

# **Beyond the Technology for Sex Selection**

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# **“GENDERCIDE”**

1985 book by Mary Anne Warner

## **100 MILLION “MISSING WOMEN”**

**Nobel Laureate economist Amartya Sen introduced the concept of “missing women” in the early 1990’s.**

**The toll reached 100 million missing women in 2000. The majority were in China, about 44 million were in India, and the rest were from nations across the world such as Taiwan, Singapore, the Western Balkans, the Caucasus, and the United States.**

# The Numbers

## 100 Million Missing Women

Boys

Girls

•	100	normal ratio
124	100	2005 China census
140	100	some provinces (Jiangxi, Henan)
105	100	Tibet and Muslim areas of China
200	100	for a 3 <sup>rd</sup> child if no boys preferences rise sharply for 2 <sup>nd</sup> and 3 <sup>rd</sup> births
32 million men		more men than women in China in 2005
40 million men		more men than women in China in 2020
40 million men		more than the total combined female population of Taiwan and South Korea
40 million men		equivalent to the entire population of boys and young men in the USA
Most		will not be able to marry

# **China: The Perfect Storm**

## **A Confluence of Factors**

### **Biological**

**Natural preference for boys**  
**Increasing populations**

### **Social**

**Family name continuation**  
**Descent of property (inheritance)**  
**Opportunities for work and education**  
**Desire for smaller families**

### **Economic**

**Males superior earning power**  
**Assets are tangible and require maintenance**  
**No social security or 401K**  
**Children needed to provide for the elderly**  
**Loss of daughter to care for husband's family is financial loss**  
**Dowry**

## **Political**

**One child policy 1970's, renewed in 2007**

**Male political domination**

**Failure to enforce the law**

**Adoption policies**

## **Technology**

**Advent of ultrasound in 1980**

## **Religious Values**

**Animism**

**Secular**

**Tacitly support male bias (Confucianism)**

**Fail to play an active role in discouraging gendercide**

**Muslim areas of China have normal ratios. The Qu'ran forbids  
killing one's children. Surah 17 v 31; 81 v 8-9**

# **Dire Consequences Predicted for China**

**Crime**

**Pornography**

**Rape**

**Child brides**

**Homosexuality**

**War**

**Civil unrest**

**Extinction of family lines**

**Violence**

**Prostitution**

**Bride trafficking**

**Polyandry**

**Build the army/paramilitary**

**Remote public work projects**

**Authoritarian rule**

**40 million men will not be able to marry and enjoy the stabilizing encouragement of a spouse. They will not have the opportunity to assume the meaning, responsibility, and pride that comes from supporting a spouse and children.**

# India

**In 2001, the UN estimated that 44 million girls were missing in India.**

**In 2006, the AP reported research that 7,000 fewer girls than expected are born each in day in India.**

**Like China, India has laws against prenatal sex determination and selection (PNDT) since 1996.**

**Like China, some of the most extreme ratios of male to female births are found in some of the most prosperous provinces (Maharashtr, Puujab, Gujarat)**

**Like China, the preference for males seems to cross religious, caste, and socio-economic boundaries.**

# INDIA

**Unlike China, India has no One Child Policy but since wealthier families are trending to have smaller families, they may feel more pressure to have males than those with larger families.**

**Unlike China, dowries are more deeply embedded in the culture. “Having a daughter is like watering another man’s garden.”**



# USA

No restrictions on sex selection.

The birth ratio in the USA is roughly normal among the general population.

The birth ratios of ethnic subpopulations of Americans such as Chinese, Filipino, and Japanese are skewed toward males.

US fertility clinics heavily advertise “family balancing”, a euphemism for sex selection by Preimplantation Genetic Determination (PGD).

US has become a major “sex selection tourism” destination for people from all over the world who wish to select the sex of their child.

**Why do China and India, who each have laws against sex selection, have such skewed ratios compared to the USA which has no laws prohibiting sex selections and readily available technology?**

# LAW

## India

**Prenatal Diagnostic Techniques (Regulation and Prevention of Misuse) Act (PNDT) made prenatal sex determination and selection illegal. It went into effect in 1996.**

## China

**One Child Policy (1979, renewed in 2006)**

**Marriage Law – forbids infanticide**

**Women's protection Law – protects women who keep daughters**

**Maternal Health Care Law – limits ultrasound results**

## Britain

**Law prohibits the use of PGD for anything but genetic disease**

## Sweden

**Affirmed freedom of sex selection in 2009**

## USA

**Does not restrict sex selection**

**It can be very difficult to prove that sex selection was the reason for the abortion.**

# Methods for Sex Selection

## Pre Implantation

Positions

Timing (Shettles)

Diets, douches (PH)

Pills, supplements

Sperm sorting (flow cytometry, Microsort)

## Post Implantation

Ultrasound

Amniocentesis

Fetal blood (from 6<sup>th</sup> week)

Chorionic villus sampling (tissue)

## Post birth

Infanticide (abandonment, exposure, malnutrition,  
smothering, drowning, poisoning)

Sex selective adoption

# **Ethical and Psychological Issues**

## **Social justice**

**Value and dignity of every person**

**Gender bias and discrimination**

**Eugenics**

**Procreative liberty**

**Individual vs best interest of society**

**Access and allocation of medical resources and results**

**Discarding embryos**

## **Centrality of Human relationships**

**Couples relationships**

**Children's well being**

**Parent-child relationships**

**Trust and power in family relationships**

# Solutions

**Complex problems require complex solutions.**

**Laws regulation sex selection in China and India have had only a modest effect. Perhaps stronger enforcement would make a difference.**

**Repealing the One Child Policy might help but India struggles with sex selection despite no similar law.**

**Regulation of fertility clinics such as the Human Fertilisation and Embryology Authority (HFEA) in Britain could stop PGD and the USA's commerce as a "sex selection tourism" destination.**

## **Religion**

**Religion seems to have had little effect. A stronger voice by religion emphasizing the value and dignity of every person and clear ethical teaching on the practice of sex selection would help.**

## **Economics**

**More educational and work opportunities for women would increase women's earning power, status, and perceived worth.**

**Stronger economies provide more security for families and confidence they can care for themselves in the future.**

## **Political**

**Involve more women in the political process. Improve adoption laws and opportunities. Regulate the use of technology for gender selection. Protect women at every level.**

## **Social**

**Recognize the value of women**

**Value women's roles and work**

**Recognize women's inheritance rights**

**(proposed Hindu Succession Act)**

**Educate women**

**Eliminate dowries**

**Change tradition**



## **Technology**

**Limit technology's use in sex selection  
Sex selection utilizes low tech methods as well  
as high tech. It is not the only factor in limiting  
sex selection.**

# **Beyond the Technology of Sex Selection**

**100 million missing women is a huge tragedy and a complex international problem.**

**Limiting technology such as PGD and ultrasounds to be used for the purpose of sex selection is an important but modest step.**

**The larger problems that cannot be neglected are the religious, social, economic, and political traditions that will perpetuate the loss of women.**

**Hearts and values must change not just laws about technology.**

# The Exception

## South Korea

Is heading toward normality after years of a skewed ratio.

Did not change deliberately.

Female education

Antidiscrimination suits

Equal rights rulings

made son preference seem old fashioned and unnecessary

Modernization

Prosperity

Economist 2010

# **Alternative Views**

**J Appel suggests paying parents to have girls (or tax boys).**

**Robert Sparrow in the lead article of the July American Journal of Bioethics makes the case that since we now have the technological ability to select the sex of our children we should abandon dimorphism (two sexes) and insure that all our children be female.**

**But these are discussions for another day**