

International Best Practices for the Prevention of Prenatal Sex Selection

Recommendations for Action for Armenia

Presented to Garik Hayrapetyan, UNFPA Armenia Assistant Representative

by Laura Rahm, Independent Researcher

Contact information:

Laura Rahm
Grethenweg 141
60598 Frankfurt, Germany
laurarahm@hotmail.com

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Acknowledgments

As a contribution to the current research of UNFPA Armenia, this paper aims to identify best practices for the prevention of prenatal sex selection by examining previously successful instruments and campaigns internationally and then giving concrete recommendations for action in Armenia. It takes into consideration the specific notion of the phenomenon in Armenia as presented in the recent UNFPA report on “Prevalence of and Reasons for Sex-selective Abortions in Armenia”.

This research is based on three sources:

- Interviews with representatives from international, governmental and non-governmental organizations that deal with preventing sex-selective abortions,
- Scientific papers and presentations on the prevention of sex-selective abortions,
- Online research on international best practices for preventing prenatal sex selection, sex-selective abortions and normalizing the skewed sex ratio at birth (SRB).

The findings of this research are condensed in the present report.

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I. Introduction

Several Asian countries face sex ratio at birth (i.e. SRB) imbalances due to sex selection.¹ Sex selection is the practices of choosing the sex of one's offspring. It can be achieved through several methods including prenatal practices (e.g. in vitro fertilization, sex-selective abortion) and postnatal practices (e.g. sex-selective infanticide). This paper focusses on sex-selective abortions as it is the most common variation practiced in Armenia and throughout Asia.² The natural SRB ranges between 104-106 males per 100 females and is susceptible to local biological diversity.³ 107 and above (males per 100 females) is commonly considered a skewed SRB. Countries with severe SRB imbalance (over 110 males per 100 females) are China, Armenia, India, Albania, Vietnam, Azerbaijan and Georgia. In Armenia the overall SRB during 2001-2010 was 115.5.⁴

The practice of sex selection is condemned as a harmful and unethical practice by a variety of international frameworks which enjoin governments to eliminate all form of gender discrimination and violation of women's human rights.⁵ There is also a wide agreement about the underlying conditions of sex selection, which are: 1) son preference, 2) low fertility and 3) access to technology.⁶ These preconditions are often divided into a demand side (underlying son preference and the wish for smaller families) and a supply side (available technology). Son preference is a deeply embedded cultural phenomenon that values male offspring more than female offspring. This "demand" for sons becomes more problematic as the trend in developing countries goes to having a reduced number of children (low fertility). The access to (or "supply" of) modern technology such as ultra-sound machines and the availability of safe abortions are further missing links that enable women to abort unwanted female fetuses. While supply can be limited (e.g. banning of sex-selective abortions, controlled access to technology) long-term success measures in preventing sex selection will have to tackle the demand side. Son preference and gender-based discrimination are the root causes for sex selection.⁷ Thus, preventive measures have to primarily target changing social norms and mindsets promoting gender equality and raising the status of girls and women in society. This doesn't happen overnight. Multilevel strategies, coordinated effort and political commitment are necessary to change people's attitude in the long run.⁸

Throughout this paper we will get to know different measures that address sex selection from both the supply and demand side. The goal will be to analyze international best practices in order to propose a set of guidelines to help Armenia overcome their challenge of a skewed sex ratio at birth.

¹ For international figures on SRB see CIA (2012).

² Guilмото (2007), p. 3

³ Ibid., p. 2

⁴ Guilмото (2012b). Guilмото's study estimates 18,920 more male births than the natural average due to sex selection during 2001-2010. This is 9.1% of the total number of male births in Armenia.

⁵ UN (1995); UN (1994); CEDAW (1979). In October 2011 the Parliamentary Assembly of the Council of Europe (PACE) adopted Resolution 1829 (2011) on Prenatal Sex Selection asking member states including Armenia to introduce legislation for the prevention of sex selection. See PACE (2011).

⁶ See Interagency Statement of OHCHR, UNFPA, UNICEF, UN Women and WHO: WHO (2011).

⁷ WHO (2011)

⁸ Sen (2009); Ganatra (2008)

II. International case studies

Several countries in Asia have addressed sex selection by various means and lessons can be drawn from their experiences; but frankly the first and only successful country to reduce sex selection and balance its skewed sex ratio at birth is South Korea. In this chapter we will summarize case studies of South Korea, China and India.

a. South Korea

South Korea had a sex ratio at birth of 116 males per 100 females in the 1990s and reduced its ratio to 107 by 2007.⁹ Recent figures show that the sex ratio has remained at 107.¹⁰ South Korea was able to balance its skewed SRB through a mix of stricter regulations, technology control, policies and awareness-raising campaigns that strengthened the role of women and increased their value in society. Experts identified the following factors responsible for declining sex ratios in South Korea:¹¹

1. Rapid economic development: 20 years of economic growth
2. Increased urbanization and shift away from an agricultural-based economy
3. Increased financial security of parents in old age
4. Legal reforms: inheritance rights, recognition of female-headed households, equal rights for women in their birth families after marriage
5. Greater access to education for women
6. Increased female participation in labor market and better job opportunities for women
7. Increased awareness through a national media campaign against sex selection (“Love your daughter”- campaign)
8. Advocacy in the medical profession to prevent sex-selective abortions
9. Regulation of sex determination tests through a well-structured and controlled health system

Factors 1-3 are **socioeconomic drivers** that brought economic growth and stability to South Korea. Factors 4-6 refer to the **promotion of gender equality** in the spheres of family, education and work force, ultimately altering the status of women in society and contributing to an increase in women’s autonomy.¹² Drivers 7 and 8 are **awareness-raising and advocacy** informing about sex selection and its consequences. Factor 9 refers to the law of **prohibiting prenatal sex determination** which was implemented in South Korea in 1987. This law was rescinded in 2008 when the Constitutional Court ruled that parents have the right to know the sex of the fetus again thanks to the normalization of SRB. It showed that there has been increased confidence in the current situation and girls and boys are now equally desired.¹³ All factors named above contributed to the South Korean success story. As we shall see, every country faces a different set of preconditions which makes it impossible for other countries to imitate the South Korean example exactly.

b. China

China started to address sex selection in the late 1980’s. However, unlike South Korea, China is still struggling with one of the highest SRB imbalances worldwide. The Chinese example is unique in many ways but most notably because their SRB is a result of a

⁹ WHO (2011)

¹⁰ Nevertheless, a SRB of 107 remains higher than the natural biological range and there is a higher ratio among later order births. CIA (2012); Barot (2012)

¹¹ WHO (2011); Ganatra (2008); Guilmoto (2007)

¹² Chung & Das Gupta (2007)

¹³ See Asia Pacific News (2008). In December 2012 South Koreans elected their first female president, Park Geun-hye.

politically enforced low fertility rate (i.e. the Chinese one child policy) combined with culturally embedded son preference. In 2000 China began the “Chaohu Experimental Zone Improving Girl-Child Survival Environment” pilot program to balance its SRB. In 2003 China expanded the program to 24 other counties under the title “Care for Girls Campaign”. The following table is adapted from the Li Shushuo’s report “Imbalanced Sex Ratio at Birth and Comprehensive Intervention in China” giving an overview of the program’s main activities:

Table 1: Main activities of “Care for Girls” campaign in 24 Chinese counties

Category	Meaning	Contents	Successful examples
Organizing and Leadership	Providing institutional support by governments at all levels.	<ul style="list-style-type: none"> ● Establish an authority of “Care for Girls” campaign; ● Make annual programme of the campaign by local government; ● Issue special documents on the campaign; ● Provide special fund for the campaign; ● Conduct special events addressing SRB, etc. 	<u>Yancheng county, Henan province</u> 1. Establish a special authority in charge of “Care for Girls” campaign, with the head of county appointed as head of the authority; 2. Cooperate with relevant departments in cracking down on the “Two Illegals”; 3. Strictly evaluate government performance.
Cracking down on the “Two illegalities”	Cracking down on non-medical aimed pre-natal sex determination and sex-selective induced abortion.	<ul style="list-style-type: none"> ● Crack down on the “Two Illegals” through cooperation of relevant authorities; ● Encourage individuals to not engage in the “Two Illegals” by reward; ● Investigate cases of the “Two Illegals”; ● Supervise use of ultrasound machines and induced abortion. 	<u>Huanggang city, Hubei province</u> 1. Leader groups on different levels all put emphasis on investigating “Two Illegals” cases; 2. Different offices in every county cooperate closely in cracking down on the “Two Illegals”; 3. Cooperation with neighbouring counties to prevent migrants from doing sex-selective abortion.
Whole-course family planning and reproductive health services	Offering health-care services to women at reproductive age.	<ul style="list-style-type: none"> ● Provide authorized hospital delivery, abortion and ultrasound check; ● Offer contraceptive services; ● Provide regular IUD check, and treat pregnancy and gynaecologic diseases; ● Regularly call on pregnant and postpartum women. 	<u>Donghai county, Jiangsu province</u> 1. Identify target people; 2. Offer better services to women in pregnancy; 3. Stipulate the approved abortion, report death of girl infants; 4. Supervise and report pregnancy monthly; 5. Treat diseases for women at reproductive age.
Benefits and Interests Orientation	Supporting girl-only families by offering special benefits and interests in order to change preference for sons.	<ul style="list-style-type: none"> ● Enact preferential policies of reward to help girls in families without a son, and to improve girl-child’s survival environment and women’s development in domains of education, medical care, employment, old-age support and political participation. 	<u>Anxi county, Fujian province</u> 1. Build houses for poor families with girls only; 2. Alleviate poverty of families with girls only; 3. Help girls continue their education; 4. Give pension support to families without sons.
Advocacy	Change son-preferential ideology by giving wide publicity on knowledge related to laws and regulations, parenthood and reproductive health.	<ul style="list-style-type: none"> ● Develop networks and organizations of advocacy; ● Create a strong public-opinion atmosphere showing love for girls through slogans, picture posters, theatrical performances, advertising cards and other means; ● Cultivate awareness of “Care for Girls” by training; ● Encourage women to participate in social activities, etc. 	<u>Beijing</u> 1. Taking advantage of various mass media, such as broadcasting, television and internet; 2. Publicizing successful examples in these activities; 3. Establishing various locations for advocacy.
Management and evaluation	Ensure accurate statistics on the data of SRB and evaluation of work addressing SRB.	<ul style="list-style-type: none"> ● Register birth, abortion, infant and children (under 5) death accurately by sex; ● Mutual report of SRB data among relevant authorities; ● Integrating work performance of the “Care for Girls” campaign into evaluation system of relative authorities. 	<u>Jinghai county, Tianjin city</u> 1. Appointing specialized personnel for statistics; 2. Having a clear division of statistic responsibilities, fixing a schedule of reporting relevant data and procedure.

Source: Li (2007), p. 3 of the appendix

Interestingly, although the pilot program showed initial success, when the program was expanded it met with limited success in other counties. The reasons given for this limited success were enumerated by the WHO report:

“After an initial successful pilot project, the campaign was expanded to the 24 counties with the most severe imbalances in the sex ratio at birth, and results indicate a positive effect on sex ratios (Li, 2007). However, a recent evaluation indicated that in some counties the campaign was introduced without local support and that the introduced policies contradicted existing social policies such as those relating to land and inheritance rights (Zhenzhen & Löfstedt, unpublished, 2009). This highlights the need for a more-unified system of social policy, and for sustainable and long-term approaches rather than short-term measures.”¹⁴

Unlike South Korea, China seems to have met with limited success for at least two reasons. Firstly, they failed to properly adjust the campaign to local conditions and receive local support when expanding to other counties; secondly, they introduced policies that contradicted existing ones, especially in the area of land and inheritance rights. This theme of conforming to local conditions (or failure thereof) will resurface throughout this investigation.

¹⁴ WHO (2011), p. 7

c. India

India also introduced a number of policies to respond to SRB imbalances and sex selection. The most renowned policy is the Pre-Natal Diagnostic Techniques (Regulation and Prevention of Misuse) Act, the PNDT Act, passed in 1994 which prohibits doctors and clinics from using technology such as scans for sex determination. The Act was altered in 2003 to include prohibiting pre-implantation techniques (i.e. in-vitro sex selection).

However, there are a number of “loopholes” that were detected by experts. Guilмото summarizes them in the following quote:

“(...) difficulties and loopholes in the provisions of the [PNDT] Act (...) include: lack of resources to carry out inspection and monitoring, lack of corresponding qualified staff, poor performance of advisory committees at various levels, political pressures brought on the “Appropriate Authorities”, conflict of interest for doctors charged with the prosecution of other doctors, insufficient understanding of the law and procedural errors, and, in some cases, victimization of pregnant women. Doctors have also already complained of harassment, with the Indian Radiological and Imaging Association having created a website to document such cases.”¹⁵

Like China and South Korea, India presents a unique socio-cultural environment that needs to be taken into account when addressing its SRB. It is not enough to just implement policy and capacity development programs. The successful monitoring and enforcement of these programs needs to be fitted to local conditions in order for solutions to be not only sustainable but also ethically appropriate. Further on we will take a closer look at the specific case of Nawanshahr in Punjab, India to discuss the effectiveness and appropriateness of unconventional monitoring and enforcement methods. For policies to be effective they have to be sufficiently enforced and monitored over time.

¹⁵ Guilмото (2007), pp.21-22

III. Best practices for the prevention of prenatal sex selection

The following is an overview of the different approaches and analyses commonly used to combat SRB imbalances.

a. Policy responses

Most affected countries respond to the problem of sex-selective abortions by introducing public policies to address both the supply and demand side of the problem (see Table 2 below). Often different approaches exist simultaneously.

Table 2: Supply and demand side of public policies to address sex selection

	Supply side	Demand side
Aim	Limit access to sex determination and sex-selective abortions	Reduce son preference and promote gender equality
Policy responses	<ul style="list-style-type: none"> • Laws and policies to regulate access to technology • Prohibition of sex selection and sex-selective abortions • Prohibition of advertisement of sex determination • Setup of a highly organized and controlled health system 	<p><u>Short-term measures:</u></p> <ul style="list-style-type: none"> • Conditional cash transfers for parents of daughters <p><u>Long-term efforts:</u></p> <ul style="list-style-type: none"> • Policies promoting gender equality and women empowerment, particularly in the areas of: <ul style="list-style-type: none"> - Education - Employment - Inheritance rights • Pension and social security • Coherence of laws and policies (avoid contradictions)

Source: UNFPA Vietnam (2011). Changes made by author.

i. Supply side: restricting access to technology for sex-selective purposes

Supply side measures aim at restricting access to technology for sex-selective purposes. Policy responses include laws to regulate access to technology (e.g. prohibit determination and disclosure of the fetus sex) as well as prohibiting sex selection, sex-selective abortions and the advertisement of sex determination. These measures often go hand in hand with the setting up a highly organized and controlled health system that closely monitors and reports pregnancies, abortions, and sex ratio at birth.

Since the late 80s - starting with South Korea - several countries in Asia banned prenatal sex detection, sex selective abortions (see Table 3) and prohibited advertisement of prenatal sex determination. Mechanisms to regulate access to technology include the following: 1) registration of hospitals and their technology (also portable ultrasound machines); 2) limiting ultrasound sale and usage to authorized hospitals; and 3) introducing strict reporting standards on treatment and medical history along with maintaining proper digital records.¹⁶ Penalties for revealing the sex of the fetus and practicing sex-selective abortions vary from country to country (see Table 3). They include fines, seizure of ultra-sound machines, revocation of medical license, and imprisonment. As we shall see, these policies are easier to implement than they are to monitor and enforce.

¹⁶ Kumari (2012); Ganatra (2008), p. 91

Table 3: Laws and policies about sex selection / abortion in selected Asian countries

Country	Prenatal sex determination	Abortion
China ²⁴	Banned since 1989. Penalties include fines, revocation of licence. Pre-implantation sex selection is also prohibited.	Abortion available and widely accessible since 1953. Sex selective abortion prohibited since 1994, no criminal penalties.
India ^{18,25}	Banned since 1994. Pre- and peri-conception techniques prohibited from 2002. Penalties include seizure of machines, fines, jail terms and revocation of licence.	Since 1971, abortion legal to 20 weeks for a broad range of indications: risk to the woman's life, physical and mental health, contraceptive failure in married women, rape and fetal anomaly.
Nepal ²⁶	Banned in 2002, penalties include 3–6 months imprisonment.	Abortion legalised in 2002. Available on request for 12 weeks and for limited conditions to 18 weeks. The law bans sex selective abortion; penalties include 1 year imprisonment.
South Korea ¹⁹	Prohibited since 1987. Penalties increased in 1994 to include imprisonment, a fine up to US\$12,000 and revocation of licence.	Legalised in 1973 and allowed to save the life of the woman, for rape, incest and some birth defects, and medical conditions. In practice, abortion widely available.
Vietnam ^{17,27}	Determining sex through traditional or modern means prohibited in 2003. Violations can be fined.	Abortion has been legal since 1960. Sex selective abortion banned in 2003. Penalties include fines.

Source: Ganatra (2008), p. 92

While these laws and policies are crucial to protect the fundamental rights of women and girls, the effectiveness of banning prenatal sex determination and sex-selective abortions is discussed controversially and put into question. Despite prior mentioned controls, ultrasound availability has increased continuously throughout Asia. Rapid development of technology and low prices allows commercialization and the spread of products. The most disturbing aspect of restricting technologies like ultrasound is the resulting growth of illegal and black market access.¹⁷

Moreover, it is difficult to prove that ultrasound was used for sex determination. Ultrasound technology is an important and appropriate medical tool to follow the development of the fetus and detect abnormalities. Doctors while doing ultrasound scans can simply refer to the sex of the fetus discretely or nonverbally. Offenses are practically impossible to prosecute. Sex-selective abortions are likewise difficult to detect. Women as well as doctors may specify other reasons such as social, economic, physical or psychological issues that make an abortion necessary. The sooner the sex of the fetus can be determined, the less clear the motivation behind having an induced abortion is.¹⁸ Women may determine the fetus sex in one hospital and go to different hospitals for an induced abortion.

Banning sex selection is not only difficult to monitor and likely to give rise to clandestine activities; there is also an implicit danger that may lead to limited access to safe abortions, a fundamental right women have long fought for. There can be harmful consequences for women's health when access to technology and services is denied. The UNFPA Armenia report showed that 0.8% of women of reproductive age (15-49 year-olds) in 2,830 households covered by the survey underwent sex-selective abortions.¹⁹ A more recent study

¹⁷ WHO (2011); Ganatra (2008). A Nepalese study revealed that despite legal sanctions medical practitioners continued providing sex determination and sex-selective abortions. CREHPA (2007)

¹⁸ Stump (2012)

¹⁹ UNFPA Armenia (2012)

for UNFPA Armenia suggests that this number is likely to be higher.²⁰ Nonetheless, a large percentage of women seek an abortion for reasons other than sex-selective purposes. Poorly considered restrictions may put the health and lives of women in jeopardy and violate human and reproductive health rights.²¹ For the given reasons, introducing supply side measures in isolation is unlikely to show expected results to prevent sex selection and may violate the human rights of women. They have to be introduced in an integrated approach along with demand side measures that target the root cause of sex selection - gender inequity - and change patriarchal mindsets in society.

ii. Demand side: Promoting gender equality and women's rights

Demand side measures aim at the root of the SRB problem, son preference. Low fertility is not typically seen a problem in over populated developing countries. The problem starts when cultural son preference, combined with lowering fertility rates, leads to sex selection. The following quote of Barot presents the key factors leading to son preference in Asia:

„Particularly in India and China, a deep-seated preference for having sons over daughters is due to a variety of factors that continue to make males more socially and economically valuable than females. Inheritance and land rights pass through male heirs, aging parents depend on support from men in the absence of national security schemes and greater male participation in the workforce allows them to contribute more to family income. Women, on the other hand, require dowries and leave the natal family upon marriage, which make them an unproductive investment. Moreover, only sons carry out certain functions under religious and cultural traditions, such as death rituals for parents.“²²

This quote illustrates the demand for policies that aim at reducing son preference and ensuring gender equality. Societies with equal rights, opportunities and obligations for men and women are less likely to prefer one sex over the other. The “need” for sons to function as breadwinners, providers for parents in old age and inheritors of the family estate becomes redundant when men and women have equal rights and are equally empowered.

Policies addressing the demand side of sex selection can be divided into short-term measures and long-term efforts. Short-term measures include financial incentives and benefits to parents of daughters. China for example introduced as part of their “Care for Girls” campaign special benefits such as housing and pension subsidies for families with only girls.²³ India offers financial assistance for parents who keep their daughters in school and unmarried until the age of 18.²⁴ As we will see in the analysis for best practices for Armenia financial incentives are controversial in the sense that families ‘get paid to like their daughters’. However, they can effect short-term change to the perceived value of girls, at least until long-term measures show effect.²⁵

Long-term efforts include first and foremost policies for the promotion of gender equality and women empowerment. Table 4 shows laws and regulations introduced by the Chinese government to enhance gender equality, particularly in the areas of employment, education and inheritance rights.

²⁰ Guilimoto (2012b)

²¹ WHO (2011); Ganatra (2008)

²² Barot (2012)

²³ Li (2007); Xinhua (2006)

²⁴ Kumari (2012); Ganatra (2008)

²⁵ WHO (2011)

Table 4: Chinese laws and regulations to promote gender equality

Laws and Regulations	Items
Stipulation of Labour of Woman Staff (1988)	Article 3. With the exception of the special types of work or post unsuitable to women, no unit may, in employing staff and workers, refuse to employ women by reason of sex.
Law of the People's Republic of China on the Protection of Rights and Interests of Women (1992, 2005 revised)	Article 2. The country shall take necessary measures to gradually perfect its systems that safeguard women's rights and interests, and to eliminate all discrimination against women. Discrimination against, mal-treatment of, abandonment of, or cruel treatment in any manner causing injury or death of women shall be prohibited.
Constitution of the People's Republic of China (1982)	Article 49. Marriage, the family and mother and child are protected by the state.
Compulsory Education Law of the People's Republic of China (1986)	Article 9: All citizens are entitled to have equal opportunities to receive education, regardless of nation, race and sex.
Law of Succession of the People's Republic of China (1985)	Article 9. Males and females are equal in their right to inheritance.
Marriage Laws of the People's Republic of China (1950, 1981, 2006 revised)	Article 2. A marriage system based on the free choice of partners, on monogamy and on equality between man and woman, shall be applied. The lawful rights and interests of women, children and old people shall be protected. Family planning shall be practiced.

Source: Li (2007), p. 2 of the appendix

Several countries have also improved their pension and social security systems in order to ensure financial independence in old age. South Korea for example eliminated one of the pillars of son preference by establishing an improved welfare system. Broadly speaking, the state is now responsible for the elderly, so they don't rely on their children (traditionally sons) to provide for them in old age. The Maintenance and Welfare of Parents and Senior Citizen's Act of 2007 in India established that children are financially responsible for their parents only to the degree that they inherit the parent's estate.²⁶ Both of these examples - revision of welfare system and equal inheritance rights - illustrate how the cycle of son preference can be broken in the long run. As we have seen in the Chinese case study introduced earlier, these measures can only be effective when contradictions with existing legislation are avoided. Revising existing policies and ensuring coherence is therefore critical.

In this chapter we reviewed policy responses that tackle the supply (aiming at limiting access to sex selection) and the demand side of sex selection (promoting gender equality). However, policies have only proven successful when they are effectively enforced and monitored.

²⁶ WHO (2011)

b. Law enforcement and monitoring

For policies to be successful, they must be properly enforced. Likewise, in a broader sense, the effectiveness and efficiency of policy interventions must be kept track of over time. Monitoring is not only essential to determine whether or not policies are successful. It is also critical to identify the need for future changes or adjustments in policy statements or in the actions taken to enforce them.²⁷ Both, law enforcement and monitoring, are key factors to address sex selection, measure progress and balance SRB in the long run.

While there is a wealth of information about adopted policies²⁸, very little has been investigated about how to step up from the policy to law enforcement level. South Korea, China and India all introduced sweeping legal reforms as part of their policy reforms. However, as we have seen, effective implementation of these laws has proven to be problematic. India had problems with “loopholes in the provisions”, doctors prosecuting other doctors, and legal defense groups like the “Indian Radiological and Imaging Association”.²⁹ China had difficulties expanding the “Care for Girls” campaign because “the introduced policies contradicted existing social policies such as those relating to land and inheritance rights”.³⁰ The problem with law enforcement is that for it to work, it needs to be part of a coherent legal structure. This means that legal reforms have to be consistent with existing laws, they have to avoid reinforcing gender discrimination and they have to ensure access to technology and services for reproductive health. All of these aspects must also be consistent with the local policies and cultural traditions of each region. Obviously, successful law enforcement requires a certain level of monitoring.

Monitoring is overseeing the effectiveness, efficiency and impact of interventions using performance indicators such as data on SRB, gender discrimination or gender inequality.³¹ The quality of this data is essential. Successful monitoring means establishing high standards of research, data collection and analysis. The impact of single and collective measures such as legislative changes, new policies, incentive programs as well as media and awareness-raising campaigns must be properly monitored, and “given a high priority and sufficient resources”.³²

Deolalikar and Nandi also underline the need of monitoring the impact of legislative and policy changes in the following quote:

“The problem is that while there have been a large number of empirical studies of the child sex ratio in India and in other countries in recent years, none has focused on the impact of legislation or a policy intervention on improving the boy-girl balance.”³³

Any future attempt at developing locally effective policies to improve SRB imbalances will have to address this gap in current research. An integrated system for monitoring and evaluation remains one of the greatest obstacles to developing successful policies.

²⁷ For information on “Building Better Policies-Performance and Measuring Results” and evidence-based policies see World Bank (2012).

²⁸ For Armenia see www.genderbasedviolence.am website on the adopted policies on gender and prevention of gender-based violence.

²⁹ Guilhoto (2007), pp.21-22

³⁰ WHO (2011), p. 7

³¹ For more information on gender related indicators compare The Global Gender Gap Report 2012 by the World Economic Forum (2012).

³² WHO (2011), p. 9

³³ Deolalikar and Nandi (2011), p. 3

Monitoring based on invasive control techniques, fear and shame has widely been criticized and promised not to show long-term success.³⁴ Often in this context the example of Nawanshahr in Punjab, India is brought to the table. In 2005 Nawanshahr had a skewed sex ratio of as low as 774 females to 1000 males.³⁵ At this time the local government along with civil organizations and community watch groups³⁶ introduced controversial measures:

„(...) Local authorities launched a vigorous campaign in 2005 to register personal details of all pregnant women in an electronic database. The women were followed up with weekly telephone calls from three months of pregnancy to after birth. (...) Every scan and abortion was investigated and there was also vigilant monitoring of ultrasound clinics. Monetary incentives were paid to community members to act as “informers”. The local NGO created awareness by publicly shaming families who had or were considering sex selection; they held “condolence meetings” and “death rites” to mourn the death of “girls killed in the womb”. The imbalanced ratio began to correct itself and the model was hailed as one to be replicated. However, with changes in the district authorities in 2007 and ending of the pregnancy monitoring and related schemes, sex ratio imbalances have reappeared. Whether such intrusion into women’s lives is ethical remains an issue, whether it succeeds or not.”³⁷

Recent trends show that the sex ratio in Nawanshahr has improved significantly (878 females per 1000 males as per preliminary census of 2011) and many top ranking posts in the district are now occupied by women.³⁸ However, the negative means by which these results were accomplished can be put into question. The end result is that there is an ethical dimension to implementing monitoring and enforcement plans. By far the most desirable and efficacious methods build on positive feedback and focus on including community members in both identifying the problems SRB imbalances cause as well as deciding on how to implement their own solutions. Once again, this only reinforces the need for further research into how to fit policymaking, monitoring and enforcement with local conditions.

c. Shifting mindsets

Shifting mindsets is the most crucial, long-term and culturally sensitive aspect of successfully addressing SRB imbalances. Culturally embedded son preference and gender-based discrimination are the root causes for sex selection. Thus, sustainable preventive measures have to target changing social norms and mindsets promoting gender equality and raising the status of women and girls in society. In this chapter we will present two effective ways of doing so, namely through capacity development and awareness-raising campaigns. They are key factors of any long-term integrated approach to preventing gender-biased attitudes and sex selection.

Ultimately, there are three crucial aspects to successfully shifting mindsets, which are valid for capacity development and awareness-raising campaigns. These are a.) creating reliable data that monitors the magnitude of the problem, b.) focusing on the consequences of sex selection, and c.) exploring alternative solutions to sex selection in a participatory approach.

³⁴ WHO (2011); Ganatra (2008)

³⁵ The Times of India (2007)

³⁶ In the case of India, monitoring approaches also include establishing and training of community watch groups. Their function is to identify and report illegal activities in clinics. Community watch group members are volunteers that promote security and growth in their community. Compare the concept of “Green Ladies and Gentleman” that voluntarily assist in German hospitals to give assistance to people in need. Information in German available under <http://www.ekh-deutschland.de/>.

³⁷ Ganatra (2008), p. 95

³⁸ Census of India (2011). See also Sareen (2012) and France 24 (2012) for more information on the controversial measures introduced to fight SRB imbalance in Nawanshahr, India.

i. Capacity development

A crucial element of preventing sex selection is capacity development.³⁹ Capacity development includes a variety of measures such as training, policy development and quality assurance.⁴⁰ In this paper we will refer to it as the training and dialogue with specific groups to act as multipliers and trainers. International best practices for the prevention of sex selection involve a broad mix of people and groups in their training programs, e.g. students, young or soon-to-be parents, religious leaders, government officials, ethics committees of gynecologists and obstetricians etc. The NGO Centre for Social Research developed a comprehensive approach by dividing their target groups into two categories and addressing them through direct participation and cooperation:

Table 5: Target groups of capacity development to prevent sex selection

Target group	Description
Social public	Households, community members, NGO members partaking in focus group discussions and social audits
Medical personnel	Doctors, nurses, private and public hospitals, conducting medical audits in premises where sex detection techniques are present

Source: own presentation based on Kumari (2012)

The content of the trainings varied in correspondence to the target group, but generally covered: a) informing about the dimensions and locality of SRB imbalance, b) indicating the consequences of sex selection on a personal, intra-family, society level, and c) identifying alternatives to harmful practices in a participatory approach.

The training of medical staff is especially important since doctors may participate unknowingly in sex selection when disclosing information about the fetus sex in medical procedures. Therefore it is important that doctors identify and pay special attention to cases that fit sex selection profiles (e.g. third or fourth pregnancies with prior female children) and encourage medical staff to use non-discriminative and neutral remarks concerning the sex of the child. Women shortly after the birth of a daughter are quite often confronted with the words 'Do not worry, next time it will be a boy'. Such statements are harmful and can damage the confidence of young mothers.

Capacity development with male focus groups has also proven successful.⁴¹ Examples from India have shown that men change their attitude towards the sex of the fetus when it is brought to their attention that the male sperm determines the fetus sex.⁴² Complaints from husbands, partners or other family members and that blame women for 'not being able to bear sons' are therefore proven wrong. Illustration 1 shows a sample educational tool on the biology of sex determination.

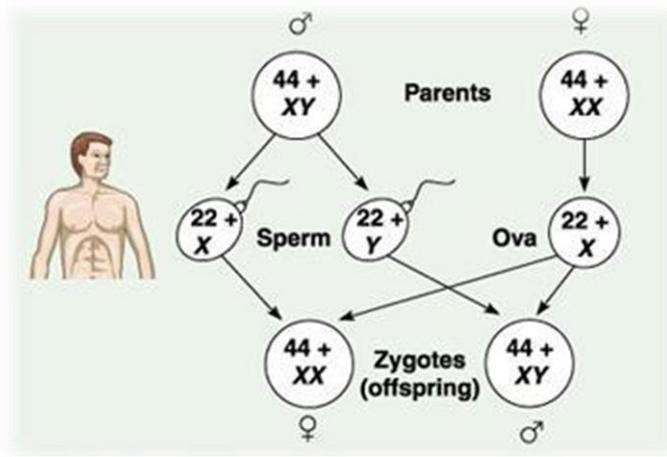
³⁹ Here referred to as the process of strengthening the ability of individuals, organizations and networks to develop and use their resources for sustainable development in an effective and efficient way. See definition of GIZ (2012).

⁴⁰ UNFPA (2012)

⁴¹ Examples can be drawn from the report „Partnering with men to end gender-based violence: Practices that work from Eastern Europe and Central Asia”, UNFPA (2009)

⁴² Kumari (2012)

Illustration 1: Sample educational tool on the biology of sex determination



Humans have 46 chromosomes. The eggs from a woman have 23 chromosomes, including one X-chromosome. Sperm cells have 23 chromosomes, one of which is either an X or a Y chromosome. As illustrated in the picture, the sex of the fetus is determined by either the X or Y chromosome, which is introduced by the male sperm cell.

Source: TutorVista (2010)

There is also the question of how to present new knowledge in capacity development activities. Critical judgments about ‘bad’ behavior are not effective means of preventing sex selection or changing people’s mindsets. As previously mentioned, negative ‘fear and control’ messages like those stemming from monitoring and law enforcement techniques are problematic (see previous chapter). A more effective approach is to focus on positive values.⁴³ By stimulating discourse around positive values and using non-invasive communication techniques participants are able to share experiences and develop ‘their own’ solutions to what they identify as ‘their own’ problems, and ultimately identify alternatives to harmful gender biased practices. Providing venues and guidance for people to build their own solutions to their own problems creates an environment of positive social feedback.

ii. Awareness-raising campaigns

Awareness-raising campaigns are a key measure to addressing prenatal sex selection. Where capacity development is aimed at training key target groups, awareness-raising campaigns are aimed at informing the general public. These large scale campaigns seek to positively influence public opinion on gender equity and strengthen the role of women in society. The content of effective awareness-raising campaigns is similar to what we have seen above in capacity development; however it generally has a more personal or emotional touch to it, capturing people’s attention and interest and starting a public debate (instead of training isolated groups in capacity development programs).

A communication strategy that proved effective in awareness-raising by UNFPA India focused on the following aspect:⁴⁴ Firstly, it highlighted the demographics of sex selection showing SRB trends on a regional, national and local level and presenting the missing numbers of women and girls that were not being born due to sex selection. Secondly, it gave the campaign “a face” presenting images and slogans accessible and meaningful to people. “Love and cherish one’s daughter” is a simple message that everyone can emotionally connect with. Thirdly, the UNFPA India campaign presented the consequences of sex selection, such as marriage squeeze, violation of women’s sexual and reproductive rights, and increase in gender based violence. Finally, these consequences were juxtaposed with female role models and girl’s aspirations showcasing women’s success in society and their contributions to their birth family. Positive reinforcement increases women’s status in society and, ultimately, their cultural value.

⁴³ WHO (2011); Mackie and LeJeune (2009)

⁴⁴ UNFPA India (2008)

Different channels can be used to broadcast this content and stimulate debate at local and national levels. Guilмото points out the important role of the press for successful awareness-raising campaigns in the following quote:

“The press in several countries has offered a crucial platform for these campaigns. For instance, the media has generally reported extensively on various survey and census results, highlighting imbalanced sex ratios, as well as on campaigns to counteract gender inequity and discrimination against girls. An additional dimension of the problem is gradually also receiving increased press coverage: the fate of unmarried young boys, as well as related developments such as women’s trafficking and increased gender-based violence.”⁴⁵

The WHO study also refers to fictional TV drama as an, “ideal vehicle (...) as the practice [of sex selection] involves conflicts between generations and between husbands and wives, set against issues of sexuality and reproduction”.⁴⁶ The ideal target group for fictional drama is young, unmarried women because “they are the most open to questioning values and behaviors.”⁴⁷ In addition to the press and media outlets, celebrities can also be important catalysts for social change. Celebrities can act as highly influential multipliers of innovative ideals and not only legitimate those ideals, but also serve publically as role models. We will come back to this issue in the next chapter.

Obviously son preference and patriarchal social structures are deeply embedded cultural phenomena that are difficult to overcome. There is no ‘one size fits all’ solution to complex social issues like sex selection. Especially awareness-raising campaigns need to be carefully fitted to the local context. They have to take into account the “people from the communities that are affected”⁴⁸ and these have their own traditions, rules and mores. However, if properly crafted to local conditions, they are a powerful tool to change people’s mindsets, break the cycle of son preference and provide a long-term solution to sex selection.

d. Coordination and collaboration among stakeholders

Sex selection is a complex, multidimensional problem. It cannot be addressed by any one single approach; multiple stakeholders have to come together to address the issue. Preventing sex selection means making drastic changes in social and cultural norms. These have to be supported by the widest range of people possible in society. Coordinated effort and collaboration among stakeholders is crucial in order to address sex selection sustainably.

Specific players are international (developmental) organizations, national and local governments, NGOs, in particular women’s rights organizations and key opinion makers such as religious leaders, celebrities, or politicians etc.

Illustration 2 represents a UNFPA mind map identifying partners in advocacy including:

- Key opinion makers such as leaders of industry and key bureaucrats
- Media (print, radio/TV, internet)
- Medical community such as doctors or medical students.

⁴⁵ Guilмото (2007), p. 11

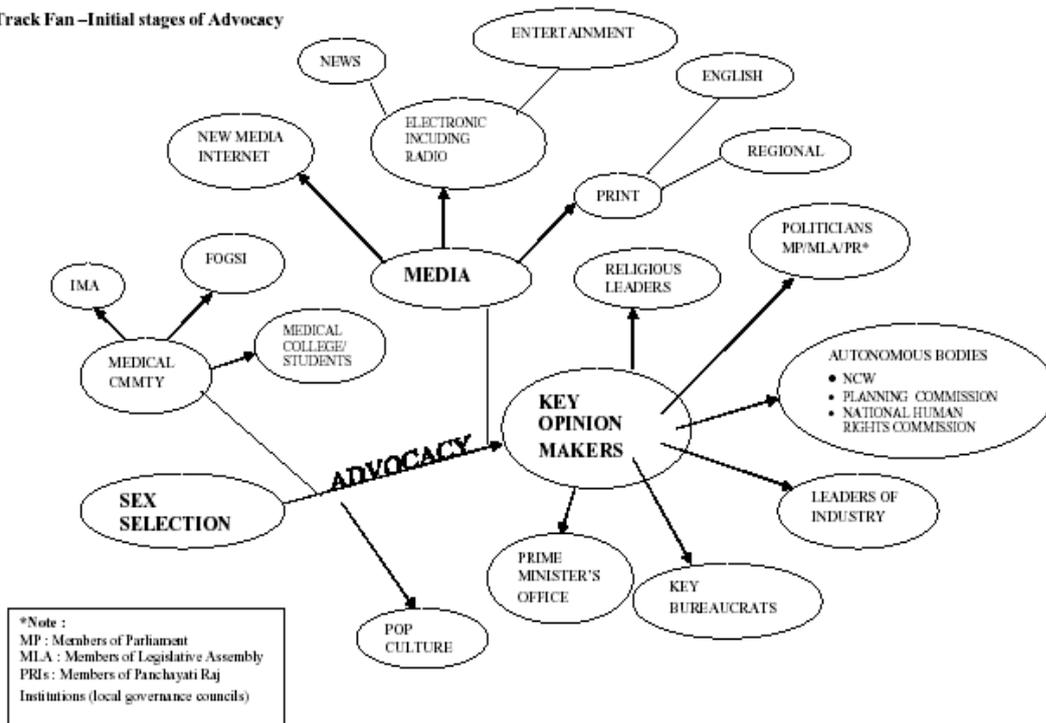
⁴⁶ WHO (2008), p. 8

⁴⁷ Ibid.

⁴⁸ Ibid.

Illustration 2: UNFPA India Track Fan - Initial stages of Advocacy

Track Fan –Initial stages of Advocacy



Source: UNFPA India (2008)

Little research has been done on coordinated multi-stakeholder efforts to prevent sex selection. This information gap will have to be filled in order to properly address SRB imbalances. However, instructive examples can be drawn from multi-stakeholder interventions on related problems like gender-based violence as presented in the 2005 Bott, Morrison and Ellsberg's report. This report states that "multi-sectoral collaboration is important for most gender-based violence initiatives, regardless of sector, but those that aim to improve women's lives through social services, economic empowerment and infrastructure improvements require a multi-sectoral approach – almost by definition."⁴⁹

Like sex selection, gender-based violence is embedded in complex, multi-layered cultural contexts. Although distinct, both phenomena share the need to bring multiple stakeholders together to develop effective long-term strategies. As such, lessons learned about the best ways of preventing and responding to sex selection can be drawn from experiences with preventing gender-based violence. The following list of suggestions is adopted from the Bott, Morrison and Ellsberg's report:⁵⁰

- **"Employ a multi-sectoral approach"**. Include all sectors involved in the prevention of sex selection, such as law enforcement, public health care, educational institutions, international development agencies, etc.
- **"Work at different levels"**. Include individual, community, institutional, legal and policy levels.
- **"Create partnerships between government and nongovernmental agencies"**. Collaboration between these two players with distinct approaches and abilities is likely to create a win-win situation for both sides and can play a major role in preventing prenatal sex selection.

⁴⁹ Bott, Morrison, Ellsberg (2005), p. 6

⁵⁰ *Ibid.*, pp. 6-7

- **“Address norms, attitudes and beliefs at all levels of society”**, e.g. through multimedia campaigns to overcome deeply engrained gender stereotypes.
- **“Target young people”**, e.g. through youth oriented educational programs. Often young people are more open for change and new ideas than older adults. Special focus should be put on young, urban, well-off women as they are highly susceptible to sex-selective abortions.
- **“Demonstrate the developmental impact”** of eradicating gender-based sex selection. This includes showcasing the long-term effects on population development, public health and socioeconomics. Focus on reliable, research based data.
- **“Build the knowledge base through rigorous evaluation”**. Build a reliable knowledge base to assure informed decision making among policy makers and program managers and increase resource allocation for preventing of sex selection.

Clearly, including stakeholders in cooperative solutions is essential to resolving sex selection and SRB imbalances. Perhaps the greatest hurdle to building these networks is our current lack of knowledge. Very little information exists on best practices or on analysis of failed and successful collaborations. What does seem clear is that certain preconditions have to be met to build and maintain comprehensive alliances. These preconditions are a.) access to reliable data, b.) proper analysis of the data, c.) political will to prevent sex selection, d.) incorporation in the international development agenda, and e.) availability of funding. The challenge of effectively tackling sex selection is to raise awareness and assure long-term commitment of all stakeholders as catalyzers and guarantors of economic development, public health and human rights.

The box below presents suggestions for consideration when setting up coordinated multiple stakeholder interventions.

Illustration 3: How to set up coordinated multiple stakeholder interventions

How to set up coordinated multiple stakeholder interventions

1. Identify key stakeholders (see example UNFPA India mind map)
2. Define their involvement, role and competency
3. Model a multi-stakeholder engagement – what could cooperation look like?
4. Consider strengths and weaknesses of multi-stakeholder interventions:
Stakeholders as enablers and resisters
5. Set clear program objectives and measurable outcomes
6. Implement monitoring and evaluation system

Source: own presentation

IV. Analysis of best practices for Armenia

This investigation has looked at the phenomenon of prenatal sex selection throughout Asia with special attention on South Korea, China and India. Each country has formulated a solution based on a similar set of approaches even though each has focused on different aspects to different degrees of success.

What we learn from the case studies and best practices analyzed above is that sex selection is unique to the country and area it exists in. There is no single 'one-size-fits-all' solution that can be applied to all SRB problems. However, there are certain lessons learned that can help Armenia to address sex ratio imbalance and sex selection.

What Armenia can learn from South Korea:

- South Korea's success is intimately related to its economic boom. Armenia is unlikely to experience such a boom in the near future. Economic growth alone cannot be expected to drive the cultural changes necessary to balance Armenia's skewed SRB.
- Armenia can however invest in comprehensive legal reforms like South Korea did. Areas for further legal reforms are: inheritance rights, recognition of female-headed households, and equal rights for women in their birth families after marriage.
- South Korea has heavily promoted greater access to education for women as part of their strategy to strengthen gender equality and reduce SRB imbalances. Armenia, on the contrary, has already expanded women's access to education. Boys and girls have equal educational opportunities and currently more women than men enroll in higher education. Unfortunately, this has not led to equal economical participation and professional opportunities for women in Armenia. Discrimination in the job market and pay inequality both reinforce gender biases and hinder gender equality. Armenia needs to invest in increased female participation in labor market and better job opportunities for women if it wants to see the same kind of benefits South Korea reaped.

What Armenia can learn from China:

- There are two major problems in the Chinese program that can be avoided in the Armenian context. Firstly, the Chinese campaign was introduced without local support on the ground; and secondly, the introduced policies contradicted existing social policies such as those related to land and inheritance rights. For Armenia to avoid the same mistake, it needs to encourage local support for reforms. This can be done by capacity development, awareness-raising campaigns and/or stakeholder cooperation. The key is to encourage positive feedback (e.g. positive messages, community participation, etc.). Secondly, Armenia needs to make sure that both policy and enforcement are coherent within the existing legal framework.
- Armenia's population and geographical size are far smaller than China.⁵¹ Armenia can use these conditions for their advantage. It is much easier for countries with short distances to develop, monitor and enforce policies as well as coordinate capacity development, awareness campaigns, and multiple-stakeholder interventions in different regions. Armenia should put emphasis on establishing highly flexible and connected local support systems.
- Armenia's small size and population has another organizational advantage. Local programs can be checked for consistency; contradictions are easier to both find and fix.

⁵¹ Country size: 0,31 % of Chinas land equals the country dimensions of Armenia (9.596.961 km² vs. 29.743 km²). In terms of citizens: Armenia's population equals 0,23 % of Chinas population (3.100.236 people living in Armenia vs. 1.344.130.000 people living in China), see World Bank (2011).

What Armenia can learn from India:

- In India, law enforcement and monitoring was weakened by insufficient resources and unqualified staff. This resulted in the further victimization of women. In order to avoid similar problems, Armenia should pay special attention to effective law enforcement and assure sufficient funding and qualified staff for monitoring purposes.
- As we have seen, there is the risk of violating human and reproductive rights of women when introducing supply side restrictions in isolation. Armenia should aim for a coherent and integrated approach which emphasizes demand side measures (e.g. policies that promote gender equality along with awareness-raising and media campaigns). Demand side measures are more difficult to implement but promise to lead to effective and sustainable results.

There are three more aspects relevant to the analysis of best practices for the prevention of prenatal sex selection in Armenia:

Research is key:

The phenomenon of sex selection is rather new to Armenia. It started in the 1990 with the economic downturn but went long undetected due to missing data. More research is needed in order to fully understand underlying root causes, dimension and consequences of sex-selective abortions in Armenia. Research is affordable and key for further designing prevention campaigns targeted to Armenian context. Special emphasis has to be put on developing the methodology of a monitoring and evaluation system that measures the impact and effectiveness of multiple stakeholder interventions tackling sex-ratio imbalance. This is true not only for the case of Armenia but internationally valid. Armenia can be at the forefront developing and testing such a methodology since it is a rather small “testground”. Such a methodology is crucial in order to determine which mix of policies and preventive measures works best in which context and why. It is crucial for an effective and efficient response. A system of indicators for tracking the impact of interventions must be developed and used, not only to measure SRB but also to indicate the level of gender discrimination and gender inequality.⁵² Parallels can be drawn from other methodologies such as Bamberger’s guidelines for developing and implementing equity-focused evaluations.⁵³

Financial incentives – a doubtful short-term measure

The 2012 UNFPA Armenia study shows that the main reasons for son preference in Armenia are that men are considered as breadwinners, inheritors of the family estate, and provide financial aid for parents in old age.⁵⁴ Policy responses need to address existing inequalities and ensure equal rights, opportunities and obligations for men and women, so that Armenians are less likely to prefer one sex over the other and perceived disadvantages of having daughters are eliminated. One way of doing so – as we have seen in the present report – are financial incentives for families with daughters. Such measure might help Armenia on a short-term basis to increase the perceived value of girls until long-term measure take effect. However, the feasibility and effectiveness of these incentives are doubtful for several reasons:

1. Economic feasibility: In times of economic austerity it is unlikely that sufficient funding for financial assistance to families of daughter will be provided.
2. Appropriateness: Studies show that sex selection in Armenia is more common among well-off families of the middle or upper class. Financial incentives might not be as attractive to families as anticipated and therefore not show the desired effect.
3. Positive discrimination is in itself questionable: The message should not be to prefer one sex over the other, but to value both equally.

⁵² WHO (2011), p. 9

⁵³ Bamberger (2011)

⁵⁴ UNFPA Armenia (2012)

It is therefore questionable whether incentives will show the desired impact. A more feasible way is to invest scarce resources into more promising efforts like multiple-stakeholder interventions, awareness-raising and media campaigns.

Integrated holistic approach

A successful sex selection prevention campaign in Armenia needs to take into account that an integrated approach tailored to the specific cultural environment is necessary. This indicates that the awareness-raising campaign may be the most difficult part of the Armenian program. What psychologically works in China and India may not work in Armenia.

TV is one effective instrument of awareness-raising. Regarding the UNFPA Armenia report, 96.7% of interviewed women state that they watch TV daily. It is the most common media used by women (followed by the internet (13.4%), newspapers (11.8%) and radio (10,5%)).⁵⁵

TV drama appears to be a viable vehicle for the promotion of healthy gender attitudes and can play an important role in the prevention of sex-selective abortions in Armenia.

A major part of promoting healthy gender attitudes includes changing prevailing attitudes about sex selection. However, it is important to craft these messages carefully. Advocacy campaigns run the inherent risk of promoting unintended side effects like reduced access to safe abortion, reinforcement of gender stereotypes, over-dramatization of the situation or upsetting the balance between individual and collective interests. This emphasizes the need to not just promote what seems to have worked for other campaigns in other countries but to carefully research the social dynamics underpinning the Armenian problem and craft an appropriate campaign.

⁵⁵ UNFPA Armenia (2012), p. 14

V. Prioritized recommendations for action for Armenia

This chapter gives concrete and prioritized recommendations for governmental, non-governmental and international organizations in Armenia to prevent prenatal sex selection and balance SRB. Recommendations should be addressed with special emphasis on targeting Armenia's urban, aspiring middle class since sex-selective abortions are predominant among this emerging socioeconomic stratum.

a. More research is needed

The following recommendations can be given regarding data collection, monitoring, evaluation and enhancement of research on SRB and prenatal sex selection:

1. Research sex selection in Armenia.
 - a. Collect data on sex ratios at birth at national and regional (i.e. marz) level, provision of reliable statistics.
 - b. Analyze the dimensions of sex-selective abortions.
 - c. Analyze the root causes and conditions underlying sex-selective abortions in Armenia (e.g. son preference, family systems, patrilocal society, gender roles in marriage, inheritance, family name, masculinity etc.).
 - d. Explain regional differences in son preference in Armenia.⁵⁶
2. Explain the correlation between SRB and birth order in the case of urban, well-educated and well-off women.⁵⁷
3. Investigate the linkage between intrafamilial violence and sex-selective abortions.
4. Explain the higher sex-ratio imbalance in the case of the third and fourth births and consider these factors in the training of medical staff when dealing with women in their third or fourth pregnancy (see chapter 4 on capacity development).
5. Research the individual and social consequences of demographic imbalance caused by sex selection in Armenia in the medium and long run.
6. Contribute to the development of a methodology for monitoring and evaluation (e.g. support of PhD projects in the area of monitoring and evaluation)
7. Monitor and evaluate multi-stakeholder interventions in Armenia.

b. Legal measures and monitoring of law enforcement

The Armenian government plays a key role in addressing sex selection. Recommendations to tackle demand side measures are:

1. Promote gender equality and women's rights in a coherent legal framework.
2. Revise inheritance laws and establish equal rights and responsibilities within the birth family also after marriage.
3. Promote female participation in the labor market (e.g. quotas, tax reduction for meeting goals in a determined time frame).
4. Improve pension systems and ensure financial security in old age.
5. Monitor and analyze the implementation of laws and policies on gender equality.

⁵⁶ The recent UNFPA Armenia study indicates that son preference is relatively greater in some parts of the country (eg. Lori (93.7%), Tavush (50.7%), Shirak (46.2%) and Gegharkunik (45.6%), see UNFPA Armenia (2012), p. 29.

⁵⁷ For urban women, from the third child on, the SRB tends to increase and peaks in the case of the fourth child (3.27), and then decreases. A similar peak (3.3) in the case of fifth birth can be noted for women with tertiary education. There is also a correlation observed between women's income and greater predominance of boys, see UNFPA Armenia (2012), pp.18-19.

Recommendations on the supply side are:

1. Introduce regulations that control the access to technology and regulate the use of pre-conception / pre-natal sex selection techniques as well as the use of ultrasound machines to authorized clinics.
2. Register clinics/facilities and their technology, including portable ultrasound machines, and introduce a standardized reporting system maintaining proper digital records.
3. Set up a highly organized and controlled health system that a.) reports the numbers of pregnancies, b.) tracks pregnancies, and c.) encourages medical staff to be neutral and non-discriminative regarding the sex of babies.
4. Investigate risks of drug-induced abortions (e.g. use of Cytotec / Misoprostol) and consider making it a prescription drug.
5. Consider introducing sanctions for practicing sex-selective abortions. Sanctions might include fines, license withdrawal, and seizure of ultrasound machines.

c. Capacity development and awareness-raising

Recommendations for successful implementation of capacity development are the following:

1. Develop and introduce guidelines for medical staff, ethics committee and all relevant public authorities.
2. Train the medical personnel regarding established guidelines.
3. Consider developing an ethics committee of gynecologists and obstetricians.⁵⁸
4. Provide and promote family planning and sexual education, e.g. inform soon-to-be parents about the biology of conception, educate teenagers and young adults about the use of contraception to prevent unwanted pregnancies, correct stigmas and false assumptions regarding hormonal contraception causing phenomena such as abnormal hair growth, obesity, menstrual dysfunction, infertility or cancer, also among doctors).
5. Educate about side effects of abortion drugs such as Cytotec / Misoprostol.

Recommendations for awareness-raising campaigns:⁵⁹

1. Organize awareness-raising initiatives and campaigns involving the general public, relevant social and other networks, civil and international organizations.⁶⁰
2. Mobilize the youth by organizing target group specific awareness-raising campaigns, e.g. for young, urban, well-educated and well-off women.
3. Promote advocacy, sensitization and awareness-raising programs conducted by both governments and nongovernmental organizations.
4. Introduce awareness-raising campaigns with young men – future fathers-to-be, e.g. sensitization campaigns, educational trainings and sexual education in military schools, rural communities etc.⁶¹
5. Promote media campaigns about the root causes and consequences of sex-selective abortions.
6. Promote special media campaigns for mother's day, international women's day, women's sports events, etc. to promote women's role in society together with the private sector (Private Public Partnerships). Showcase successful women and female role models.
7. Monitor of the impact of campaigns.

⁵⁸ For details see PACE Report Prenatal Sex Selection, Doc. 12715.

⁵⁹ The appendix includes extensive supplementary examples from international multi-media campaigns.

⁶⁰ Include the Council of Europe as stated in Resolution 1829 Art 9.4.

⁶¹ For best practices see UNFPA (2009).

d. Multi-stakeholder collaboration

The following recommendations can be given regarding multi-stakeholder interventions:

1. Identify involved parties and potential cooperation partners (mind map, stakeholder analysis).
2. Build partnerships to prevent sex selection:
 - a. Strengthen cooperation among UN and International Agencies: United Nations Population Fund (UNFPA), United Nations Development Programme (UNDP), United Nations Children's Fund (UNICEF), United Nations Entity for Gender Equality and the Empowerment of Women (UNWOMEN), World Health Organization (WHO), Council of Europe, etc.
 - b. Collaborate with international cooperation agencies and incorporate prevention of prenatal sex selection into framework of existing assistance and cooperation programs, especially in the areas of education, youth and dialogue with civil society.
 - c. Strengthen cooperation between public authorities and NGOs.
3. Promote advocacy in the Gender Theme Group and formulate a coherent approach to sex selection.
4. Establish, implement and monitor multi-sector action plans to address prenatal sex selection.
5. Incorporate the topic in current and potential GBV prevention projects since gender-based sex selection stems from and reinforces discrimination against women in the South Caucasus region.
6. Collaborate with the church and target religious leaders with ethics-based arguments.⁶²

⁶² For successful approaches see South Korea's "Love your daughter"- campaign and UNFPA India initiative "India's Missing Daughters: Faith for Action Against Sex Selection", one-day conference organized by Sri Sri Ravi Shankar's The Art of Living Foundation and UNFPA in November 2005, New Delhi, India.

VI. Conclusions

Women in Armenia feel pressured to give birth to sons because of unequal opportunities (inheritance, economic prosperity, and social status). I agree with Doris Stump's statement that she gave me in an interview that banning sex selection can possibly help in the short-term, but is not a sustainable means in the long run. The core task is to alleviate the root cause of son preference and sex selection by addressing gender inequity and improving the living conditions of women and girls in society.

As we have seen there is no 'one size fits all' solution to preventing prenatal sex selection. International best practices can give guidance but they cannot be adopted one to one without local support on the ground. An integrated and comprehensive approach is necessary to balance SRB effectively and sustainably. Upon reviewing the relevant literature there seem to be three preliminary conclusions that can be drawn.

The first preliminary conclusion is that, in most cases, supply side measures like policy, enforcement and incentives seem to be effective short-term measures for addressing SRB imbalances. Obviously, these measures need to be minimally adjusted to fit the specific cultural environment but they appear to produce measurable results when appropriately implemented.

The second preliminary conclusion is that demand side measures like capacity building and awareness-raising campaigns are less easy to design, implement and measure than supply side measures. However, despite the complexity of addressing demand side issues, they appear to be the only measures providing long-term solutions to SRB imbalances.

The third preliminary conclusion is that more research is needed. The problem of permanently changing deeply embedded patriarchal mindsets appears to be approachable from two directions. The first is to continue down the road of 'trial and error' that we are currently on: try as much as possible and invest in what appears to work in each individual environment. The problem with this approach is that it is wasteful. Not only does it waste the time, effort and money of each stakeholder, but there is no guarantee that such a complex multivariable problem as sex selection will yield predictably positive results over varying cultural landscapes. The second approach is to invest in research towards an understanding of the many variables and the development of a methodology that can produce measurable results in changing cultural landscapes. This would imply the pooling of international resources and the establishment of long-term research programs. Neither approach guarantees success but the research approach does promise more rewards because a methodology can build on a base of predictably applied solutions.

The six key components presented in this report are research, legal framework, monitoring and law enforcement, capacity development, awareness-raising campaigns and multiple stakeholder cooperation. These components should help to consolidate the disparate information sources and focus building an international body of research that is accessible and helpful to stakeholders at all levels. The hope is that this report can serve as the basis for a six area intervention plan in Armenia. Balancing SRB and preventing prenatal sex selection in any affected nation is crucial for laying down a social foundation that not only promotes healthy socioeconomic growth but ultimately supports nations like Armenia emerge to the international platform.

PACE Resolution 1829 sums it up in saying that "(the) most effective and durable way to prevent prenatal sex selection is promoting the equal value of women and men in society and their effective equality in all aspects of life."⁶³

⁶³ PACE (2011)

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VIII. Links and Media Outlets

Examples for awareness-raising campaigns available on YouTube:

a. News clips

AFP News, 2012. *India cracks down on sex-selective abortions*. [Online]

Available at: http://www.youtube.com/watch?v=Gl_eLYWC5JE

[Accessed 31 07 2012].

Council of Europe, 2011. *Prenatal sex selection, interview with Doris Stump, rapporteur of PACE*. [Online]

Available at: <http://www.youtube.com/watch?v=XlxcJm8bYEs>

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Euronews, 2011. *Four countries urged to act against choosing babies' gender*. [Online]

Available at: <http://www.youtube.com/watch?v=aKkZjkMPZ0I>

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United Nations, 2011. *UN agencies urge concerted effort to stop gender-biased practice of 'son preference'*. [Online]

Available at: <http://www.youtube.com/watch?v=82Rq-vy3f4E>

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b. Documentaries

CharaGG, 2011. *The Red Apple, Sex selection in Armenia*. [Online]

Available at: <http://www.youtube.com/watch?v=0X-n3HvdH3o>

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red20055, 2008. *India's Missing Girls, Part 1-3*. [Online]

Available at: <http://www.youtube.com/watch?v=krwqSgRuuSA&feature=related>

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Starryeyedfilms, 2009. *Petals in the Dust: The Endangered Indian Girls Documentary Film*. [Online]

Available at: <http://www.youtube.com/watch?feature=endscreen&NR=1&v=M3gafLeQrQI>

[Accessed 31 07 2012].

womenintheworld, 2010. *"I Didn't Want a Daughter"*. [Online]

Available at: <http://www.youtube.com/watch?v=hnhHtaVdmQ&feature=related>

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c. Online campaigns

Anon., 2012. *Social media campaign: 50 Million Missing: a campaign to end India's female gendercide*. [Online]

Available at: http://www.flickr.com/groups/50_million_missing/pool/

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MrVikramsahney, 2011. *Save The Girls Child Campaigns- Vikram Sahney*. [Online]
Available at: <http://www.youtube.com/watch?v=5R5cspxft4E>
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Available at: <http://www.youtube.com/watch?v=P8QXY07d3k>
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The 50 Million Missing Campaign, 2012. *Gender Bytes - A Blog on India's Female Gendercide*. [Online]
Available at: <http://genderbytes.wordpress.com/>
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d. Ideas for media campaigns in Armenia

- Promote the production of TV episodes on prenatal sex selection. The Hrayr Maroukian Foundation (HMF) produced these six episodes about the challenges and achievements of women in Armenia in cooperation with Yerkir Media, funded by the Norwegian Foreign Ministry. One of the episodes introduces reproductive health of women as a serious area of concern in Armenia today. Several health care experts address the multiple reasons for increasing infertility rates, abortion rates as well as the importance of preventive care. Another segment of the six part series presents successful Armenian business women and breadwinners, "in order to begin dismantling rigid stereotypes that are prevalent in our traditionally patriarchal society". Women entrepreneurs and managers participated as panelists to discuss how they have become equal participants of economic life. Even if sex-selective abortions are not directly mentioned, it is a great means to promote women's economic participation in society and gender equality. Recommendation: Gain the Norwegian Foreign Ministry as a cooperation partner for further campaigns. Information available at:

HMF News, 2012. *Women in Armenia: Six Part Television Series*. [Online]
Available at: <http://www.maroukianfoundation.org/english/archives/770>
[Accessed 13 08 2012].

- Organize fundraising events, media campaigns, and/or flash mobs with Armenian celebrities to stop sex selection, e.g. benefit concerts with Cher who participated in humanitarian efforts to Armenia in the 1990s. An example of a successful media campaign for promoting gender equality starring Daniel Craig is the following:

WeAreEquals, 2011. *EQUALS*. [Online]
Available at: <http://www.youtube.com/user/WeAreEquals?feature=watch>
[Accessed 31 07 2012].

- Promote special media campaigns for mother's day, international women's day to worth ship women's role in society together and partner with the private sector (Private Public Partnerships). For best practices visit "ComVoMujer" on Youtube or "Celebrate your daughter-campaign" by BK&Co Company.