiveness of modern contraceptive methods significantly affects birth control, maintenance of women's health, reduction of maternal and perinatal mortality, gynecologic disease rates, and prevention of abortion-related complications [1,3]. Although there has been a recent increase in the utilization of contraceptive methods in the last thirty years, approximately 40-50 million abortions are performed worldwide each year and almost half of them occur in unsafe conditions [5]. Unsafe abortion is one of the most important public health problems in the world. According to the World Health Organization (WHO), the numbers of unsafe abortions in different regions of the world are approximately as follows: about 5 million in Africa, about 10 million in Asia, up to 1 million in Europe, and about 4 million in Latin America and the Caribbean. On average, one complicated abortion occurs every 7 births. Between 1 and 5 women who have an abortion require emergency medical care because of complications such as sepsis, bleeding, and trauma. Globally, about 13% of all maternal deaths are related to complications from the 25 million abortions that occur each year, which includes bleeding and infections, and results in the deaths of at least 70,000 women. In addition, tens of thousands of women face long-term health consequences, including infertility [2].

Contraception and abortion have always been conscious forms of birth control and planning. Although there are many ways to prevent unwanted pregnancies in modern medicine, women still continue to resort to abortion.

Objective. Determine the prevalence of abortion practices among women in Kazakhstan.

Methodology: A cross-sectional study was conducted in the period from March 14 to March 30, 2024, to assess the state of abortion practice among women. The object of the study were women aged 18 years and older living in different regions of Kazakhstan. Stratified random sampling was used to form the sample, taking into account the geographical, age and socio-economic diversity of the population of Kazakhstan. The number of respondents amounted to 237 people. Women filled out anonymous questionnaires containing questions about socio-demographic characteristics, abortion experience, factors influencing the decision to have an abortion and access to reproductive services.

All female participants were informed about the purpose of the study and their rights to confidentiality. The study was conducted in compliance with all norms and regulations regarding data protection and research participation Statistical analysis was performed using the program StatTech v. 4.1.7 (developer - StatTech LLC, Russia). Quantitative data were evaluated for conformity to normal distribution using Kolmogorov-Smirnov (if the number of subjects was more than 50). In case of absence of normal distribution, quantitative data were described using median (Me) and lower and upper quartiles (Q1 - Q3). Categorical data were described with absolute values and percentages. Comparison of two groups on a quantitative indicator whose distribution differed from normal was performed using the Mann-Whitney U-criterion. Comparison of three or more groups by quantitative indicator, the distribution of which differed from normal, was performed using the Kraskell-Wallis criterion, a posteriori comparisons - using the Dunn's criterion with Hill's correction.

Results

The study involved 237 women from different regions of the Republic of Kazakhstan. The average age of women was 30 years. The full characteristics of the study participants are presented in Table 1.

Table 1.

Characteristics of study participants.

Parameters	Categories	Abs.	%	95% CI
1	2	3	4	5
Marital status	Widow	3	1,2	0,3 – 3,6
	Married	153	63,7	57,3 – 69,8
	Single	55	22,9	17,8 – 28,8
	Divorced	29	12,1	8,2 – 16,9
Education	Higher	159	66,2	59,9 – 72,2
	Other	2	0,8	0,1 – 3,0
	Unfinished higher education	20	8,3	5,2 – 12,6
	Unfinished secondary	5	2,1	0,7 – 4,8
	Secondary specialized	35	14,6	10,4 – 19,7
	Secondary	19	7,9	4,8 – 12,1

Cont.Table 1.

1	2	3	4	5
Workplace	Unemployed	9	3,8	1,7 – 7,0
	Housewife	26	10,8	7,2 – 15,5
	Other	39	16,2	11,8 – 21,5
	Own business	28	11,7	7,9 – 16,4
	Retired woman	1	0,4	0,0 – 2,3
	Working occupation	30	12,5	8,6 – 17,4
	Employee	66	27,5	22,0 – 33,6
	Service sector	41	17,1	12,5 – 22,5
Region	Abay	87	36,2	30,2 – 42,7
	Akmola	14	5,8	3,2 – 9,6
	Aktobe	10	4,2	2,0 – 7,5
	Almaty	2	0,8	0,1 – 3,0
	East Kazakhstan	22	9,2	5,8 – 13,5
	Almaty city	20	8,3	5,2 – 12,6
	Astana city	22	9,2	5,8 – 13,5
	Shymkent city	23	9,6	6,2 – 14,0
	Zhambyl	1	0,4	0,0 – 2,3
	Zhetysu	3	1,2	0,3 – 3,6
	West Kazakhstan	14	5,8	3,2 – 9,6
	Karaganda	14	5,8	3,2 – 9,6
	Kostanai	1	0,4	0,0 – 2,3
	Kyzylorda	2	0,8	0,1 – 3,0
	Mangystau	2	0,8	0,1 – 3,0
	Pavlodar	2	0,8	0,1 – 3,0
	North Kazakhstan	1	0,4	0,0 – 2,3
Monthly family income (approximately)	100 000 - 150 000 tenge	19	7,9	4,8 – 12,1
	150 000 - 200 000 tenge	49	20,4	15,5 – 26,1
	200 000 - 300 000 tenge	67	27,9	22,3 – 34,1
	70 000 до 100 000 tenge	8	3,3	1,4 – 6,5
	More than 300 000 tenge	95	39,6	33,4 – 46,1
	50 000 - 70 000 tenge	2	0,8	0,1 – 3,0

Abortion in the anamnesis was indicated by 27.1% of the interviewed women. We analyzed age according to abortion history. The vast majority of abortions 69.0% were performed in the first trimester of pregnancy.

Two groups are represented in the “Abortion history” category: “Yes” (confirmed case of abortion) and “No” (no abortion).

Interestingly, the mean age of those who had a history of abortion was higher (34.00 years) compared to those who had no abortion (29.00 years). This may indicate that age may be a risk factor for abortion. According to the table presented, when age was analyzed according to abortion history, significant differences (p < 0.001) were found (method used: Mann-Whitney U-test) (Fig.2).

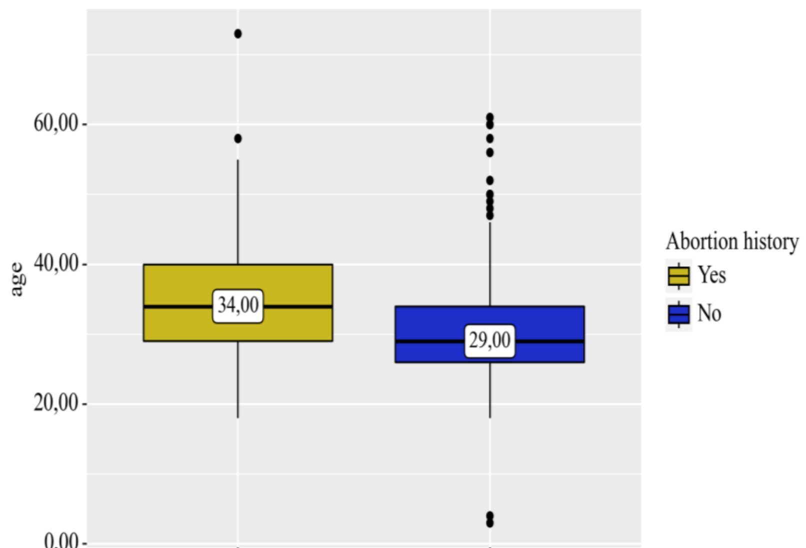

Figure1. Age analysis according to abortion history.

We analyzed age according to the reason for induced abortion.

The study identified several categories of reasons for induced abortion: “Other”: The mean age in this category is 28.50 years, with a range of 25.00 to 33.75 years, and includes 70 observations.

The level of significance (p) for this group is 0.017*, indicating a statistically significant difference in age between this category and others.

“Many previous pregnancies, short duration after previous pregnancy”: This group has a mean age of 35.00 years, interquartile range of 33.00 to 36.00 years and includes 9 observations.

Table 2.

Analysis of age according to the cause of induced abortion.

Parameters	Categories	Age			p
		Me	$Q_1 - Q_3$	n	
The reason for induced abortion	Other	28,50	25,00 – 33,75	70	0,017*
	Many previous pregnancies, short term after previous pregnancy	35,00	33,00 – 36,00	9	
	Do not interrupt education (complete education)	25,00	19,50 – 26,50	4	
	Health problems (indications from the mother)	31,00	27,00 – 39,75	66	
	Disagreements with my husband	29,00	27,00 – 30,00	5	
	Fear of parents and public criticism (fear of being criticized)	30,50	28,75 – 32,50	4	
	Economic reasons	34,00	32,25 – 40,75	4	

* – differences are statistically significant (p < 0,05)

And other categories such as “Not to interrupt education”, “Health problems”, “Disagreement with husband”, “Fear of parents and public criticism” and “Economic reasons” with different mean ages and interquartile range intervals.

It is also observed that the mean age varies in each category, which may indicate the influence of different factors on the abortion decision. Based on the data obtained when analyzing age according to the reason for induced abortion, we found statistically significant differences (p = 0.017) (method used: Kraskell-Wallis Criterion).

We analyzed age according to the initiator of induced termination of pregnancy (abortion) (table 3).

Table 3.

Age analysis according to the initiator of induced termination of pregnancy (abortion).

Parameters	Categories	Age			p
		Me	$Q_1 - Q_3$	n	
Initiator of artificial termination of pregnancy (abortion)	Husband	24,50	21,00 – 40,00	6	0,046*
	Other	29,00	25,25 – 35,75	90	
	Medical worker	35,00	29,00 – 40,50	15	
	Self	33,00	29,00 – 37,00	42	
	Family	32,00	31,50 – 32,50	2	

* – differences are statistically significant (p < 0,05)

The study identified several categories of initiators of induced abortion:

“Husband: The mean age in this category is 24.50 years, with a range of 21.00 to 40.00 years, and includes 6 observations. The level of significance (p) for this group is 0.046*, indicating a statistically significant difference in age between this category and the others.

“Other,” “Health Care Provider,” “Self,” and “Family”: Each of these categories has a different mean age and interquartile range interval.

It is also worth noting that the mean age in each category varies, which may indicate different factors influencing the abortion decision depending on the role of the initiator.

For example, the mean age for initiators categorized as “Husband” is significantly lower than for the other categories, which may reflect the different social and cultural contexts in which such decisions are made. A comparison of age by initiator of induced abortion revealed significant differences (p = 0.046) (method used: Kraskell-Wallis test). We performed an analysis of age in relation to the problem after abortion (Fig.2).

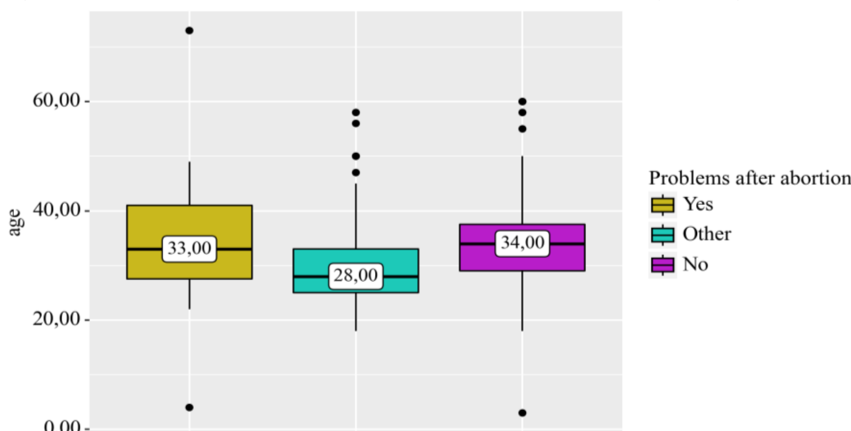

Figure 2. Analyzing age in relation to the issue of the abortion ambassador.

The study divides participants into two categories: “Yes” (those who had problems after abortion) and “No” (those who did not have problems after abortion). “Other” is also indicated for the latter category, perhaps meaning something like “No, but with other circumstances”.

The mean age in the “Yes” category is 33.00 years, with an interquartile range of 27.50 to 41.00 years, and includes 19 observations.

The level of significance (p) for this group is 0.018*, indicating a statistically significant difference in age between this category and the others.

The mean age in the “Other” category is 28.00 years, with an interquartile range of 25.00 to 33.00 years, and includes 67 observations. The mean age in the “None”

category is 34.00 years, with an interquartile range of 29.00 to 37.50 years, and includes 63 observations.

These data indicate that age may play a role in the likelihood of post-abortion problems, as the mean age for those who had problems is lower than for those who did not have problems. According to the table presented, when comparing age according to the problem of the abortion ambassador, statistically significant differences ($p = 0.018$) were found (method used: Kraskell-Wallis Criterion).

When asked the question "Suppose you are currently having an unwanted pregnancy, what would you do?" 40.7% of women answered "I would continue to carry the pregnancy", 22.8% chose the answer "I would have an abortion (induced abortion)" and 13.8% answered "I don't know what to do".

Discussion. In India, due to many social and economic problems, women are allowed to have abortions, but at the same time there are many barriers to legal abortion, thus in 2015, 78% of abortions in non-medical facilities were performed in this country [6]. The results of our study showed that 42.1% women had abortion in a government health facility, 6.6% in a non-government health facility, 10.5% in a private clinic and 40.8% indicated other. Data on the age distribution of abortion are available for only a limited number of countries. According to the Guttmacher Institute, of the 17 countries with reliable abortion registration systems, 12 countries have the highest number of abortions in the 20-24 age group, when women are usually unmarried but sexually active. When a woman has an unplanned pregnancy for various reasons, such as ineffective contraception, she is forced to choose between continuing the unwanted pregnancy or terminating it. Most abortions occur as a result of an unwanted pregnancy. The Guttmacher Institute estimates that 99 million unwanted pregnancies occur worldwide each year. This means that 44% of all pregnancies either occur at the wrong time ("untimely pregnancies") or occur against the wishes of the woman/couple ("unwanted pregnancies"). The incidence of unintended pregnancies in developing countries is higher than in developed countries: 65 per 1000 women of reproductive age compared to 45 per 1000 respectively. When faced with an unwanted pregnancy, on average 56% of women decide to have an abortion.

This rate is significantly higher in Central and East Asia and Eastern Europe (77-78%), while it is significantly lower in North America and Oceania (36-38%) and Eastern, Central and Southern Africa (30-36%). In our study, 22.8% of women expressed willingness to terminate unwanted pregnancy. The frequency of unintended pregnancies may indicate unmet demand for contraception or ineffective use of contraceptive methods. Therefore, improving the quality of family planning services is seen as a key method to reduce the number of unintended pregnancies and, consequently, abortions. Studies from different regions of the world show that as childbearing becomes more common, couples are increasingly turning to contraceptive methods, but not always successfully.

Conclusion. Abortion history was reported by 27.1% of women. Most of them, 69.0%, terminated pregnancy in the first trimester. Among respondents, 25.6% reported experiencing spontaneous abortions, while 23.8% underwent safe induced abortions. The primary reason cited for induced abortions, constituting 41.5%, was health concerns (based on maternal indications). In the majority of instances, equivalent to 26.8%, abortions were self-initiated by women.

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