Oversights in global gynaecological disability measurement

Since 1990, the Global Burden of Disease Study (GBD) has guided health priority setting.[1] GBD 2021, the most recent iteration at the time of writing, tracked incidence, prevalence, and severity of 371 ailments, aggregating diverse data sources to provide national and small-area estimates.[1] GBD's comprehensive accounting, which synthesises prevalence, morbidity, and mortality into disability-adjusted life-years (DALYs), has famously elevated the significance of non-fatal disability, including low back pain, migraines, and depression.[2–4]

However, the GBD-estimated burden of non-cancerous gynaecological and urogynaecological health conditions is surprisingly small and oddly distributed—a signal that it fails to appropriately account for prevalent, burdensome female ailments. Strikingly, in 2021, premenstrual syndrome accounted for a third of global non-cancerous gynaecological and urogynaecological DALYs, and several common, debilitating conditions (eg, urinary incontinence and dysmenorrhoea) were absent from common causes (appendix p 1).[5]

These absences are substantial in scope and magnitude. For example, in the USA, where representative survey data are available, 27% of women older than 50 years reported incontinence requiring protective garments.[6] This percentage would translate—assuming a mild incontinence disability weight—to about 350 000 DALYs annually in the USA, exceeding the burden of any single non-cancerous gynaecological and urogynaecological condition reported.[7] For reference, the largest reported burden was from premenstrual syndrome, with 298 000 US DALYs, representing 36% of US non-cancerous gynaecological DALYs.[5]

Undercounting the burden of gynaecological and urogynaecological conditions likely arises from three factors.[8] First, GBD estimates evaluate the prevalence of many gynaecological and urogynaecological conditions from claims. Many common gynaecological and urogynaecological conditions might not be reported to physicians, nor show up in claims—including incontinence,[6] dysmenorrhoea,[9] pregnancy-related fatigue,[10] and menopause symptoms.[11] Likewise, the GBD's prevalence estimates for endometriosis require diagnostic surgery ("confirm[ation] by laparoscopy or pathology")[12] resulting in lower prevalence than in sources that account for under-reporting or underdiagnosis.[13] This focus on claims contrasts with approaches used for other conditions, such as low back pain and the outlier of premenstrual syndrome, that GBD quantifies largely from survey self-reports (as shown by the GBD 2019 data input sources tool).

Second, undercounts are compounded by omissions. Several gynaecological conditions (eg, dyspareunia and vulvodynia) were not associated with a published disability weight in 2021.[7,8] Others, such as pregnancy-related fatigue, pain, and nausea and vomiting, and menopause symptoms, such as hot flushes and incontinence, might not be included even in the Other gynaecological diseases category.[14]

Finally, estimation of disability weights for gynaecological and urogynaecological conditions using the GBD standard paired-comparison surveys might also be downward biased due to gender biases and cultural beliefs about what is considered normal.[8,15] If leaking urine after childbirth or during menopause is considered routine, it might not be deemed unhealthy, despite its impact on overall wellbeing.

The GBD previously highlighted the significance of disabling conditions that had been overlooked due to an absence of fatalities and formal under-reporting. To quantify the full global burden of disease, the same careful accounting should be applied to gynaecological conditions.

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For more on the **Institute for Health Metrics and Evaluation Global Burden of Disease Study 2019 data input sources tool** see https://ghdx.healthdata.org/gbd-2019/data-input-sources?com

See **Online** for appendix

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Authors' reply

Alyssa Bilinski and Natalia Emanuel draw welcome attention to the challenges of estimating the global burden of non-cancer gynaecological disorders.[1,2] We agree that these conditions represent a major source of ill health among women and that further methodological refinement is needed to capture their full impact. Several of the issues they highlight are already being addressed in ongoing Global Burden of Disease (GBD) work.

Two assertions bear some comment. One is that the GBD estimate of non-cancer gynaecological disease burden is "surprisingly small" and second that it is "oddly distributed".

In our view, the current estimate of the total burden of gynaecological disease is not small. Across all women, gynaecological disorders account for more than 2% of total DALYs—greater than several major chronic conditions including asthma, cirrhosis, and breast cancer, and similar to chronic headache disorders. The central message of GBD 2021, continued in GBD 2023, is that gynaecological disorders are a substantial contributor to global health loss.[3]

The main limitation lies in the distribution of this burden across specific causes. In GBD 2021 and GBD 2023, the largest contributor to gynaecological disability-adjusted life-years (DALYs) was other gynaecological diseases, a residual category aggregating a broad set of International Classification of Diseases codes from vital registration, claims, and hospital sources. Premenstrual syndrome is the second-leading contributor to overall gynaecological disability, and contributes the most DALYs among the specified disorders for which separate estimates are made. The residual "other" category likely includes both cases of GBD-modelled disorders, such as fibroids, endometriosis, or prolapse, that in clinical settings would be treated without definitive diagnosis, and cases of additional conditions (such as menopause-related symptoms). These ambiguities arise from fundamental gaps in population-representative data and the absence of scalable, minimally invasive diagnostic methods and case definitions for several gynaecological conditions.

The GBD team is expanding disability weight coverage,[4] reviewing crosswalks for symptom-based prevalence, and collaborating with external experts to improve data inputs. We concur that improved measurement of gynaecological morbidity is both a technical and equity imperative.[3] Continued cooperation between researchers, clinicians, and women's-health advocates will strengthen future estimation efforts and ensure that the global burden of gynaecological disease is more accurately and comprehensively represented.

We declare no competing interests.

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Uterine atony and anaemia in postpartum haemorrhage

Idnan Yunas and colleagues' Article found that 70% of cases of postpartum haemorrhage are said to be caused by uterine atony and that anaemia is a strong risk factor for the condition.[1] The 2023 WOMAN-2 cohort study of 10 561 women with moderate (haemoglobin 70–99 g/L) and severe (haemoglobin <70 g/L) anaemia giving birth in hospitals in south Asia and sub-Saharan Africa was not included in the review.[2] Ours was the first large cohort study of the effect of anaemia on women giving birth in settings where most maternal deaths occur.[3]

We found that a 10 g/L reduction in prebirth haemoglobin was associated with a nearly 30% (adjusted odds ratio 1·29, 95% CI 1·21–1·38) increase in the odds of postpartum haemorrhage.[2] Our study eventually recruited 15 066 women. The association between prebirth haemoglobin and postpartum

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Supplementary appendix

This appendix formed part of the original submission. We post it as supplied by the authors.

Supplement to: Bilinski A, Emanuel N. Oversights in global gynaecological disability measurement. *Lancet* 2026; **407:** 27–8.

Appendix: Oversights in global gynecological disability measurement

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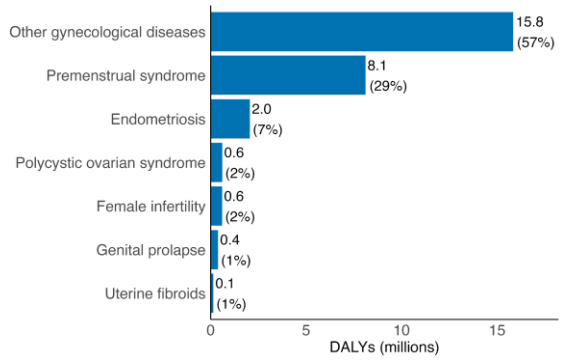
Figure 1. Global gynecological disability-adjusted life-years by cause (2021)[1]

Panel A: Causes of gynecological disability



Panel B: Sources of underestimation

Examples of underdiagnosis in claims data

- Urinary incontinence
- Endometriosis
- Dysmenorrhea

Examples of omitted disability weights

- Vulvodynia
- Dyspareunia

Examples of potentially biased disability weights

- Postpartum recovery
- Menopause symptoms

[1] See data and code at: https://github.com/abilinski/Womens_Health_DALYs.