



**The Economic Impact of
Untreated Obstetric Fistula**

March 2024



FISTULA
FOUNDATION

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A Report by Fistula Foundation

EXECUTIVE SUMMARY | The physical and social effects of obstetric fistula, for women who suffer from it, are stark and severe. Less well understood are the effects of this condition on women’s contribution to the economic life of their communities. Using a methodology that applies DALYs (Disability-Adjusted Life Years) data to regional GDP data, Fistula Foundation calculated that the economic impact of untreated obstetric fistula across Sub-Saharan Africa and South Asia totals nearly \$700 million per year. By accelerating fistula treatment, the global community can unlock a vast store of economic potential.

The physical effects of obstetric fistula are stark. It leaves a woman with a hole between her vagina and her bladder or rectum, and it causes incontinence. The social consequences of this condition are equally apparent. It causes a woman to become isolated from her community; in too many cases, her friends and family members abandon her. Less obvious, and less well understood, are the effects of this condition on a woman’s work life and on her contribution to the economic life of her community.

A recent report from the McKinsey Health Institute and the World Economic Forum (WEF) highlights the economic consequences of failing to address conditions that affect women’s health. In a groundbreaking feat of research and analysis, the report describes a vast, global “women’s health gap.” Across a wide range of debilitating conditions, women are more likely to suffer than men, or likely to suffer for longer periods than men, according to the report. Along with evoking the inequitable human toll created by this gap, the report rigorously documents the loss of productivity that results from allowing billions of women to endure serious, long-term health challenges. The title of the report frames this loss in terms of opportunity: “Closing the Women’s Health Gap: A \$1 Trillion Opportunity to Improve Lives and Economies.”¹

Using a methodology similar to the one employed by the McKinsey and WEF teams, Fistula Foundation has calculated the economic impact of failing to treat cases of obstetric fistula across Sub-Saharan Africa and South Asia. According to this calculation, the loss of economic productivity caused by untreated obstetric fistula totals nearly \$700 million per year.

Loss of Livelihood

Fistula dramatically limits a woman’s ability to earn a living or provide for her family. Women with fistula, because they leak urine or feces uncontrollably, usually emit an unpleasant smell that makes it difficult for them to secure or maintain a job. In many cases, they experience symptoms—such as pain, soreness, and foot drop—that render them physically unable to work. In some cases, they resort to begging as their only option for sustaining themselves.²

¹ McKinsey Health Institute, Closing the women’s health gap: A \$1 trillion opportunity to improve lives and economies, January 17, 2024. Retrieved February 27, 2024, from <https://www.mckinsey.com/mhi/our-insights/closing-the-womens-health-gap-a-1-trillion-dollar-opportunity-to-improve-lives-and-economies>

² Bari K, Oliver VL, Abbas S, Marthias T, Kane S. The economic consequences of obstetric fistula: A systematic search and narrative review. *Int J Gynecol Obstet.* 2024; 00: 1-12. doi:10.1002/ijgo.15370

Every year, organizations like Fistula Foundation help cure thousands of women with fistula. Even so, a much greater number of women continue suffer from this condition, and new cases continue to occur. Since women typically develop fistula in their early to mid 20s, timely intervention and surgical repair can enable these women to reclaim decades of productive life.

Analytical Framework

The authors of “Closing the Women’s Health Gap” use a sophisticated methodology for analyzing the economic impact of failing to treat women’s health challenges. At its core, though, the report follows a simple, compelling approach to measuring that impact: It uses a metric known as Disability-Adjusted Life Years (DALYs) to identify the total amount of productivity lost per year as a result of conditions that contribute to the global “health gap.” It then multiplies this DALYs-based data by the per-capital GDP of countries where women affected by those conditions live.

One DALY translates into the loss of one year of healthy life. To assign DALYs figures to specific conditions, the “Women’s Health Gap” report relies on the “Global Burden of Disease” study conducted by the Institute for Health Metrics and Evaluation (IHME). That study applies a disability weight to each condition, making it possible to quantify the “burden” of that condition on a scale from 0 (perfect health) to 1 (equivalent to death). By applying this weight to the number of people affected by a condition globally, the report’s authors are able to calculate the total DALYs for each health challenge that contributes to the overall health gap.

The “Women’s Health Gap” report focuses on DALYs for a set of 64 conditions, ranging from neonatal disorders to polycystic ovary syndrome. (These conditions account for 86% of the global disease burden identified by IHME.) By 2040, according to the report’s authors, the total health gap between men and women will reach 75 million DALYs. On the basis of that finding (along with other factors), the authors conclude that addressing gender-based disparities in access to health care could translate into a \$1 trillion increase in global GDP by 2040.

To examine the economic impact of obstetric fistula, Fistula Foundation used a streamlined variation of the “Women’s Health Gap” report methodology. In brief, we calculated that impact by applying DALYs-based data to per-capita GDP data in regions where fistula persists.

Scale of Disability

Our analysis of fistula-related DALYs, like the DALYs analysis provided in “Women’s Health Gap,” draws on data from the “Global Burden of Disease” study conducted by IHME. That study provides data on DALYs for a set of conditions called “maternal obstructed labor.” Among those conditions are two types of obstetric fistula, vesico-vaginal fistula (VVF) and rectovaginal fistula (RVF).

Using an IHME chart that breaks down the shares of total DALYs attributable to types of maternal obstructed labor, we estimate that VVF and RVF account for 40% of that total. We excluded from our analysis two other types of maternal obstructed labor: YLL (years of life lost), which covers cases in

which a woman dies during, or as a result of, obstructed labor; and YLD (years lived with a disability) for cases in which obstructed labor resulted from an acute event. By focusing on YLD for VVF and RVF, we are able to estimate the annual total number of DALYs caused by untreated obstetric fistula.³

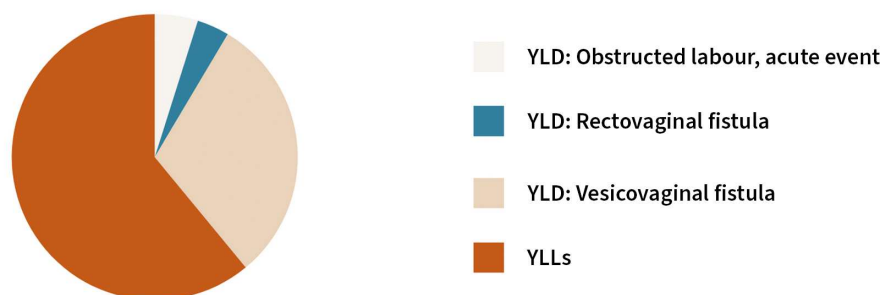


Figure 1: Composition of DALYs by YLLs and constituent sequelae YLDs for both sexes combined, 2019

Source: Institute for Health Metrics and Evaluation

According to IHME, the total disease burden for maternal obstructed labor in Sub-Saharan Africa comes to 507,033.83 DALYs; in South Asia, that figure is 378,270.86 DALYs.⁴ Applying the 40% ratio to those totals, we arrive at reasonable estimates of the disease burden for obstetric fistula in each region: 202,813.53 DALYs in Sub-Saharan Africa, and 151,308.34 DALYs in South Asia.

Economic Impact

To calculate the economic impact of untreated fistula, we applied a cost-of-human-capital approach. Using this method, we multiplied the per-capita GDP for both Sub-Saharan Africa⁵ and South Asia⁶ by our estimates of fistula-related DALYs in those regions. The result: The economic cost of failing to treat VVF and RVF exceeds *\$691 million annually*. In the context of countries with developing economies, that figure represents a staggering loss of economic potential.

Region	Per-Capita GDP (2022)	DALYs for Fistula (2019)	Economic Impact
Sub-Saharan Africa	\$1,701.20	202,813.53	\$345,026,380.64
South Asia	\$2,287.40	151,308.34	\$346,102,706.07
Total		354,121.88	\$691,129,086.70

³ Institute for Health Metrics and Evaluation. (2019). Maternal Obstructed Labor and Uterine Rupture - Level 4 Cause. Retrieved February 8, 2024, from https://www.healthdata.org/results/gbd_summaries/2019/maternal-obstructed-labor-and-uterine-rupture-level-4-cause

⁴ Institute for Health Metrics and Evaluation (IHME). GBD Compare. Retrieved February 28, 2024, from <https://vizhub.healthdata.org/gbd-compare>

⁵ World Bank. (n.d.). Sub Saharan Africa. World Bank Open Data. Retrieved February 8, 2024, from <https://data.worldbank.org/region/sub-saharan-africa>

⁶ World Bank. (n.d.). South Asia. World Bank Open Data. Retrieved February 8, 2024, from <https://data.worldbank.org/region/south-asia>

Complicating Factors

We believe that this calculation represents a strong estimate of the economic toll created by leaving women to suffer from obstetric fistula. However, we also note circumstances that lend complexity to our effort to apply the “Women’s Health Gap” methodology to this condition.

The analysis by the McKinsey and WEF teams covers both the direct impact—the reduced burden on health systems, for example—and the indirect impact of closing the women’s health gap. Our analysis covers only the indirect impact of reducing the loss of productivity caused by living with fistula. The “Women’s Health Gap” methodology, unlike our analysis, also adjusts for the variable effect of different conditions on women during their period of peak earning potential. That said, women with fistula typically experience this condition in their early adult years, at the very moment when their years of prime working age would otherwise begin.

In addition, most women who suffer from fistula live in poor, rural parts of the world, and therefore their earning potential is likely to be lower than the per-capita GDP of their region. Nonetheless, regional per-capita GDP data serves as a reasonable proxy for the economic impact of declining to treat women with fistula, and using that data aligns with the “Women’s Health Gap” methodology.

Potential Regained

When a woman with fistula receives treatment, she gains a newfound ability to contribute productively to the economic life of her community. Elizabeth (right) suffered a prolonged, obstructed labor while giving birth in her village in Kenya. She delivered a stillborn baby, and soon began to leak urine uncontrollably. For two years, fistula took away the joys of her life. “I was left alone, without a friend or a husband. I wondered where to go and what to do,” she recalled. Then everything changed. First, Elizabeth received life-transforming surgery at Cherangany Nursing Home in Kitale, Kenya. Then, through an organization called Women and Development Against Distress in Africa (WADADIA), she received an opportunity to start a new life. WADADIA enabled her to enroll in a free course to learn hairdressing. That course set her on a path to launch her own business.



The economic consequences of untreated obstetric fistula are severe. This condition drastically limits a woman’s ability to earn a living and to provide for her family. By accelerating treatment of obstetric fistula, the global community can not only improve the quality of life for millions of women but also unlock a vast store of economic potential.