

## Many People Who Have Herpes Use Condoms Only During Symptomatic Outbreaks

Three-fourths of individuals who know that they have genital herpes either abstain from vaginal sex or always use condoms when they have symptoms, but only one-fifth do so when they are free of symptoms.<sup>1</sup> In an international cross-sectional study of individuals with genital herpes who were in monogamous, heterosexual relationships, only about half knew that the infection could be transmitted between outbreaks. Participants' odds of having sex (vaginal, oral or anal) during symptomatic periods were elevated if they or their partner used an IUD, if they were Latin American or European (rather than North American) and if they had previously had an STI. Their odds also increased with the number of sex acts per month and with the number of outbreaks per year.

The study was conducted between 1998 and 2001 among clinic clients who were being screened for participation in an international trial of drug therapy to prevent transmission of genital herpes. In 17 countries in North America, Latin America and Europe, researchers gave questionnaires to individuals visiting clinics who were infected with herpes simplex virus type 2, reported having had symptoms and had partners who had never had symptomatic genital herpes. Participants provided information about their demographic characteristics and their sexual behavior (including whether they practiced abstinence and used condoms during symptomatic and asymptomatic periods), and answered questions testing their knowledge about genital herpes.

Analyses were based on a total of 1,193 individuals, 88% of whom were white and 60% of whom were female. The median age was 36 among men and 33 among women. Six in 10 participants had attended college, and seven in 10 were employed. The median number of outbreaks of genital herpes each year was five. Some 87% of participants said that they were able to recognize early symptoms of an outbreak.

Participants had sex with their partner a median of 6–7 times per month. During periods when they had no symptoms of genital herpes,

98% of individuals had vaginal sex, 76% had oral sex and 25% had anal sex. In contrast, during periods when they had symptoms, 40% of individuals had vaginal sex, 29% had oral sex and 11% had anal sex.

For certain types of sex, regular condom use was more common during symptomatic periods than during asymptomatic ones. Specifically, 20% of individuals used condoms for every act of vaginal sex when they did not have symptoms, but 35% did so when they had symptoms. Similarly, 2% always used condoms when having oral sex during asymptomatic periods, whereas 7% did so during symptomatic periods. The level of regular use of condoms when having anal sex did not vary with the presence of symptoms.

An analysis of overall changes in behavior between asymptomatic and symptomatic periods showed that most participants (89%) engaged in some type of sex without always using condoms when they had no symptoms, and a substantial proportion of this group (38%) continued to do so when they were symptomatic. Nonetheless, the majority of individuals modified their behavior, either abstaining from sex or always using condoms, when herpes symptoms were present. Whereas only one-fifth (21%) of participants abstained from or always used condoms during vaginal intercourse when they were free of symptoms, three-fourths (74%) did so when they had symptoms. The patterns for oral sex (26% vs. 73%) and anal sex (78% vs. 91%) were similar.

Nearly all individuals (97%) knew that genital herpes is sexually transmitted, and two-thirds (66%) were aware that the disease is incurable. Most knew that medication can prevent outbreaks (91%) and can speed the healing of sores (96%), and that condoms can help prevent the spread of the disease between partners (92%). However, only 67% knew that a person can still transmit the virus after a sore has completely healed, and only 53% were aware that the virus can be transmitted between outbreaks.

In a multivariate analysis, individuals who currently used an IUD or whose partner did

had higher odds of engaging in any kind of sexual activity during symptomatic periods than did nonusers (odds ratio, 3.0). The odds of having sex despite the presence of symptoms were higher among Latin American and European participants than among their North American counterparts (2.2 and 1.7, respectively), and higher among individuals who had previously had an STI than among those who had not (1.4). The odds also rose with each additional sexual act per month (1.1) and with each additional recurrence of symptoms per year (1.1).

A final, multinomial analysis examined factors associated with individuals' risk of transmitting genital herpes, as defined by their sexual behavior and condom use during asymptomatic and symptomatic intervals. The lowest risk (characterized by having vaginal sex only during asymptomatic periods and always using condoms) was associated with high levels of education and of knowledge about genital herpes. The highest risk (marked by frequent sexual activity with irregular condom use during both symptomatic and asymptomatic periods) was associated with being in a long-term relationship.

Study participants, the researchers acknowledge, were interested in preventing transmission of genital herpes and may not be representative of other populations. Nevertheless, although the majority of this group either abstained from sex or always used condoms when they had symptoms, their level of consistent condom use during asymptomatic periods was fairly low, suggesting that individuals with genital herpes may believe that they have little or no risk of infecting others at such times. "A focus of prevention must continue to highlight the importance of regular and consistent condom use during both symptomatic and asymptomatic periods," the researchers conclude.—S. London

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## Starting Breast-feeding Soon After Birth Lowers Infants' Risk of Neonatal Death

The longer the delay between birth and the start of breast-feeding, the greater the likelihood that infants will die before they are four weeks old, according to an observational study conducted in rural Ghana.<sup>1</sup> Breast-feeding was initiated after the first day of life for 29% of infants. After other factors were taken into account, the odds of dying before four weeks of age was more than twice as high among these infants as it was among infants who began breast-feeding within 24 hours of birth. An estimated 16% of all neonatal deaths that occurred among the infants in the study could have been prevented if all infants had begun breast-feeding on their first day of life.

Researchers analyzed surveillance data from a trial of vitamin A supplementation conducted among women of childbearing age in four rural districts of Ghana (Kintampo, Wenchi, Techiman and Nkoranza). Among singleton infants born to mothers in the trial between July 2003 and June 2004, those who started breast-feeding, who survived for at least one day and whose mothers received a home visit by a fieldworker during the neonatal period were included in the analysis. During the home visits, made every four weeks, fieldworkers collected information about pregnancies and births, maternal and infant health and mortality, socioeconomic and household characteristics, and home-based neonatal care practices, including breast-feeding. The timing of initiation of breast-feeding was categorized as early (starting on the first day of life) or late (starting after the first day). Breast-feeding was classified as exclusive (feeding with breast milk only), predominant (feeding with breast milk along with nonmilk fluids) or partial (feeding with breast milk along with animal milk, infant formula or solids).

Analyses were based on 10,947 infants, of whom about 1% died in the neonatal period (days 2–28 of life). During the neonatal period, 70% of infants were exclusively breast-fed, 27% were predominantly breast-fed and 2% were partially breast-fed. After factors potentially affecting neonatal mortality and breast-feeding practices were taken into account, the odds of neonatal death rose with the level of supplementary feeding; this association persisted after accounting for the timing of initiation of breast-feeding. Compared with ex-

clusively breast-fed infants, partially breast-fed infants had almost four times the odds of dying during the neonatal period (adjusted odds ratio, 3.8).

Some 71% of infants began breast-feeding by the end of their first day of life (including 43% who began within one hour of birth), and 99% did so by the end of their third day. After factors potentially affecting neonatal mortality and breast-feeding practices were taken into account, the odds of neonatal death rose with time to initiation of breast-feeding; this association persisted when the type of breast-feeding was taken into account. Infants' odds of dying were more than doubled if they began breast-feeding on their second day or their third day (adjusted odds ratios, 2.5 and 2.8, respectively), and were more than tripled if they began after their third day (3.6), as compared with their first hour of life.

Overall, infants were more than twice as likely to die during the neonatal period if breast-feeding was initiated late instead of early (adjusted odds ratio, 2.4). In addition, the odds of neonatal death for infants who began late remained elevated after the exclusion of those who had a high risk of dying because of factors such as prematurity, congenital abnormalities or illness (2.4) and those who died during days 2–7 (2.4). The odds associated with starting late were also elevated among infants who were exclusively breast-fed (2.2) and those who were predominantly breast-fed (2.6), but not among those who were partially breast-fed.

Final analyses indicated that 41% of neonatal deaths occurring during days 2–28 (22% of all neonatal deaths) could have been prevented if all infants had begun breast-feeding in their first hour of life. Similarly, 30% of neonatal deaths occurring during days 2–28 (16% of all neonatal deaths) could have been averted if all infants had begun breast-feeding during their first day of life.

According to the researchers, early initiation of breast-feeding may protect against neonatal mortality in four ways. First, suckling shortly after birth may help establish breast-feeding and ensure that it continues. Second, early breast-feeding may prevent exposure to substances in other foods that disrupt normal priming of the digestive tract. Third, components of early milk may promote maturation of the digestive tract and protect against infection. And fourth, the bodily warmth associated with breast-feeding may avert infant death from hypothermia. Taken together, the

researchers assert, the results suggest that programs to promote breast-feeding in less developed settings should emphasize early initiation, as well as exclusive breast-feeding. "This is particularly relevant for Sub-Saharan Africa," the researchers note, "where neonatal and infant mortality rates are high, most women already exclusively or predominantly breast-feed their infants, and delay of initiation of breast-feeding beyond the first day of life is common."—S. London

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## Skewed Sex Ratio of Births In India May Be the Result Of Sex-Selective Abortion

Although determining the sex of a fetus—and terminating the pregnancy based on the test results—is illegal in India, about half a million female fetuses in the country are aborted each year because of a cultural preference for sons, according to estimates from a national survey.<sup>1</sup> As a result, in 1997, only 899 girls were born in India for every 1,000 boys, and the sex ratio was even more skewed among families who had had only girls. Moreover, the proportion of births that were female was particularly low among educated women, who may be best able to afford ultrasound to identify the sex of their fetus.

The findings come from an analysis of data from the Special Fertility and Mortality Survey, a 1998 survey in which the Indian government asked a nationally representative sample of ever-married women about their fertility history. Respondents also provided demographic information. The survey did not ask about respondents' use of prenatal sex determination or whether they preferred children of a particular sex. The current analysis focused on 133,738 births that occurred in 1997, including 71,666 boys and 62,072 girls.

After adjustment for consistency with India's annual nationwide demographic survey, the birth data yielded a sex ratio (defined as the number of female births per 1,000 male births) of 899. For first-born children, the sex ratio was slightly lower (871). However, among families that already had one child, the sex ratio for the second birth differed dramatically, depending on whether the last child born had been a girl or a boy (759 vs. 1,102, respectively), a pattern

that was apparent in all but one of the 17 Indian states included in the study. The bias toward male births was even greater when a family already had two female children: The sex ratio for births to families with two girls (719) was far lower than that for births to families with two boys (1,176) or with one boy and one girl (908). Overall, about 5,000 fewer girls were born to respondents in 1997 than would have been expected if the births had been evenly distributed between the sexes.

Of the various demographic variables examined in the study, maternal education proved to be a strong predictor of a newborn's sex. Among women who had previously given birth to a girl, the likelihood that the second child would also be a girl was significantly lower for women with at least a 10th grade education than for women who were illiterate (sex ratios, 683 and 869, respectively). Sex ratios for second births did not differ by the mother's religion, the family's land holdings or whether the family lived in an urban area.

According to the researchers, infanticide is unlikely to account for the skewed sex ratios. Infanticide usually occurs on the day of birth, and such cases would presumably be reported as stillbirths or neonatal deaths; however, respondents reported more stillbirths among boys than among girls, and the number of stillbirths (1,203) was substantially smaller than the number of missing females (although stillbirths may be underreported). Another 4,173 births resulted in early neonatal deaths, but these, too, were more prevalent among boys than girls, and the sex ratio for these deaths—unlike that for infants who survived—did not vary by maternal education.

## In Turkey, Pregnant Women's Risk of Domestic Abuse Is Linked to Education, Income, Number of Children

The presence and level of physical, emotional and sexual abuse during pregnancy varies according to the characteristics of women and their husbands, according to a 2003–2004 cross-sectional survey of pregnant rural and urban women in Malatya, Turkey.<sup>1</sup> Overall, 32% of women had experienced at least one type of abuse from their spouse or his family during pregnancy. The odds of experiencing any abuse during pregnancy were elevated among women whose pregnancy was unwanted and who had a low family income, as well as among those whose husband had little or no education.

The authors argue that “the most plausible explanation” for the preponderance of boys born in India “is prenatal sex determination followed by selective abortion,” although hormonal, nutritional and other factors may also affect sex ratios. The low sex ratio observed in the study, they say, reflects a cultural preference for male children, who not only carry on the family name but generally earn more money than females and are better able to financially support their parents during the latter's final years (India does not have a social security program).<sup>2</sup> Sex-selective abortion may be particularly common among more educated mothers, the researchers suggest, because these women have more access to, and can better afford, prenatal ultrasound.

Data from other countries suggest that the natural sex ratio should be between 950 and 980; if that is the case, then the number of missing female births in 1997 for all of India would be between 590,000 and 740,000, of which the researchers estimate that 450,000 to 540,000 can be attributed to selective abortion. These figures suggest that selective abortion has resulted in about 10 million missing female births in India during the 20 years (1985–2005) since ultrasound use became common. Given that some evidence suggests that India's sex ratio has fallen further since 1997, the authors argue that “the absolute numbers of missing females [are] likely to grow.”—*P. Doskoch*

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Study participants included 824 women (70% from urban areas and 30% from rural areas) who had completed at least one trimester of their current pregnancy and were recruited systematically from 60 population clusters within Malatya province. Data on demographic, behavioral and fertility characteristics of these women were collected, with a response rate of 92%. Researchers defined physical violence as having been hit, pushed, kicked or otherwise hurt; emotional abuse as having been humiliated, insulted, threatened with violence or separated from one's children; and sexual violence

as having been physically forced or verbally coerced into having sex. The husband was the most common perpetrator (97% of physical, 81% of emotional and 100% of sexual incidents); in all other cases, women were abused by their husband's family.

In all, 261 women had experienced some type of violence during pregnancy, and 75% of those women had also been abused earlier in their marriage. Among women who had not been abused prior to their current pregnancy, 7% experienced abuse during pregnancy. Thirty-eight percent of women who had experienced physical violence prior to pregnancy, compared with 2% of those who had not, experienced physical violence during pregnancy. Those proportions for emotional abuse were 78% and 4%, respectively, and for sexual abuse, 59% and 5%.

In the bivariate analysis, the level of overall abuse was negatively associated with the educational level of the woman and her husband, the husband's occupation and the family's income, and was positively associated with the number of living children. For example, the proportion of women who had experienced any type of abuse ranged from 13% among those who had graduated from college to 44% among those who were illiterate, and from 16% among women whose husband had graduated from college to 64% among those whose husband had not finished primary school. Overall abuse had a U-shaped relationship to duration of marriage, with the highest level occurring at 4–5 years (45%).

Women in their second trimester of pregnancy were more likely to be abused than those in their third trimester (35% vs. 26%), and those whose pregnancy had been unwanted were more likely to experience abuse than were those with a wanted pregnancy (46% vs. 28%). Abuse was more common among women who smoked regularly during pregnancy than among those who did not (43% vs. 29%).

The patterns for individual types of abuse were generally similar to those for overall abuse. However, physical violence had a U-shaped relationship to the husband's education, and was not associated with the woman's education. The associations of being in the second trimester of pregnancy and having a higher number of living children with overall abuse were due entirely to their associations with emotional abuse. Sexual abuse was not associated with the duration of marriage.

In the multivariate analysis, the odds of overall abuse and each individual type of abuse

were elevated among women who smoked regularly during pregnancy (odds ratios, 1.6–1.9). Unwanted pregnancy was associated with overall abuse and with emotional and sexual abuse (1.6–1.8). Women whose husband was illiterate or had less than eight years of education were significantly more likely to experience any type of abuse, physical violence and emotional abuse (1.7–2.4). Urban residence and low family income were associated with elevated odds of overall abuse (1.5 and 1.9, respectively) and emotional abuse (1.7 and 2.0). The risk of overall abuse was elevated among women who were in the second trimester of pregnancy, and the risk of physical violence was raised among women whose husband was unemployed (2.4).

The authors point out that just 38% of the women who had experienced violence either before or during pregnancy had discussed their experience prior to their interview. Given that only 2% of women had talked about their situation with a health care worker, the authors emphasize the importance of initiating health-based interventions to identify and help women who are being abused. They conclude that, in conjunction with other medical and social service programs, “the golden opportunity of antenatal care should be used to diagnose, assess and prevent domestic violence.”—*H. Ball*

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## In China, Negative Attitudes Toward HIV-Infected People Are Associated with Risky Sexual Behavior

In China, migrants who hold stigmatizing beliefs about HIV-infected people have higher levels of sexual risk behaviors and lower levels of protective behaviors than other migrants.<sup>1</sup> In a cross-sectional survey among sexually experienced young adults who had migrated from rural to urban areas, some 65% of respondents believed that HIV-infected people should be ostracized, forced out of their villages, distanced as friends, or deprived of educational or employment rights. Compared with other migrants, these migrants were more likely to have had an STI, multiple sex partners or commercial sex partners, and they were less likely to use condoms or to accept an HIV test.

In 2002, researchers gave anonymous, self-administered questionnaires to migrants aged 18–30 working in the cities of Beijing and Nanjing. Respondents rated their agreement with four statements pertaining to stigma against HIV-infected people: “HIV-infected people should be ostracized by their spouse and family members,” “HIV-infected people should be forced to leave their villages,” “I would not be able to maintain a normal relationship with my friends if they became infected with HIV” and “HIV-infected people should not have the same rights to education and employment as others.” Respondents provided information about their migratory history; this information was converted to a mobility index (number of migratory cities divided by years of total migration), with a higher index indicating a higher level of mobility. They also answered ques-

tions testing their knowledge of HIV, with higher scores on a scale of 0–22 indicating greater knowledge, and questions about their risk and protective behaviors. Analyses were restricted to sexually experienced respondents.

Of the 2,153 migrants included in the study, slightly more than half were recruited from Nanjing. Their average age was about 25, and one-third were women. Nearly all were of Han ethnicity (97%) and had at least a middle school education (93%). Somewhat more than half (56%) were single. Half had been migrating for five or more years, and the majority (71%) had worked in at least two cities.

Overall, 65% of migrants agreed or strongly agreed with at least one of the four statements indicating stigma against people with HIV. More specifically, 24% agreed or strongly agreed with one statement, 21% with two, 12% with three and 8% with all four. Migrants who held stigmatizing beliefs had lower scores for HIV knowledge than those who did not hold any such beliefs (13.8 vs. 15.3).

In bivariate analyses, migrants with a high school education or a postsecondary school education had lower odds of holding any stigmatizing beliefs than did those with only a primary school education (odds ratios, 0.5 and 0.3, respectively). The odds were also reduced among migrants who had a monthly income greater than US\$57 (0.6–0.7). In contrast, the odds of holding stigmatizing beliefs were higher among migrants who had a mobility index of 0.71–1.00 than among those who had an

index of 0.06–0.30 (1.4). In addition, migrants who believed that it was highly likely that they would become infected with HIV had sharply higher odds than did those who believed that it was impossible (3.1).

The questions on sexual risk behaviors revealed that 7% of migrants had bought or sold sex in the past month, 10% had ever bought or sold sex and 13% had ever been told by a clinician that they had an STI. In terms of protective behaviors, 38% of migrants used condoms at least some of the time when they had sex, and 57% were willing to take an HIV test.

In an unadjusted model, compared with migrants who did not have any stigmatizing beliefs about HIV-infected people, those who did have elevated odds of having had an STI (odds ratio, 2.3), having had multiple sex partners in the past month (1.8) and having ever bought or sold sex (1.9). On the other hand, migrants who endorsed stigmatizing beliefs had lower odds of using condoms at least some of the time (0.6) and of being willing to take an HIV test (0.6).

The patterns were similar in a multiple logistic regression model that took the migrants' social, demographic and economic characteristics into account. Compared with migrants who did not hold any such beliefs, those who held 1–4 of them had roughly doubled odds of having had an STI (odds ratios, 1.7–2.0). Similarly, compared with migrants who held no stigmatizing beliefs, those who held 2–4 such beliefs were more likely to have ever had a commercial sex partner (1.7–2.0), and those who had 3–4 such beliefs were more likely to have had multiple sex partners in the past month (2.0). In contrast, migrants who held one or 3–4 stigmatizing beliefs had lower odds of using condoms than did those who held none (0.7 for each). Migrants who endorsed two or 3–4 of the beliefs were less likely to be willing to take an HIV test than those who endorsed none (0.5–0.6).

The observed association between stigmatizing beliefs and risky behaviors among Chinese migrants, the researchers assert, may reflect an attempt to reconcile the conflict they experience when they engage in behaviors that they know are unsafe and socially unacceptable. For example, the researchers write, individuals may seek to justify their risky behavior by blaming people with HIV while assuming that they themselves are not at risk, or they may endorse mainstream beliefs in an effort to blend in with others who do not engage in risky behaviors. The finding that a per-

son's stigmatizing belief "is a potential barrier to HIV-related preventive practices highlights the difficulties and challenges in implementing behavioral interventions," the researchers conclude.—S. London

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## Rates of Cesarean Delivery In Developing Countries Suggest Unequal Access

The best current estimate of the overall rate of cesarean delivery in developing countries is 12%, according to a study using nationally representative data from 82 nations with a median reference year of 1996. Regional rates vary from 3% in Sub-Saharan Africa to 26% in East Asia and in Latin America and the Caribbean.<sup>1</sup> Among individual countries, Chad has the lowest rate (0.4%) and Chile the highest (40%). On average, rates among urban women are three times as high as those among rural women.

In 1994, the World Health Organization recommended that a nation's cesarean birth rate should be in the range 5–15%, and cautioned that a rate lower than 5% may indicate inadequate access to the procedure. However, there is currently no consensus on the optimal range. This study documents population-based national rates of cesarean births in the developing world, calculates regional rates, assesses trends in national rates and examines the disparity in use of cesarean delivery between urban and rural women.

Rates were calculated using a variety of data sources; however, nationally representative surveys of reproductive-age women conducted between 1990 and 2003 (mostly Demographic and Health Surveys) were the source for information on 73 of the 82 countries included. The median reference year was 1996, with a range of 1992–2003 for the nine different regions. Regional rates were weighted using the estimated number of births occurring in each country in 2000.

Overall, an estimated 12% of all live births in developing countries are cesarean deliveries; this represents nearly 14 million cesarean births in 2000. The reference year is 1993 or earlier for 16 of the 82 nations; the estimate

rises only marginally when these earlier data are excluded. However, the overall rate drops to 9% when data for China are excluded; China's cesarean rate is 26%, and 16% of births in the developing world occur there.

East Asia and Latin America and the Caribbean have the highest regional cesarean rates (26%), followed by West Asia (11%), North Africa (8%), South Asia (7%), Eurasia and Southeast Asia (5%) and Sub-Saharan Africa (3%). Twenty-five of the 29 countries in Sub-Saharan Africa have rates of 5% or lower. The nations with the highest rates are Chile, Brazil, Dominican Republic, South Korea, China and Iran (30–40%).

The average annual rate of change between 1991 and 1998 (the average reference years for surveys taken in 1986–1994 and 1996–2003, respectively) was calculated for 36 countries, representing 45% of all births in the developing world in 2000. In 26 of these countries, rates were higher in 1998 than in 1991: Thirteen nations showed annual increases of 0–5%, eight had increases of 6–10% and five had increases of 11% or more. Of the 10 countries that had either no change or a decline in rates, nine were in Sub-Saharan Africa.

Cesarean rates among urban women were, on average, three times as high as those among rural women. With the exception of Peru and Paraguay, the largest disparities (urban-rural ratios of 5–9) were in countries that have low cesarean rates, and thus the disparity represents relatively small absolute differences between the two populations. Thirteen of the 17 nations in Sub-Saharan Africa showed an increase in this disparity from 1991 to 1998 (using the same data as for the average annual rates); no pattern of increasing or decreasing disparity by residence was seen for nations in other regions.

The researchers believe that because many of these developing countries have both high rates of maternal mortality and a marked disparity in cesarean rates between urban and rural women, the generally low cesarean rates suggest that those who are at greatest risk for obstetric complications do not have adequate access to the procedure. In countries where access is poor, the researchers say, it is critical to determine the proportion of women who likely need such live-saving care but fail to get it.

This study has a number of limitations. Many of the estimates are based on data that are more than 10 years old, and because cesarean rates appear to have increased over the study period, these estimates are likely to be

lower than current cesarean rates. Another limitation is that the data for eight countries were collected from health facilities rather than representative surveys, and these lower-quality data are believed to yield lower cesarean estimates. Finally, the assessment of trends based on secondary analysis of survey data is inherently difficult, and even large changes in rates may not be statistically significant, especially where national rates are low.

To address the relative scarcity of data on cesarean delivery in developing countries, the researchers call for improved monitoring of the procedure, especially in nations with poor medical access. Such monitoring could also help determine the level of unmet obstetric need, particularly among rural women; this would aid in identifying women who require but fail to receive cesareans. The researchers suggest that the UN Millennium Development Goal of increasing the use of skilled attendants at birth represents "an excellent opportunity to direct attention to rapidly changing practices regarding cesarean birth," particularly in countries and areas "where women die from lack of availability of and access to this procedure and where women and health systems experience the consequences of unnecessary surgical intervention."—J. Thomas

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