



Prevalence and Causes of Gender-Biased Sex Selection in the Republic of Armenia

2022

Research Report

The research was carried out in the framework of “Addressing Gender-Biased Sex Selection and Related Harmful Practices in the South Caucasus: Support for Regional, National and South-South Interventions” project. The project is implemented by the United Nations Population Fund (UNFPA) in cooperation with the OxYGen Foundation, and is funded by the European Union and UNFPA.

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ABBREVIATIONS

CATI	Computer Assisted Telephone Interviews
FGD	Focus group discussion
GBSS	Gender-Biased Sex Selection
ICHD	International Center for Human Development
MM	Mass media
RA	Republic of Armenia
SRB	Sex ratio at birth
UN	United Nations
UNFPA	United Nations Population Fund

1. ACKNOWLEDGEMENTS

The survey was conducted in June 2022 in the framework of “Addressing Gender-Biased Sex Selection and Related Harmful Practices in the South Caucasus: Support for Regional, National and South-South Interventions” project. Similar research has been conducted in 2011 and 2017.

The project is implemented by the United Nations Population Fund in cooperation with the OxYGen Foundation, funded by the European Union and the United Nations Population Fund. All phases of the research were carried out by the Breavis team in close cooperation with the UNFPA Armenia office and the OxYGen Foundation team.

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2. EXECUTIVE SUMMARY

The purpose of the research on gender-biased sex selection (GBSS) in the Republic of Armenia (RA) is to identify the attitude and behavior of 18-49 years old ever-pregnant women and their family members with regard to sex-selective abortions.

The research is to assess the prevalence and causes of sex-selective abortions in Armenia, as well as the changes and trends in this field over the past 5 years.

The research was conducted in June 2022 with a combination of quantitative and qualitative methods: document analysis, telephone interviews with 1920 ever-pregnant women aged 18-49 living in Armenia, and 5 focus group discussions involving decision-makers in the field, healthcare workers, experts, and married women and men. To enable comparative analysis, the methodology and sample size were brought in line with those of the survey conducted in 2017.

The results of the research are presented in the Report in accordance with the applied methods. First, the situation of gender-biased sex selection in Armenia and globally is referred to, followed by the results of the quantitative and qualitative studies featured in separate sections.

Global and local context

According to the Global Gender Gap Report 2021, Armenia's gender gap index is the highest in the region. Among 153 countries, Armenia ranks the 98th, Georgia is the 74th, and Azerbaijan is the 94th.

The Republic of Armenia is among the countries with the largest deviation in the sex ratio at birth (SRB) rate. The sex imbalance of newborns has started to increase gradually since the beginning of the 1990s. In 1995, 110 boys were born per 100 girls, in 1998 the indicator exceeded 115, and in 2000 it reached 120 (the natural SRB level is 104-106 boys per 100 girls). Later, however, certain improvements were observed. According to the data of the RA Statistical Committee, the SRB rate in 2021 was **108.8 boys per 100 girls**. In 2022, according to the first semester data, the indicator increased again, reaching 111, which was 3 points higher compared to the data of the same period in 2021 (108).

Comparative analysis of the statistical data indicates that from 2016 to 2021, the SRB has decreased in most regions of Armenia. In 2021, the largest deviation in the sex ratio was recorded in Armavir and Lori, followed by Shirak and Syunik regions. Lori is the only region, where the sex imbalance has increased in comparison to 2016 data.¹ In 2016, the lowest sex imbalance had been documented in Lori.

The statistical data also proves that the largest imbalance in SRB is observed in the case of the 3rd and 4th child. However, during 2005-2021, the imbalance decreased in this case as well: in the case

¹2016 data has been taken as the baseline considering its reflection in the previous research carried out in 2017.

of the 3rd child, the SRB was 183 boys per 100 girls in 2005, whereas in 2021 this indicator decreased to 121 boys per 100 girls.

To prevent GBSS in Armenia, the Government implements the 2020-2023 Action plan on Prevention of Gender-biased Sex Selection (N42-A/1 and N962-A), which addresses three main directions:

- Evidence-based policy-making;
- Capacity building;
- Public awareness.

The policies on preventing GBSS in Armenia include legislative prohibitions limiting sex-selective abortions without medical indication. Awareness raising, financial assistance, and other legal reforms aimed at strengthening women's rights and reducing preference of child's sex have also been planned.

Quantitative research results

The average age of 1922 women participating in the survey was 35 years. The youngest was 19 years old, and the oldest one - 49 years old.

The problem of preference for the sex of child

Both in the family and among surrounding people, the share of those preferring boys is greater compared to those who prefer girls. Compared to the results of the previous (2017) research, the percentage of those who give equal preference to both sexes has decreased, and the percentage of respondents who prefer a child of any sex during pregnancy has increased.

In particular, 53% of respondents believed that boys were preferred among the **surrounding people**, and 18% stated that boys were preferred in their family. Only 11% of respondents indicated that their **surrounding people** gave preference to girls, and the same number of respondents stated that their **families** preferred girls.

When analyzing the obtained results by regions, it becomes evident that boys are most preferred in Gegharkunik region. Thirty-three percent (33%) of the respondents from this region stated that they preferred boys in their family. Tavush is the only region where the proportion of those preferring girls in the family is higher. Moreover, the preference for girls in Tavush region has increased in 2022 compared to the data of 2017. In Yerevan, these indicators are equal. Interestingly, husbands across all regions prefer boys the most.

In other regions, son preference remained the same, however, at the same time, the percentage of respondents with equal preference for both sexes has decreased. Gegharkunik has the lowest score of equal preference (60%): in 2017, this indicator was 75%. In general, the share of those who give equal preference in all regions decreased compared to 2017 data.

When referring to the reasons for preferring one or the other sex, 91% of respondents stated that they preferred sons in the family, because “sons continue the lineage”, 83% stated that “sons are the defenders of the motherland”, 67% - “sons are heirs to property”, 59% stated that “it hurts the parents to see their daughter's difficulties.”

Seventy-five percent (112 respondents) of respondents who indicated that “after marriage, the daughter is no longer yours” said that “it hurts the parents to see their daughter’s difficulties”, and 69% (102 respondents) said that “marrying off the daughter is psychologically difficult.”

In some responses, differences are observed depending on the age of the interviewed women. Only sixteen percent of respondents aged 19-29 believe that preference is given to boys in their family because girls have fewer opportunities in life and in the society, whereas 31% of respondents aged 30-39 think so.

Respondents whose families prefer girls, in 67% of cases stated that “daughters are always ready to help parents”, in 10% of cases that “there are fewer girls in the family”, and in 5% of cases that “love for girls in the family is big.”

Seventy-three percent of the families with more than one child who gave preference to sons indicated that their last child was a boy, whereas the last child of 55% of families preferring daughters and having more than one child was a girl.

Sex preference by order of pregnancy

The results of the research demonstrate no significant difference in sex preference during the **first pregnancy**.

Twenty-seven percent of the interviewed women stated that they wanted to have a girl during their first pregnancy. This indicator has increased by 11% compared to the previous analysis data. It also increased in the case of responses regarding the preferences of the husband/partner, mother-in-law, and mother: while in 2017 nine percent of respondents stated that during the first pregnancy their husband wanted to have a girl, the same indicator reached 19% in 2022.

In Gegharkunik region, 52% of respondents stated that during the first pregnancy, their husbands gave preference to sons, and only 11% indicated that their husbands preferred a daughter. Although the percentage of women preferring a son is lower than that of husbands, it remains significantly high. Mothers of husbands and wives are more neutral in terms of preference. Despite this, son preference continues to prevail. The picture is almost the same in Aragatsotn and Shirak regions. According to the survey results, the proportion of girls and boys born during the first pregnancy is equal to the natural level, however, the proportion deviates already during the second pregnancy. The biggest sex imbalance is in the case of the fourth child.

Along with the increase in the number of pregnancies, the proportion of desired pregnancies among the respondents is decreasing. If the first pregnancy was desirable for 94% of respondents, the

fourth pregnancy was desirable only for 57% of respondents. As the number of pregnancies increases, the proportion of live births decreases and abortions increase. Moreover, after the third pregnancy, the number of female fetus abortion increases compared to that of male fetus.

Awareness and use of methods to find out the child's sex

Ninety-six percent of respondents stated that they were aware of some method of identifying the sex of the child before the end of pregnancy. As a method of determining the sex of the child, 95% of informed respondents mentioned ultrasound examination, 29% indicated the calculation based on dates, and 19% - the blood test.

The analysis by income groups shows that 11% of the respondents in the low-income group are not aware of the methods for determining the sex of the child, while only 3% of the respondents in the high-income group are unaware. The analysis based on educational level also shows that the lower the educational level of the respondents, the higher the level of unawareness.

Fifty-six percent of respondents used an ultrasound examination to find out the sex of the child, 41% did not use any method, and 2% indicated that they used the “traditional” method (calculation, the method of parents’ birth dates and the use of Chinese tables).

Seventy-five percent of respondents from families preferring sons did not use any method to find out the sex of the child, and 72% of the respondents from families that gave preference to daughters indicated that they did not use any method to find out the sex of the child.

Findings of qualitative research

Both the experts, as well as married women and men, who participated in the focus group discussions, believe that, in general, preference is given to boys in Armenia. According to the prevailing opinion, preference changes starting with the second child: if the first child is a boy, then the family prefers the second child to be a girl, and vice versa. The situation becomes alarming from the third child onwards, especially if the first two children are of the same sex, and particularly if they are girls. According to the collected qualitative data, the reasons behind the preference for boys are rooted in the imperatives of socioeconomic, cultural, and security problems.

3. METHODOLOGY

3.1. Data collection methods

The survey was conducted by combining quantitative and qualitative methods, using 3 methods of data collection: desk review, telephone interviews, and focus group discussions.

3.2. Quantitative survey sample and data collection

Quota sampling approach was used for the quantitative survey. The sample size was calculated according to the number of women aged 18-49 in the city of Yerevan and all 10 regions: $N=673,458$. Thus, with $\gamma=95\%$ confidence level and $\Delta=2.23$ margin of error, the sample size is $n=1,920$ interviews. After specifying the size of the sample, it was distributed among Yerevan, urban and rural areas of regions, according to the percentage proportion of general population presented below:

N ^o	Region / Region	City	Village
1	Yerevan	729	-
2	Aragatsotn	17	56
3	Ararat	49	124
4	Armavir	56	106
5	Gegharkunik	43	110
6	Lori	83	47
7	Kotayq	91	65
8	Shirak	91	56
9	Syunik	60	30
10	Vayots Dzor	11	18
11	Tavush	34	44
<i>Total</i>		<i>1,264</i>	<i>656</i>

Table 1. Sample distribution in regions and in Yerevan

For the purpose of the survey, the respondents were the ever-pregnant women aged 18-49 living in Yerevan and all 10 regions of Armenia.

Data collection was conducted at Breavis office through telephone interview method and lasted for 18 days. As a result of the fieldwork, 1,966 interviews were conducted, 45 regional cities, including all region centers, and 306 large and small rural settlements were included in the scope of the survey. The number of interviews conducted in each region and administrative districts of Yerevan is presented in the tables below:

№	Region/Region	N of questionnaires from the
1	Aragatsotn	90
2	Ararat	175
3	Armavir	170
4	Gegharkunik	152
5	Lori	136
6	Kotayq	165
7	Shirak	160
8	Syunik	101
9	Vayots Dzor	35
10	Tavush	82
<i>Total</i>		<i>1,266</i>

Table 2. N of questionnaires from the field by regions

№	Administrative district	N of questionnaires from the field
1	Ajapnyak	81
2	Avan	46
3	Arabkir	69
4	Davtashen	32
5	Erebuni, Nubarashen	84
6	Kentron, Nork Marash	66
7	Malatia-Sebastia	79
8	Nor Nork	95
9	Shengavit	84
10	Kanaker-Zeytun	64
<i>Total</i>		<i>700²</i>

Table 3. N of questionnaires from the field by Yerevan administrative districts

Considering the purpose of the survey and the sensitivity of the topic, only female interviewers have been recruited to ensure a most genuine and relaxed environment for the interviews. 22 interviewers participated in the research conducting 8-15 interviews per day.

Before launching the fieldwork, training was conducted for all interviewers and quality control coordinators. The training consisted of the following sections:

- presentation of the purpose and main goals of the survey;
- presentation of the questionnaire, introducing completion techniques;
- program presentation;
- role play;
- presentation of the survey sample; and
- general organizational course.

² Part of the invalid questionnaires was from Yerevan.

Each interviewer conducted two pilot interviews after the training. Based on the interviews, the identified mistakes were corrected, complex or ambiguous questions were replaced with easy-to-understand vocabulary, and the versions of questions were revised. Based on the results of the pilot interviews, the questionnaire was finalized and presented to the interviewers, after which the fieldwork phase was launched.

To obtain a consent for participating in the survey and to conduct 1,966 interviews, 24,000 phone calls were to be made. As a result, 18,853 phone numbers either did not exist, were unavailable or did not meet the quota. Thus, 5,147 prospective respondents were contacted to obtain consent for participating in the survey. Consequently, rejection rate amounted to 62% (3,181). Below are the rejections according to reasons:

Refusal reasons	Total	
Refusal due to the lack of time	1,704	54%
Refusal due to the topic	206	6%
Refusal, as they do not participate in surveys	107	3%
Refusal for other reasons	162	5%
Interrupted interview ³	1,002	32%
<i>Total</i>	3,181	100%

Table 4. Refusals by refusal reasons

The issues faced during the survey are presented below:

Issues	Solutions
Refusals were received from potential respondents because of the length and topic of the interview.	The interviewers were instructed to continue making calls until the planned number of interviews was complete.

Table 5. Issues during the data collection

3.3. Qualitative survey sample and data collection

Five focus group discussions were conducted in the following cities: Gyumri, Gavar, Ashtarak, Masis and Yerevan.

N	Region /Region	Participants
FGD 1	Shirak	Decision makers, healthcare specialists

³ 549 interviews out of 1,002 were interrupted, as the respondent had never had a pregnancy, 196 did not meet the residence quota, 36 did not meet the age quota, and 144 interrupted the interview after question C9: "Who in your family decides how many daughters and how many sons you should have?", 30 stopped after question C13: "In your family, is preference given more to sons or to daughters?", and 47 stopped after question C14: "Why does your family give preference to sons rather than to daughters?"

FGD 2	Gegharkunik	18-49 years old married women
FGD 3	Aragatsotn	18-49 years old married women and men
FGD 4	Ararat	18-49 years old married women and men
FGD 5	Yerevan	Decision makers, healthcare specialists

Table 6. Focus group discussion sample

The selection of the participants was made taking into account the age, place of residence and marital status. 5-7 participants were involved in each FGD. The total number of participants was 29. All discussions were audio recorded and transcribed.

3.4. Quality control of the survey

The quality of the survey has been checked at several levels:

1. Quality control of telephone interviews during the interview
2. Quality control of conducted telephone interviews
3. Quality control of the telephone interview database
4. Checking transcripts of conducted focus group discussions

3.4.1. Quality control of telephone interviews during the interview

In the case of telephone interviews, the interviewers' work and the quality of the interviews were checked in 2 stages:

- **Supervision of interviewers by coordinators.** Each interviewer was supervised by Quality Control coordinators during the data collection. The latter monitored the interview process during the loudspeaker interview and took notes on the interviewer's work (interviewing and maintaining the sample), guided by the pre-given criteria. The coordinators attended 11 interviews on average per day. 10.6% of all interviews were monitored, and as a result, 1 questionnaire was marked as invalid due to non-observance of survey rules.
- **Checking the recordings of the interviews.** As part of the survey, 98.8% of interviews were recorded, and 19.3% of these interviews were checked by the Quality Control coordinators. Distribution by the interviewer was maintained. As a result, 38 questionnaires were marked as invalid due to non-observance of the sampling and survey rules.

3.4.2. Quality control of conducted telephone interviews

All interviews were checked for the duration and logic. The software checked both the total duration of all interviews (100%) and the duration of individual questions. Interviews lasting less than the accepted minimum duration were double-checked and dismissed if problems were identified. As a result of checking the logic and duration of the questionnaire, 5 of them were marked as invalid.

3.4.3. Quality control of the telephone interviews' database

The conducted interviews (100%) were verified by the relevant data processing specialists. Since the program did not give the possibility of omissions, during the verification, special attention was paid to the content errors, incorrect filling of questionnaires and deviation from the sample. At the beginning of each day, the interviewers were informed about the errors in order to reduce the possibility of making the same errors on other days. The corresponding part (not the complete part) of the finished database was given to the quality control department every day to carry out the checks.

Thus, 2 methods were used to verify all telephone interviews, and 29.9% of interviews were double-checked using 2 other methods.

The final results of quality control and double-checking, as well as the number of missing questionnaires, respectively, are presented below:

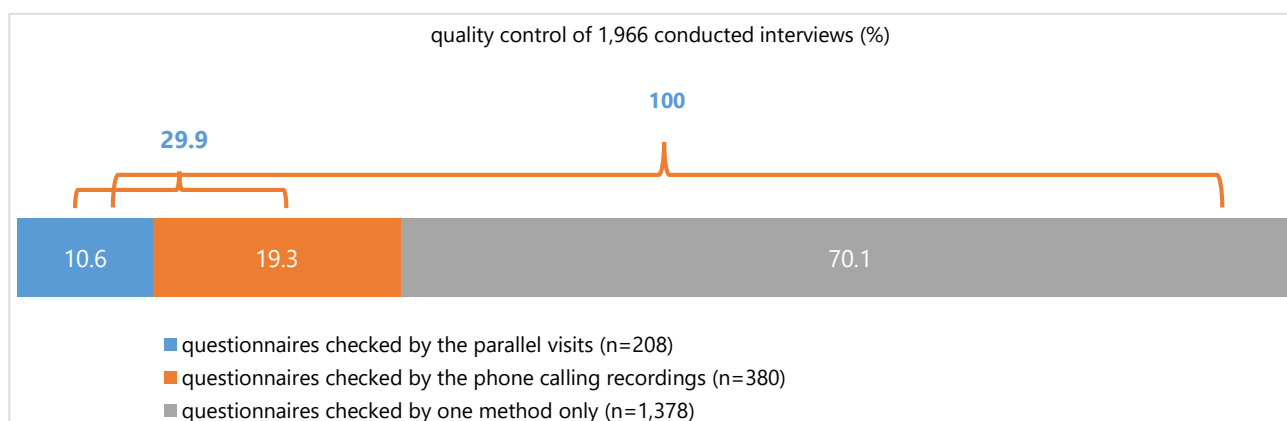


Table 7. Quality control results

Invalid questionnaires	Quantity	Percentage
Interviewers work control by Quality Control supervisors	1	0.05
Questionnaire duration and logic checking	5	0.25

Interview audio recoding checking	38	1.93
Total	44	2.24
<i>Database</i>	1,922	

Table 8. Invalid questionnaires

Thus, during the quantitative survey, 1,966 telephone interviews were conducted, of which 44 questionnaires were dismissed, and 1,922 questionnaires were incorporated in the final database. Due to quality control and verification, the research has been qualified as approved. All 1,922 questionnaires included in the database have been valid.

3.4.4. Checking transcripts of conducted focus group discussions

All 5 transcripts of the FDGs were quality-checked first by comparing them to the audio recording, from the first second to the last one, then randomly selected portions of the entire audio recording from the beginning, middle, and end of the discussion and comparing with the transcript, amounting to 20% of the total discussion, hence those sections were checked twice.

3.5. Survey data processing

The telephone interview questionnaire (see Annex 1) consists of different sections and includes 97 questions corresponding to the research objectives and tasks. To carry out the survey, a special CATI (Computer Assisted Telephone Interviews) software package (IdSurvey) was used for interviews. Coding of the questionnaires is the transfer of its .docx version to the CATI system, during which, taking into account the characteristics of each question, appropriate coding was done. When working with the software package, the logic of the questions (transitions, order) in the questionnaire was also taken into account.

Following the coding of the questionnaire, the SPSS database was prepared and linked to the questionnaire so that each data was saved in its intended location. During the preparation of the database, the specificity of each question was taken into account. The necessary information about the variables and their values has been included in the database. There are 371 variables in the database.

After finalizing the software version of the questionnaire and the structure of the database, the questionnaire was also tested with tablets. Both the database and the questionnaire were checked,

and comparison of the given response entries in the database was made. All errors and omissions were corrected before the training of the interviewers and coordinators.

The purpose of the database check is to exclude all the errors in the final database, which occurred during the previous stages. The database has been created automatically, therefore, input errors, as well as non-observance of the passage by the interviewers, are excluded. The questions which are not categories, but texts or numbers, have been cleared. Afterwards, the database was sent for final analysis and report preparation.

3.6. Ethical considerations

All interviewers were trained not to direct respondents' responses, to be respectful, regardless of personal attitudes, towards respondents' views. Consent to participate was obtained before the interview, and voluntary participation was ensured with no consequences for refusals. Anonymity and privacy of personal data are protected; ethical requirements have been respected.

4. SITUATIONAL ANALYSIS OF THE PREVALANCE OF THE GENDER-BIASED SEX SELECTION

4.1. Global perspective

Discrimination against women is one of the main causes leading to gender-biased sex selection and preference for male children. Other preconditions include the availability of reproductive health and diagnostic technologies, and a low birth rate in general.⁴ According to the Global Gender Gap Report 2021,⁵ the highest gender gap among the general population is in the Middle East and North Africa, and the lowest gender gap is in the Western Europe and North America. According to the index, the lowest gender gap is reported in Iceland at 89.2% and the highest in Afghanistan at 44.4%.

Armenia is in the 98th place among 153 countries by the gender gap index, neighboring Georgia is in the 74th place, and Azerbaijan - in the 94th. Thus, Armenia's index is the highest in the region.

According to the global development indicators, over the past ten years, the highest gap in sex ratio was reported in Azerbaijan: 116 boys per 100 girls in 2012. In 2020 this indicator decreased to 112 boys per 100 girls.

The ratio is also high in China, Vietnam, and India. As of 2020, Armenia is among the top five countries in the world with an SRB rate.

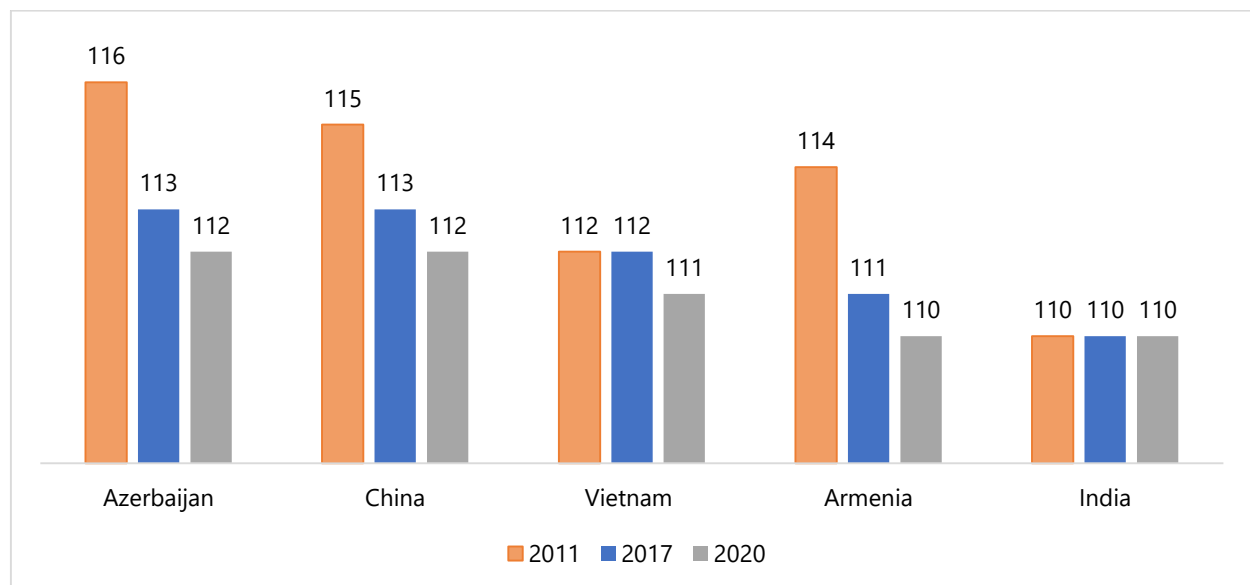


Figure 1. Sex ratio at birth by countries

⁴ Sex Ratio Imbalance at Birth Rate and Current Fertility Patterns, Results and Political Sub-statements, UNFPA Asia-Pacific Regional Office (2012).

⁵ World Economic Forum. Global Gender Gap Report 2021. Insight Report. March 2021. Available at https://www3.weforum.org/docs/WEF_GGGR_2021.pdf.

GBSS is often interpreted in a narrow context. Examples of such contexts include the requirement of a girl dowry in India, family planning regulations in China, late marriage, limiting a couple to one child. In Eastern Europe the preference for male children is associated with conflicts, war, or economic crisis. There are, however, obvious social and demographic commonalities across all countries with the same issue (from Korea to Albania) that are likely to explain the rise of male births over the last 30 years. Three of those commonalities have already been revealed:

- Parents want to have access to acceptable and effective options for determining the sex of their child, so that they have the ability to change the random, biological distribution of sex of the child;
- Parents will choose the sex of the child only when they realize the clear benefits of having a boy;
- Small family norms are a clear prerequisite for sex selection. Otherwise, the family would simply have more children to achieve their preference.⁶

4.2. Situation in the Republic of Armenia

In the Republic of Armenia, the sex imbalance of newborns began to gradually increase after the independence in 1991. In 1995, 110 boys were born per 100 girls, in 1998 the figure exceeded 115, and in 2000 it reached 120. Later, however, some improvements were observed in the sex imbalance of newborns.⁷

According to the data of the Statistical Committee of the RA, the sex ratio of newborns is as follows:

- Between 2012 and 2017, the indicator decreased from 115 boys/100 girls to 110 boys/100 girls
- From 2018 to 2020, the indicator was stable: 111 boys per 100 girls
- In 2021 the ratio decreased to 108.8 boys per 100 girls
- In 2022, according to the first semester data, the indicator increased again, reaching 111, which is 3 points higher compared to the data of the same period in 2021 (108).

The natural level of the SRB in the world is 104-106 boys per 100 girls. Statistical data shows that the highest SRB rate in Armenia in 2021 was recorded in Armavir and Lori, followed by Shirak and Syunik. Lori is the only region where the sex imbalance has increased compared to 2016, while Lori has recorded the lowest sex imbalance in 2016.

Looking at the general picture, it can be concluded that between 2016 and 2022, sex imbalance has decreased in most regions.

⁶ Sex imbalances at birth in Armenia, Christophe Z. Guilmoto IRD/CEPED Paris, Yerevan 2013

⁷ The data was obtained from the Statistical Committee of Armenia: <https://armstat.am/am/?nid=12>

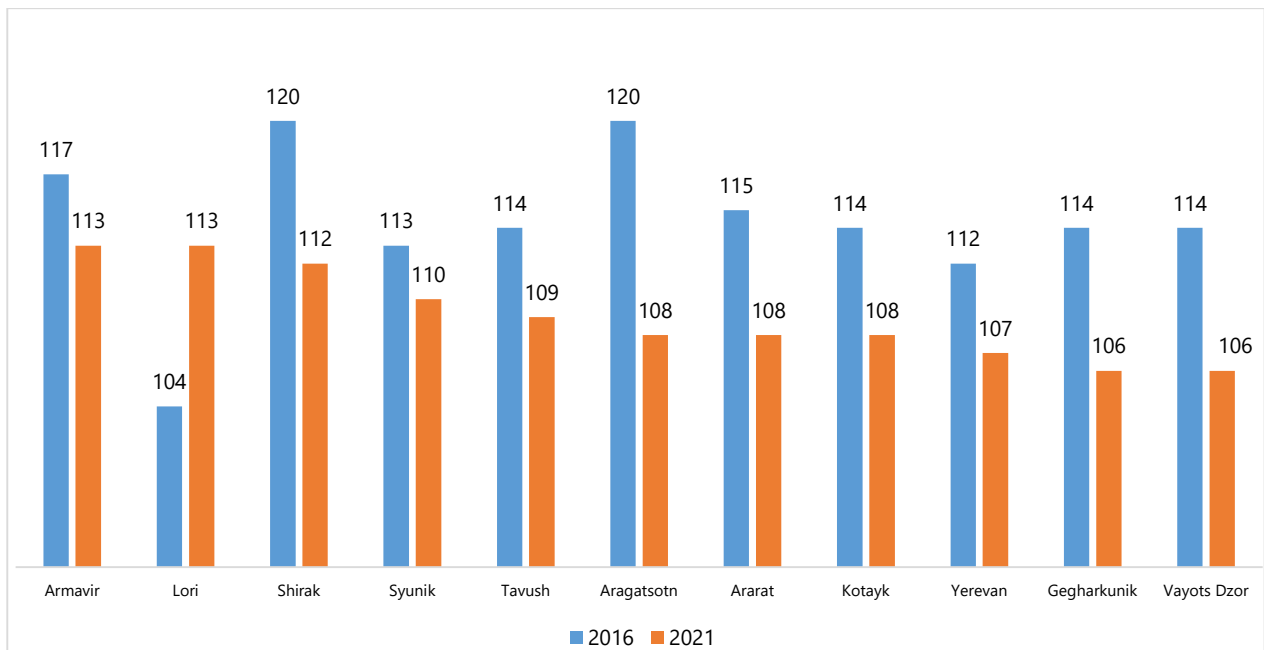


Figure 2. Sex imbalance of newborns by regions

The statistical data shows that the biggest difference in the SRB is in the case of the third and fourth child. Moreover, Figure 3 below shows that in the case of the third and fourth child the SRB has decreased over the years (2005-2021). If the ratio for the third child in 2005 was 183 boys per 100 girls, then this indicator decreased to 121 boys per 100 girls in 2021. In the case of the first child, the SRB did not change much, but for the second child, it decreased from 110 boys per 100 girls to 103 boys per 100 girls. In 2021, the SRB was 108.8 boys per 100 girls.

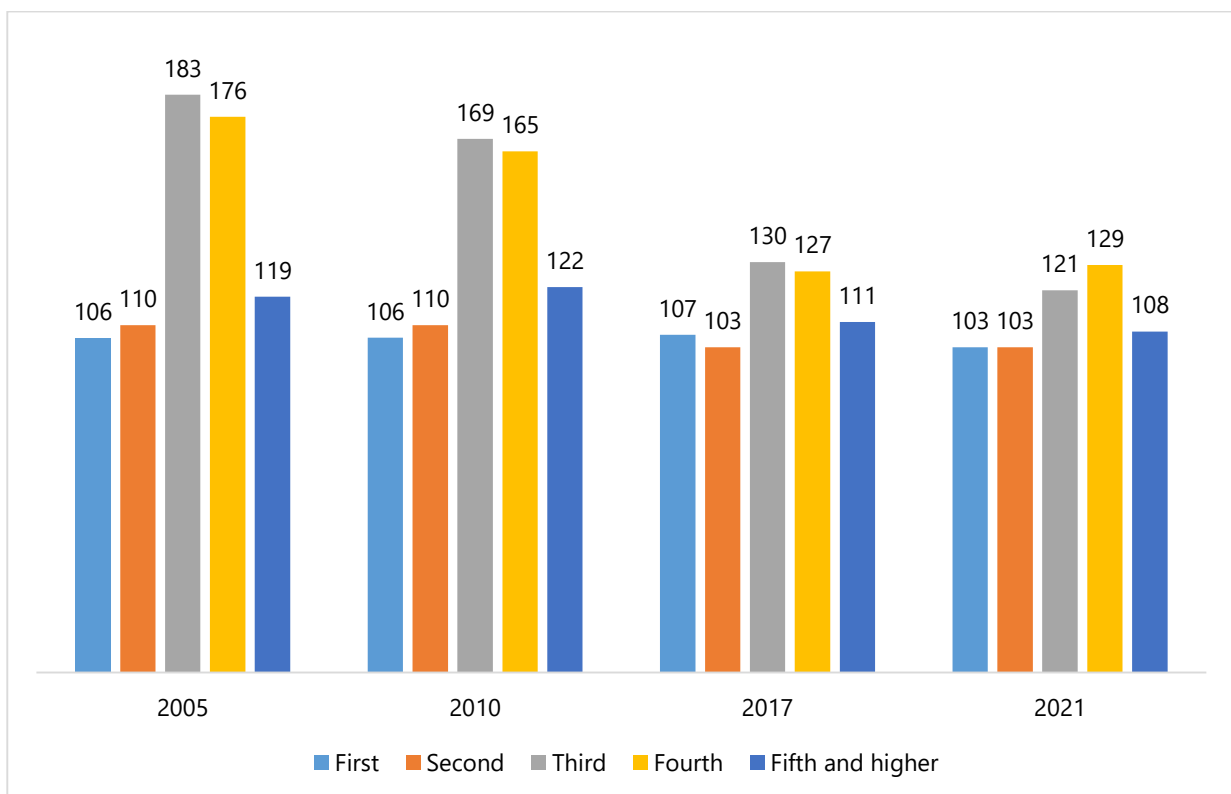


Figure 3. Sex imbalance of newborns by number of children

The monitoring report⁸ signposted that when the problem was first identified, many specialists, scientists, and officials were inclined to deny the existence of the problem, bringing various arguments. Even today, skeptical arguments can be heard even from experienced and well-known specialists.

The official recognition of the issue of GBSS by decision-makers and specialists in Armenia took about 3 years, starting from the period when the UNFPA first raised the issue. Experts have assessed the effectiveness of previously used mechanisms to influence state policy, including the dissemination of information about the risks and negative consequences of sex-selective abortions, public awareness campaigns.

Thus, the results of the “Sex Imbalance of Newborns in Armenia”⁹ study published by UNFPA in 2013 was fundamental in convincing policymakers to recognize the existence of a sex imbalance in Armenia as not only a human rights issue, but also as a matter of national security. After the problem was identified, it was also incorporated in the state policy on the mother and child health care and the program to combat gender-based violence.

Due to the programs for preventing GBSS, Armenia has registered a significant improvement in the sex ratio at birth in a relatively short period of time and with limited funding.

In 2015-2016, courses aimed at raising awareness about gender equality were organized. Among them is the 2016-2017 Caring for Equality¹⁰ program, which aimed to change attitudes and prevent harmful behaviors for women and girls. The program was implemented in Armenia at the national and community levels. Approximately 1,000 parents, 1,000 young people, and 1,500 service providers were involved in the program. In June 2017, the International Center for Human Development (ICHD), with the support of UNFPA, implemented another project on the topic “Combating gender discrimination in Armenia”,¹¹ which was intended to carry out specific actions within the framework of the global program supported by the UNFPA Armenia. The highest level of knowledge about reproduction, reproductive health and rights, sex ratio at birth, gender stereotypes and sex-selective abortions without medical indications was found in Vayots Dzor.

The findings of the “Sex-selective abortions as part of gender discrimination in the Armenian family” research¹² show that the main reasons for sex-selective abortions are:

- The desire to ensure the “continuity” of the nation;
- Considering the son as the main breadwinner of the parents in the future;
- Man’s image, reputation, and self-esteem in the society;

⁸ Dr. Laura Rahm, [Center for Population](https://armenia.unfpa.org/en/publications/monitoring-evaluation-framework) and Development. Monitoring & Evaluation Framework. Global Action on Son Preference and Gender-Biased Sex Selection. Paris 2019. Available at <https://armenia.unfpa.org/en/publications/monitoring-evaluation-framework>

⁹ [https://armenia.unfpa.org/sites/default/files/pub-pdf/Sex Imbalance report Arm final-with%20cover-final 0.pdf](https://armenia.unfpa.org/sites/default/files/pub-pdf/Sex%20Imbalance%20report%20Arm%20final-with%20cover-final%200.pdf)

¹⁰ <https://www.wvi.org/armenia/caring-equality>

¹¹ Monitoring Public Policy and Programmes to Prevent Gender-Biased Sex Selection and Sex Selective Abortions in the Republic of Armenia, 2016

¹² Sex-selective abortions as part of gender-based discrimination in Armenian family, Anna Voskanyan

- Perceiving the son as a labor force in the family in the villages, without which the family cannot maintain the economy and engage in farming;
- Migration and work abroad.

It has also been concluded that sex-selective abortions are often performed at home, using medicines and “traditional” methods, rather than in hospitals. It is noteworthy that men are mostly unaware of these methods. However, women reported 11 different methods of abortion, ranging from hormonal medicines to having various objects inserted into their genitals, such as pieces of rusty metal. At the same time, men have introduced other ways, such as walking on a pregnant woman's back, biting her belly, etc. This shows that abortion is not only performed without a doctor’s counsel, but can also be manifested in dangerous forms of intervention.

It should be noted that according to the RA Law on “Human Reproductive Health and Reproductive Rights”, abortion from the 12th to the 22nd week is allowed only for medical reasons or social indications, with the written consent of the woman. If there are no valid reasons, abortion in any other unplanned case, including sex-selective abortion, between 12 and 22 weeks of pregnancy is prohibited. The Law also stipulates that abortion can be performed only in institutions that have a medical license.¹³

Below are presented the obligations undertaken by the RA to fight gender-based discrimination.¹⁴ Policies to prevent gender-based discrimination include legislative prohibitions on sex-selective abortions for non-medical reasons. It also includes raising awareness, financial assistance and other legal reforms aimed at strengthening women’s rights and reducing gender bias.

In order to prevent GBSS, the Government implements the National Action Plan for 2020-2023 on Prevention of GBSS (N42-A/1 and N962-A) in three main directions:

- Evidence-based policy-making;
- Capacity building; and
- Public awareness raising.

The evidence-based policy aims to develop a factual, scientific-analytical basis for elaboration of policies addressed at the prevention of sex-selective abortions, increasing the competitiveness of women in the labor market, and strengthening the role of women in ensuring family income.

One of the purposes of capacity building is to establish a political network of specialized journalists on sex-selective abortion due to the gender-biased sex selection and highlight this issue, involve the social support network in the prevention of GBSS, ensure that the girl child is valued among individual groups of society by developing and implementing targeted approaches by regions and

¹³ <https://www.arlis.am/documentview.aspx?docid=107500>

¹⁴ Dr. Laura Rahm. Global Guidelines for Monitoring and Evaluation of the Global Action on Son Preference and Gender-Biased Sex Selection (GBSS), August 2019. Available at <https://armenia.unfpa.org/sites/default/files/pub-pdf/Global%20M%26E%20Framework.pdf>.

different social groups. Moreover, continuous development of the mutually agreed capacities (including knowledge of population and development issues, effective communication skills, effective use of social advertising, and development of argumentative and targeted messages) of representatives of government agencies and non-governmental organizations involved in the network.

The main goal of public awareness raising is the appreciation of the economic role of women in the family and society, leading to the well-being of the family and the economic development of society.

Global commitments	National legislation	Programs/campaigns
CEDAW	Armenia's Constitution	State programme to prevent sex-selective abortions
Child Rights Convention	Civil Code	National Gender Policy Implementations Strategy
International Conference on Population and Development	Law on Equal Rights and Opportunities of Women and Men	National Action Plan to prevent GBSS and sex-selective abortion
SDGs	Law on Reproductive Health and Reproductive Rights	Early childhood care, female labour market participation, women's economic empowerment
Global Programme to Prevent GBSS and Son Preference	Law on Preventing Domestic Violence	Social Campaigns (Bavakan e)

Table 9. Armenia's commitments to fight gender-based discrimination

The main target of the policies, programs and National Action Plan is to reach 107 girls for every 100 boys by 2023. That target for 2015-2019 was 111 girls for every 100 boys.

In summary, it can be stated that sex-selective abortions are constantly being studied, and the Republic of Armenia is developing policies to prevent and take necessary steps to fight GBSS.

5. PREVALENCE AND CAUSES OF GENDER-BIASED SEX SELECTION IN ARMENIA: PRESENTATION OF QUANTITATIVE SURVEY RESULTS

5.1. Socio-demographic profile of respondents

The average age of 1,922 women, who participated in the survey, was 35. The youngest was 19 and the oldest was 49 years old.

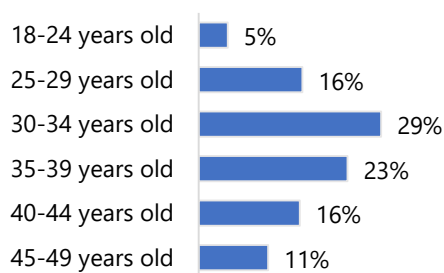


Figure 4. Distribution by age

90% of respondents are currently married and live with their husband/partner, 2% are married but do not live with their husband, 5% are divorced, and 2% - widowed.

4 of the respondents stated that they have never been married, had a child or children, 2 of them stated that they lived with a man, but were not married.

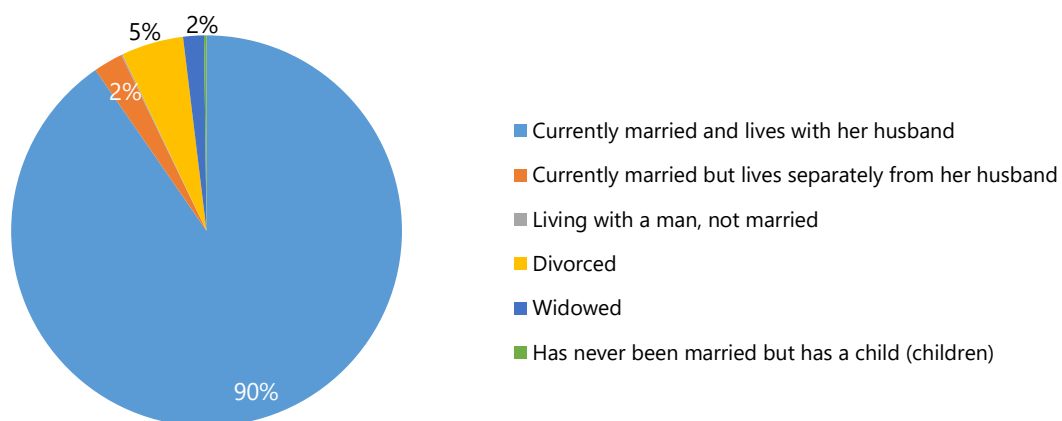


Figure 5. Marital status

The distribution of respondents by region and type of settlement is representative for the Republic of Armenia. Accordingly, 35% of respondents were from rural areas, 29% from urban areas and 36% from Yerevan.

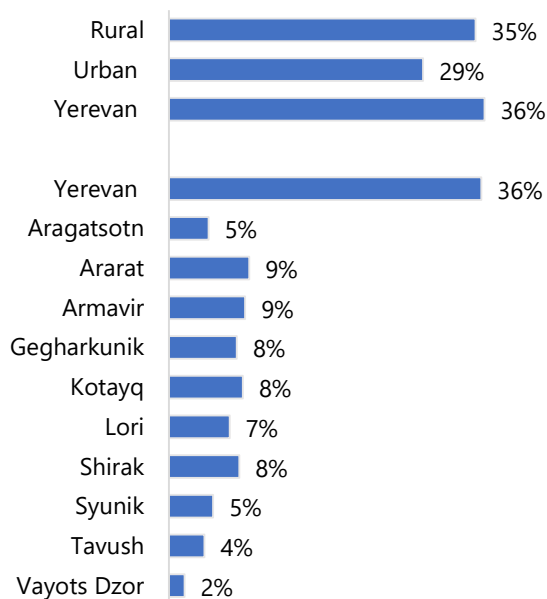


Figure 6. Distribution by region and settlement type

33% of respondents stated that they had a secondary or lower education,¹⁵ 22% - vocational education,¹⁶ and 45% - higher or postgraduate education.¹⁷ The same question was also asked about the educational level of their partner/husband, and the results of the survey showed that the partner or husband of 51% of respondents had a secondary or lower education, 16% had a vocational education, and 33% had a higher or postgraduate education.

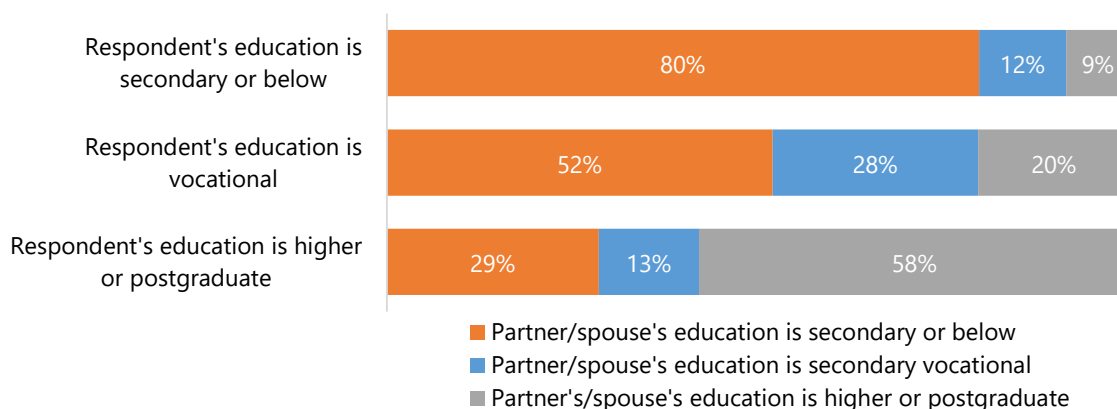


Figure 7. Education

9% of husbands/partners of the respondents with a secondary or lower education have higher or postgraduate education, and 29% of partners/spouses of the respondents with higher or postgraduate education have secondary or lower education.

89% of respondents profess the Armenian Apostolic Church, 4% - the Armenian Evangelical Church, 3% do not profess any religion, 2% profess the Armenian Catholic Church, and 2%

¹⁵ Elementary education: grades 1-4, middle school: grades 5-9, high school: grades 10-12, pre-professional vocational-technical education.

¹⁶ Vocational and non-higher education: implementation of vocational educational programs on the basis of at least basic general education.

¹⁷ Higher professional education - professional education implemented with bachelor's, graduate specialist, master's programs based on at least secondary education. Postgraduate professional education - professional education carried out on the basis of higher professional education (master's degree, certified specialist) as a postgraduate student, researcher, applicant.

indicated another religion. 9 of the respondents stated that they were sectarian, and 3 professed Sharfardin.¹⁸

63% of respondents live in a nuclear family, 34% live with their husband’s parents, and 3% live in an extended family with their husband’s parents and other relatives.

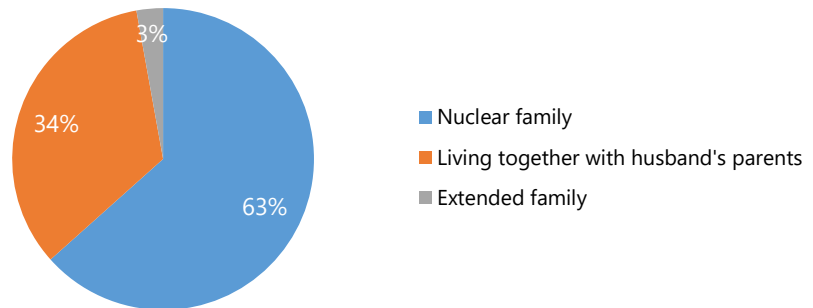


Figure 8. Distribution by family type

34% of respondents mentioned employment in the public sector as the main source of income, 20% - full time work in the private sector, 14% in agriculture. Sources of income were also private sector employment with a daily salary, own business, pension, allowance, remittances from abroad, and commerce.

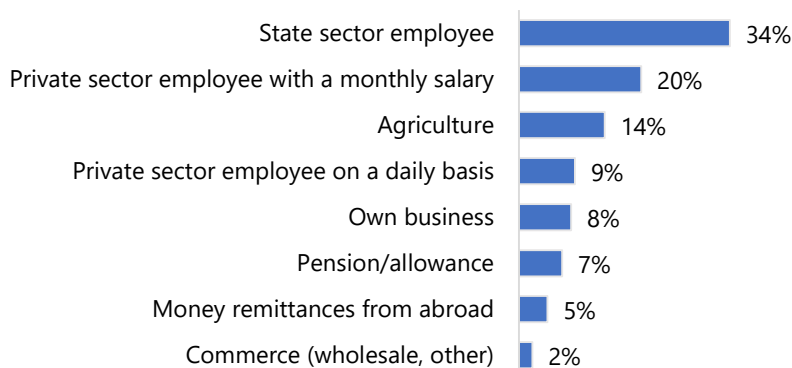


Figure 9. Main source of family income

75% of respondents indicated that the primary breadwinner in their family was the husband or partner, and 10% indicated that they were the main breadwinners in their family. In addition to the mentioned options, the following answers were also indicated: husband’s/partner’s parents, wife and husband together, wife’s parents, husband and husband’s parents together.

¹⁸ Sharfardin is the religion of Yezidis (a minority group) living in Armenia.

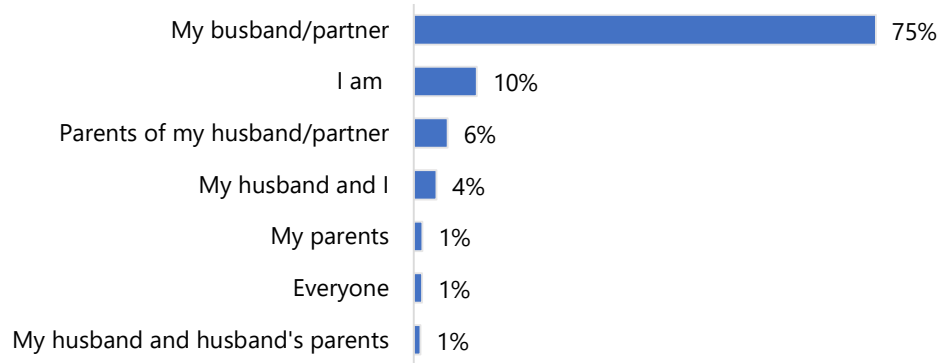


Figure 10. Family's first breadwinner

42% of respondents stated that they were housewives, 24% were state sector employees, and 14% private sector employees with a daily salary. Agriculture, private business, and work abroad were also mentioned as types of employment. 29% of respondents stated that their husband/partner was a state sector employee, 37% - a private sector employee, of which 23% worked with a monthly, and 14% with a daily salary.

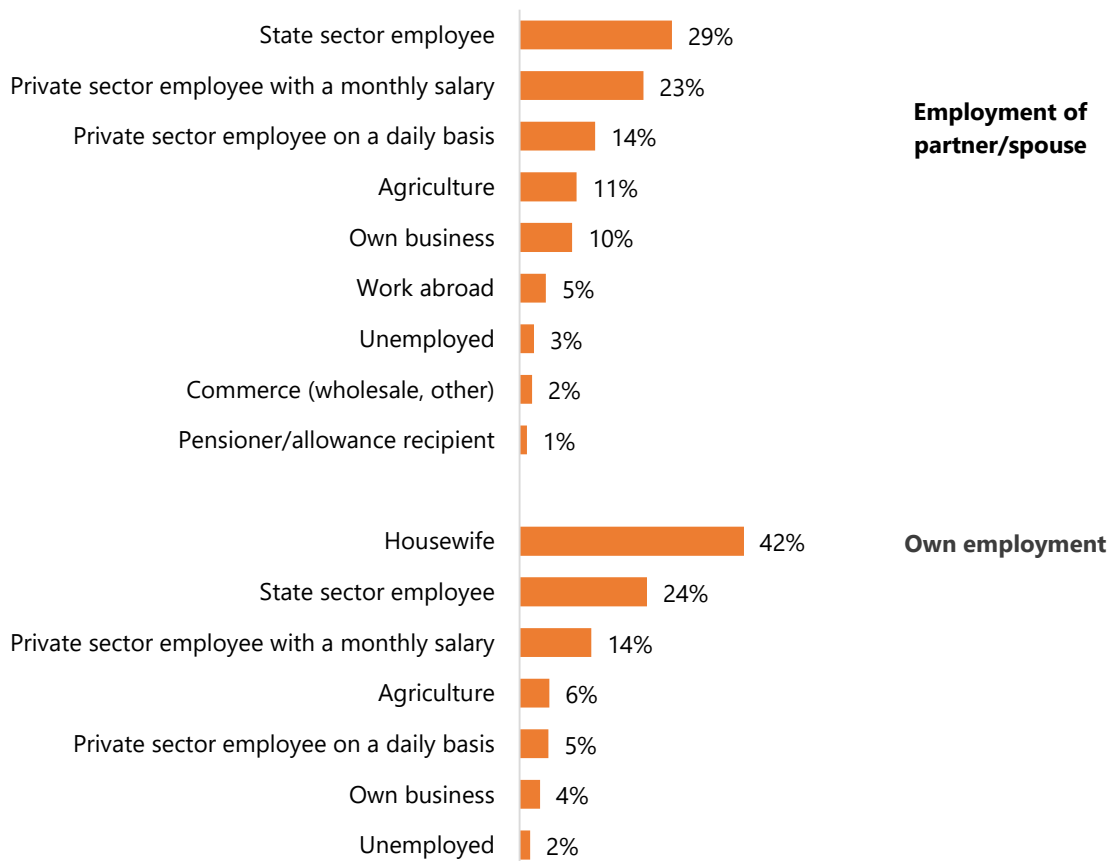


Figure 11. Respondent's and her partner/spouse's main employment

25% of respondents have an income of more than 100,000 AMD, and 29% have no income.

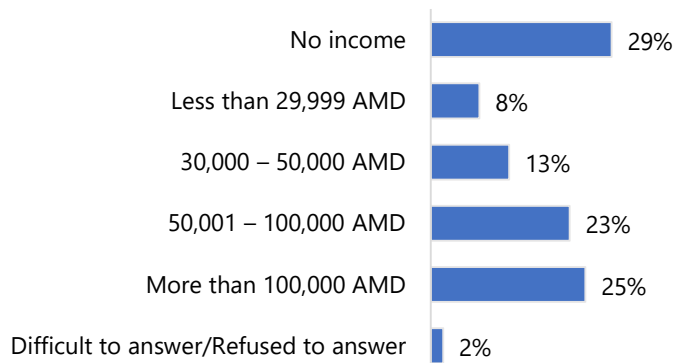


Figure 12. Monthly average income

57% of respondents stated that they and their husband/partner decided together how and what their money and income should be spent on. 33% stated that they personally decided how to manage their own income. 30% of those aged 19-29 stated that they personally decided how to manage their own income, 31% of 30-39 year-olds, 38% of 40-49 year-olds. 5% of respondents mentioned that their husband/partner would decide.

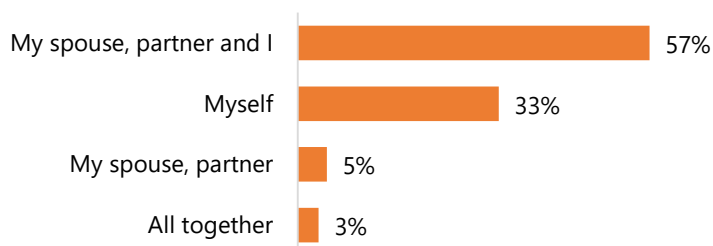


Figure 13. Primary decision maker in spending income/money

The results of the survey show that the household on average spends the most on food (124,000 AMD), and the least on entertainment (26,000 AMD on average) on monthly basis.

Type of expense	The most, AMD	The least, AMD
Food	600,000	124,000
Transportation	300,000	37,000
Education	1,000,000	27,000
Clothing, household goods	500,000	43,000
Utility services	400,000	31,000
Entertainment	4,000,000	26,000
Loan, debt	5,000,000	80,000
Other	2,000,000	24,000

Table 10. Household expenses per groups, AMD

16% of respondents stated that the average monthly income of their family was more than 420,001 AMD.

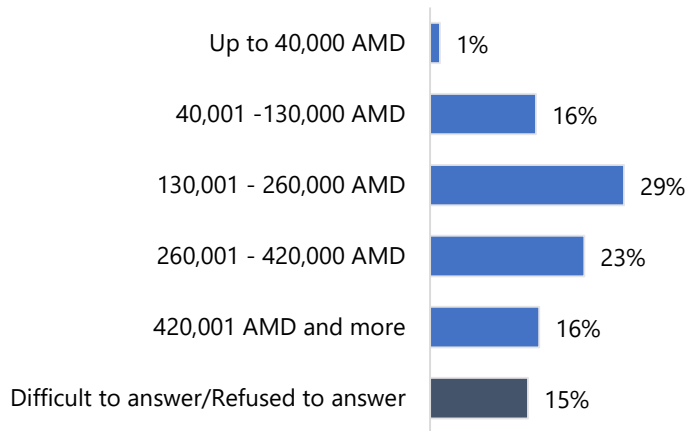


Figure 14. Family's average monthly income

The share of respondents with high income is the highest in Yerevan. Respondents from Gegharkunik region indicated the highest percentage of low income.

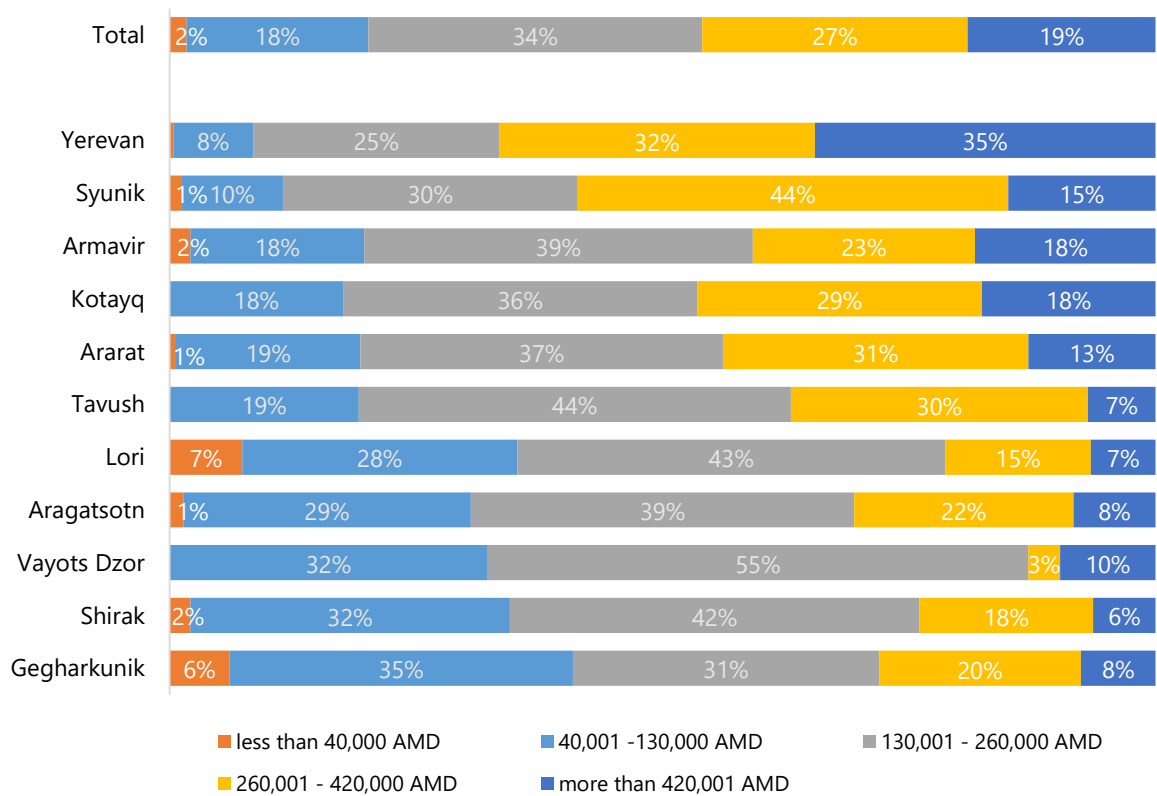


Figure 15. Family's average monthly income by regions

5.2. Household facilities

All respondents own a mobile phone, 97% have Internet access, 64% have a car, 42% have agricultural land, 22% have a landline phone, and 6% have agricultural equipment.

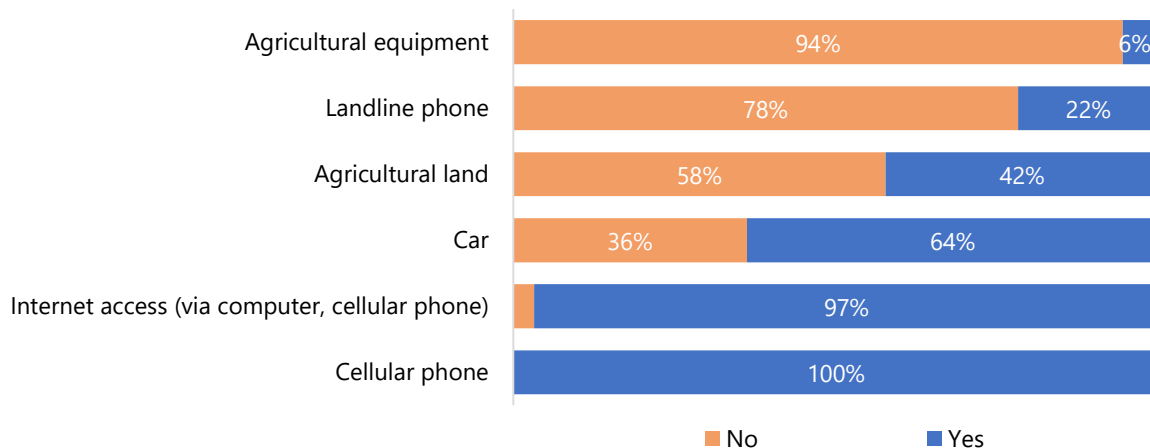


Figure 16. Availability of facilities in the household

77% of respondents read information and news on the Internet, 43% watch TV, 8% listen to the radio and 2% read newspapers almost daily.

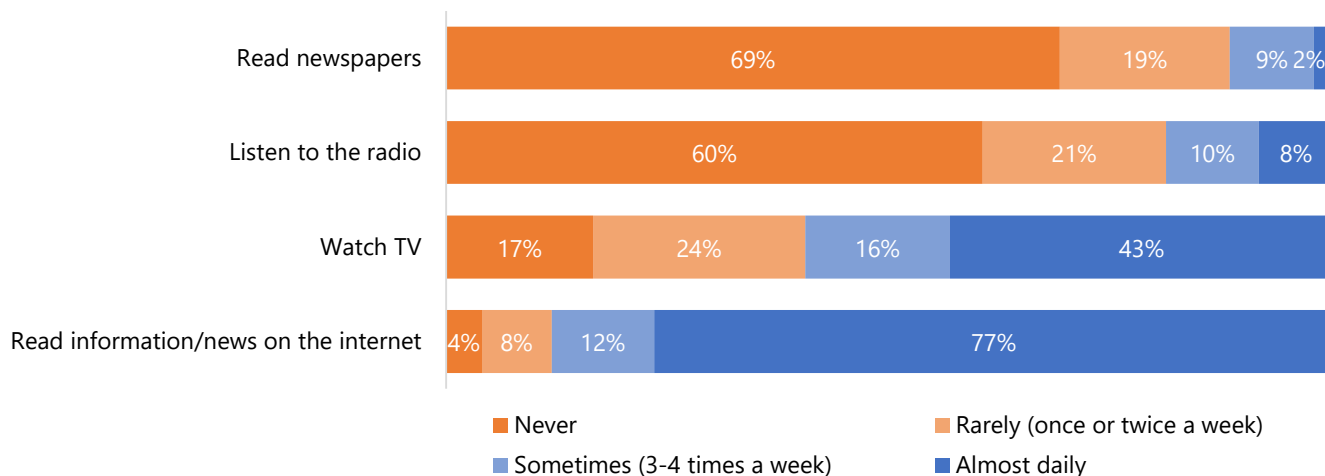


Figure 17. Sources of information and usage frequency

5.3. Pregnancy history and result

85% of respondents got married after the age of 19, 14% at the age of 17-18, and 1% at the age of 14-16.

7 respondents got married at the age of 14-15: 3 of them were from Yerevan, 3 from a rural area and 1 from an urban area. 4 of them have a middle school education, 2 have a high school education, and 1 has a vocational education. 5 of them professed the Armenian Apostolic Church,

one respondent was a follower of the Catholic Church and one was a sectarian. The age of the respondents who were married at the age of 14-15 at the time of the survey was 19, 25, 36, 42, 43, 45 and 49 years old.

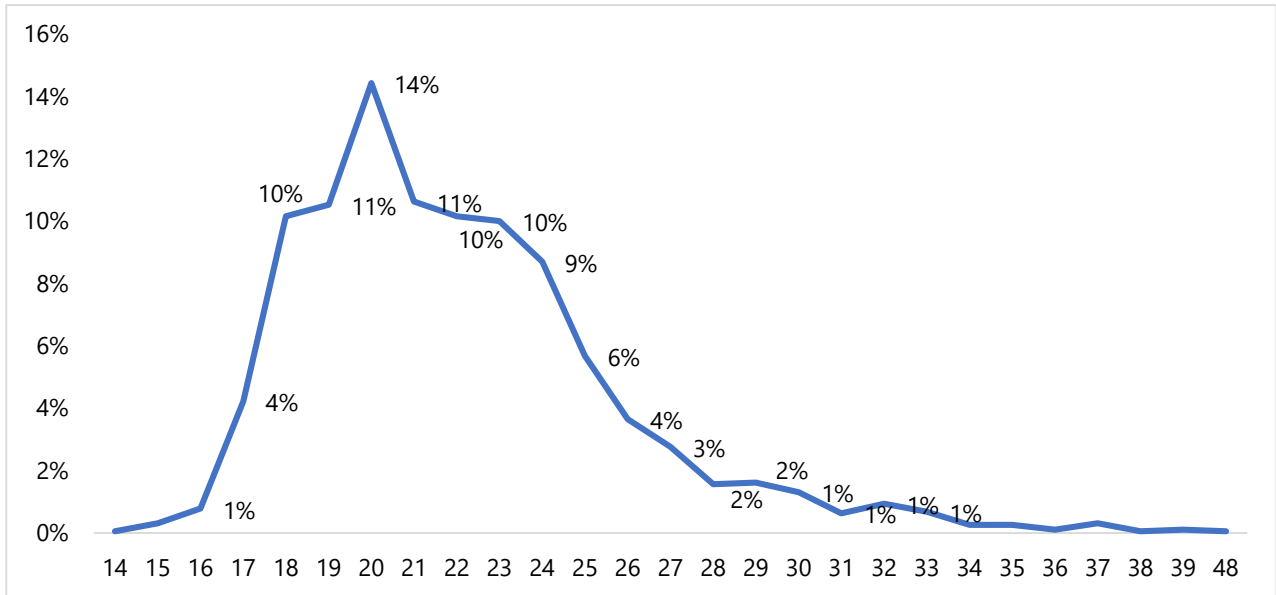


Figure 18. Marriage age distribution

During the first pregnancy, 8% of respondents were under 18, 63% were 19-24 years old, and 29% were 25-40 years old.

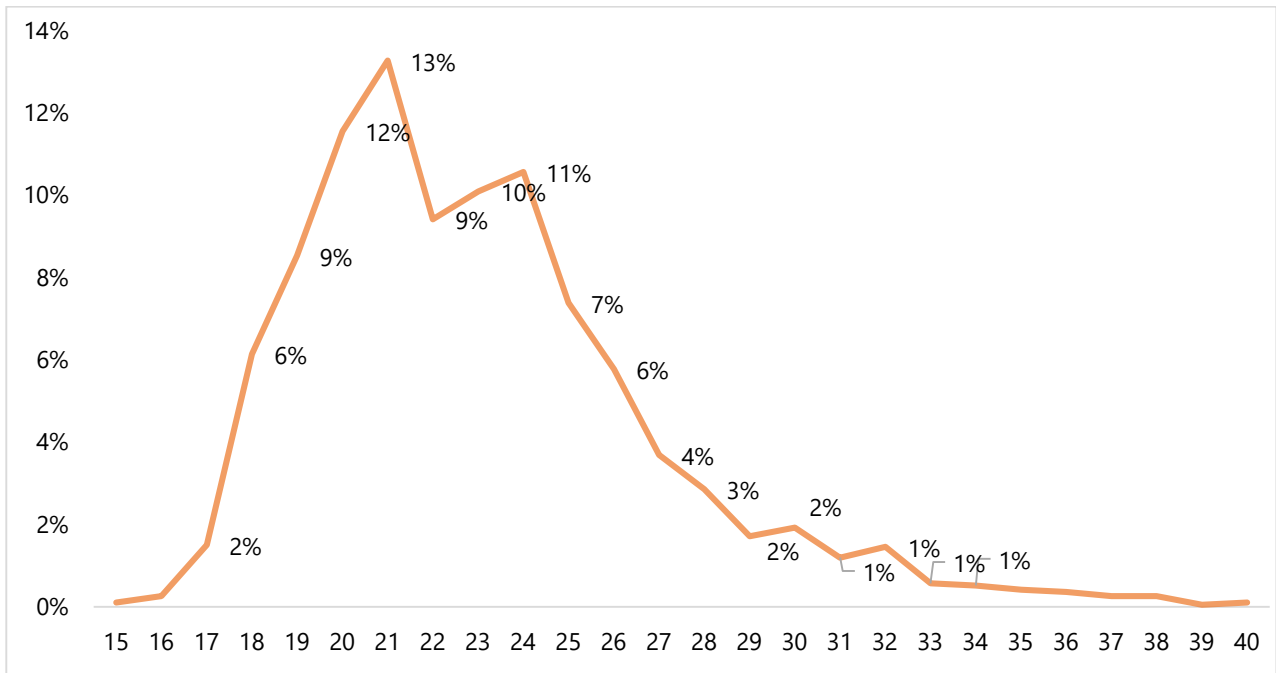


Figure 19. Distribution of age at first pregnancy

During the first pregnancy, 43 respondents under the age of 18 (154 respondents) were from Yerevan, 25 from Gegharkunik, 17 from Armavir, 13 from Syunik, 12 from Kotayk, 11 from Ararat, 10 from Shirak. Total distribution by regions is presented below:

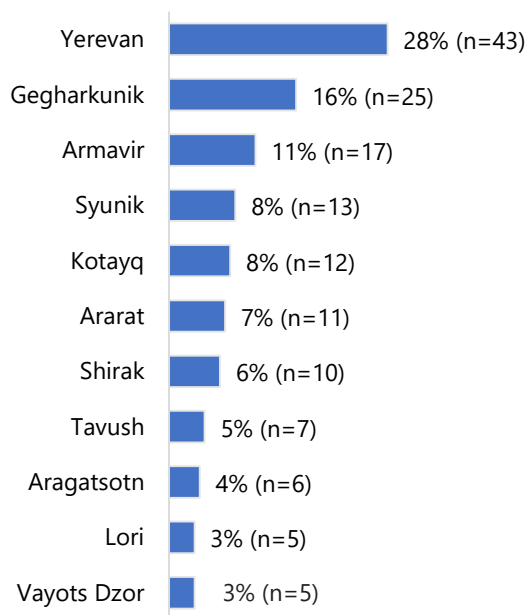


Figure 20. Distribution of women under 18 during the first pregnancy, by regions

This figure shows the distribution of respondents according to the number of pregnancies:

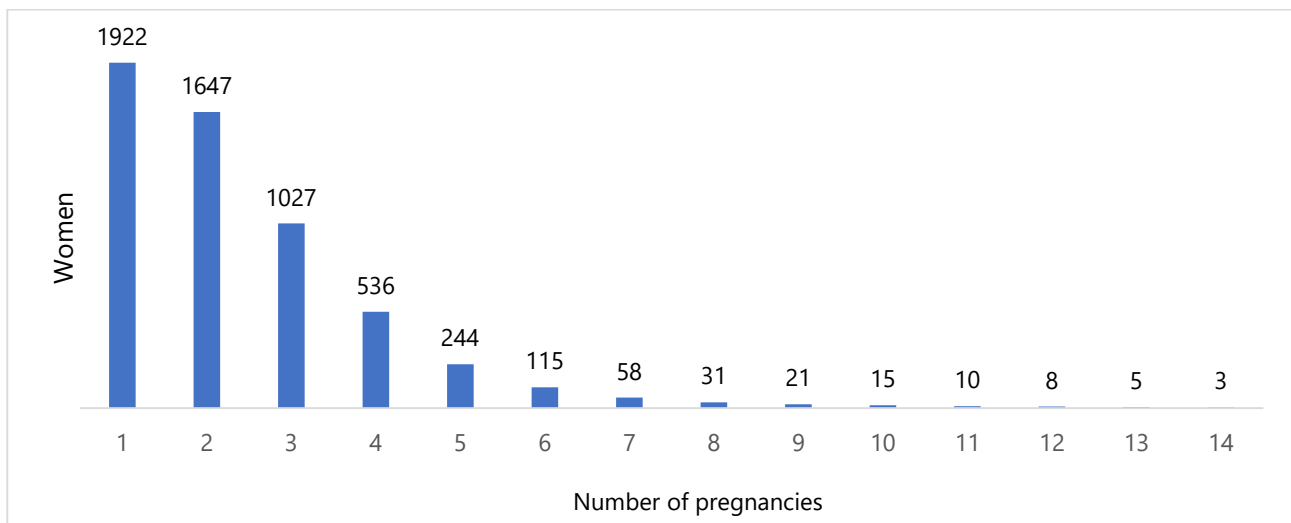


Figure 21. Distribution of respondents by the number of pregnancies

Respondents most often stated that they had one daughter and one son - 26%. 14% have two sons, 11% - two daughters and one son, and 10% have two daughters. 3% have three sons, and 1% have three daughters.

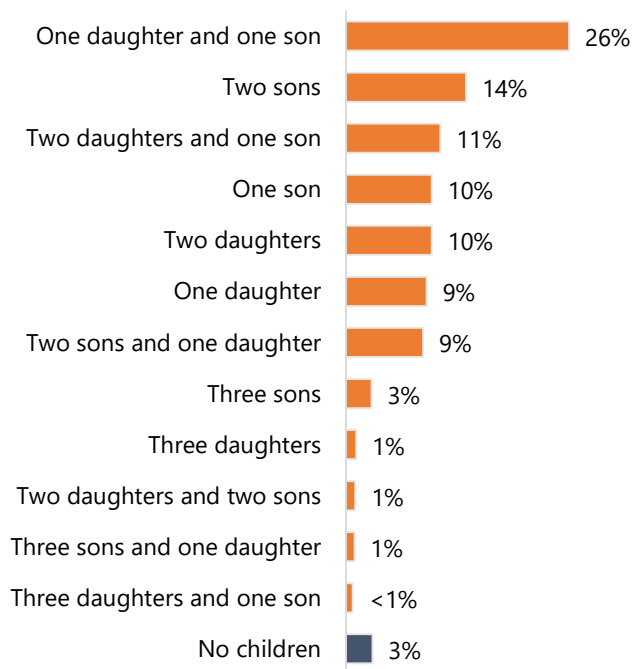


Figure 22. Number of children by sex

7% of respondents stated that they did not want to have a daughter after getting married or living with their partner, and 3% did not want to have a son. The share of those who wanted to have one daughter and one son was the same (51%). The proportion of those who wanted to have two sons and two daughters was 42% and 40% respectively.

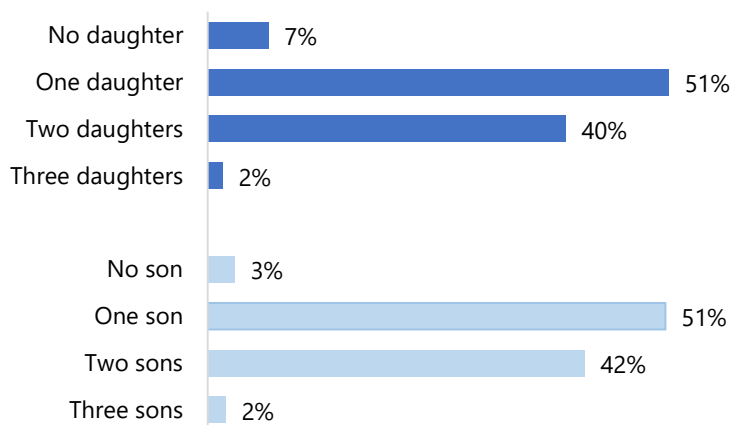


Figure 23. Number of desired sons and daughters

In fact, 31% of respondents have no daughters and 23% have no sons.

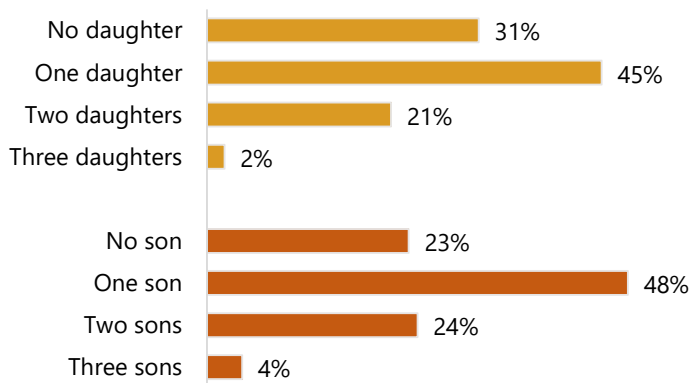


Figure 24. Number of actual sons and daughters

78% of the respondents, who stated that they did not want to have a daughter after getting married or living with a partner, did not have a daughter.

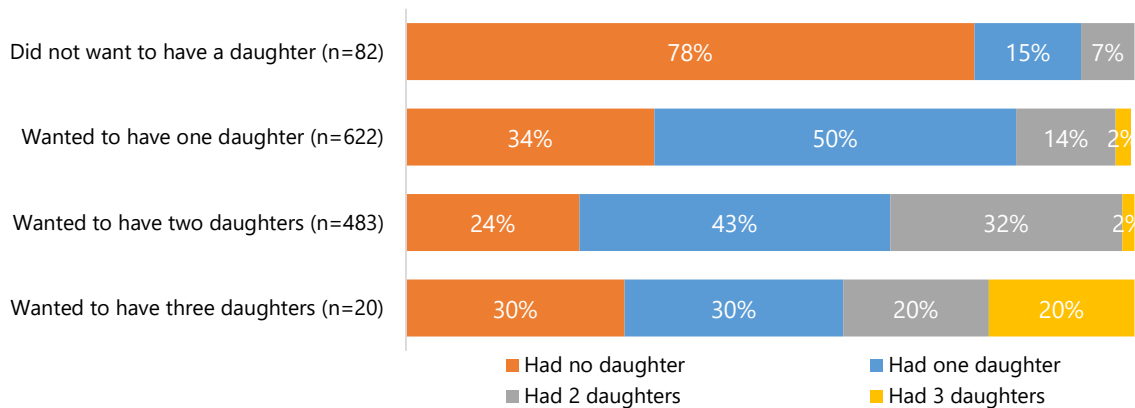


Figure 25. Number of actual and desired daughters after marriage or cohabitation

Fifty-five percent of respondents, who did not want to have a son, had no son. The number of respondents who wanted to have a son was higher from those wanting to have a daughter.

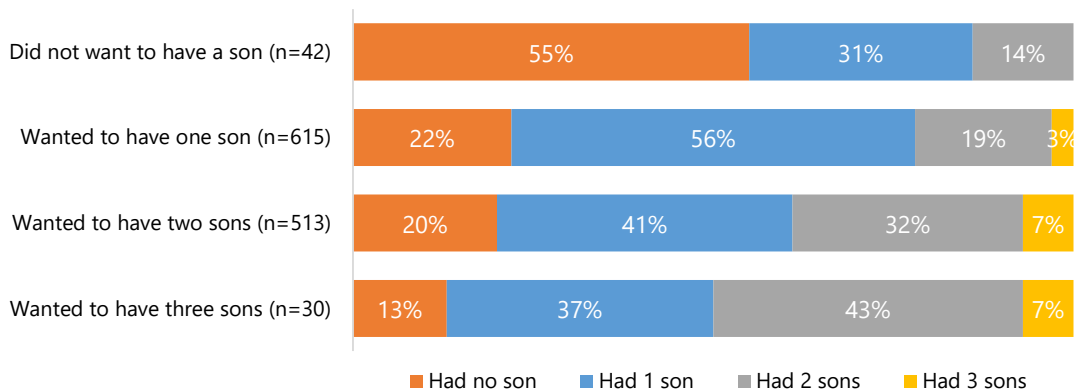


Figure 26. Number of actual and desired sons after marriage or civil partnership

72% of respondents stated that they and their husband decided how many daughters and sons they should have. 10% said that they made the decision themselves, 2% said their husband/partner

decided, and 8% said no one decided. The share of deciding together has decreased compared to the previous survey, while the share of deciding independently has remained almost the same.

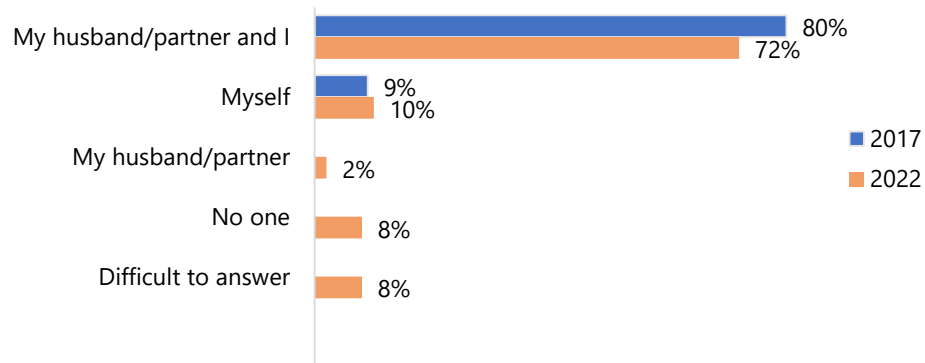


Figure 27. Decision makers on the number of daughters and sons

3% of respondents believe that they have no right to decide how many daughters or sons they will have. The analysis by demographic groups shows that the share of those who think so is the highest among those with a secondary or lower education (5%). 6% of the respondents with a family income of 41,000-130,000 AMD believe that they do not have the right to decide how many daughters or sons they will have.

62 respondents stated that they did not have the right to decide how many sons and daughters they would have. 53% of them (33 respondents) had a secondary or lower education, 82% (51 respondents) were 30-49 years old, and 42% of them (26 respondents) were from rural areas. 8% of the respondents (9 respondents) who mentioned agriculture as their main employment stated that they did not have the right to decide how many daughters and how many sons they would have.

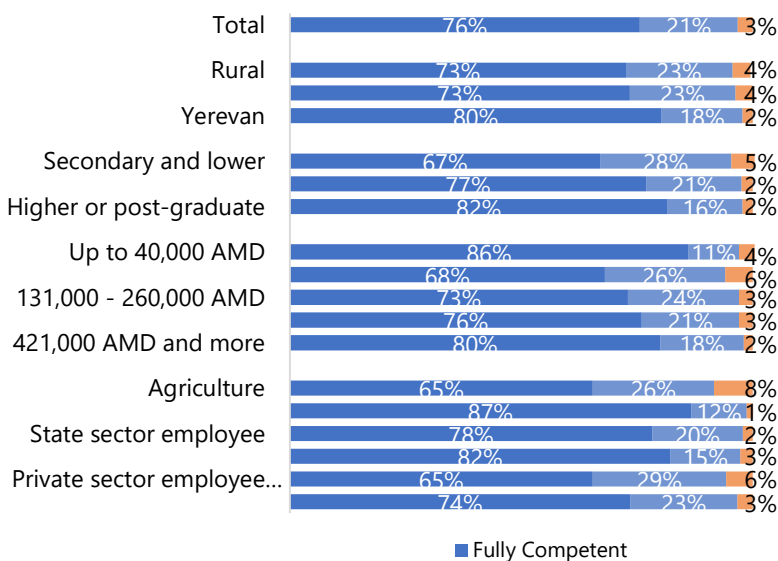


Figure 28. Decision on the number of daughters and sons

53% of respondents believe that boys are preferred in their **community**, and 18% state that boys are preferred in their **family**. 11% of respondents state that girls are preferred in their **community**, and the same number state that girls are preferred in their **family**.

Both in the family and in the community, the proportion of those who prefer boys is greater than those who prefer girls. Compared to the previous survey, the percentage of those expressing equal preference for both sexes has decreased.

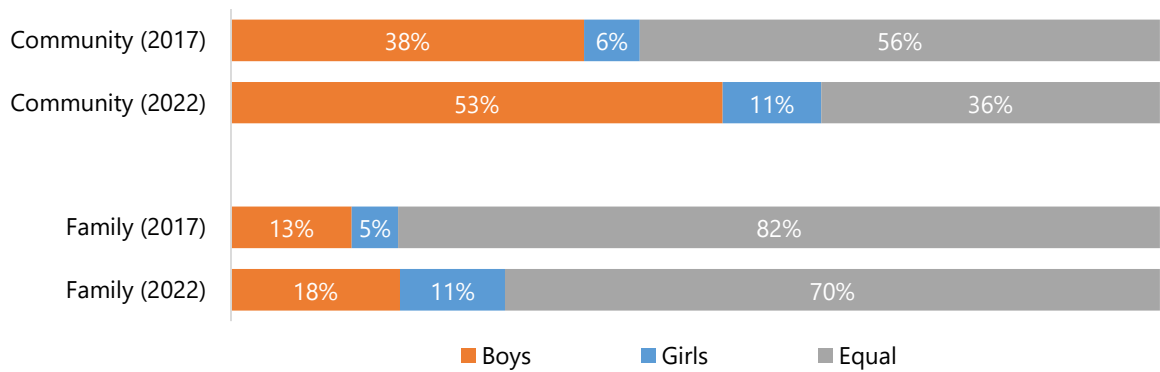


Figure 29. Sex preference of a child

The analysis by regions shows that the largest percentage of those who prefer boys in the family is in Gegharkunik (33%). Tavush is the only region where the proportion of those who prefer girls in the family is greater than boys (17%). In Yerevan, this indicator is equal (12%).

The preference for girls in Tavush region has increased in 2022 compared to the data of 2017. In other regions the preference for boys remained the same, but in parallel, the percentage of respondents who stated that they gave equal preference to both sexes, decreased. The lowest indicator of equal preference was in Gegharkunik, 60%, which decreased by 15% compared to 2017. In all regions, the share of those giving equal preference has decreased compared to 2017.

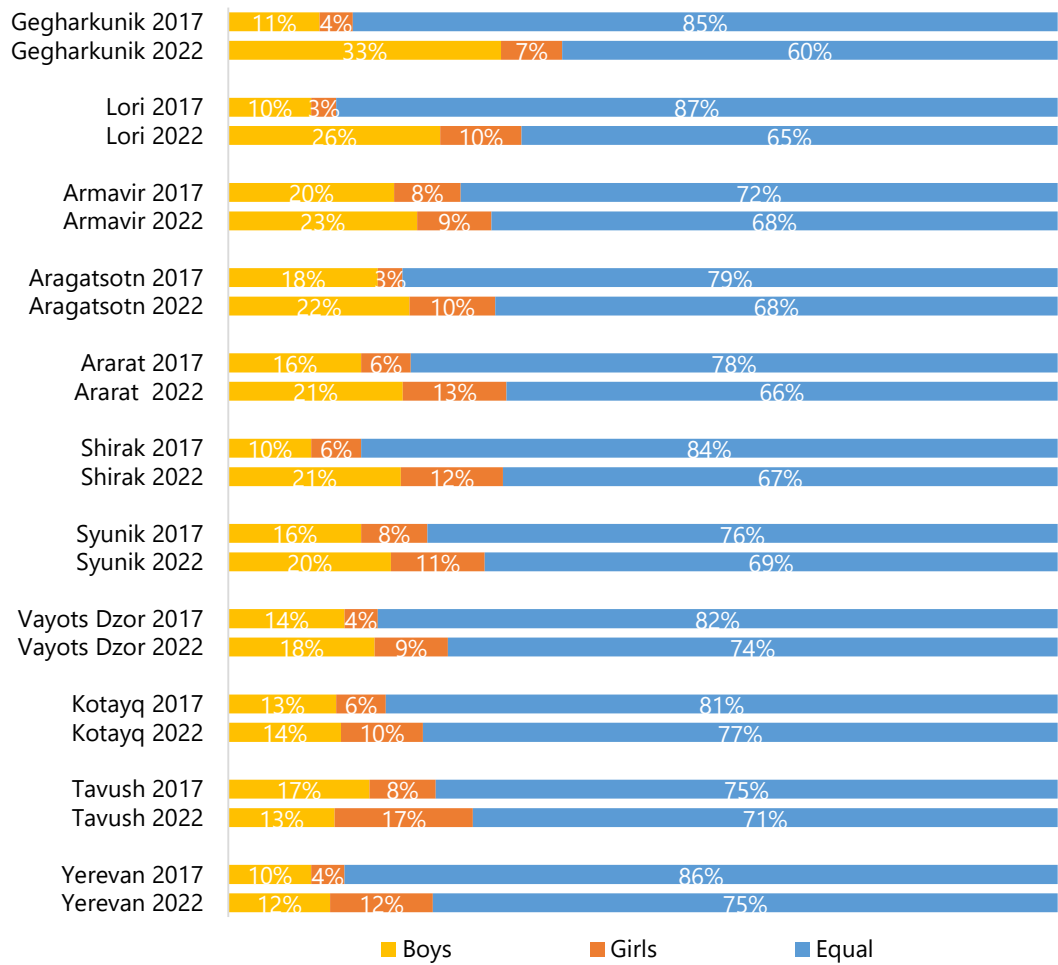


Figure 30. Sex preference in the family by regions

91% of respondents stated that sons were preferred in the family, because “sons continue the family lineage”, 83% stated that “sons are the defenders of the homeland”, 67% - “sons are inheritors of property”, 59% - “it hurts the parents to see their daughter’s hardships.” In the Figure below, all reasons are grouped by socio-economic, security, and psychological factors.

Those respondents who indicated that “after marriage, the daughter is no longer yours”, 75% of them (112 respondents) also indicated that – “it hurts the parents to see their daughter’s hardships” and 69% of them (102 respondents) also noted that “it is psychologically difficult to marry off the daughter.”

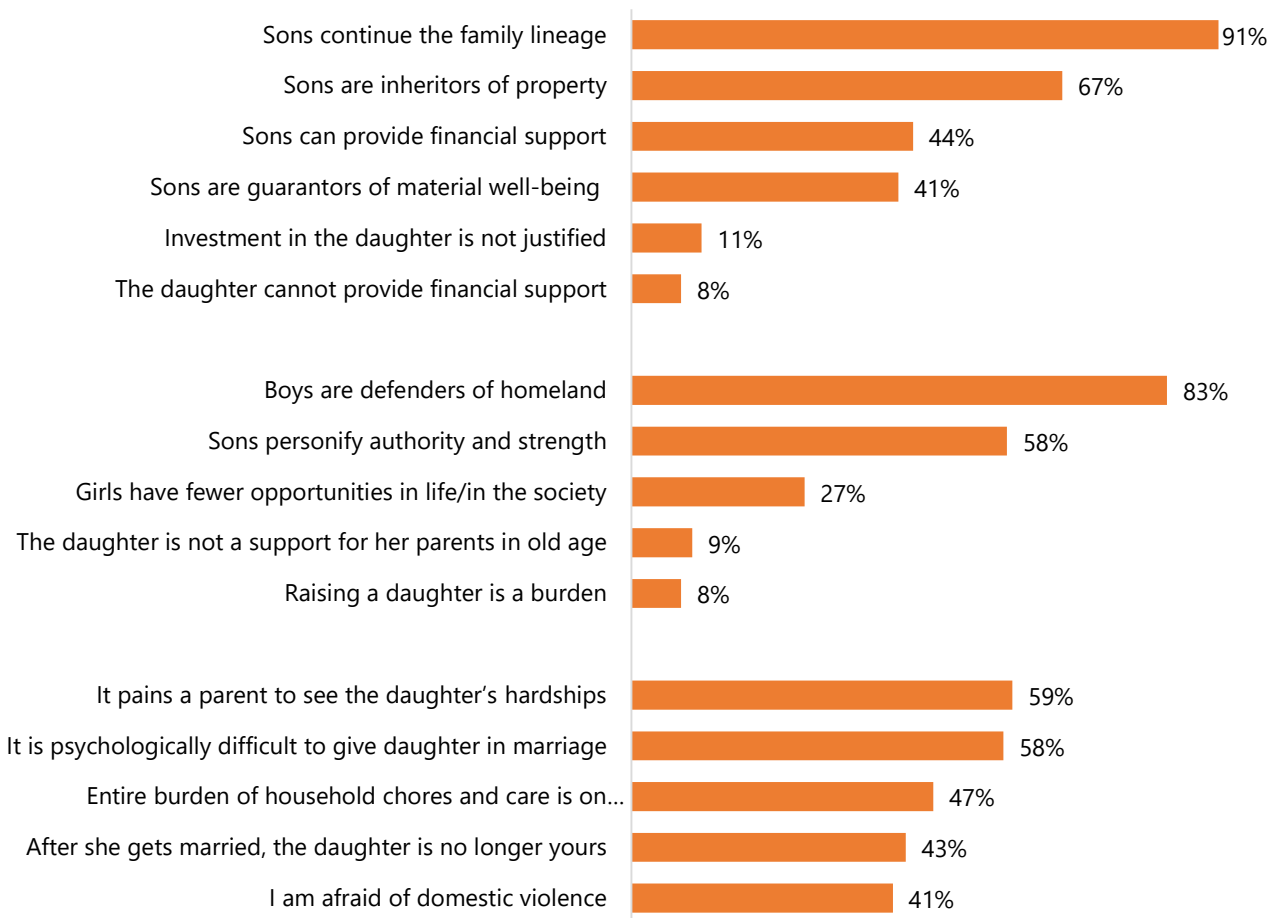


Figure 31. Reasons for son preference in the family

In the case of some answers, there are noticeable differences depending on the age of the interviewed women. The proportion of young respondents, who agreed with the statements in Figure 32, is less than the proportion of respondents in the older age group. 16% of respondents aged 18-29 and 31% of respondents aged 30-39 think that boys are preferred in their family because “girls have less opportunities in life and in the society.”

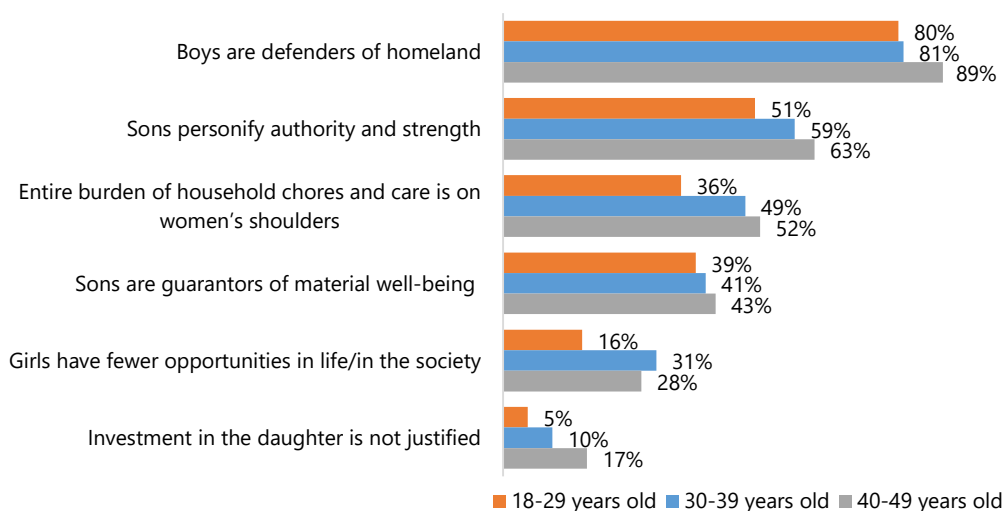


Figure 32. Reasons for son preference in the family by age groups

67% of the respondents, who stated that they preferred female children in their family, as a reason indicated that “the daughter stands ready to help her parents,” 10% stated that “there are few girls in the family,” and 5% said that “there is a lot of love for girls in the family.”

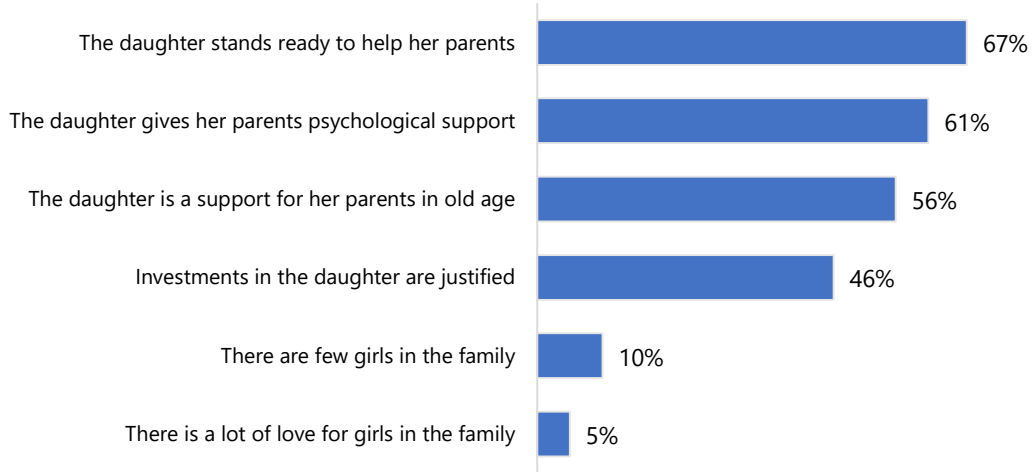


Figure 33. Reasons for daughter preference in the family

27% of respondents stated that they wanted to have a girl during their first pregnancy. This indicator has increased by 11% compared to the previous analysis. It also increased in the case of family members (husband/partner, mother, and mother-in-law). If in 2017 nine percent of respondents stated that during their first pregnancy their husband wanted to have a girl child, according to the results of the 2022 survey, this indicator has increased to 19%.

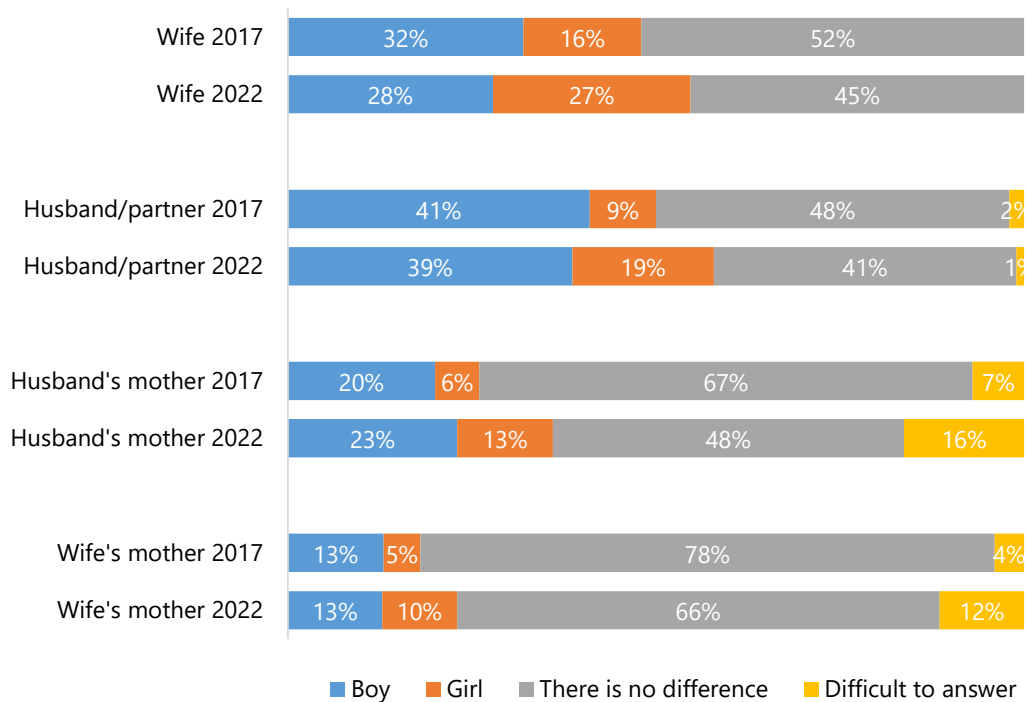


Figure 34. Preferred sex of the child during the first pregnancy

In Gegharkunik region, 52% of respondents stated that their husbands gave preference to boys during the first pregnancy, while only 11% indicated that their husbands preferred a girl child. Although the percentage of women preferring a male child is less than that of husbands, it still makes up a high percentage. Mothers of husbands and wives are more neutral in terms of preference, although the preference for boys continues to prevail over that of girls. The situation is almost the same in Aragatsotn and Shirak.

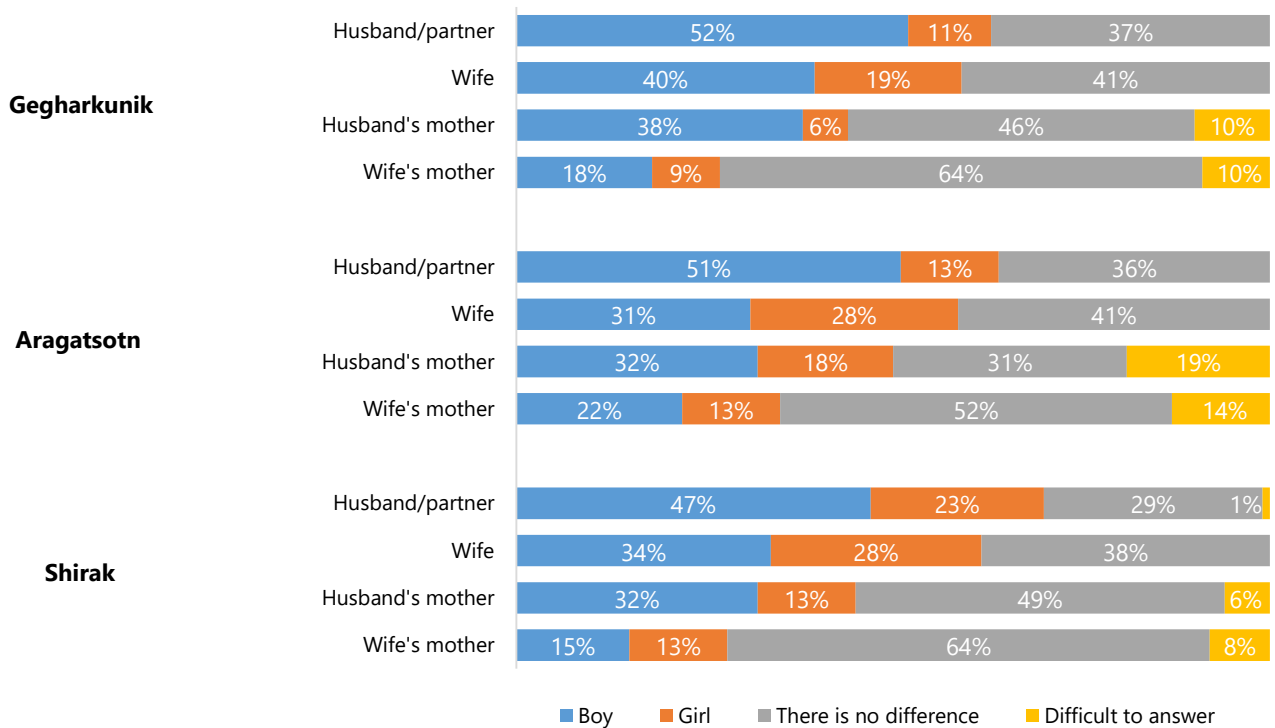


Figure 35. Preferred sex of child during the first pregnancy: Gegharkunik, Aragatsotn, Shirak

In Lori, women give more preference to girl children - 29%, and the tendency of husbands to give more preference to boys remains the same. In Armavir and Kotayk, the situation is similar: the proportion of those who prefer boys is high.

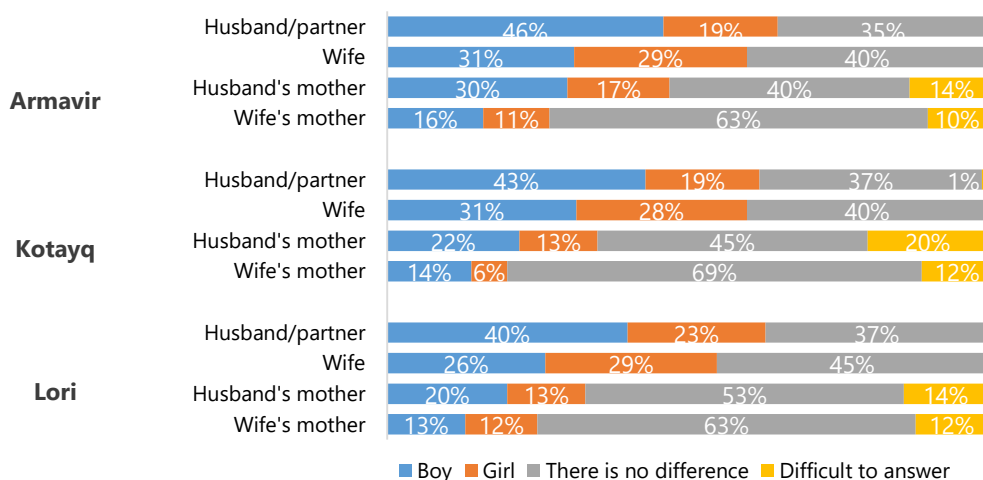


Figure 36. Preferred sex of child during the first pregnancy: Armavir, Kotayq, Lori

In Syunik, women (29%) and their mothers (14%) give more preference to girl children, and in Yerevan, women also prefer girl children (28%) more than boys.

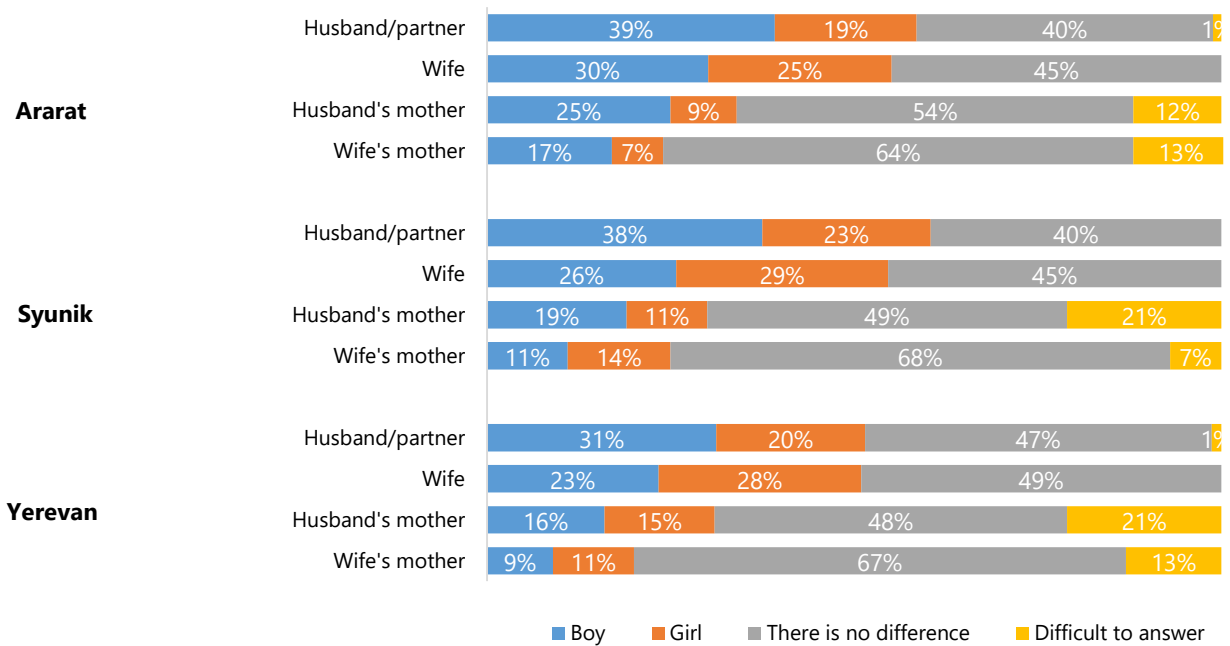


Figure 37. Preferred sex of child during the first pregnancy: Ararat, Syunik, Yerevan

Women in Tavush (24%) and Vayots Dzor (24%) prefer female children. In these regions, the percentage of the answer “there was no difference” is also higher compared to other regions.

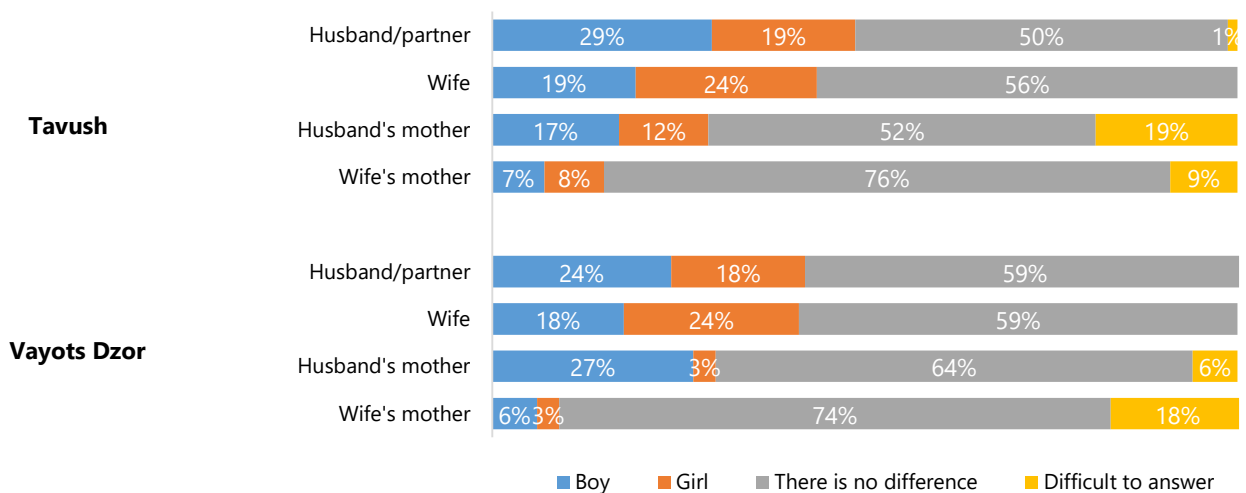


Figure 38. Preferred sex of child during the first pregnancy: Tavush, Vayots Dzor

With the increase in the number of pregnancies, the proportion of desired pregnancies among the respondents is decreasing. If the first pregnancy was desirable for 94% of respondents, then the 4th pregnancy is desirable for 57% of respondents.

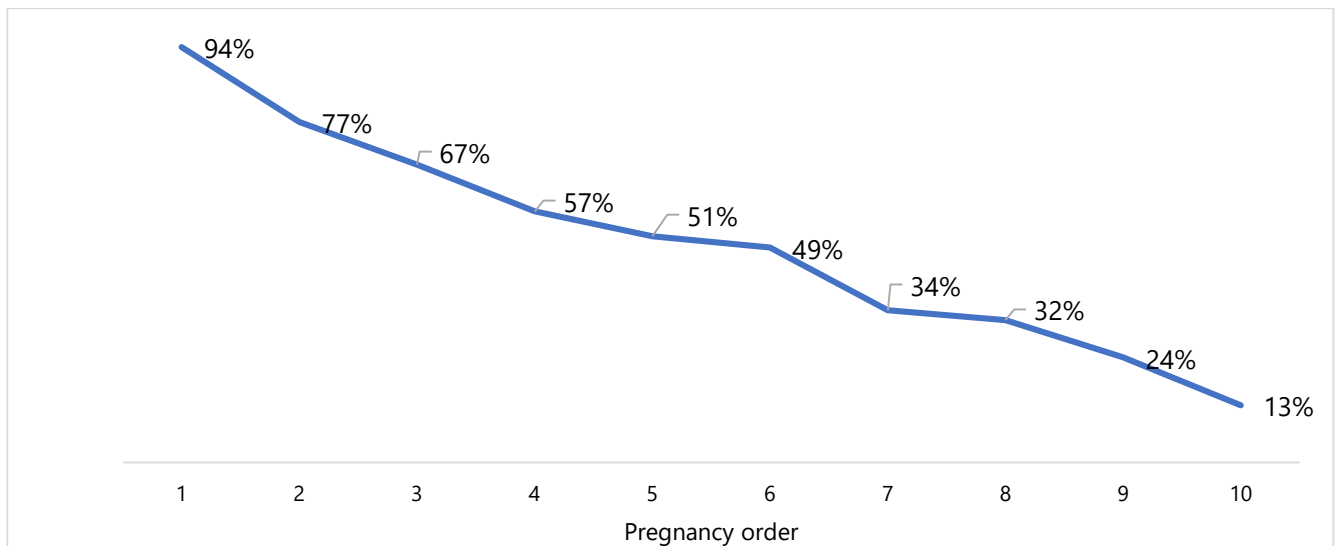


Figure 39. Desired pregnancy distribution by order of pregnancy

With the increase in the number of pregnancies, the proportion of live births also decreases and the proportion of abortions increases.

The “other” option mentioned in Figure 40 includes the options “stillbirth”, “miscarriage”, “pregnancy has not ended yet.”

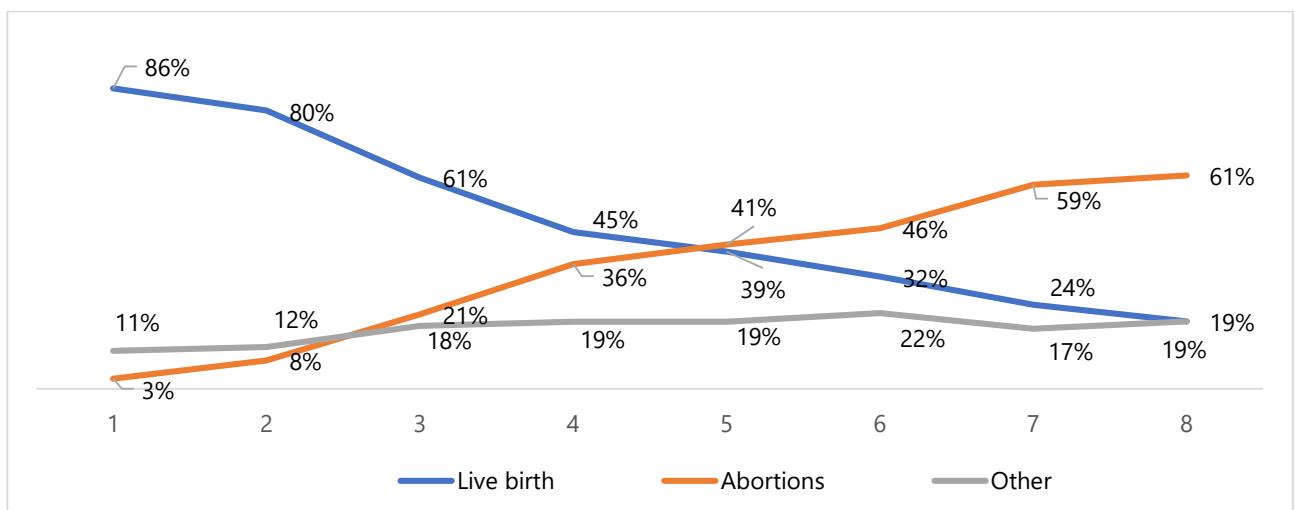


Figure 40. Pregnancy result by pregnancy order

Abortions by order of pregnancy show that after the 3rd pregnancy the number of abortion of female fetuses increases compared to male fetuses.

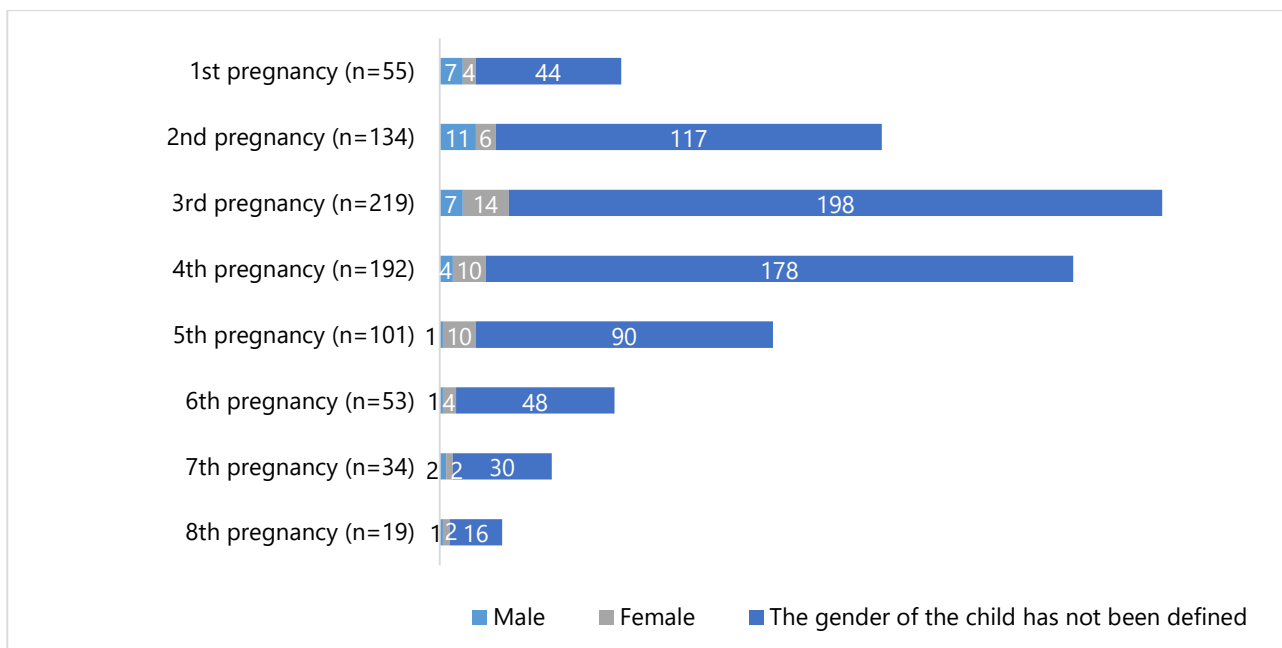


Figure 41. Abortion by sex of fetus and pregnancy order

The results of the survey show that there is no significant difference between having a son or a daughter during the first pregnancy, and the son preference prevails from the 5th pregnancy.

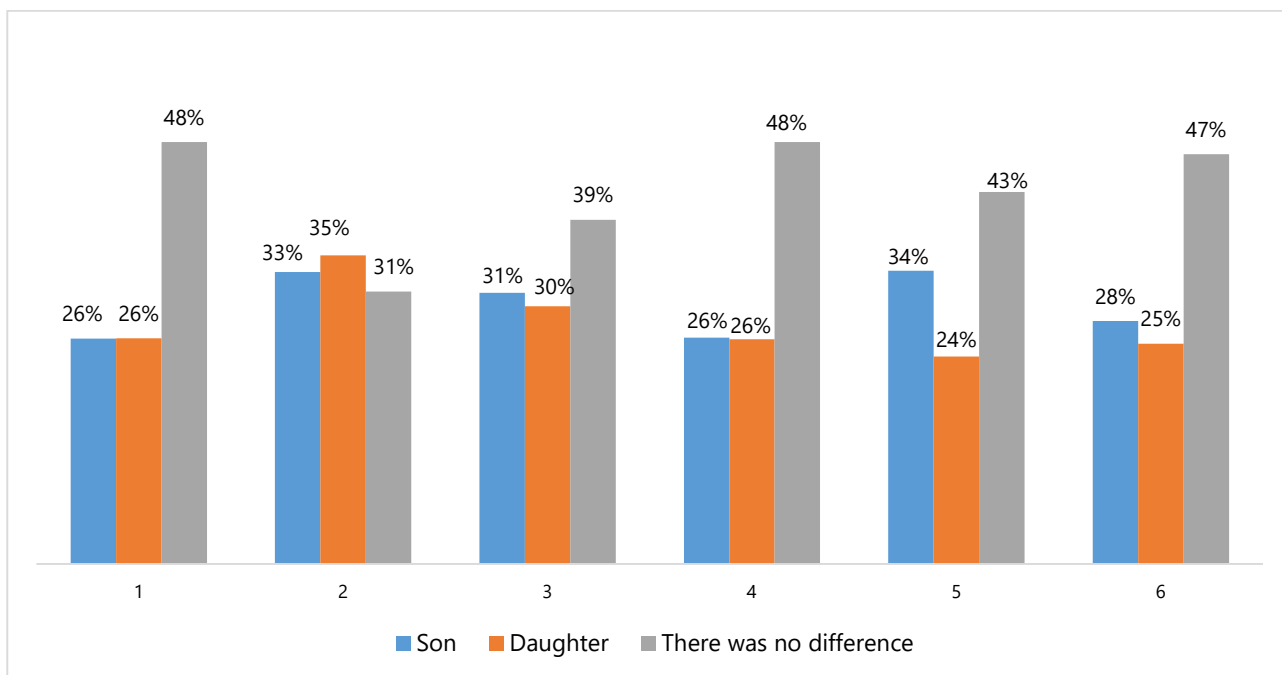


Figure 42. Sex preference of the child by pregnancy order

Comparing the results of this survey with those of the 2017 analysis, it can be noted that the percentage of respondents, who give preference to one or another sex of the child during pregnancy, has increased.

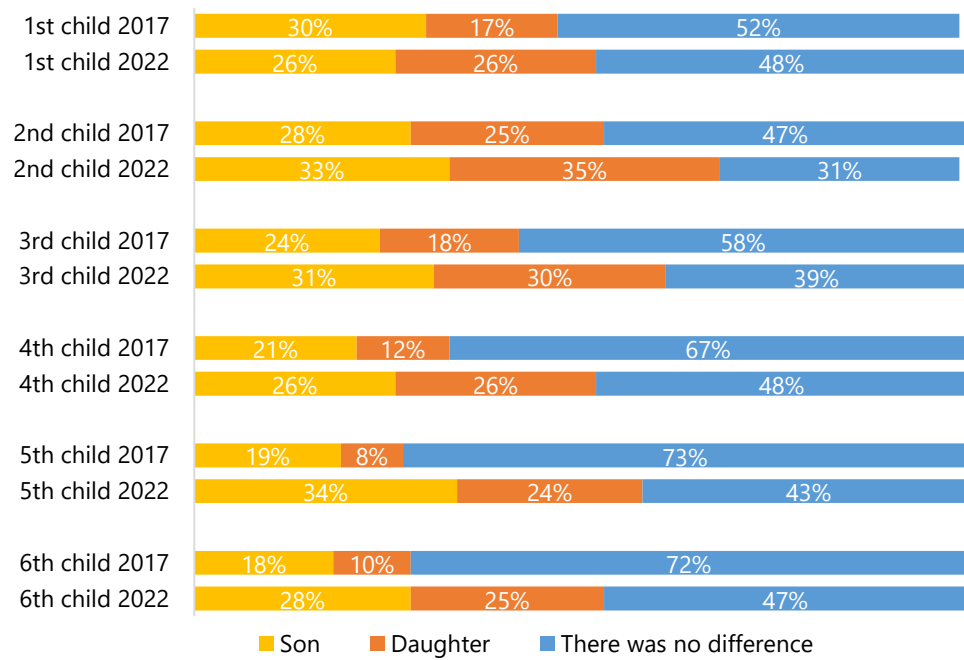


Figure 43. Sex preference in 2017 and 2022 by pregnancy order

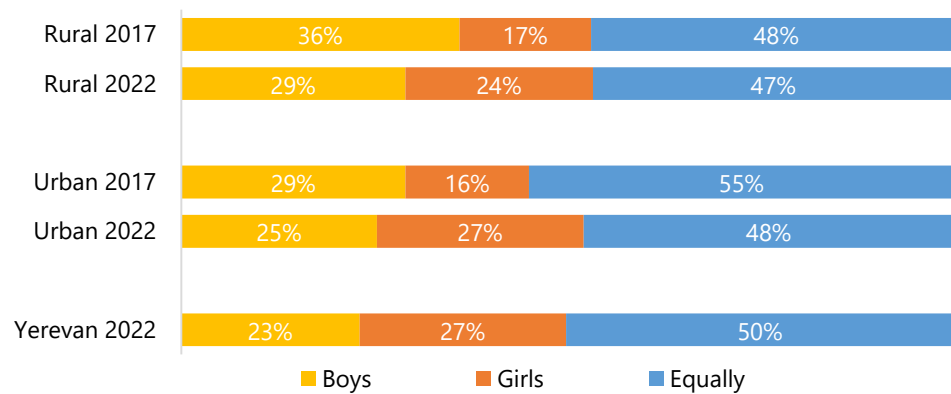


Figure 44. Sex preference for the first child by community type¹⁹

5.3.1. Ultrasound examination

Ultrasound examination is an important part of the pregnancy management process. According to the survey, 88% of women underwent an ultrasound examination during their first pregnancy, and the percentage of women who underwent an ultrasound examination decreases along with the increase in the number of pregnancies. 12% of the respondents did not mention that they had an ultrasound examination during the first pregnancy: 21% of them (48 people) had children in 1990-

¹⁹ 2017 data for Yerevan is not available.

1995, 24% (54 people) in 1996-2000, 22% (50 people) in 2001-2005, 15% (35 people) in 2006-2010, 11% (26 people) in 2011-2015, and 7% (16 people) in 2016-2022. After 2010, during the first pregnancy, 47 women did not undergo ultrasound examination. 16 of them had a secondary or lower education, 18 had a vocational education, and 13 - higher or postgraduate education. Moreover, 13 of them were from urban areas, 19 from rural areas, and 15 from Yerevan.

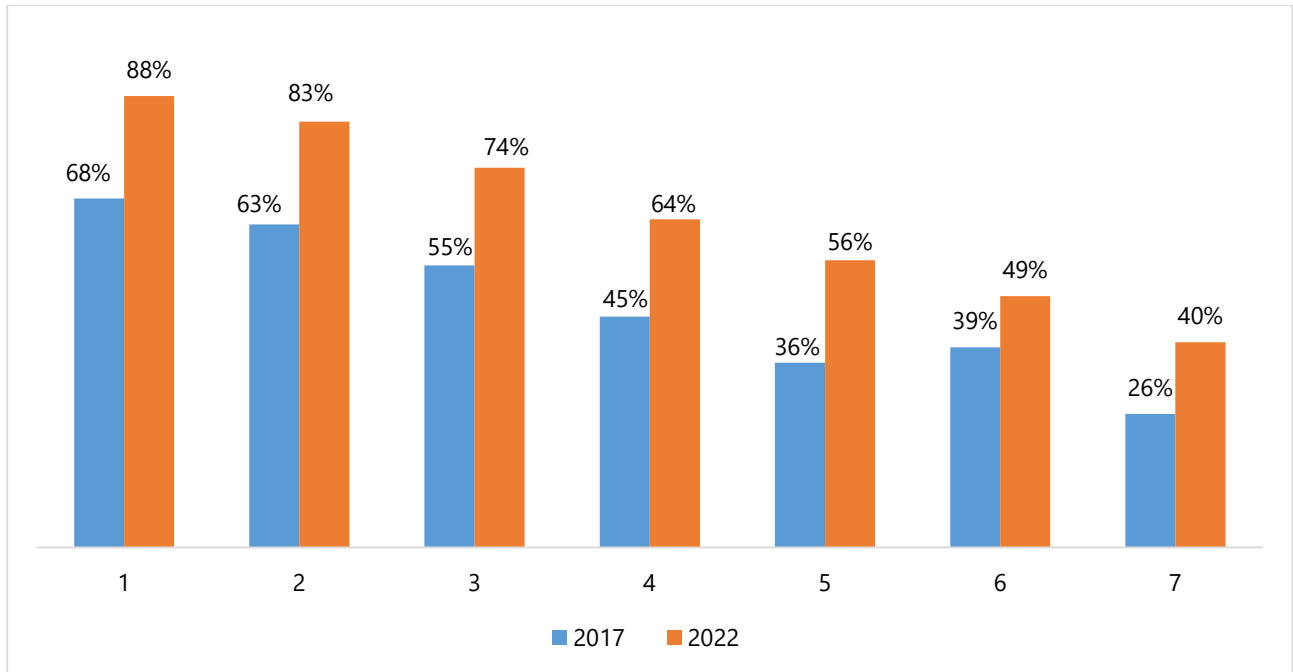


Figure 45. Proportion of women who underwent ultrasound examination by pregnancy order

90% of respondents, who had a live birth as a result of their first pregnancy, underwent an ultrasound examination. Along with the increase in the order of pregnancy with a live birth, the percentage of respondents who have undergone an ultrasound examination also increases. Before 2000, 60% of respondents, who had their first pregnancy, underwent an ultrasound examination. From 2000 to 2010, 90% of first live birth pregnancies reported having an ultrasound examination, and after 2010, 98% of first live birth pregnancies reported having an ultrasound examination.

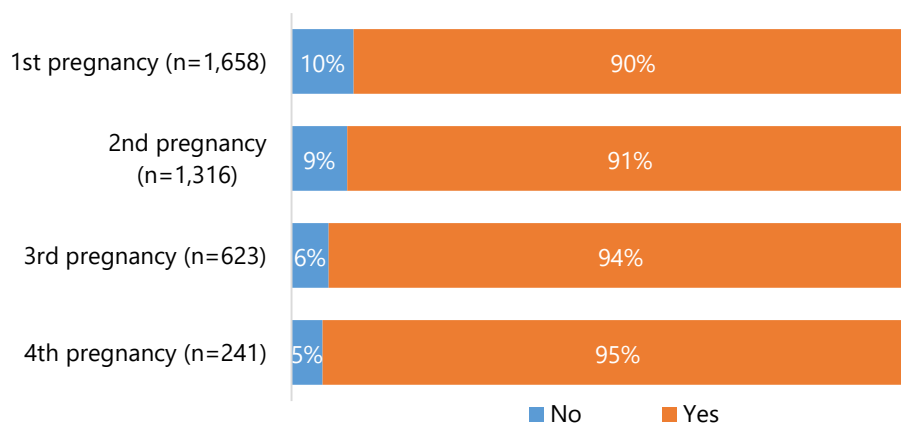


Figure 46. Proportion of women undergone and not undergone ultrasound examination by pregnancy resulting in live birth

The highest percentage of respondents, who did not undergo ultrasound examination, was among those with secondary and lower education. 18% of them indicated that they had not undergone an ultrasound examination, while 6% of those with higher or postgraduate education indicated that they had not undergone such an examination. It should also be noted that with the increase in income, the proportion of those who have undergone ultrasound examination also increases.

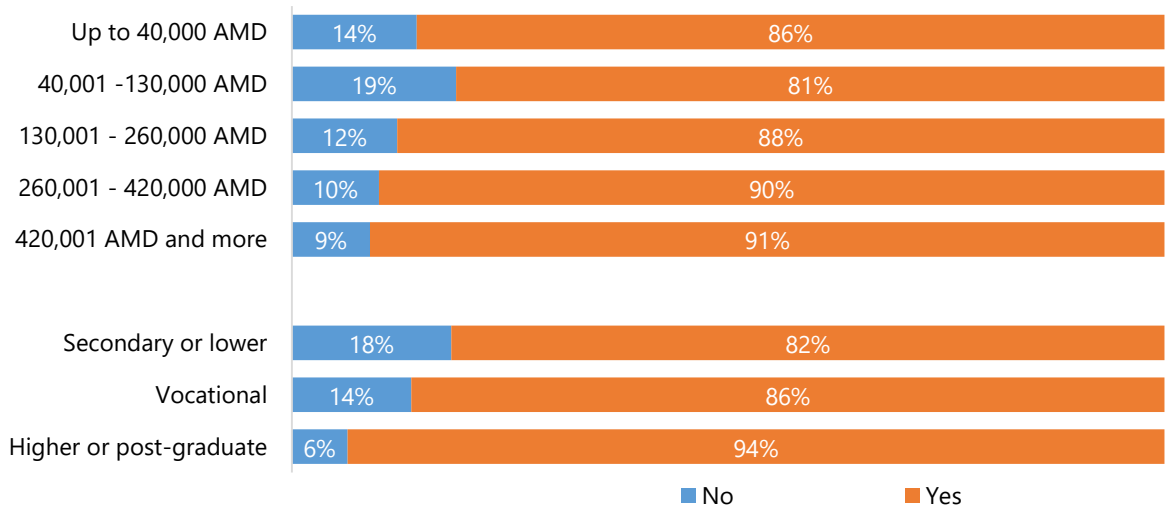


Figure 47. Proportion of women undergone and not undergone ultrasound examination, by income and education

The highest percentage of respondents who did not undergo an ultrasound examination during the first pregnancy is in Gegharkunik region (24%). The analysis by the type of settlement shows that the percentage of those who have not undergone ultrasound examination in rural and urban settlements is higher than in Yerevan.

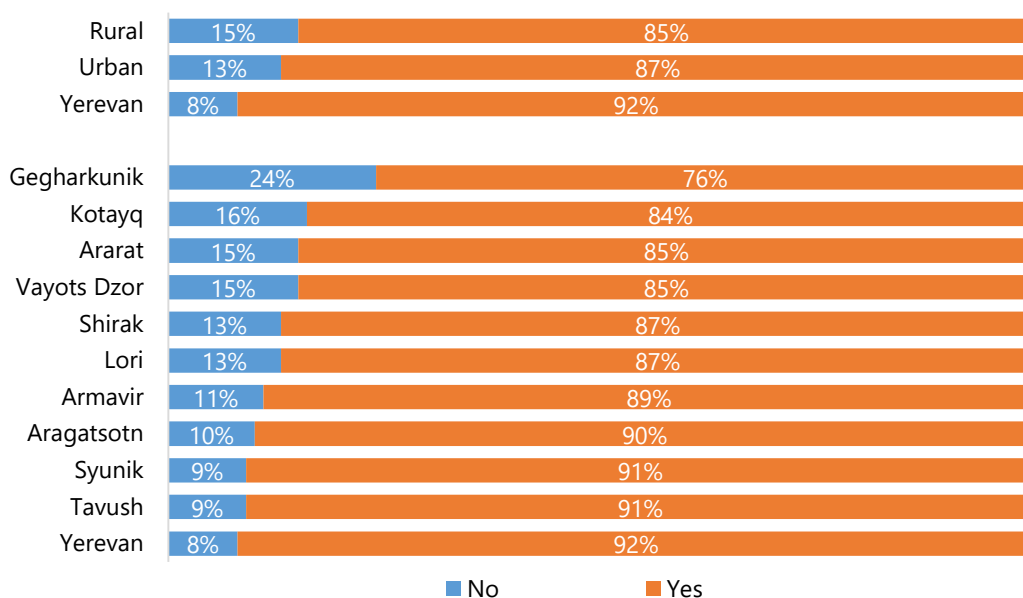


Figure 48. Proportion of women undergone and not undergone ultrasound examination, by type of settlement and region

During the first pregnancy the proportion of girls and boys is equal to the natural level. The imbalance increases starting from the second pregnancy. The biggest difference is **in the case of the 4th child**.

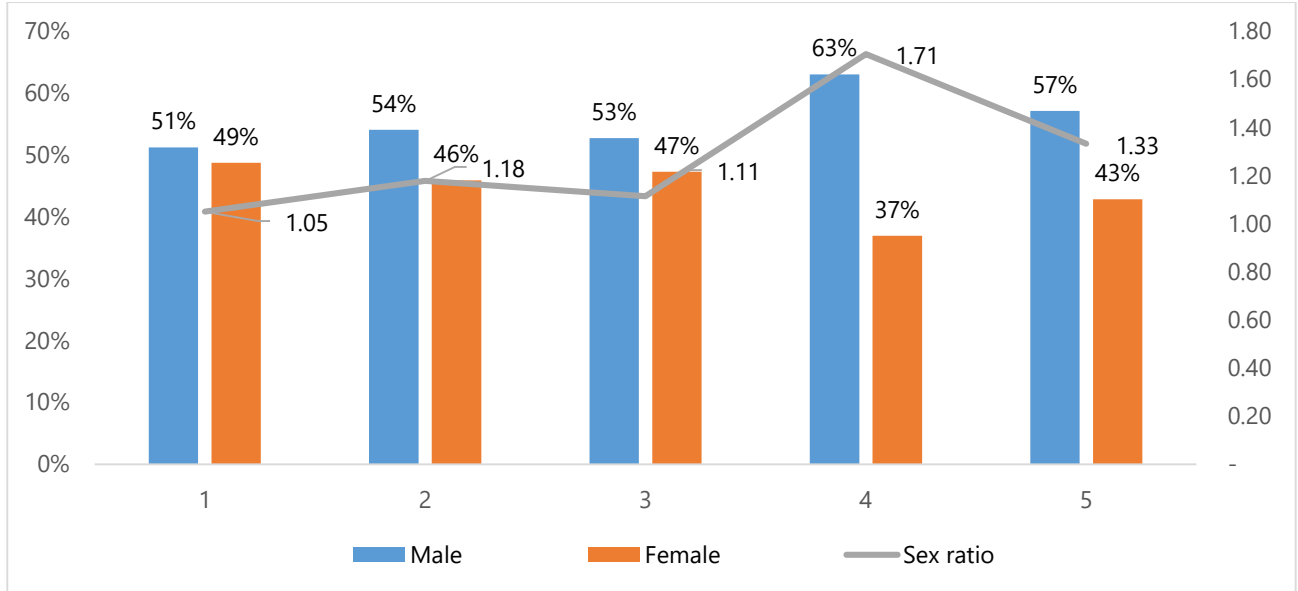


Figure 49. The proportion of girls and boys born according to the pregnancy order (2022)

In 2017, the highest imbalance was recorded in the case of the **3rd pregnancy**.

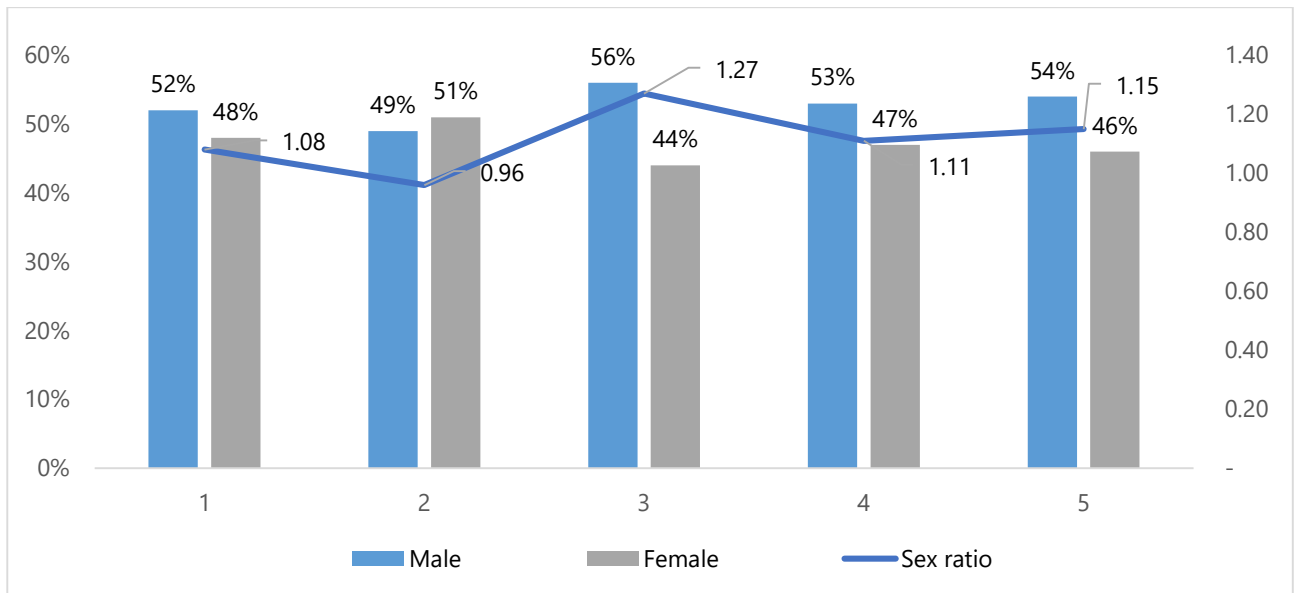


Figure 50. The proportion of girls and boys born according to the pregnancy order (2017)

5.4. Son and daughter preference

This part of the Report presents the analysis based on the responses of the women who have mentioned that their families gave preference to sons or daughters.

In the total sample, 18% of the respondents (350 respondents) gave preference to sons, and 11% (217 respondents) to daughters.

The percentage of respondents with higher and post-secondary education (75%) is higher compared to other groups who stated that they treated children of both sexes equally in their family.

The same picture is also among those with high incomes (74%).

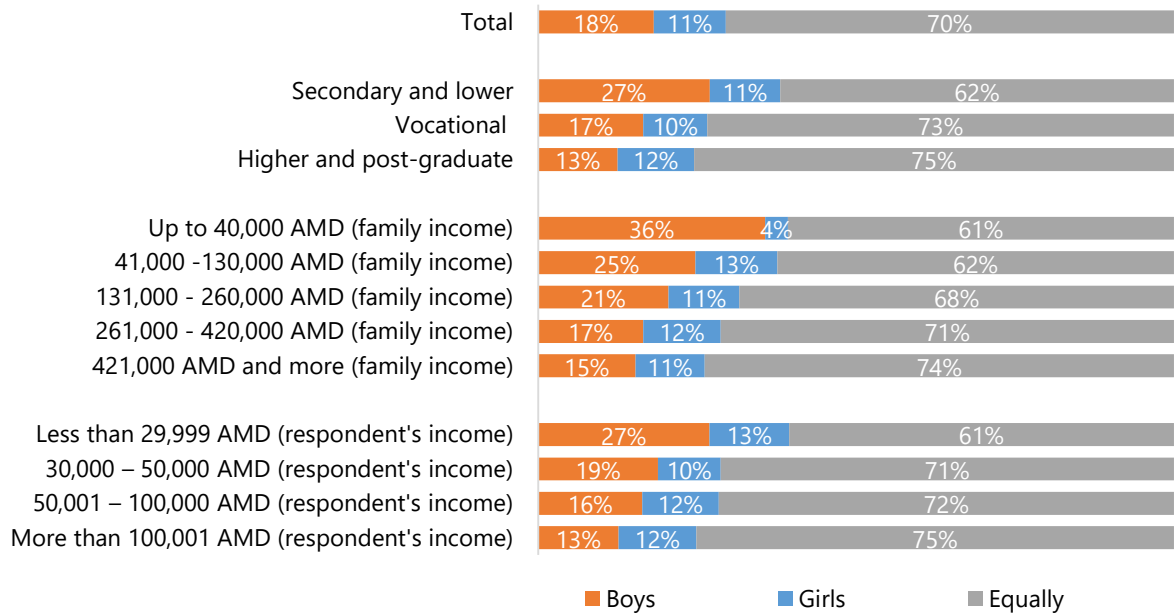


Figure 51. Family preference of child's sex by demographic groups

The results of the survey showed that in 61% of the families giving preference to sons the first child was male and in 56% of families giving preference to daughters the first child was female.

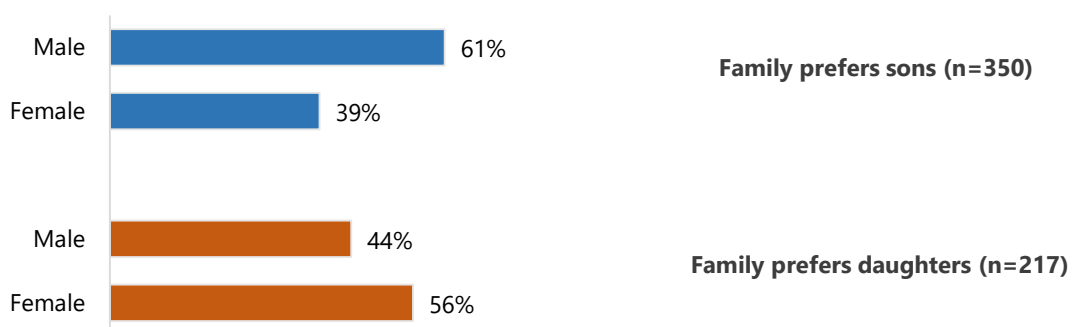


Figure 52. The sex of the first child in the family

42 respondents indicating that their family preferred sons, had an ultrasound to make sure the last child was a boy, and most of them (83%), considered it an effective way. 37 respondents who indicated about daughter preference in their families had an ultrasound examination, and 92% of them found it an effective way for determining the sex of the child.

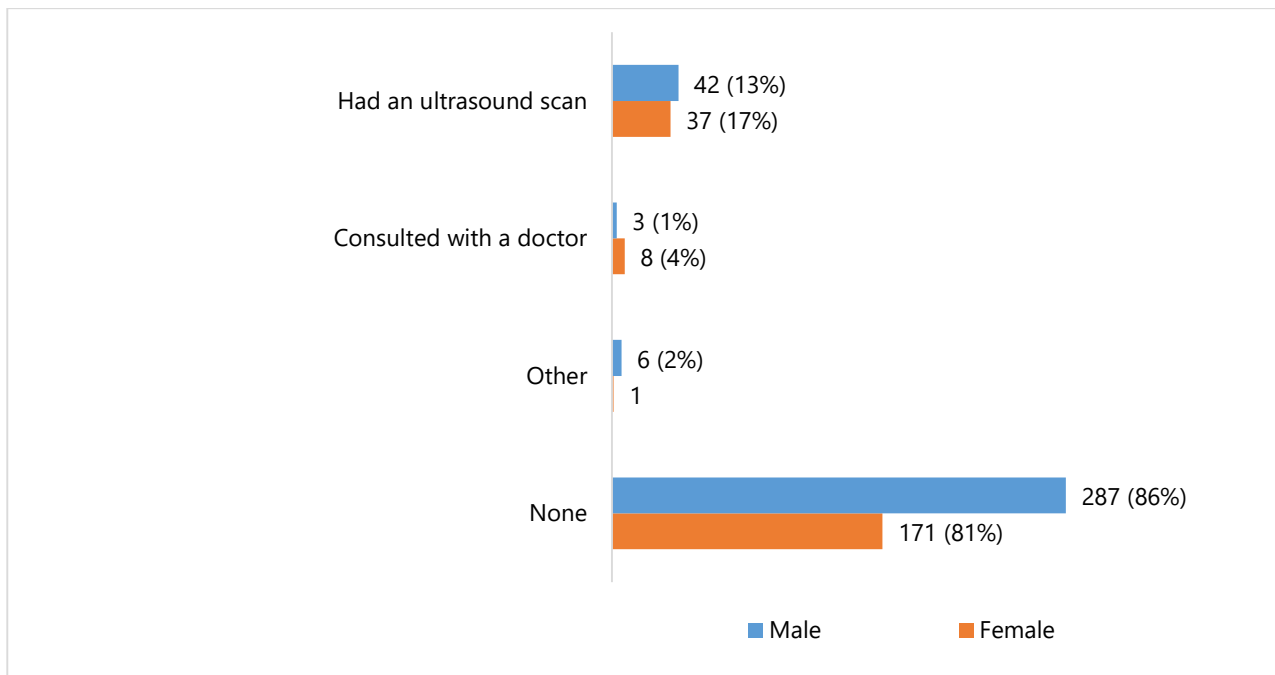


Figure 53. Methods of determining the sex of the next child

73% of families having more than one child and giving preference to sons stated that their last child was a boy, and 55% of families giving preference to daughters had a girl.

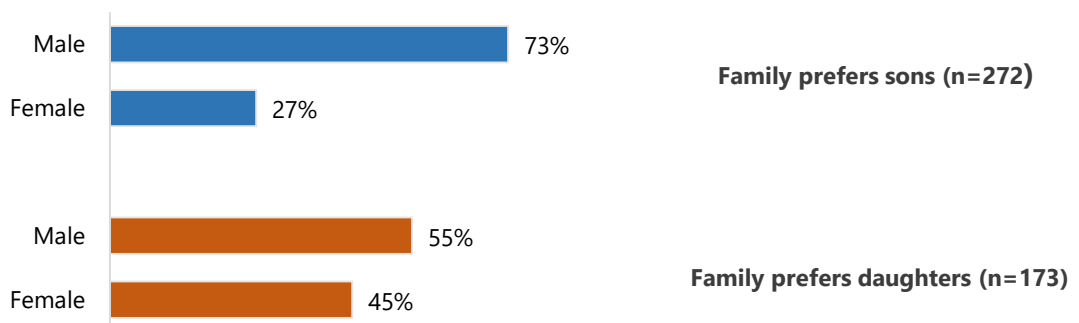


Figure 54. The sex of the last child in the family

The results of the survey show that there is no significant difference between responses to complaints about the sex of the last child regardless the preference.

According to respondents, they were not pressured for the last child being of the preferred sex. However, 1 respondent stated that she was pressured to have a girl, and 4 respondents stated that they were pressured to have a boy.

75% of the respondents, who preferred sons in the family, did not use any method to find out whether the child was male, and 72% of the respondents, who preferred daughters in the family, indicated that they did not use any method to find out whether their child was female.

This question was given to those who indicated having more than one child in the family (445 respondents).

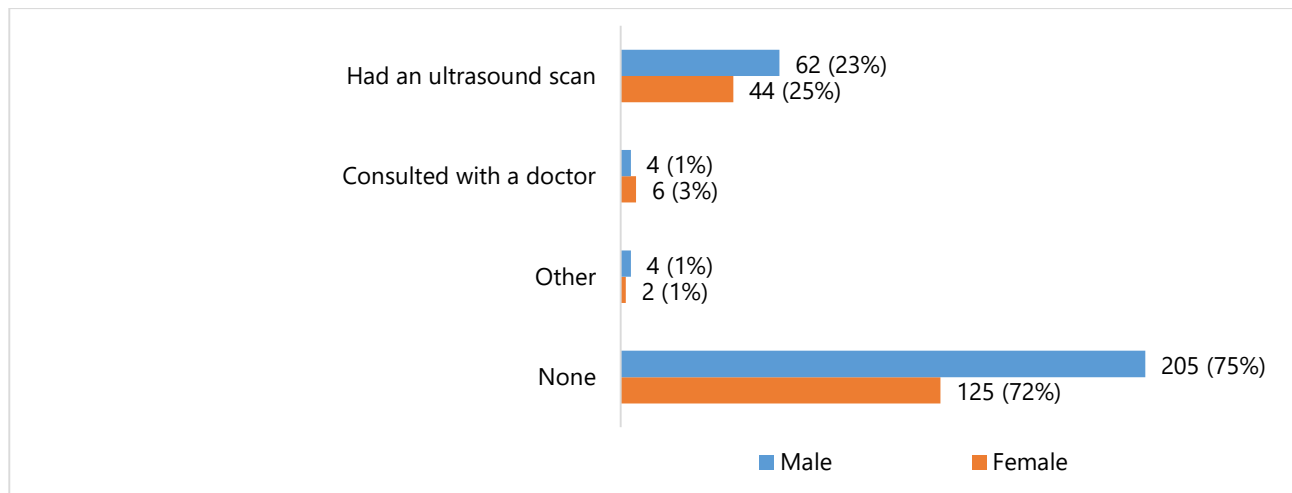


Figure 55. Methods of determining the last child's sex

5.5. Tests for determining the child's sex before birth and their results

96% of respondents stated that they heard about methods to be used for determining the sex of the child before the end of the pregnancy. The analysis by income groups shows that 11% of the respondents in the low income group are unaware of the methods of determining the sex of the child, while only 3% of the respondents in the high income group are unaware.

The analysis by education has similar results: the lower the educational level of the respondents, the higher the proportion of unawareness.

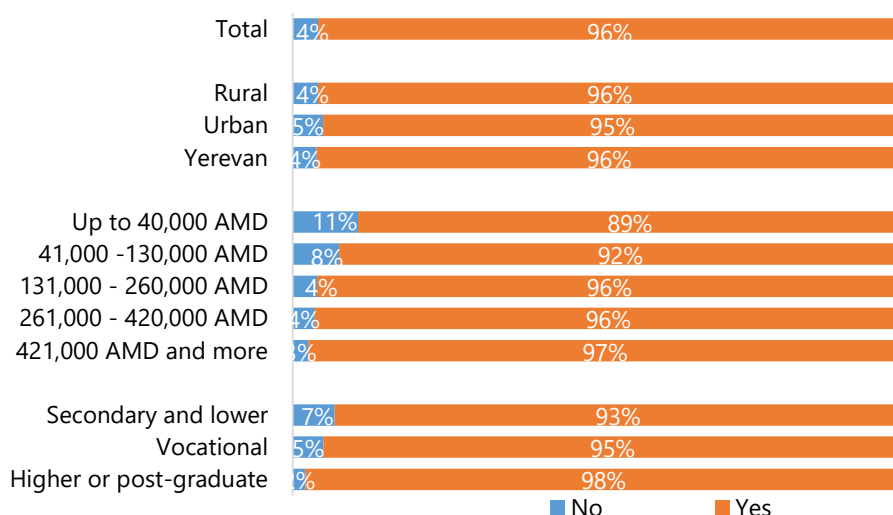


Figure 56. Awareness about the method for determining the child's sex

95% of respondents, who are aware of the methods of determining the child’s sex, were aware of the ultrasound, 29% mentioned the calculation as a method, and 19% - the blood test method. Dates of birth and the shape of the pregnant woman’s belly were also mentioned among methods of determining the sex of the child.

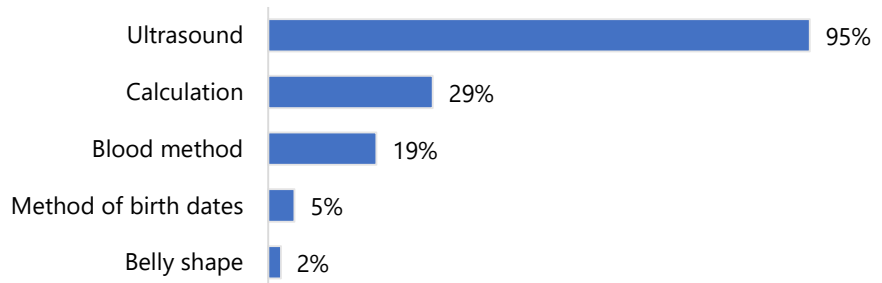


Figure 57. Methods of determining the child’s sex

56% of respondents used ultrasound to find out the sex of the child, 41% did not use any method, and 2% stated that they used the “traditional” and other methods which include calculation, Chinese charts, date of birth of parents, pregnant belly shape, calendar method etc.

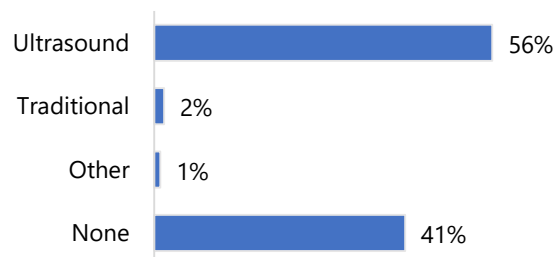


Figure 58. Using the method of determining the child’s sex

53% of respondents learned about ultrasound examination as a method of determining the sex of a child from a medical center, 18% from friends and relatives. Answers such as “parents”, “publications”, “mass media” and others were also given.

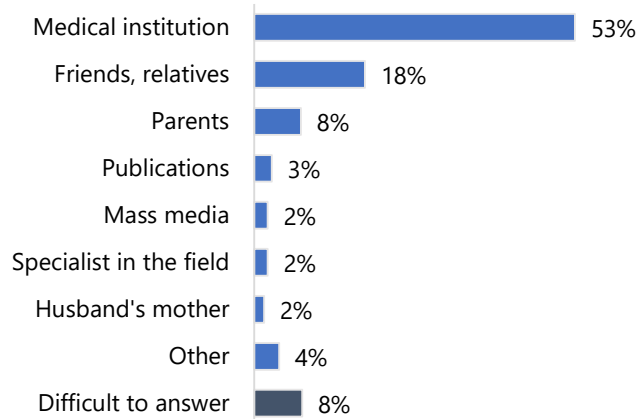


Figure 59. Source of information about the ultrasound method

41% of respondents, who used ultrasound examination as a method of determining the sex of the child, stated that they have used this method for the last 5 years.

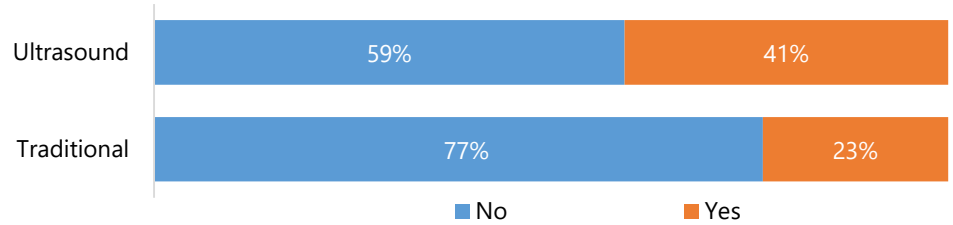


Figure 60. Use of the method of determining child's sex in the last 5 years among the respondents

40% of respondents indicated that they used the method of finding out the sex of the child in the maternity hospital, 27% in the outpatient clinic/polyclinic, 25% in the medical center where ultrasound was made.

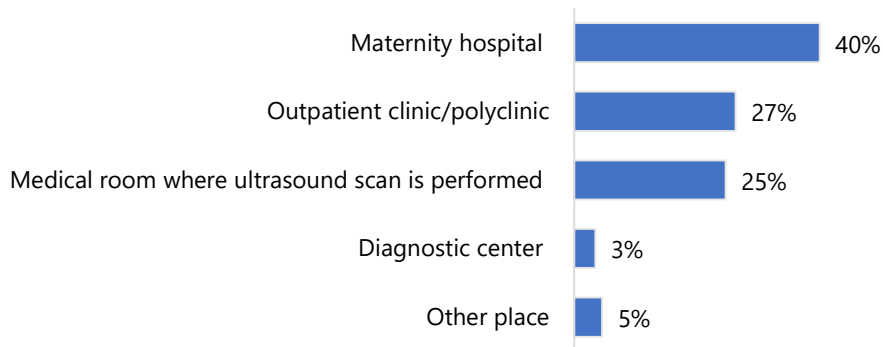


Figure 61. Location of the method of determining the child's sex

82% of respondents stated that they decided to undergo the examination to find out the sex of the child, and in the case of 7%, the husband/partner suggested to undergo the examination.

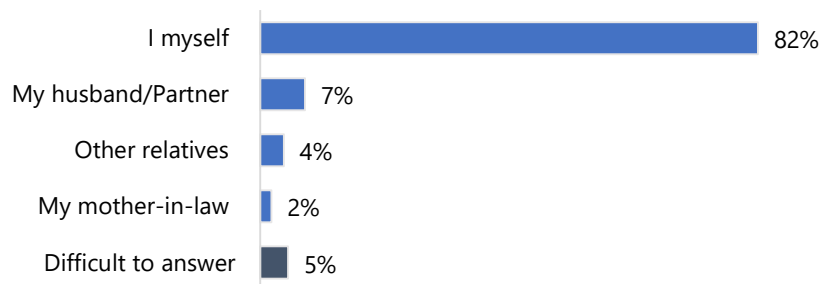


Figure 62. Proposer of an examination to determine child's sex

According to the obtained data, the available methods of determining the sex of the child are most often used in the 12th week of pregnancy.

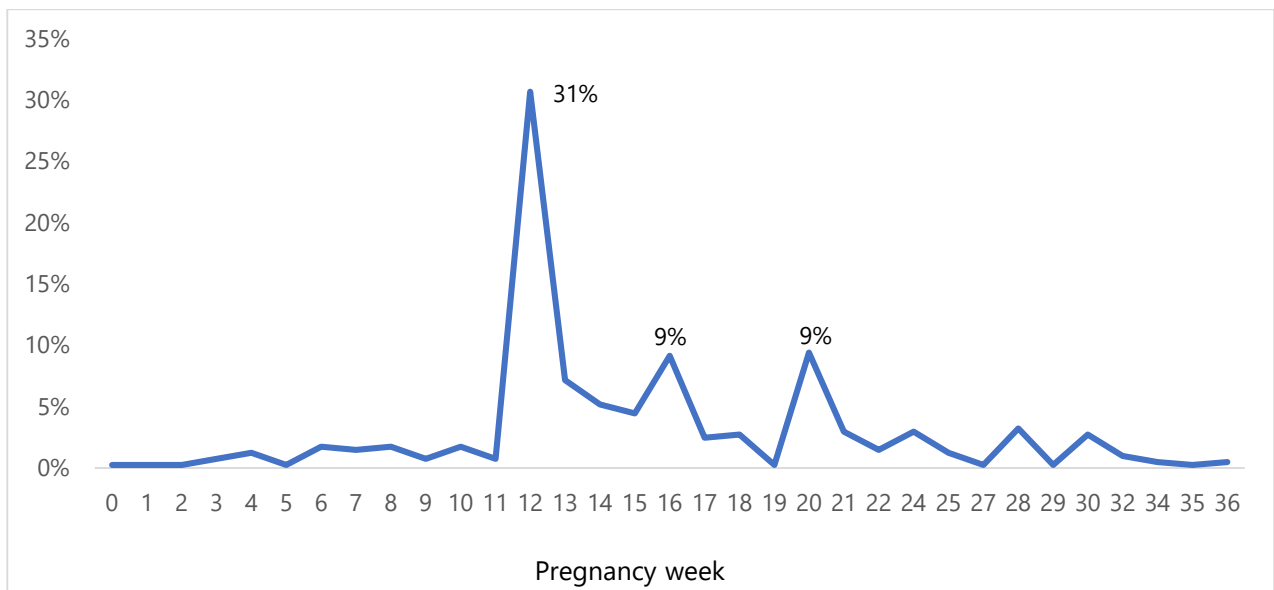


Figure 63. Distribution of use of the method to find out child's sex by pregnancy week

Respondents found it difficult to answer what would happen if they had a child of the unwanted sex.

34% of respondents believe that abortion is legal in Armenia and the Figure below shows until which week they think it to be legal.

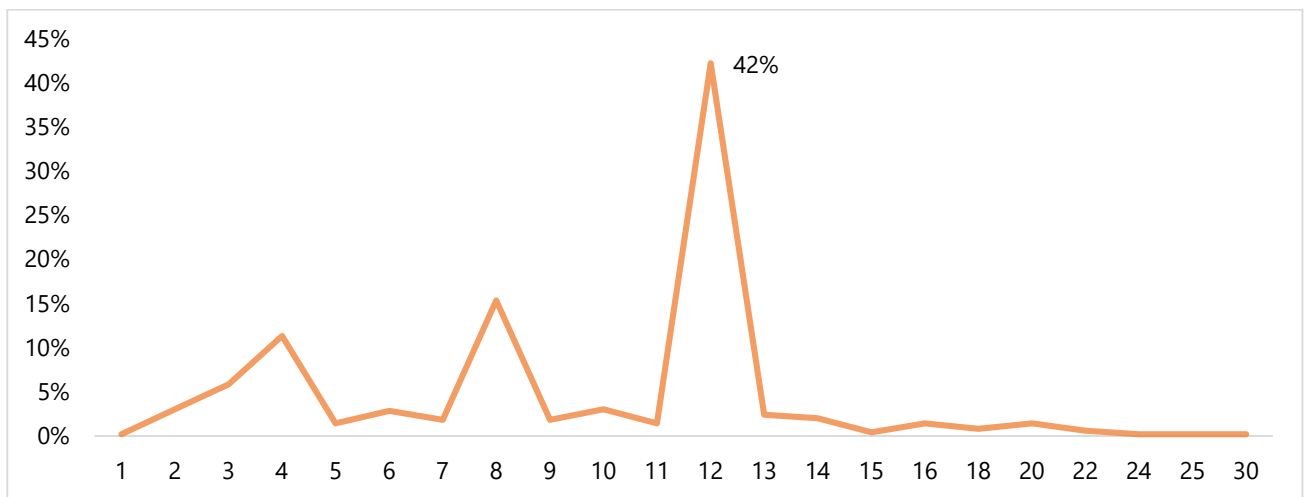


Figure 64. Abortion in the Republic of Armenia, the week considered legal

Thus, it can be concluded that the majority of respondents are aware of the methods of determining the sex of the child and almost half of them use those methods to find out the child's sex.

6. GENDER-BIASED SEX SELECTION PREVALENCE AND CAUSES IN ARMENIA: PRESENTATION OF QUALITATIVE SURVEY RESULTS

6.1. Presenting the opinion of specialists' group

All the specialists involved in the FGDs believe that son preference in Armenia has a long history, however, recent years saw changes in that regard. These changes are not expressed as a transition to daughter preference, but rather they now want the child to be healthy first, and secondly – to determine the sex. Nonetheless, according to specialists, there are still families who think it's important the first child to be a boy, which is explained by the following reasons:

- It is the boy who continues the surname;
- Armenia faces the threat of a long-term war, and boys serve in the army and guard the borders;
- The boy supports and helps in the household, especially with agricultural works in regions;
- The boy swiftly reaches out to his parents whenever help is needed.

Regarding the sex of the second child, according to specialists, people prefer the child of an opposite sex. However, this is directly related to the number of planned children. [*“It depends on how many children are planned. If many children are planned, then the second one doesn't matter either, but if the possibilities are limited, then targeted efforts are made starting from the second child,” specialist, Yerevan.*]

According to specialists, people turn to medical institutions mainly to find out the sex of the child. In particular, ultrasound examination and blood analysis are used. The latter is still not widespread, because the method is not talked about, thus those who have already been informed in some way, use it. During the discussion with specialists in one of the regions, it was noted that there were still families in the region where grandmothers predict the sex of the child based on the pregnant woman's walking style, the form of the belly, the woman's “beautification” or “ugliness” during pregnancy, as well as through certain calculations.

After finding out the sex of the fetus, people's reactions vary. [*“Looking at who has what at home. If he/she has 3 girls, it is clear that they are happy for a boy. If there are 2 boys and a girl, they are happy again. But if they are of the same sex and mostly girls, girls... the situation is very bad,” specialist, Yerevan.*]

One of the doctors also mentioned that in practice they encountered cases when the course of pregnancy was difficult and the child's life was threatened. When the fetus was a male, the husband showed willingness to do everything possible to save the child, but the same willingness was not observed in the case of a female fetus.

According to specialists, abortion can be considered “justified” in the following cases:

- The life and health of the mother is in danger;
- The child's life is in danger;
- The child may or will definitely be born with limited abilities, health issues incompatible with life;
- If the family does not have the opportunity to provide the child with a quality life: finances, social conditions;
- It is an unwanted pregnancy as a result of sexual abuse, or the couple has decided to divorce during the pregnancy.

According to specialists, the following abortion methods are used:

- Surgical intervention at the hospital;
- Medical intervention at home or at the hospital under the supervision of a doctor.

Other methods that were believed to be practiced in the past, included foot-walking on the woman's back, a woman jumping from a high place, intervention by means of an instrument, for example, a knitting needle.

It is important to note that, according to specialists, there is a noticeable tendency to turn to physicians in this process. Women decide to have an abortion without surgical intervention for three main reasons:

- the physician does not permit abortion because of the pregnancy term;
- financial problems;
- seeking to keep the pregnancy a secret.

In any case, specialists believe that a woman should have sufficient knowledge about abortion, and if absolutely necessary, even be able to perform it herself under the supervision of a physician. In order to raise the awareness of women, according to specialists, various state and non-state institutions organize training courses, distribute leaflets; however, they emphasize the fact that these courses should be organized not only for women but also husbands, husband's and wife's mothers. Another issue is that men actually do not participate in such courses, and a special strategy for their engagement should be developed.

As mentioned, that there is a direct and indirect psychological pressure on family planning (including planning the sex of children). In some cases, the woman herself is already convinced that she must have a boy child, which is an example of indirect pressure exerted mainly by the husband and his parents. There are many cases when the pregnant woman goes to her prenatal care appointment with her husband and his mother, who stay throughout the entire process. According

to doctors, this creates an uncomfortable situation, and in many cases, doctors have to ask the attendants to leave the examination room so that they can understand the situation and do their work.

Specialists note that based on their work duties and guided by human values, they hold individual conversations with expecting women in order to understand the situation and try to stop them from terminating the pregnancy. In the meanwhile, they believe that the problem should be prevented at a much earlier stages, before the pregnancy, rather than through health measures. The role of education, laws and mass media is highlighted here. In particular, experts recommend the following steps as preventive measures to eliminate sex-selective abortions in Armenia:

- carry out premarital counseling, including sex education, family planning, parenting;
- raise the issue of depopulation through mass media and various state programs to encourage having children, regardless of sex;
- promote larger families with the example of public figures;
- use social networks as a platform to provide information;
- organize training courses with the participation of doctors and psychologists for different age groups.

6.2. Presenting the opinion of married women and men

All the participants believe that boys are preferred more than girls in Armenia. Starting with the second child, preference begins to change: if the first child is a boy, then families want to have a girl, and vice versa. Concerns start to become apparent from the 3rd child onwards, especially if the first two children are of the same sex, and especially if they are both girls. According to the participants, the reason for boy preference is as follows:

- Parents live with the boy's family;
- The boy is the successor of the nation, the family name;
- Armenia faces the threat of a long lasting war, and boys serve in the army and guard the borders.

It is important to note that, according to the participants, the change in the role of girls is noticeable, particularly with regard to working, earning money, and taking care of parents.

Regarding the question of how many children should be in an Armenian family, the participants agree that “the more, the better.” Some even refer to historical facts that Armenian families used to be large, with 8 or more children, and in that case having many children was explained by a

rational choice. In other words, people thought that they would lose lives during war or to various diseases.

Currently, the number of children in the family has decreased, according to the participants, primarily due to social and financial conditions. However, unlike Yerevan, the number of children in regions is higher, because children help with agricultural work, the needs of children are moderate and raising them in the villages is relatively easier than in Yerevan.

The participants also mention that there is an interesting trend of having the third child with a big age difference from older siblings. The latter is explained by “selfish” intentions: as children grow up, the parents are left alone, and to make life interesting, they decide to have a third child.

At the same time, there are cases when families are pressured to have or not to have a child. [*“I have a friend who has health problems related to the heart, she has 2 daughters and they forced her to have a boy. At the cost of her life, the pregnancy lasted for 3-4 months, and was eventually terminated as the doctors insisted. The life of either the child or the woman was at stake here. They were forced, and it was forced by people who had a medical education, medical workers: the mother-in-law was a doctor, her husband was a dentist. That girl was also a doctor-dentist, but they forced her, as a traditional Armenian girl, she had to accept. However, after receiving treatment in Yerevan for a long time, it was no longer possible. Currently, that girl is receiving treatments. It all happened before the war.”*]

It’s worthwhile mentioning that participants heard about some cases, when families decided to have 3 or more children because of the state support, with the intention to use the provided money to renovate the house or solve other household issues.

This problem is directly linked to the age, educational level and the type of settlements of the family. Especially in regions, senior family members, even relatives, can have an influence on whether or not to have children.

According to the participants, most popular methods for determining the sex of the child are the following:

- Ultrasound examination;
- Blood test;
- Special calculations, Chinese calendar.

Abortion is considered “justified” in the following cases:

- Undesired sex of the fetus;
- Family's social and financial conditions;
- Health problems of the fetus (genetic diseases);
- Health problems of the mother threatening her life;
- Unwanted pregnancy as a result of sexual abuse.

Among other forms of abortion, the participants indicate the following:

- Medication intake;
- Surgical intervention;
- Drinking milk with vodka, lifting heavy objects as old/traditional methods.

All the participants agree that the termination of pregnancy by taking medication at home is dangerous and should be consulted with a doctor. [*"Drank medicine, went to the hospital where they had to remove the fetus, took a double dose, and the 25-year-old girl died."*]

Some of the female participants shared their experience of abortion (non sex-selective abortions) with evident remorse. Psychological support is very important, because right after the termination of pregnancy and later throughout life, women need support which they cannot get.

In general, participants believe that both male and female children should be in the family, but considering current geopolitical situation in Armenia, it is important to have male children, because in addition to the risk of a war, men usually leave to work abroad; in fact, there are settlements in Armenia where either no or few men live.

To reduce the number of sex-selective abortions in Armenia, the participants suggest the following:

- Strengthen the role of women and girls in the society: elimination of stereotypes;
- State should provide sufficient support to employed and unemployed mothers;
- State supervision over hospitals' activities with regard to abortions performed after 12 weeks of pregnancy;
- Introduce special lessons in the school curriculum on family planning, parenting and other similar topics.

7. CONCLUSIONS

- The research shows that GBSS is widespread in the regions, particularly in rural areas. While the respondents in Yerevan are neutral about giving preference to a child of a particular sex, the tendency to give preference to a child of a particular sex, especially a boy, prevails in the regions.
- Giving preference to a child of one or the other sex is mainly reviewed in the context of solving socio-economic, cultural, and security problems and is expressed by the manifestation of gender stereotypes. Thus, boys continue to be considered as guarantors of security, and continuity of the family, and girls as helpers and caretakers of the family and parents.
- Continuous inter-sectoral cooperation, promotion of engagement by various state and non-state actors with vested interest in solving the problem had a positive impact on reducing sex imbalance. In particular, coordinated work of the state authorities, local and international organizations within the framework of 2020-2023 Action Plan on Prevention of GBSS in Armenia, which includes policy development, capacity building, and public awareness campaigns, plays a significant role.
- Mechanisms aimed at preventing GBSS are introduced at national level in Armenia, with the consolidated efforts of the state, civil society, and international organizations. Nevertheless, there is a need to promote engagement of regional and local authorities, public and private organizations operating at the local level, in implementation of actions aimed at the prevention of GBSS.
- According to the research findings, the respondents' level of education affects family planning and child preference. In particular, in the families of respondents with higher education, the attitude towards a child of both sexes is significantly more similar than in the case of respondents with a lower educational level. The analysis reveals that the level of education is also directly linked to the decision on the number of children. Thus, women with a low level of education are more inclined to think that they do not have an opportunity to decide on how many daughters and sons to have. The percentage of those with low education was also high among respondents who did not undergo an ultrasound examination during pregnancy.
- The healthcare system, particularly the primary healthcare workers and their integrity can greatly contribute to the prevention of GBSS, the change in attitudes of women and their family members, and the strengthening and implementation of legal regulations on GBSS, in particular with regard to the prevention of sex-selective abortions and elimination of cases of cover-up of the latter.

8. RECOMMENDATIONS

- Develop mechanisms to ensure participatory monitoring and evaluation of the National Action Plan, deviations in the sex ratio and the factors affecting them, with active involvement of interested structures at the national and local levels.
- Promote the involvement of regional and community authorities in the localization, implementation, monitoring and evaluation of the National Action Plan.
- Contribute to the development of policies promoting the economic, social and political engagement of women, which are aimed at strengthening and valuing the role of women in the society.
- Implement large-scale and multi-format campaigns and public awareness initiatives aimed at valuing girl children, strengthening the role of women, transforming social norms, and eliminating stereotypes and harmful practices resulting therefrom.
- Ensure the involvement of spouses and older women and men in training and campaigns on gender-biased sex selection to change their attitude.
- Survey married men and women of the same age group, who will have at least one pregnancy, to obtain comprehensive information and understand the behavior of all parties.
- Control the work of hospitals, in particular, to study the cases of fetal removal after 12 weeks in order to understand the reasons therefor.
- Provide appropriate premarital consultation and capacity-building opportunities, including sex education, family planning, and parenting.
- Raise the problem of depopulation by promoting births through mass media and various state programs, sharing the best examples of large families, and involving well-known public figures.
- Develop the capacity of health workers to fight against gender-biased sex selection, providing knowledge about demographic problems caused by gender-biased sex selection, pre- and post-abortion counseling.
- Increase the gender sensitivity of health workers by providing information about harmful practices resulting from gender stereotypes.
- Raise the awareness of decision-makers, especially at the regional and community levels, regarding gender-biased sex selection, and increase their active participation and initiative in activities against gender-biased sex selection.

ANNEX 1. TELEPHONE INTERVIEW QUESTIONNAIRE

Interviewer ID Quality control number

Date ____/06/2022 Interview start time / ____:____/

Prevalence of and reasons for sex-selective abortions in Armenia

Hello, my name is _____ and I work for Breavis, a public opinion research company.

We are conducting a survey, which we believe will be instrumental in ascertaining prevalence and causes of sex-selective abortions in Armenia. We request your consent to take part in this important study. We guarantee to maintain strict confidentiality regarding the information provided by you.

And now, please answer the questions listed below.

Screening questions

S1. Have you ever been pregnant?

1. Yes
2. No (*Out of target, end the interview*)

S2. What is your marital status?

1. Currently married and lives with her husband
2. Currently married but lives separately from her husband
3. Living with a man, not married
4. Divorced
5. Widowed
6. Has never been married but has a child (children)
7. Has never been married and has no child
96. Other (specify) [____]

Part 1. Socio-demographic characteristics

A1. Where do you live (region)?

1. Yerevan
2. Aragatsotn
3. Ararat
4. Armavir
5. Gegharkunik
6. Kotayk
7. Lori
8. Shirak
9. Syunik
10. Tavush
11. Vayots Dzor

A2. Settlement type:

1. Urban
2. Rural
3. Yerevan district

A3. Settlement name (specify): [_____]

A4. How old were you on your last birthday? [_____]

A5. What is the highest level of education you attained?

1. Has no elementary education
2. Elementary education (grades 1-4)
3. Basic education
4. Senior high school
5. Pre-professional (vocational- technical) education
6. Post-secondary vocational non-tertiary education (non-degree technical and liberal arts colleges)
7. Tertiary education
8. Post-tertiary education

A6. How many years did it take you to achieve that level? [_____]

A7. What is your religion?

1. Armenian Apostolic
2. Armenian Catholic
3. Armenian Evangelical
4. Sectarian
5. Shar-fardi (Yezidi)
96. Other
97. No religion

A8. What kind of family do you live in?

1. Nuclear; husband/wife, child(ren)
2. With parents
3. Extended family (with parents and other relatives) (mention the number of nuclear families) [_____]

A9. How many members is your family composed of? [_____] 98. Refuse to answer

A10. What is the main source of income in your family?

1. Agriculture
2. Commerce (wholesale, other)
3. Our own business
4. Government employee
5. Private sector employee with a monthly salary
6. Private sector employee on a daily basis
7. Money remittances from abroad
8. Rental income
9. Pension/allowance
96. Other (specify) [_____]
98. Refuse to answer

A11. Who is the primary breadwinner in your family?

1. I myself
2. My husband/partner
3. My parents
4. Parents of my husband/partner
96. Other (specify) [_____]

A12. (If S2<6) What is the highest level of education your husband/partner achieved?

1. Has no elementary education
2. Elementary education (grades 1-4)
3. Basic education
4. Senior high school
5. Pre-professional (vocational- technical) education
6. Post-secondary vocational non-tertiary education (non-degree technical and liberal arts colleges)
7. Tertiary education
8. Post-tertiary education

A13. (If S2<6) How many years did it take him to achieve that level? [_____]

A14. (If S2<6) What is your husband/partner's main occupation?

1. Agriculture
2. Commerce (wholesale, other)
3. His own business
4. Government employee
5. Private sector employee with a monthly salary
6. Private sector employee on a daily basis
7. Money remittances from abroad
8. Unemployed
9. Pensioner/allowance recipient
96. Other (specify) [_____]
98. Refuse to answer

A15. What is your main occupation?

1. Agriculture
2. Commerce (wholesale, other)
3. His own business
4. Government employee
5. Private sector employee with a monthly salary
6. Private sector employee on a daily basis
7. Money remittances from abroad
8. Unemployed
9. Pensioner/allowance recipient
10. Homemaker
96. Other (specify) [_____]
98. Refuse to answer

A16. What is your average monthly income?

1. 0 AMD
2. Less than 29,999 AMD
3. 30,001 – 50,000 AMD
4. 50,001 – 100,000 AMD
5. More than 100,001 AMD
98. Refuse to answer
99. Difficult to answer

A17. (If A16>1) Who is the primary decision-maker regarding how and what your personal income/ money should be spent on?

1. I myself
2. My husband/partner
3. My husband/partner and I
4. My father-in-law
5. My mother-in-law
96. Other (specify) [_____]
98. Refuse to answer

A18. How much money did your family spend last month on the average (in AMD)?

1. Food [_____]
2. Transportation [_____]
3. Education [_____]
4. Clothes, household goods [_____]
5. Utilities [_____]
6. Entertainment [_____]
7. Loan, debt [_____]
8. Other [_____]
98. Refuse to answer
99. Difficult to answer

A19. What is your family's average monthly income?

96. Average monthly income (in AMD) [_____]
97. 0 AMD
98. Refuse to answer
99. Difficult to answer

Part 2. Availability of facilities and amenities

B1. Please answer whether your household has the following facilities? 1. Yes 2. No

N	Variable	Answer
1.	Agricultural land	1 2
2.	Car	1 2
3.	Agricultural equipment	1 2
4.	Landline phone	1 2
5.	Cellular phone	1 2
6.	Internet access (via computer, cellular phone)	1 2
7.	Land	1 2
8.	Trade/services facilities	1 2
9.	Industrial area	1 2
10.	Farm animal(s) / poultry	1 2
96.	Other (specify) [_____]	1 2

How often...

1. Almost daily
2. Sometimes (3-4 times a week)
3. Rarely (once or twice a week)
4. Never
99. Difficult to answer

N	Variable	Answer
B2.	...do you listen to the radio?	1 2 3 4 99
B3.	...do you watch TV?	1 2 3 4 99
B4.	...do you read newspapers?	1 2 3 4 99
B5.	...do you read information/news on the internet?	1 2 3 4 99

Part 3. Pregnancy history, male child preference

C1. (If S2<6) How old were you when you got married (when you started living together with your husband/partner)? [_____]

C2. How old were you when you got pregnant for the first time? [_____]

C3. (If S2<6) When you were getting married, how many children and of which gender did you want to have?

1. Desired number of daughters [_____]
2. Desired number of sons [_____]

99. Difficult to answer

C4. Did you want to have a girl or a boy during your first pregnancy?

1. Girl

2. Boy

95. It made no difference

C5. (If S2<6) Did your husband/partner want to have a girl or a boy during your first pregnancy?

1. Girl

2. Boy

95. It made no difference

99. Difficult to answer

C6. (If S2<6) Did your mother-in-law want you to have a girl or a boy during your first pregnancy?

1. Girl

2. Boy

93. Not applicable

95. It made no difference

99. Difficult to answer

C7. Did your mother want you to have a girl or a boy during your first pregnancy?

1. Girl

2. Boy

93. Not applicable

95. It made no difference

99. Difficult to answer

C8. How many children did you give birth to? How many of them are girls and how many boys?

1. Girl(s) [_____]

2. Boy(s) [_____]

C9. Who in your family decides how many daughters and how many sons you should have?

1. I myself

2. My husband/partner

3. My husband and I

4. My mother-in-law

96. Other (specify) [_____]

98. Refuse to answer

99. Difficult to answer

C10. To what extent are you entitled to make a decision on how many daughters or how many sons you wish to have?

1. To a large extent

2. To some extent

3. Not entitled at all

98. Refuse to answer

C11. In your social environment, is preference given more to boys or to girls?

1. To boys

2. To girls

3. Equally (*Don't read*)

C12. Why do you think it is true? [_____] 99. Difficult to answer

C13. In your family, is preference given more to sons or to daughters?

1. To sons (GoTo C14)

2. To daughters (GoTo C15)

3. Equally (*Don't read*)

C14. Why does your family give preference to sons rather than to daughters? (You can give more than one answer to this question.)

1. Sons are guarantors of material well-being
2. Sons personify authority and strength
3. Sons can provide financial support
4. Sons are inheritors of property
5. Sons continue the family lineage
6. Boys are defenders of homeland
7. After she gets married, the daughter is no longer yours
8. Raising a daughter is a burden
9. The daughter cannot provide financial support
10. The daughter is not a support for her parents in old age
11. Investment in the daughter is not justified
12. Girls have fewer opportunities in life/in the society
13. Entire burden of household chores and care is on women's shoulders
14. It hurts parents to see their daughter's hardships
15. It is psychologically difficult to give daughter in marriage
16. I am afraid of domestic violence
17. Other (specify) [_____]
99. Difficult to answer

C15. Why does your family give preference to daughters rather than to sons? (You can give more than one answer to this question.)

1. The daughter gives her parents psychological support
2. The daughter stands ready to help her parents
3. The daughter is a support for her parents in old age
4. Investments in the daughter are justified
5. Other (specify) [_____]
99. Difficult to answer

Part 4. Pregnancy history and outcome

Now I would like to know the outcome of each of your pregnancies from the day you got married. Please start from your first pregnancy ...

D1. Pregnancy history

D2. How many months have passed since your previous pregnancy/ childbirth?

D3. When you first found out about your pregnancy, did you want to have a child at that time? Or did you want to have a child later or you no longer wanted to have (more) children?

1. I wanted to have a child at that time
2. I wanted to have a child later
3. I no longer wanted to have a child

D4. Pregnancy outcome

1. Live birth
2. Stillbirth
3. Artificial termination of pregnancy
4. Miscarriage
5. Pregnancy is not over yet

D5. At the time of pregnancy, did you want to have a son or a daughter?

1. Son
2. Daughter
3. It made no difference

D6. Did you undergo ultrasound testing during pregnancy?

1. Yes
2. No

D7. Child's sex

1. Male
2. Female
97. The sex of the child was not found out

D8. The child's age at this moment (...years old) [_____] 93. Not applicable 94. Has died

D1	D2	D3	D4	D5	D6	D7	D8
1		1 2 3	1 2 3 4 5	1 2 95	1 2	1 2 97	[_____] 93 94
2	[_____]	1 2 3	1 2 3 4 5	1 2 95	1 2	1 2 97	[_____] 93 94
3	[_____]	1 2 3	1 2 3 4 5	1 2 95	1 2	1 2 97	[_____] 93 94
4	[_____]	1 2 3	1 2 3 4 5	1 2 95	1 2	1 2 97	[_____] 93 94
5	[_____]	1 2 3	1 2 3 4 5	1 2 95	1 2	1 2 97	[_____] 93 94
6	[_____]	1 2 3	1 2 3 4 5	1 2 95	1 2	1 2 97	[_____] 93 94
7	[_____]	1 2 3	1 2 3 4 5	1 2 95	1 2	1 2 97	[_____] 93 94
8	[_____]	1 2 3	1 2 3 4 5	1 2 95	1 2	1 2 97	[_____] 93 94
9	[_____]	1 2 3	1 2 3 4 5	1 2 95	1 2	1 2 97	[_____] 93 94
10	[_____]	1 2 3	1 2 3 4 5	1 2 95	1 2	1 2 97	[_____] 93 94

Part 5. Son preference - 2

If C8 indicates that the respondent does not have any children, do not read block E. Fill out, if the respondent selected "preference is given to SONS" option (if C13=1) in question C13.

E1. In your family, is the first child female or male?

1. Male
2. Female

E2. When that child was born, did someone in your family express his/her discontent about the child's sex? If yes, who? (You can give more than one answer to this question.)

1. I myself
2. My husband/partner
3. My mother-in-law
4. My father-in-law
5. My mother
6. Other relatives
97. No

E3. Was or is there any pressure brought to bear on you to have male child next by all means?

1. Yes
2. No (GoTo E6)

E4. Who brought or brings pressure to bear on you most?

1. My husband/partner
2. My mother-in-law
3. My father-in-law
4. My mother
5. Other relatives
98. Refuse to answer

E5. What is the reason for that pressure? [_____] 99. Difficult to answer

E6. What measures did (do) you take to make sure your next child is male? *(You can give more than one answer to this question.)*

1. I used medicinal herbs, resorted to methods of traditional medicine
2. I consulted a doctor
3. I underwent ultrasound testing
4. Other (specify) [_____]
97. I took no measures (*GoTo E8*)

E7. Did (or do) those measures turn out useful?

1. Yes
2. No
3. The outcome is still unknown (pregnancy is not over yet)

E8. Was the last child born in your family female or male?

1. Male
2. Female
3. I have one child only (Skip E9-E14)

E9. When that child was born, did anyone in your family express his/her discontent about the child's sex? If yes, who? *(You can give more than one answer to this question.)*

1. I myself
2. My husband/partner
3. My mother-in-law
4. My father-in-law
5. My mother
6. Other relatives
97. No

E10. Was or is there any pressure brought to bear on you so that the last child should by all means be male?

1. Yes
2. No (*GoTo E12*)

E11. Who brought or brings pressure to bear on you most?

1. My husband/partner
2. My mother-in-law
3. My father-in-law
4. My mother
5. Other relatives
98. Refuse to answer

E12. What measures did (do) you take to make sure your last child was (is) male? *(You can give more than one answer to this question.)*

1. I used medicinal herbs, resorted to methods of traditional medicine
2. I consulted a doctor
3. I underwent ultrasound testing
4. Other (specify) [_____]
97. I took no measures (*GoTo E14*)

E13. Did (or do) those measures turn out useful?

1. Yes
2. No
3. The outcome is still unknown (pregnancy is not over yet)

E14. (If E8=2) Since your last child is a girl, is pressure still brought to bear on you to have a son?

1. Yes
2. No
3. I can't say

Part 6. Daughter preference – 2

If C8 indicates that the respondent does not have any children, do not read block F. Fill out, if the respondent selected “preference is given to DAUGHTER” option (if C.13=2) in question C.13

F1. In your family, is the first child male or female?

1. Male
2. Female

F2. When that child was born, did someone in your family express his/her discontent about the child’s sex? If yes, who? (You can give more than one answer to this question.)

1. I myself
2. My husband/partner
3. My mother-in-law
4. My father-in-law
5. My mother
6. Other relatives
97. No

F3. Was or is there any pressure brought to bear on you to have female child next by all means?

1. Yes
2. No (GoTo F6)

F4. Who brought or brings pressure to bear on you most?

1. My husband/partner
2. My mother-in-law
3. My father-in-law
4. My mother
5. Other relatives
98. Refuse to answer

F5. What is the reason for that pressure? [_____] 99. Difficult to answer

F6. What measures did (do) you take to make sure your next child was (is) female? (You can give more than one answer to this question.)

1. I used medicinal herbs, resorted to methods of traditional medicine
2. I consulted a doctor
3. I underwent ultrasound testing
4. Other (specify) [_____]
97. I took no measures (GoTo F8)

F7. Did (or do) those measures turn out useful?

1. Yes
2. No
3. The outcome is still unknown (pregnancy is not over yet)

F8. Was the last child born in your family male or female?

1. Male
2. Female
3. I have one child only (Skip F9-F14)

F9. When that child was born, did someone in your family express his/her discontent about the child’s sex? If yes, who? (You can give more than one answer to this question.)

1. I myself
2. My husband/partner
3. My mother-in-law
4. My father-in-law
5. My mother
6. Other relatives

97. No

F10. Was or is there any pressure brought to bear on you so that the last child should by all means be female?

1. Yes
2. No (*GoTo F12*)

F11. Who brought or brings pressure to bear on you most?

1. My husband/partner
2. My mother-in-law
3. My father-in-law
4. My mother
5. Other relatives
98. Refuse to answer

F12. What measures did (do) you take to make sure your last child was (is) male? (You can give more than one answer to this question.)

1. I used medicinal herbs, resorted to methods of traditional medicine
2. I consulted with a doctor
3. I underwent ultrasonic testing
4. Other (explain)
97. I took no measures (*GoTo F14*)

F13. Did (or do) those measures turn out useful?

1. Yes
2. No
3. The outcome is still unknown (pregnancy is not over yet)

F14. (If F8=1) Since your last child is a boy, is pressure still brought to bear on you to give birth to a daughter?

1. Yes
2. No

Part 7. Prenatal sex determination tests and their outcome

The following questions are to be given to all survey participants

G1. Have you ever heard of any method of determining the sex of baby before birth? [Please check with D.6]

1. Yes
2. No (*GoTo G19*)

G2. Can you tell me about that method? (You can give more than one answer to this question.)

1. Ultrasound
2. Amniocentesis
3. Blood method
4. Traditional (specify) [_____]
5. Other (specify) [_____]

G2.1 Which method did you use most often to find out the sex of your baby before birth?

1. Ultrasound
2. Amniocentesis
3. Blood method
4. Traditional
5. Other
97. None (*GoTo G19*)

G3. How did you first learn about this method?

1. My husband/partner
2. My parents
3. My mother-in-law
4. Friends, relatives

5. Medical institution
6. Publications
7. Mass media
8. Other (specify) [_____]
99. Difficult to answer

G4. Where can you get that method? (You can give more than one answer to this question.)

1. In a maternity hospital
2. In an outpatient clinic
3. In a medical room where ultrasound scan is performed
4. In a diagnostic center
5. In another venue
99. Difficult to answer

G5. Is (are) that place(s) accessible to you (with a view to finding out the sex of the baby before birth)?

1. Yes
2. No
99. Difficult to answer

G6. Have you tried within the last 5 years to make use of that method to find out the sex of the baby before birth?

1. Yes
2. No (GoTo G19)

G7. Where did you go?

1. To a maternity hospital
2. To an outpatient clinic
3. To a medical room where ultrasound scan is performed
4. To a diagnostic center
5. To another venue

G8. Who suggested you undergo that testing?

1. I myself
2. My husband/partner
3. My mother-in-law
4. My mother
5. Other relatives
99. Difficult to answer

G9. At what term of pregnancy did you undergo that testing?

96. Weeks [_____]
99. Difficult to answer

G10. What did the testing show?

1. Boy
2. Girl
97. The test failed to determine the sex (GoTo G19)

G11. After the sex of the baby was determined, did you want to have a child of that sex?

1. Yes
2. No
99. Difficult to answer

G12. After the sex of the baby was determined, did your husband/partner want to have a child of that sex?

1. Yes
2. No
99. Difficult to answer

G13. After the sex of the baby was determined, did your family want to have a child of that sex?

1. Yes
2. No
99. Difficult to answer

G14. What did you do after the baby's sex was determined?

1. I terminated pregnancy
2. I maintained pregnancy (GoTo G19)

G15. How did you terminate the pregnancy? Do not read the options

1. I had a drug-induced abortion
2. Abortion terminated through (fake) miscarriage
3. I terminated pregnancy using another method (except 1 and 2)
4. Other (specify) [_____]

G16. Who made a decision to terminate pregnancy through induced abortion? Was it you or someone else?

1. I myself
2. My husband/partner
3. My mother-in-law
4. My mother
5. Other relatives
6. Doctor/clinic
98. Refuse to answer

G17. Where was pregnancy terminated?

1. At home, without seeking doctor's assistance
2. In a maternity hospital
3. In an outpatient clinic
4. In another venue
5. Refuse to answer

G18. What could have happened, if you gave birth to a child of undesired sex?

1. (mention) [_____]
99. Difficult to answer

G19. Is induced abortion legal in the Republic of Armenia?

1. Yes
2. No
99. Difficult to answer

G20. (if G19=1) Before what term of pregnancy is induced abortion legal in the Republic of Armenia?

1. (mention) [_____]
95. At any time
99. Difficult to answer

**Thank you for your time! The interview is over.
Do you have any questions?**

ANNEX 2. FOCUS GROUP DISCUSSION GUIDES

Focus group discussion guide: specialists Gender-biased sex selection prevalence and reasons in Armenia

Q1. Let's get acquainted. Tell me what is your name, how old are you, and what do you do?

You are probably aware that in many families, when planning children, they pay attention to what gender the child will be.

Q2. According to you, in Armenia, more girl or boy children are preferred?

Q3. And does that preference vary depending on which child it is?

Q4. What do you think is the reason for these preference? According to you, when or in the case of which child the sex preference for a boy or a girl prevails?

Q5. Based on your work, what methods do patients use to find out the sex of the baby? What do people know about this? Where did they find out about it?

Q6. And what was their reaction after learning the sex of the child?

Q7. In your opinion, in what cases can abortion be considered “justified”? Why do you think so?

Q8. And what forms of abortion do people know about? Are all these forms available in your place of residence or in Armenia?

Q9. What are the main reasons for patients to resort to abortion?

Q10. Are there any training courses, meetings where these issues are discussed? Who, which organization organizes it? How effective do you think they are?

Q11. And what kind of information do you or your medical institution provide to patients about consequences of abortion? In what format(s) is it presented? What changes take place as a result of those conversations?

Q12. To what extent do other family members also participate in the processes of pregnancy management and abortion? For example, they go to check-ups together with a pregnant woman, go together for an abortion, etc.

According to different opinions, in our society preference is given mainly to male children, leading to abortion of female children.

Q13. What is your approach to this?

Q14. Based on your activity, can you say who mostly takes that step: the mother herself, forced by her husband, forced by her mother-in-law, or other cases?

Q15. What kind of preventive actions/measures do you think should be taken in order to reduce the number of sex-selective abortions in Armenia? Who, which organization should deal with this issue?

Is there an idea you would like to but did not have a chance to raise or discuss?

Thank you

Focus group discussion guide: married women and men
Gender-biased sex selection prevalence and reasons in Armenia

- Q1. Let's get acquainted. Tell me your name, how old are you, and what do you do?
- Q2. How long have you been married and how many children do you have, what gender are they?

You are probably aware that in many families, when planning children, the focus is on the gender of the child.

- Q3. According to you, in Armenia, girls or boys are preferred?
- Q4. Does that preference vary depending on which child it is?
- Q5. What do you think is the reason for these preference? According to you, when or in the case of which child do they think it must be a girl or a boy?
- Q6. When talking about Armenian families, how many children, in your opinion, should be in a family? Who should decide this?
- Q7. Have you heard about cases when pressure was used in the family regarding the number of children? For example, they forced her to have another child, or on the contrary, they told her it was enough, etc. Please bring examples from what you heard or learned about.
- Q8. How much influence do the older generation or relatives have in this matter, according to you?
- Q9. In general, how can you find out the sex of a child before birth? What do you know about it? Where did you find out about it?
- Q10. In your opinion, in what case will abortion be considered as “justified”? Why do you think so?
- Q11. What forms of abortion have you ever heard of? Are all these forms available in your place of residence or in Armenia?
- Q12. **Ask only in the women's group.** Have you ever had to take that step? Would you share your experience, which method did you use, was it your personal or other people's initiative, etc.?

According to different opinions, in our society preference is given mainly to male children, leading to abortion of female children.

- Q13. What is your approach to this?
- Q14. What do you think should be done in order to reduce the number of sex-related abortions in Armenia? Who should deal with this issue?

Is there an idea you would like to but did not have a chance to raise or discuss?

Thank you

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