

health research. Such methods may include passive parental consent, community consent, and/or independent adolescent consent. We feel that these alternate methods may better reflect the South African social context, and serve the interests of South African adolescents who wish to take part in school-based sexual health research. In this, we do not suggest undermining parental authority but rather encouraging parallel efforts to promote shared decision-making about enrolment in important research.

**Amanda Jayne Mason-Jones**

*Health Systems Research Unit  
South African Medical Research Council  
Cape Town; and  
Adolescent Health Research Unit  
University of Cape Town  
amanda.mason.jones@mrc.ac.za*

**Melanie Zuch**

*Department of Community Health  
Brown University  
Providence  
Rhode Island  
USA*

**Cathy Mathews**

*School of Public Health and Family Medicine  
University of Cape Town; and  
Health Systems Research Unit  
South African Medical Research Council  
Cape Town*

**Lesley Henley**

*School of Child and Adolescent Health  
University of Cape Town*

from Asia.<sup>5</sup> For traditional, economic and social reasons, many families prefer to have sons, and this is a cause of the increased male/female ratio, infanticide, abandonment of newborn girls, and neglect of daughters.<sup>6</sup> The preponderance of males occurs predominantly in lower socio-economic classes, and there is concern that their marginalisation may lead to antisocial behaviour threatening societal stability and security.<sup>6</sup> An excess of men conduces to insecurity, in turn motivating families to have more sons for protection. Son preference has been reported also from Africa,<sup>7</sup> where gender shifts are not yet prominent, probably because of the unavailability of prenatal gender testing. However, should fertility decline, the motivation for gender-selective abortions would become stronger, and many families would try to have at least one boy to secure the patriarchal lineage.<sup>7</sup>

Population size and gender imbalance in some countries can be underestimated because men are predominant in migrating and can be overlooked in a census; in Russia, for example, many people don't know that the census of 2010 has taken place. The gender imbalance will probably increase in the future, because of gender-testing technologies and their increasing availability, and discrimination in care practices for girls.<sup>3,6</sup>

Due to migration, a regional excess of men can have global repercussions. The outflow of men can further stimulate gender-selective practices in their native countries. The increasing gender imbalance may require a revision of traditional patterns of sexual behaviour, including effective measures against gender-selective abortions. However, measures taken by individual countries might be insufficient – international efforts could be required.<sup>8</sup> Unfortunately, for young males in some regions, the damage has already been done, and measures against gender imbalance in today's newborns won't help them.

A globalised mankind needs to eliminate the motives for high fertility and gender shifts, and protect and support childless elderly people, unwed mothers and families raising girls. Traditions favouring men as the inheritors and maintainers of lineage and posterity<sup>7</sup> should be discouraged.

**Sergei V Jargin**

*Peoples' Friendship University of Russia  
Moscow  
Russia  
sjargin@mail.ru*

1. National Health Act, 2003. Pretoria: Government Gazette, 2000:869.
2. Ethics in Health Research: Principles, Structures and Processes. Pretoria: Department of Health, 2004.
3. Nyirenda M, McGrath N, Newell ML. Gender differentials in the impact of parental death: Adolescents' sexual behaviour and risk of HIV infection in rural South Africa. *Vulnerable Child Youth Stud* 2010;5(3):284-296.
4. Strode A, Grant C, Slack C, Mushariwa M. How well does South Africa's National Health Act regulate research involving children? *S Afr Med J* 2005;95(4):265-268.
5. Lesch E, Kruger L-M. Mothers, daughters and sexual agency in one low-income South African community. *Soc Sci Med* 2005;61:1072-1082.
6. Weithorn LA. Children's capacities to decide about participation in research. *IRB: Ethics and Human Research* 1983;5(2):1-5.

## Where have all the flowers gone?

**To the Editor:** The title of the recent editorial<sup>1</sup> applies too to a related theme: gender imbalance.

The distinction between male and female is a key dimension of population dynamics.<sup>2</sup> In some southern and eastern Asian countries, the sex ratio has become skewed towards men, partly in consequence of gender-selective abortions;<sup>3,4</sup> in the People's Republic of China, for example, the newborn male/female ratio is about 119:100.<sup>4</sup> Similar data have been observed in India<sup>3</sup> and among immigrants to Europe

1. van Niekerk JP de V. Where have all the flowers gone? *S Afr Med J* 2011;101(5):281.
2. Lutz W, Samir KC. Dimensions of global population projections: what do we know about future population trends and structures? *Philos Trans R Soc Lond B Biol Sci* 2010;365:2779-2791.
3. Hesketh T, Lu L, Xing ZW. The consequences of son preference and sex-selective abortion in China and other Asian countries. *CMAJ* 2011 14 Mar [Epub ahead of print].
4. Torjesen I. Chinese would resist having larger families if one child policy was relaxed. *BMJ* 2010;340:c1212.
5. Singh N, Pripp AH, Brekke T, Stray-Pedersen B. Different sex ratios of children born to Indian and Pakistani immigrants in Norway. *BMC Pregnancy Childbirth* 2010;10:40.
6. Hesketh T, Xing ZW. Abnormal sex ratios in human populations: causes and consequences. *Proc Natl Acad Sci USA* 2006;103(36):13271-13275.
7. Beyeza-Kashesy J, Neema S, Ekstrom AM, Kaharuzza F, Mirembe F, Kulane A. "Not a boy, not a child": A qualitative study on young people's views on childbearing in Uganda. *Afr J Reprod Health* 2010;14:71-81.
8. Jargin SV. Ethical challenges in an age of overpopulation. *S Afr Med J* 2010;100:694.