

Women, work, and water

March 22 is World Water Day, reminding us that safe and affordable drinking water for all is essential for human health and is a human right.¹ Safe drinking water access prevents numerous infectious diseases and exposure to harmful chemicals, whereas ineffective access can compromise public health efforts, including the quality of health-care services.² In most countries, managing and safeguarding domestic water relies on women's unpaid work. This is also true of many proposed solutions, allowing them to appear falsely low-cost, cementing existing inequalities, and blunting the potential for water research, policy, and practice to support both gender equality and safe drinking water for all.

Women and girls are usually responsible for collecting household water when water is not on the premises.³ Women might need to visit various sources to meet their household needs, seeking water deemed to be safe and palatable for drinking and cooking from one source and visiting other sources for washing clothes and dishes.⁴ Water work is hard. It entails getting to the source, extracting water, and carrying loads of often 20 L (20 kg or 44 lbs) at a time; container type, distance, terrain, season, animals, weather, women's health status, household size, specific need, and other factors combine to shape day-to-day labour and experiences. Water work, particularly fetching, has health consequences, including pain, fatigue, and injuries, such as fractures, dislocations, and lacerations.^{5,6} In many regions, unsustainable economic development has made the search for reliable water even more onerous.⁷ Even when water does not need to be fetched—eg, when piped water is delivered for a few hours every few days—it must be stored, protected from contamination, and carefully rationed to meet multiple daily needs. Water work is unpaid. The costs of water provision are paid in inadequate water quantity and quality, time spent walking or waiting, calories expended, sleep lost, injuries sustained, and safety risks endured. For some, the work is all consuming, and limits education and paid work opportunities.⁸ For others, water work results in missing social and community commitments, anxiety and stress, conflict, and shame if household water needs remain unmet.^{9,10}

Water researchers, policy makers, and professionals acknowledge that women and girls bear a

disproportionate burden when faced with unreliable and unsafe access to water services. Nonetheless, many research, policy, and practice initiatives have accepted the norm of women as water workers, exploiting social expectations for programme needs at the expense of women. For example, a recent review of chlorine point-of-use water treatment approaches found that women were made responsible for carrying out treatment tasks and, therefore, shouldered the associated time burdens.¹¹ Women are targeted in hand hygiene interventions, with promotion activities that explicitly describe “super” or “ideal” mothers as those who perform the interventions as expected.¹² Community-based drinking water projects designed by non-governmental organisations and researchers frequently rely on women, such as community leaders and female nurses, to teach people about safe water and how to use and maintain the water system. Such initiatives take advantage of unequal gender norms for programme gains,¹² and reinforce existing biases that undervalue women's time, energy, and bandwidth, with the assumption that these can be harnessed routinely to serve others. These assumptions have been beneficial for implementers, allowing them to promote interventions as low-cost because the labour of daily implementation is considered to be free. When interventions succeed, they are lauded as effective; when they fail, the users (implicitly, women) are blamed for non-adoption or inconsistent compliance.¹¹ The time and labour costs of



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compliance usually remain unevaluated and, therefore, unmentioned.¹³

Ironically, although women are apparently competent to do the most gruelling and unpaid water work, they remain under-represented in water positions that are paid, professionalised, and respected.¹⁴ Only around 18% of water utility workers are women,¹⁵ and in about 25% of reporting countries women hold fewer than 10% of government water, sanitation, and hygiene jobs.¹⁶ Feminist scholars have argued (for some years) that policy reforms that intentionally relieve the burden of water work on women would be more securely in place if more women held leadership positions in all levels of water governance and financing.¹⁷ Documented examples of community-owned and community-managed water systems in water-stressed rural areas give credence to this claim, at least for local-scale systems.¹⁸

It is possible to design research, policy, and practice initiatives that are intentional about relieving the time, labour, and bandwidth responsibilities of women and girls. Providing services that relieve these responsibilities and do not cement existing disparities are fully aligned with global water and sustainable development goals. Studies have estimated time saved (around 22 h per month) when intermittently supplied piped water is replaced by continuous supplies.¹⁹ Where centralised utilities do not exist, small networked chlorinated systems are a potential intermediate delivery option.⁹ Where even small networks do not exist, water can be delivered to rural and peri-urban households by flexible hoses from staffed kiosks.²⁰ Commercial options, such as treated water delivered to households in narrow-necked containers with spigots, are common in high-income countries; these approaches could be adapted for low-income households with affordable user costs and minimum volumes at no or low cost. These approaches are far from the ideal of continuous, treated, pressurised supplies available in the home, but they represent interim supply models that are technically feasible and do not treat women as part of the water infrastructure.²¹

On this World Water Day, to truly accelerate change, we urge water researchers, policy makers, and professionals to design, deliver, evaluate, and advocate for water delivery systems that provide safe water and positively impact girls' and women's lives. Persistent inequities in water work should not be made invisible

and cemented through allegedly low-cost solutions. Rather, interventions and services should—and can—be designed to accelerate positive change for access to water and gender equality. The first step for the global safe water community, however, is to make visible the gendered costs of water work rather than be a silent partner in its continued invisibility.

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