The Costs of Postabortion Care in Developing Countries Are Substantial and Vary Across Settings

In developing nations, the financial burden of postabortion care on national health systems is substantial, and the costs of the components of this care can vary considerably across countries. According to a comparative analysis of data from costing studies of postabortion care in Colombia, Ethiopia, Rwanda and Uganda in 2008-2012,1 the cost of providing postabortion care to one woman ranged from \$334 International dollars (I\$) in Rwanda to I\$972 in Colombia. These costs were equivalent to 11% of the annual per capita income in Colombia, 29% in Rwanda and 35% in both Ethiopia and Uganda. Furthermore, although the cost of drugs and supplies for postabortion care did not differ greatly among the countries examined (I\$79-115), the labor costs associated with such care did-ranging from I\$43 in Uganda to I\$301 in Colombia.

The generalizability of the few extant studies on the cost of postabortion care is limited because the studies lack a standard methodology. To help establish a consistent evidence base, comprehensive national surveys on the cost of postabortion care were conducted in the four developing countries using the specially developed Post-Abortion Care Costing Methodology. Key informants at health facilities in each country were asked about the direct expenses related to the treatment of five categories of abortion complicationsincomplete abortion, sepsis, shock, cervical or vaginal laceration, and uterine laceration or perforation; the survey gathered detailed information on the costs of labor, drugs, materials and supplies. In addition, informants were asked about the indirect costs (i.e., capital costs and overhead costs) of postabortion care. Information given by the respondents was verified by outside sources (e.g., drug and supply prices were obtained from each country's medical procurement organization and international sources) or at the central level (e.g., at the Ministry of Health). For the comparative study, researchers analyzed the findings from the four costing surveys to assess the new methodology and to determine the

differences in component costs and total cost of postabortion care across countries.

In 2012, the per capita gross domestic product for Colombia was 1\$9,121, whereas the figures were much lower for the three African countries (1\$981–1,167). Per capita health expenditures followed a similar pattern: The figure for Colombia (1\$927) was considerably higher than that for Ethiopia (1\$64), Rwanda (1\$188) or Uganda (1\$122). Health expenditures in Colombia and Ethiopia accounted for 5–6% of the country's gross domestic product, while in Rwanda and Uganda, it was 9–11%.

According to the researchers, access to legal abortion has been highly restricted in the four countries examined, although Colombia and Ethiopia broadened access 2005-2006. Some 404,000 induced abortions were performed in Colombia the year the country's costing survey was conducted; the number was 382,000 in Ethiopia, 297,000 in Uganda and 60,000 in Rwanda. The induced abortion rate was highest in Uganda (54 per 1,000 women aged 15-44), followed by Colombia (39), Rwanda (25) and Ethiopia (23). The number of women receiving postabortion care during the survey year ranged from 17,000 in Rwanda to 93,000 in Colombia. Some 23-29% of women undergoing induced abortion in Colombia, Rwanda and Uganda received treatment for postabortion complications; 14% of women who had abortions in Ethiopia received such treatment. Incomplete abortion-the least severe type of abortion complication-was the most common in all four countries (67-94% of cases), followed by sepsis (10-22%) and shock (4-9%); lacerations and perforations-the most serious type of complicationwere the least common (0.4-7%). Overall, Uganda had the highest severity burden, and Colombia the lowest.

In terms of labor costs for postabortion care, several patterns emerged. In Colombia and Ethiopia, doctors spent more time with patients than nurses did, whereas in Rwanda and Uganda, the opposite was true. Also,

technical personnel, such as laboratory technicians, were more involved in postabortion care in Colombia than in the three African countries. Overall, salaries of health personnel were highest in Colombia and lowest in Uganda. The total labor cost per case for postabortion care was considerably higher in Colombia (I\$301) than in the African countries (Uganda, I\$43; Ethiopia, I\$45; and Rwanda, I\$58). There was less variation by country in the remaining components of direct costs: The average cost of drugs and supplies per case ranged from I\$79 in Colombia to I\$115 in Rwanda.

The researchers also examined the indirect costs of postabortion care in the four countries; however, data for Ethiopia were deemed "deficient" and were excluded. The total indirect costs per postabortion care case were highest in Colombia (I\$618), followed by Uganda (I\$270) and Rwanda (I\$150). The researchers summed the direct and indirect costs to calculate the total cost per postabortion care case in each country, which was I\$972 for Colombia, I\$407 for Uganda and I\$334 for Rwanda. Labor and overhead accounted for 81% of the total cost of postabortion care in Colombia, but only 22% and 46% in Uganda and Rwanda, respectively; drugs and supplies and capital costs accounted for larger proportions of the total cost in the two African countries than in Colombia. The cost of treating one postabortion patient was 11% of the annual per capita income in Colombia, 29% in Rwanda and 35% in Uganda.

The researchers note several limitations of the Post-Abortion Care Costing Methodology. Because the methodology has evolved over time, comparison across studies is somewhat restricted. In addition, although the results of abortion incidence studies conducted in the four countries were available for comparison, the inherent difficulty of collecting data on abortion means that some uncertainty remains (for example, on the proportion of women with postabortion complications not treated in the health system). Despite these limitations, the researchers note, the

methodology "has provided health policy analysts with the first national-level comprehensive estimates of the cost of [postabortion care] to health systems." They suggest that the variations in cost, particularly labor costs, "point to operational efficiencies [that] could be made in [postabortion care] delivery by sharing experiences across countries." —L. Melhado

REFERENCE

1. Vlassoff M, Singh S and Onda T, The cost of postabortion care in developing countries: a comparative analysis of four studies, *Health Policy and Planning*, doi: 10.1093/heapol/czw032.