

SEX SELECTION



The Old & New Challenges for Asian Women

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Sex Selection in China



- 2004 – 120 boys to 100 girls
- In 8-10 years expect to have 40-60 million missing women
- Primarily ultrasounds & sex selective abortions
- Cultural norms – role of son in the family
- Population control – one child policy
- “Bare Branches” –a national security risk
- Increased trafficking of women
- Ban on sex selection in 2004

Sex Selection in India



- 2001 Census
 - 927 females to 1000 males
 - 903 females to 1000 males in urban areas
 - 766 females to 1000 males in some districts
- Ultrasound & sex selective abortions
- Pre-natal sex determination -- illegal since 1994
- Cultural & economic norms – role of son in the family, inheritance & dowry costs of daughters
- Population control – two child policy

Other Asian Countries



- Korea
- Thailand
- Singapore
- Philippines

Sex Selection



- Infanticide
- Selective Abortion
- Pre-implantation genetic diagnosis
- Sperm sorting

Selective Abortion



- Prenatal – during pregnancy -- screening
 - Ultrasound
 - Amniocentesis
 - Gender Monitor
- Used for sex selection & disability de-selection

Gender Monitor



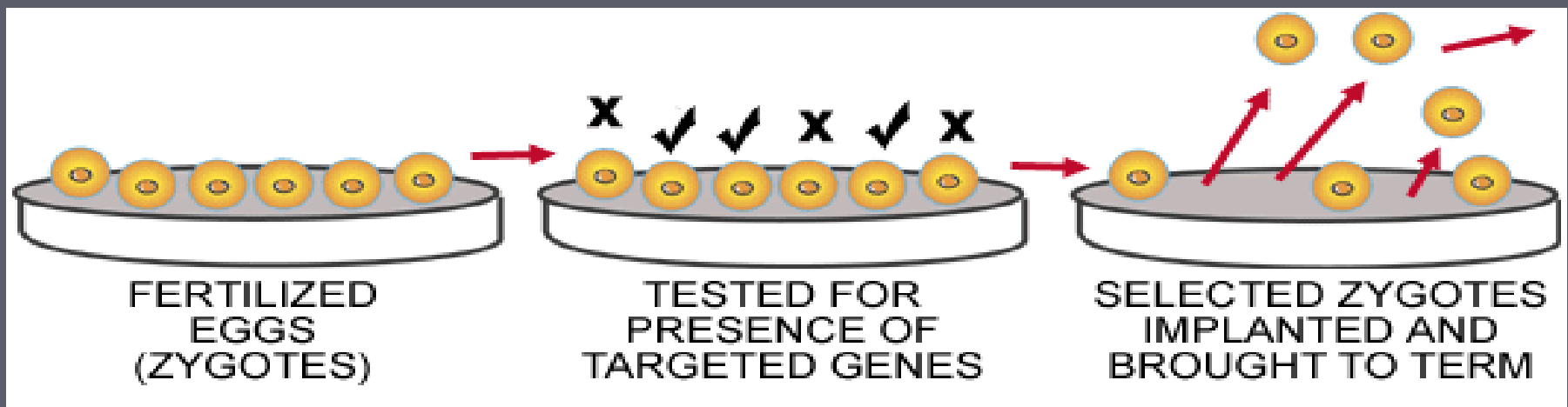
- At 5 weeks test the mother's DNA to determine the sex of baby
- Cost -- \$25 for kit & \$250-350 for DNA test
- Results via internet
- 2005



Pre-implantation genetic diagnosis (PGD)



- Using in-vitro fertilization, eggs are fertilized
- At day 3 (8 cells) a cell is extracted for testing
- Only selected embryos implanted



PGD



- Introduced in 1990s to allow at-risk parents to avoid passing on severe genetic diseases
- More recently, uses have expanded to include
 - “social” sex selection
 - late onset diseases (e.g. Alzheimer’s)
 - tissue match for existing child needing transplant
 - likelihood of deafness in future generations
- Regulated in most countries; unrestricted in the U.S.
- \$15,000 per attempt

Sperm sorting



- MicroSort® -- sorts sperm cells carrying Y-chromosome (male) from X-chromosome (female)
- Costs about \$3,200 per try
- 73% chance of getting a girl
- NYTimes, American, Delta United Airlines in-flight
- 433 births for FDA test

The MicroSort® Gender-Selection Program at GIVF

Do You Want To Choose the Gender Of Your Next Baby?



If you want to choose — or need to choose — whether your next baby is a girl or a boy, you may qualify for the MicroSort® gender selection procedure at the Genetics & IVF Institute (GIVF).

Prospective parents come from all over the world to GIVF in suburban Washington, DC. They choose this exclusive *scientifically-based* sperm sorting gender selection procedure, currently in an FDA clinical trial, for several important reasons:

- For prevention of genetic diseases
- For family balancing
- Results so far show 90% success rate for achieving girls and 75% for boys.
- FREE MicroSort for qualifying patients who use Donor Egg or Preimplantation Genetic Diagnosis at GIVF.
- For sensitive, personal attention from a caring staff of professionals, dedicated to the success of your family.

Couples also choose the Genetics & IVF Institute because we are the world's largest integrated provider of infertility and genetic services. Our expertise in the diagnosis and treatment of complex genetic and reproductive disorders is second to none.

To learn more about the Genetics & IVF Institute, and how the MicroSort® technology may help you select the gender of your next child — please visit us at:

www.givf.com

or call us at

1-800-277-6607

Now available in New York and other metropolitan areas through collaborating physicians. Call for details.

Caution: This procedure uses an investigational device limited by federal law to investigational use.

GENETICS & IVF INSTITUTE



Sperm Sorting



- Ericcson Method – also sperm separation and fertility drugs – less reliable
- Community media – *Indian Express, India Abroad, India Currents*
- Clinic Advertising – neon sign in New York City Chinatown – “You can select to have a boy or a girl before pregnancy.”

“Medical” & “Social”



- “Medical” sex selection – for sex linked diseases e.g. hemophilia and Duchene's muscular dystrophy
- “Social” sex selection – for purely preference reasons
- Disability Rights critique of the definition of “medical”

Marketing of Sex Selection



- “Family Balancing”
- “Gender Variety”
- Gender selection – “Do you want to choose the gender of your next baby?” -- MicroSort
- “Desire a Son?” -- *India Abroad*
- Baby Gender Monitor/ Baby Gender Mentor

Sex Selection in U.S.



- New pre-pregnancy technologies & 5-week sex determination
- Initial evidence – selection for girls for second child – “nation of little sisters”
- 25-35% of Americans say they would select for sex, if they could; 50-70% say they want to know the sex before birth
- Pushed by marketing and technology – if we can we should & if we can, let’s sell it

Response in U.S.



- No regulation other than professional self-regulation by the ASRM
- A woman's “right to choose” and “right to privacy” – protected by *Roe & Casey*
- No limits on abortion or “right to choose”
- “Wait to see the impact before we regulate”

Market



- Fertility industry can use sex selection to expand their market -- low entry cost
- MicroSort market estimated to be \$200-400 million/year
- US companies with with sperm sorting patents pending
 - Genetics & IVF Institute -- MicroSort
 - XY Inc. -- MoFlo
 - Pharmacia --at World Patent Office
 - Infigen
- Gender Monitor – 2,000 orders in first few weeks

Concerns & Challenges



- Sex discrimination & sexism
- Gender normalization
- International solidarity with other countries
- Violence against women & trafficking

Concerns & Challenges



- Normalizes “selection” and “design” – disability de-selection and eugenics
- Objectification of children (as accessories)
- Re/Defining the language of choice & reproductive rights
- Intersection of mainstream practices and practices in Asian immigrant communities and internationally

Policy Options



- Ban the marketing of sex selection or technology
- Ban the use of sperm sorting for sex selection
- Permit sex selection for medical reasons only
- Permit sex selection for “family balancing”
- Permit sex selection for any reason

Sex Selection Policies



Countries with policies (in addition to Council of Europe Convention on Biomedicine & Human Rights) that permit sex selection for “medical reasons” but prohibit it for “cultural reasons,” “family balancing,” or any other purpose:

Australia, Canada, China, Denmark, France, Germany, Greece, India, Japan, The Netherlands, Norway, South Africa, Spain, Switzerland, United Kingdom

CASS



Campaign Against Sex Selection

- CGS, NAPAWF, Manavi, and CWPE
 - Ban marketing
 - Regulate/license use
 - Grassroots campaign to remove ads and for clinics to not offer services
- Meetings in India and Thailand in 2005
- Strategic Meeting & Book in Jan. 06

Concluding thought



“The final goal of reproductive engineering appears to be the manufacture of a human being to suit exact specifications of physical attributes, class, caste, colour and sex. Who will decide these specifications? We have already seen how sex-determination has resulted in the elimination of female fetuses. The powerless in any society will get more disempowered with the growth of such reproductive technologies.”

- Saheli Women's Resource Centre, India 2001