

## The “continence gap”: a critical concept in obstetric fistula repair

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Recent estimates (admittedly based on educated guesswork rather than hard data) suggest that there may be as many as 3.5 million women in impoverished countries suffering from vesicovaginal and/or rectovaginal fistulas as a result of prolonged obstructed labor with as many as 130,000 new cases occurring each year [1]. Although the ultimate solution to this problem requires that non-industrialized countries develop efficiently functioning systems of maternity care that can identify and treat women who develop obstructed labor in a timely fashion, progress towards this goal is not encouraging [2]. In the meantime, an enormous burden of (exclusively female) suffering cries out for relief. With few exceptions, obstetric fistulas are only curable through surgical intervention. With few exceptions, most women with this condition lack access to competent, affordable care. There are debates about how to deal with this vast backlog of cases [3]. What is clear is that there is very little scientific evidence on which to base recommendations as how best to proceed [4].

A key factor, often overlooked, in discussions about obstetric fistulas is that the fistula itself is only one com-

ponent of a broader spectrum of injuries that has been called the “obstructed labor injury complex” [5]. The most discussed of these injuries is the vesicovaginal fistula and the unremitting urinary incontinence that accompanies it (with approximately 15% of patients also developing a rectovaginal fistula); but many of these women also have extensive vaginal scarring, secondary infertility, footdrop, and other injuries. Closure of the fistula is only the first step in the long process of restoring these women to health and successfully re-establishing the disrupted social relationships that often result from a fistula and its stigmatizing aftermath.

A key problem that is not adequately addressed in the current literature is defining what constitutes “success” in obstetric fistula surgery. There is good evidence from retrospective studies that the fistula can be closed successfully in 80% to 95% of cases. That such closure rates are possible is a tribute to the dedication and perseverance of strong-willed surgeons working in remote corners of the world under extremely difficult conditions; but patients want more than just having the holes in their bladders closed—they want a normal life thereafter and a significant “continence gap” remains for many women who have undergone otherwise successful fistula repair operations. As many as 15% to 20% of women whose fistulas have been closed remain incontinent thereafter. The reasons for this continence gap remain unclear. It is generally attributed to residual defects in the continence mechanism involving the urethra and the bladder neck. In some cases, these anatomical structures have been obliterated by obstructed labor. In other cases, the bladder is tiny, scarred, and fibrotic, sometimes only capable of holding very small amounts. Often the innervation of the bladder (which enters through the trigone) is disrupted by the injuries received. Other, as yet unknown, factors are also probably involved.

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If progress is to be achieved in rendering effective care to women who have been victims of prolonged obstructed labor, the community of fistula surgeons will have to do a better job of gathering and reporting data on patient characteristics, on the incidence and prevalence of the various components of the obstructed labor injury complex, and on the true outcomes of attempted fistula repair operations. At a minimum, data should be reported on successful fistula closure and continence rates after surgery: failed closure with persistent incontinence, successful closure and patients who are “dry” afterwards, and those who reside in the continence gap with fistulas that have been closed successfully but who remain “wet” due to various complicating factors. Gathering good data is a baseline requirement for improving clinical practice. There is a moral imperative to do the basic clinical research that allows us to move from “eminence-based medicine” deriving from individual authority to evidence-based medicine grounded on reliable data.

Beyond the continence gap, however, lie other, even less poorly addressed issues. Women who have survived obstructed labor want to regain normal lives. Most wish to become mothers if they have not already done so, but women who develop a fistula as primigravidas rarely have a successful subsequent pregnancy and the overall reproductive success of these women is dismal [6]. The scarring that often develops from prolonged obstructed labor may produce disabling vaginal stenosis that renders normal sexual relations impossible even after successful repair, and the psychosocial injuries that these women develop (an obstetric version of post-traumatic stress disorder?) may linger unaddressed for the rest of their lives.

What constitutes “success” in obstetric fistula surgery? The higher the bar is set, the more difficult it will be to achieve impressive statistical results. We suggest that true

success will involve closing much more than the “continence gap”. It must also involve efforts to improve future fertility for these women, to restore normal sexual functioning, to heal the psychosocial wounds they have sustained, and to re-integrate them successfully into societies, which have often treated them very badly indeed. None of these issues can be addressed intelligently without well-designed and properly executed scientific studies. Most of all, achieving clinical success in fistula care requires a commitment to viewing these women as something more than injured bladders waiting for a well-intentioned surgeon to come along and perform an operation. We must come to regard the obstetric fistula problem as an intolerable human rights abuse for women in impoverished nations. Those who treat these women must learn to treat the whole individual, not just her wounded urinary system.

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