

Posted on October 31<sup>st</sup> 2011

**Title: Programme Evaluation of the Janani Suraksha Yojana**

Shared by Dr. T.K. Sundari Ravindran

**Publication by:** National Health Systems Resource Centre, Technical Support Institution with National Rural Health Mission, Ministry of Health & Family Welfare, Government of India.

**Publication details:** National Health Systems Resource Centre (NHSRC), ISBN 978-81-908725-7-7, September 2011.

**Download the report**

**at:** [http://nhsrcindia.org/pdf\\_files/resources\\_thematic/Public\\_Health\\_Planning/NHSRC\\_Contribution/JSY\\_Evaluation\\_Study\\_-\\_draft\\_415.pdf](http://nhsrcindia.org/pdf_files/resources_thematic/Public_Health_Planning/NHSRC_Contribution/JSY_Evaluation_Study_-_draft_415.pdf)

### **Brief summary of the report**

The Janani Suraksha Yojana (JSY) is one of the flagship components of the National Rural Health Mission, and the key strategy to enable women to access institutional deliveries and thereby effect reductions in maternal mortality. The scheme was evaluated in the eight high-focus states of Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Orissa, Rajasthan, Uttar Pradesh, and Uttarakhand, which together account for 84.3% and 66% of India's maternal mortality and infant mortality respectively. The contents of the report is structured as below.

**The objectives of the study were to,**

1. Assess the availability and quality of health care provided to the pregnant mothers before, during and after delivery.
2. Assess the capability of different health institutions, their bed occupancy rates and trend in institutional delivery.
3. Quality of services provided by ASHAs and streamlining the cash incentives for effective programme performance.
4. Fund flow mechanism for administering JSY scheme and mechanism adopted for ensuring timely payment to the beneficiaries; and procedure for random verification of beneficiaries.
5. Impact of JSY services on maternal mortality rate and infant mortality rate.

Some of the key findings captured from the report are:

1. *The JSY has clearly increased the number of institutional deliveries. (Study shows that over 50% of women who a previous home delivery had opted for an institutional delivery. Despite this increase, the study finds persistent home deliveries, about 40% in most districts studied, ranging from 7.7% to almost 63%. Women who deliver at home are more likely to be SC/ST, belong to the BPL category, and more likely to be non literate or primary school drop outs.*
2. *The maternal mortality ratio works out to about 492 per 100,000 live births, as is expected from the purposive choice of large poor performing districts within high focus states. The incidence of complications in the study is about 11.9%.*
3. *The costs of care for complications, especially those requiring hospitalization are inordinately high and are not covered by the public health programme, forcing women and families to choose the private sector care over the public sector. Even*

*assured referral transport is much less available when complications arise than it is for normal delivery.*

4. *In the case of women who deliver in institutions, a majority of them are receiving the JSY payment, in contrast to those that deliver at home. Non payments however in some districts are as high as 55%.*
5. *Out of pocket (OOP) payments are high, amounting to Rs. 1028, and including transport, to about Rs. 1400 to Rs. 1600. OOP on home deliveries are also high, with almost 53% paying out of pocket for delivery services.*
6. *The performance on institutional deliveries in PHCs demonstrate three patterns, the first, which is a pattern seen most frequently in Bihar and Uttar Pradesh, where only two or three PHCs in the entire district provide institutional delivery services. The second pattern seen in Madhya Pradesh and Rajasthan, is where about 50 to 70% of PHCs provide institutional delivery services but a low volume, with the block PHC or sometimes one other PHC as well provide the bulk of the care. The third is the pattern of Jharkhand, Uttarakhand, Chhattisgarh and tribal Orissa where there are hardly any PHCs at this level that provide services, and even this at very low case loads.*
7. *A few not for profit private hospitals, especially the Mission Hospital seem to be playing a significant role in the provision of such emergency services. In most districts visited, every 24x7 facility and even most designated FRUs are using such Mission Hospitals as the main back up or even as the first choice for emergencies requiring surgical care.*
8. *The increase in institutional delivery has certainly increased access to delivery by an ANM, nurse or doctor attending on the delivery. However this study shows that this has not necessarily meant that Programme Evaluation of the Janani Suraksha Yojana increased access to skilled birth assistance because most nurses and ANMs who are actually providing services were not trained in the SBA training. Thus practices like the use of the partogram, active management of third stage of labour, use of injectable antibiotics, oxytocics and the use of magnesium sulfate for hypertension management, neonatal resuscitation, and the identification and basic management of hypothermia and sepsis in the newborn, all of which represent the life saving potential of skilled birth attendance are not being realized.*
9. *"...In the 24X 7 PHC's..... it has almost completely lost out in the other part of the definition, viz: the provision of Basic Emergency Obstetric and Newborn Care (BEmONC). On the newborn side, the ability to provide institutional care is even more limited. Even the simple bag and mask that should be available even for assisted home delivery was absent in about half the facilities....."*

The report further presents comprehensive recommendations based on the study...

---

**Posted on October 18<sup>th</sup> 2011**

### **Compilation of information on Malaria in Pregnancy**

Malaria infection during pregnancy is an enormous public health problem, with substantial risks for the mother, her fetus and the neonate. In areas of low transmission of *Plasmodium falciparum*, where levels of acquired immunity are low, women are susceptible to episodes of severe malaria, which can result in stillbirths or spontaneous abortion or in the death of the mother (Luxemburger et al., 1997).

In areas of high transmission of *P. falciparum*, where levels of acquired immunity tend to be high, women are susceptible to asymptomatic infection, which can result in maternal anaemia and placental parasitaemia, both of which can subsequently lead to low birth weight (Steketee, Wirima & Campbell, 1996).

Although there are fewer data about the role of *P. vivax*, there is evidence that it can also cause anaemia and low birth weight (Nosten et al., 1999). Low birth weight is an important contributor to infant mortality (McCormick, 1985; McDermott et al., 1996).

## References

Luxemburger C et al. (1997). The epidemiology of severe malaria in an area of low transmission in Thailand. *Transactions of the Royal Society of Tropical Medicine and Hygiene*, 91:256–262.

Steketee RW, Wirima JJ, Campbell CC (1996). Developing effective strategies for malaria prevention programs for pregnant African women. *American Journal of Tropical Medicine and Hygiene*, 55:95–100.

Nosten F et al. (1999). Effects of *Plasmodium vivax* malaria in pregnancy. *Lancet*, 354:546–549.

McCormick MC (1985). The contribution of low birth weight to infant mortality and childhood mortality. *New England Journal of Medicine*, 312:82–90.

McDermott JM et al. (1996). The effect of placental malaria infection on perinatal mortality in rural Malawi. *American Journal of Tropical Medicine and Hygiene*, 55:61–65.

---

## Malaria Facts

### World Malaria Report 2009

<http://www.who.int/malaria/publications/atoz/9789241563901/en/index.html>

---

## Articles from Indian context

“Availability and utilization of malaria prevention strategies in pregnancy in eastern India”, Wylie et al. *BMC Public Health* 2010, 10:557

Source: <http://www.biomedcentral.com/1471-2458/10/557>

**Background:** Malaria in pregnancy in India, as elsewhere, is responsible for maternal anemia and adverse pregnancy outcomes such as low birth weight and preterm birth. It is not known whether prevention and treatment strategies for malaria in pregnancy (case management, insecticide-treated bednets, intermittent preventive therapy) are widely utilized in India. **Methods:** This cross-sectional study was conducted during 2006-2008 in two states of India, **Jharkhand and Chhattisgarh**, at 7 facilities representing a range of rural and urban populations and areas of more versus less stable malaria transmission. 280 antenatal visits (40/site) were observed by study personnel coupled with exit interviews of pregnant women to assess emphasis upon, availability and utilization of malaria prevention practices by health workers and pregnant women. The facilities were assessed for the availability of antimalarials, lab supplies and bednets. **Results:** All participating facilities were equipped to perform malaria

blood smears; none used rapid diagnostic tests. Chloroquine, endorsed for chemoprophylaxis during pregnancy by the government at the time of the study, was stocked regularly at all facilities although the quantity stocked varied. Availability of alternative antimalarials for use in pregnancy was less consistent. In Jharkhand, no health worker recommended bednet use during the antenatal visit yet over 90% of pregnant women had bednets in their household. In Chhattisgarh, bednets were available at all facilities but only 14.4% of health workers recommended their use. 40% of the pregnant women interviewed had bednets in their household. Only 1.4% of all households owned an insecticide-treated bednet; yet 40% of all women reported their households had been sprayed with insecticide. Antimalarial chemoprophylaxis with chloroquine was prescribed in only 2 (0.7%) and intermittent preventive therapy prescribed in only one (0.4%) of the 280 observed visits. Conclusions: A disconnect remains between routine antenatal practices in India and known strategies to prevent and treat malaria in pregnancy. Prevention strategies, in particular the use of insecticide-treated bednets, are underutilized. Gaps highlighted by this study combined with recent estimates of the prevalence of malaria during pregnancy in these areas should be used to revise governmental policy and target increased educational efforts among health care workers and pregnant women.

-----

#### **Find publications on malaria in pregnancy at:**

**WHO:** This website provides various publications pertinent to issues such as Assessment of the safety of artemisinin compounds in pregnancy, report on the Global malaria control and elimination and Malaria in pregnancy: Guidelines for measuring key monitoring and evaluation indicators and an article on reducing the burden of malaria in pregnancy.

ü To access the article on “**Reducing the burden of malaria in Pregnancy**”

Visit: <http://www.who.int/malaria/publications/pregnancy/en/index.html>

ü To access the **Guidelines for the Treatment of malaria**, Second Edition, published by WHO, 2010

Visit: <http://www.searo.who.int/LinkFiles/Tools & Guidelines guideline treat malaria.pdf>

**CDC:** The Centers for Disease Control and Prevention and the World Health Organization, along with many partners, have developed *The Rapid Assessment of the Burden of Malaria during Pregnancy: A Toolkit*. This toolkit is a CD-ROM based resource designed to: \*\* help countries obtain the information they need to assess the burden of malaria during pregnancy, \*\*develop a policy or program, to assess program implementation \*\* evaluate impact, \*\* The information can also be used to advocate for policy change and to provide baseline data. When planning assessments, countries are encouraged to make use of pertinent recent data from reliable sources. However, because data may be lacking and because worldwide a relatively high number of women visit an antenatal clinic at least once during pregnancy (in sub-Saharan Africa, a high proportion visit at least once), the toolkit provides sample surveys and interview guides that can be used to conduct assessments in health facilities that serve pregnant women. By conducting an assessment, health staff can increase their knowledge of issues regarding malaria during pregnancy, while improving their ability to conduct operational research related to malaria during pregnancy. The Rapid Assessment Toolkit provides most of the materials needed to conduct a rapid assessment on a CD-ROM:

- general guidance about planning and conducting a rapid assessment (including where to locate existing data)
- sample assessment instruments, both quantitative and qualitative, which can and should be adapted to local circumstances
- specific information about how to use each tool
- guidance about the use of the information obtained
- Other resources—including relevant guidelines, sample PowerPoint presentations for training sessions, Word files of the instruments, and data analysis software (Epi Info)—are also on the CD-ROM.

The Rapid Assessment of the Burden of Malaria during Pregnancy: A Toolkit can be downloaded from

[http://www.cdc.gov/malaria/tools\\_for\\_tomorrow/pregnancy\\_toolkit.html](http://www.cdc.gov/malaria/tools_for_tomorrow/pregnancy_toolkit.html)

Get a copy of the toolkit on a CD Rom from - [malaria@cdc.gov](mailto:malaria@cdc.gov)

---

## **Treatment Guidelines**

### **Guidelines for diagnosis and treatment of malaria in India**

Publication date: June 2011

Publication details: National Institute of Malaria Research, New Delhi

Download Pdf document at: <http://www.mrcindia.org/Guidelines%20for%20Diagnosis2011.pdf>

This document is prepared based on the revised National Drug Policy on Malaria that has been adopted by the Ministry of Health and Family Welfare, Govt. of India in 2010 for healthcare personnel including clinicians involved in the treatment of malaria. It provides comprehensive treatment guidelines for Malaria in pregnancy too.

---

### **Malaria in Pregnancy - Guidelines for measuring key monitoring and evaluation indicators**

Publication

date: 2007

Languages: English

ISBN: 978 92 4 159 563 6

Source website: [Download \[pdf 1.42Mb\]](#)

This guideline is provided to assess progress in and effectiveness of the delivery of interventions for the control of malaria during pregnancy. The core indicators of process, outcome and impact have been identified in this guideline. The goal is to ensure that these indicators are collected, either routinely at health facilities and incorporated into national health information systems or through regular surveys and other Roll Back Malaria monitoring and evaluation mechanisms. Examples of the questionnaires used to elicit information are provided in Annexes 1–5, and the household survey questionnaires are available on the internet (<http://rbm.who.int/merq>).

---

## Visit some informative websites

***Malaria in pregnancy (MIP) consortium*** - <http://www.mip-consortium.org/> - (please visit the other links available on this website for more resources)

The MIP consortium in Asia, has studies being conducted in India at Ranchi, Jamshedpur, and Rourkela. The study will provide information to the national malaria control programme to develop evidence based policy for the treatment of malaria in pregnancy in India.

**Project Title:** Effective and safe treatment for malaria in pregnancy in India: a randomised controlled trial.

The primary objective of this trial is to assess the efficacy of artesunate-mefloquine (AS+MQ) compared to artesunate-sulphadoxine-pyrimethamine (AS+SP) for treatment of falciparum malaria in pregnancy in India.

The secondary objectives are to assess the safety and tolerability of AS+MQ and AS+SP. The first line drug for treatment of malaria in India is AS+SP. However there have been no clinical trials of AS+SP in pregnant women in India. Furthermore malaria parasite resistance to SP has been reported from some parts of India and therefore more data on efficacy and safety of potential drug combinations for treatment of malaria in pregnancy is needed urgently.

This randomised open-label active-controlled clinical trial will involve 500 pregnant women of all parities in second and third trimesters having *P falciparum* parasitaemia mono infection.

This trial started in June 2010 and is expected to be completed by May 2013.

---

## ***Jhpiego – an affiliate of John Hopkins University***

**Training** - Provides training materials such as - The *Malaria in Pregnancy* reference manual and clinical learning materials which are intended for skilled providers who provide antenatal care, including midwives, nurses, clinical officers, and medical assistants. The package includes reference manuals, facilitators's guide, presentation graphics, and even handouts.

It also has tutorial which discusses the impact of malaria on the pregnant woman and her newborn and other important issues concerning the prevention and control of malaria in pregnancy, brings the subject matter expert to the learner through a multimedia experience that includes: An audio-visual presentation by a subject matter expert; Photographs, charts, and graphics; and closed-captioned and downloadable text transcript.

It also has orientation material to rapidly disseminate new information in a technical area, such as national policy guidelines, to front-line providers through concise, user-friendly materials

**Program Resources:** It has the programme implementation Guide (specific to African countries) that describes seven essential program components within that approach that are needed to put MIP policy into practice at the health care facility level. Countries working at all levels of implementation—from start-up to scale up—will find the guide beneficial since it draws on real country experiences, results, and lessons learned.

Communication Strategy and IEC Materials are also available, mostly pertinent to countries such as Zambia, Nigeria and Uganda. There is a step-by-step process that defines the communication strategy and examples of possible priority problems and how to address them. This section has lot of posters, pamphlets and calendar too....

It has country-specific job aids in the form of posters, counseling cards for various stake holders.

**It has, The Rapid Assessment of the Burden of Malaria during Pregnancy Toolkit** designed to: help countries obtain the information they need to assess the burden of malaria during pregnancy, develop a policy or program, assess program implementation and evaluate impact. The information can also be used to advocate for policy change and provide baseline data. The package provides most of the materials needed to conduct a rapid assessment: general guidance about planning and conducting a rapid assessment (including where to locate existing data); sample assessment instruments, both quantitative and qualitative, which can and should be adapted to local circumstances; specific information about how to use each tool; and guidance about the use of the information obtained. Other resources, including relevant guidelines, sample PowerPoint presentations for training sessions and data analysis software (Epi Info), are also included.

**Reference materials:** It also has lot of resources, mostly South African region based on framework for MIP, strategies for implementation, key abstracts and more...

**Visit:** <http://www.jhpiego.org/files/malaria/rp/english/index.html>

---

### **Stop Malaria Now – An African European Initiative**

An website that provides resource materials on training, advocacy, posters, calenders on malaria, latest malaria conference report.....

**Advocacy Material:** In this guide you can learn more about the tropical disease malaria, its vectors, and the methods to avoid the hundred millions of infections every year. It offers guidelines that will help you to identify the activity you can do, as well as explanations and practical examples that show you How to do it. The guide directs you through the process of advocacy work and advises you on how to make your engagement a success story.

The objectives of this guide are:

- Giving an overview and an entry point to advocacy and campaigning;
- Explaining why engagement for malaria is essential.
- Mobilizing young, active people for the fight against malaria;
- Guiding through the planning process of doing advocacy;
- Sharing and stimulating ideas for campaign activities.

The target groups of this guide are:

- Young individuals who want to play a role in the fight against malaria;

- Groups of young activists who want to stand up for a healthier global society;
- Teachers who want to stimulate and assist their students in taking social responsibility;
- All other groups with no or low level experience in advocacy work and campaigning, as well as those who want to improve their advocacy work.

**Visit:**

*Home page:*

Visit: <http://www.stopmalaria.org/who-we-are.html?&L=idgtwvanizun>

*Download advocacy material:*

[http://www.stopmalaria.org/fileadmin/redaktion/videos\\_und\\_Bilder/guide/advocacy-guide-english-screen.pdf](http://www.stopmalaria.org/fileadmin/redaktion/videos_und_Bilder/guide/advocacy-guide-english-screen.pdf)

**Voices for a Malaria Free Future**

Voices for a Malaria Free Future strategically advocates in malaria endemic countries, globally and in United States to increase political commitment, mobilize resources, and ensure continued funding for malaria control. With projects in Ghana, Mali, Tanzania and Uganda, Voices strives to improve access to malaria control interventions by promoting appropriate resource allocation and resolving bottlenecks to malaria commodities. Voices also strengthens national advocacy in donor and malaria endemic countries through inspiring leadership and facilitating collaboration among stakeholders. Voices is also a founding partner in the United Against Malaria campaign leading up to the 2010 World Cup in South Africa, with Voices country programs providing a vital link to endemic leadership at the national, district and community levels.

Find in the resources section so many documented **success stories** in the above mentioned countries, by topics as well as countries. By themes it has an exclusive section on Maternal and Child Health.

Further, the resources section has **video and multimedia resources** which includes videos, podcasts and other multimedia tools.

Home page: <http://www.malariafreefuture.org/>

Visit: [http://www.malariafreefuture.org/news/success/angola\\_multiple.php](http://www.malariafreefuture.org/news/success/angola_multiple.php)

**Video –Audio Resources**

The **National Institute of Malaria Research** has documentaries produced by their audio video production unit on various themes pertinent to different parts of India, both in English and Hindi...



These films are available to institutions and public on request. The video films on cassette can be obtained by writing to:

Dr MS Malhotra, Dy Director, Audio-Visual Unit, Malaria Research Centre, 2, Nanak Enclave, Delhi-110009, E-Mail: [msmalhotra\[at\]gmail.com](mailto:msmalhotra[at]gmail.com)

For more details visit the below listed website..

[http://www.mrcindia.org/audio-visual\\_unit.htm](http://www.mrcindia.org/audio-visual_unit.htm)

**Roll Back Partnership multimedia resources** are available on varied themes such as ITN distribution, movies on malaria, community action towards malaria in countries like Zambia, Malawi, Campaigns for Malaria and more.....

Visit: <http://www.rbm.who.int/multimedia/video.html>

**Voices for a Malaria Free Future** has lots of multimedia resources and videos. Find them at:<http://www.malariafreefuture.org/resources/videos.php>

**Effects of Malaria on Pregnant Women:** This video clip explains how the home birth attendants in Africa find it difficult to tackle pregnant women with malaria and unavoidable deaths...the emphasis is laid on the need for nets, especially in the absence of health care facilities..... <http://www.youtube.com/watch?v=nlylLpAB4rs>

**'Ask Nigeria' A documentary on Malaria and pregnancy health issues** – This video clip expresses the voice of various stakeholders such as patients, general population, herbalist, HCPs on various issues such as the problem with the health system, the problems doctors face, the herbalist way of treating malaria, the expression of home birth attendants saying why they loose children born and finally how the HCP promote nets and publicize the importance of using mosquito nets especially among pregnant women to prevent themselves from Malaria.....[http://www.youtube.com/watch?v=z\\_WkzkJu\\_Qo](http://www.youtube.com/watch?v=z_WkzkJu_Qo)

**ReNOVATE'S Malaria Education Session: Pregnant Women** – This clip is a live session in Nigeria, where many pregnant women are being educated about malaria.....

<http://www.youtube.com/watch?v=1pxjEc4XyYg>

Note: This material has been compiled by CommonHealth Team for the Members of CommonHealth.

---

**Posted on October 17<sup>th</sup> 2011**

**Here is a new article on "Sex-Selective Abortions During Past Three Decades May Explain Absence of Millions of Girls in India"**

Source: *International Perspectives on Sexual and Reproductive Health, Volume 37, Number 3, September 2011 (DIGEST)*

Sex ratio data suggest that selective abortion of females increased substantially in India between 1980 and 2010, particularly among women whose only child was a daughter, according to a new analysis.<sup>1</sup> The sex ratio for second births among women with a firstborn daughter fell from 906 females per 1,000 males in 1990 to 836 females per 1,000 males in 2005; in contrast, no declines occurred in the sex ratio for firstborns or for second births after a firstborn son. Declines in the sex ratio were greater among mothers with 10 or more years of education than among those without any education, and greater among those from wealthier households than among those from poorer ones. From these and other data, the researchers estimate that the number of sex-selective abortions per decade rose from about one million in the 1980s to 2.6 million in the 1990s and 4.5 million in the 2000s, for a total of more than eight million.

Although the natural sex ratio—roughly 950–975 females per 1,000 males at birth in most high-income countries—generally varies little by birth order or by the sex of the previously born child, some evidence suggests that this is not the case in India. Moreover, the 2011 Indian census counted 7.1 million fewer girls than boys aged 0–6 years. Such findings, combined with persistent son preference and the increased availability of fetal ultrasound, led researchers to hypothesize that widespread selective abortion of females has affected sex ratios.

To assess trends in sex ratio by birth order between 1990 and 2005, and to determine if the ratio varies by women's wealth or education, researchers used data on more than 250,000 births from three rounds of the National Family Health Survey, a nationally representative survey of Indian households. Women of childbearing age were asked to provide a complete birth history (including each child's date of birth, birth order, gender and survival status), as well as information on their educational attainment, religion and household assets; the last were used to classify women into state-specific wealth quintiles. Differences in sex ratio trends by birth order and women's characteristics were identified using linear regression. To estimate the numbers of "missing" girls, the researchers compared the expected number of girls aged 0–6 (calculated from the natural sex ratio at birth and adjusted for age- and sex-specific mortality) with the actual numbers enumerated in the 1991, 2001 and 2011 Indian censuses; they calculated low, high and mean estimates.

Between 1990 and 2005, the sex ratio for second births after a firstborn daughter declined by 0.5% annually, from 906 females per 1,000 males in 1990 to 861 in 1997 and 836 in 2005. During the same period, the sex ratios for firstborns and for second births after a firstborn son did not change, remaining close to the natural sex ratio. The sex ratio for second births after a firstborn daughter was unchanged among mothers with no education and among those in the lowest wealth quintile, but fell among mothers reporting 10 or more years of education and among those in the highest wealth quintile. Among women with two daughters but no sons, the sex ratio for third births fell from 882 in 1990 to 768 in 2005, though the decline did not reach statistical significance.

The researchers noted that if no selective abortion of females had occurred and the two sexes had had equal mortality rates, the imbalances in the sex ratio should have been smaller than those they encountered. They concluded that most of the differences in the sex ratio could be explained by sex-selective abortions. After adjustments for age- and sex-specific mortality (e.g., mortality is higher among girls than among boys for most of the first five years of life), the estimated number of selective abortions of females per decade rose from about one million in the 1980s (range of estimates, 0–2.0 million) to 2.6 million in the 1990s (1.2–4.1 million) and 4.5 million in the 2000s (3.1–6.0 million), yielding a total of 8.1 million selective abortions (4.2–12.1 million). At 2010 birth and child mortality rates, a 1% drop in the sex ratio among children aged 0–6 is consistent with an additional 1.2–3.6 million abortions of females.

Although sex ratios of fewer than 950 females per 1,000 males have become widespread in India—the number of districts with such ratios increased from 336 to 433 between 2001 and 2011—the rate of increase in selective abortions of females appears to be slowing; the rate increased by 260% between 1991 and 2001, and by 170% between 2001 and 2011.

The researchers acknowledge several limitations of their analysis: Year-to-year differences in sex ratios may have been due in part to random variation, the estimates of the number of selective abortions were necessarily crude, and the estimated biological sex ratio of 950–975 females per 1,000 males is based on European and North American populations and may not be applicable to India. Despite these limitations, the researchers conclude that selective abortion of females has increased in the past 30 years and has contributed to the widening gap in the child sex ratio. They suggest that the increases in sex-selective abortion may be due to son preference combined with declines in fertility; the finding that selective abortion of females appears to be especially common among educated and wealthy women may reflect that these women are better able than others to afford ultrasound and abortion services. The researchers note that a 1996 law aimed at curbing sex-selective abortion likely has been ineffective because few providers have been prosecuted; however, efforts to prevent selective abortions of females could benefit from "reliable monitoring and reporting of sex ratios by birth order in each of India's districts."—*L. Melhado*

## REFERENCE

1. Jha P et al., Trends in selective abortions of girls in India: analysis of nationally representative birth histories from 1990 to 2005 and census data from 1991 to 2011, *Lancet*, 2011, 377(9781):1921–1928.

---

*Posted on October 13<sup>th</sup> 2011*

*Open*, the weekly current affairs and features magazine, has published an open article "**Poison Pills**" by the author, [Shahina KK](#)

Shared by: **Adv Kamayani Bali Mahabal**

Read the entire article with several excerpts  
from: <http://www.openthemagazine.com/article/living/poison-pills>

*"Oral contraception once spelt sexual liberation in the West, population control in India. But in Kerala's tribal belt of Idukki, it has played havoc with women's lives"*

*"IDUKKI, Kerala: Since puberty, Dhanalakshmi has been popping pills, round and white little pills, of which she knows nothing apart from their purpose—to retain 'purity'. The pills help her stave off the five days of 'impurity' that nature besets her with every month. It was the wisdom of her mother, Azhakamma, that first put her onto the pill regime. Today, Dhanalakshmi is 24, and she too is painfully aware of what impurity implies. If 'it' happens, she cannot stay at home. Rather than have anyone or anything suffer the accidental taint of her menses, she must isolate herself away from home with other menstruating women in Valaymapura, a gloomy little outpost on the outskirts of the settlement."*

*".....That was not the first truly tragic turn of Dhanalakshmi's life. In fact, her disability can directly be traced to a hellish conjugal life. Married at 14, only a year after her mother put*

*her on the pill to delay her periods, she suspended the regime long enough to have a baby boy the following year.”.....*

*“..Pregnancy preventive pills, dispensed freely for years as a measure to keep birth rates down and the country’s morale up, has claimed many more lives---literally and figuratively---in Idukki, the district with the second largest tribal population in Kerala, than you can imagine.....”*

*“...Bhagavatiyamma, a Muthuvan resident of Mankulam Panchayat, explains the perils of being cursed by a mountain goddess for violating the menstrual tradition. “We will be attacked by wild animals,” she says, “We will get no more rain, and the crops will be badly hit.” And in her scheme of things, there’s nothing worse than having the entire tribe bear the brunt of divine wrath. To avoid this eventuality as much as her own periodic exile, she herself had taken Mala-D for more than a decade until menopause came to her relief. “Now I am 50 and ‘it’ has stopped,” she says, as if a burden has been lifted off her frail body.”*

*“...According to Bindu, who has been working among Muthuvans for over a decade, the Department’s idea has some merit. “There is indeed a positive change in the settlements where it built these hamlets. The women now show a readiness to stop their intake of pills, but I must say, the change is very slow.” Most women have ritualised the intake.”*

*“..Pills, remember, were heavily promoted in the early phases of the Programme; usage was voluntary, but they were almost pushed down throats by State propaganda in a frantic effort to contain birth rates seen spiralling out of control in an era of population paranoia. The legacy of this development paradigm has been the widespread availability and usage of a chemical concoction that plays havoc with women’s lives till this day.”*

---

