



Water and women: A review on gender perspective role

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Abstract

One of the three universally acknowledged principles of water management is that women have a crucial role in the provision, management, and protection of water. In the underdeveloped world, where millions of women lack access to water for necessities, this notion is particularly crucial. This review goals are to present an overview of the current discussions around these issues, as well as what is known about women and water. According to a review of the literature, it is challenging to draw firm conclusions about which policies will best ensure that poor women have reliable access to water for their lives and livelihoods due to a lack of gender-disaggregated data on the impacts of water policies and underlying disagreements about how gender and development should be theorized.

Keywords: women, water, sanitation, education, health

Introduction

Less than one billion people worldwide have access to safe drinking water for residential use, while almost 2.6 billion lack adequate sanitation (WHO, 2010). With a population of more than 1.1 billion, India's citizens depend heavily on clean, safe drinking water and adequate sanitation. Only 73 percent of individuals had access to clean drinking water, and only 21.9 percent of persons in rural regions had toilets attached to their dwellings, per the 2011 Census. Women and female children bear the majority of the responsibility of domestic water collection, storage, and handling in developing nations, including India. At micro levels, the water sector continues to be dominated by men, from engineers and technocrats in charge of developing irrigation systems to men from upper castes and social classes who choose where canals, bore wells, tanks, and other water systems will be built at the community level (Pouramin, P., *et al*, 2020) ^[27]. Typically, women and girls are responsible for running the family and making sure that households have access to clean drinking water, good sanitation, and hygiene supplies. Making judgments about water provisioning is not significantly influenced by these "care" tasks, such as cooking, cleaning, and taking care of young children, the sick, and the elderly. More than 50% of Indians lack access to properly regulated drinking water (Singh, *et al*.2008) ^[28]. In addition, 42% of rural households travel daily to get drinking water, with 10.5% of those trips taking longer than 30 minutes (Women for Water, 2019). Additionally, young girls do not enroll in or leave school to assist their mothers in this chore (Singh *et al*. 2020). In count to lose out on possibilities for education and employment, women who must go vast distances to get water become particularly susceptible to violence and sexual harassment. Under-nutrition, stunting, and wasting are additional consequences of this issue.

Water collection and discrepancy

Water collection in India is a gender-unequal job, irrespective of the physique and there's no respite, even when women's are menstruating, ill, or has something else

to do (Bismar, A *et al.*, 1997) ^[2]. As groundwater resources are placed under increasing pressure, due to over-reliance and unsustainable consumption, wells, ponds, and tanks can also regularly dry up, escalating the water crisis and placing a greater burden on women to travel long distances to seek water. Access to unsafe drinking water also results in the spread of water-borne diseases such as diarrhea, cholera, and stomach ache (Gender and Water Alliance, 2003) ^[7]. In many cases girl students have to drop out of school to help their mothers to collect water and perform other household tasks, they are denied their right to education which is now a fundamental right under Article 21A of the Indian Constitution (Dutta, S *et al* 2019).

Why water collection is a problem for women

Collecting water is physically demanding, especially for pregnant women and girls. Water collection can also be a life-threatening experience for women and girls (United Nations Framework for Climate Change, 2016) ^[30]. Collecting water keeps girls out of school and education. They lose the time of their life to being a kid (SARA Lopez Garcia. *Et al*, 2019).

Areas prone to this problem

The tribal women of Rooppura and Ganpat Khara villages in the Chittorgarh district of Rajasthan used to trudge two kilometers every day to fetch dirty, unhealthy water (Joshi and Fawcett *et.al*, 2005) ^[16, 17]. In the Chichlekhare village in Igatpuri, Nashik (Maharashtra), women travel arduous three km-long treks to fetch water. People in the village are forced to fetch muddy water by going down into a deep well, where the water level has plummeted below the base of the well (Government of India., 2010) ^[8]. Temperatures in Madhya Pradesh's capital Bhopal remain over 40 degrees Celsius. As large swathes of India boil and blister under heat waves, women have to risk their lives to fetch water for their families. A video shared by news agency ANI - from a village in Madhya Pradesh's Dindori district shows how people make life-threatening descents into a deep well for water (Kapadia, K. *et al*, 2002) ^[18].

Current issues

Time

Collecting water is a time-consuming task that falls largely on women and girls as a part of household work (Nelson V *et al*, 2002) ^[26]. Added up, however, the time spent on this chore often leads to missing attendance in schools (March, C *et al*, 1999) ^[21]. A recent UNICEF study estimates it as "a colossal waste of time". If it was asked how much time women and girls spend fetching water? The result that UNICEF reached was 200 million hours/ day. More than 2 billion people around the world don't have access to clean and safe water at home. For many families, the closest source of water that's safe for cooking, drinking, and sanitation is at least 2-3 miles (Ahmed, S. *et al*, 2001) ^[1]. For many, as water sources are getting less, the problem is getting worse, both in terms of having access to clean water and in terms of gender equality. According to UNICEF's 200 million hours women spend huge time collecting water is a colossal waste of their valuable time. As World Water Week gets underway in Stockholm and experts gather to try to improve the world's access to water, the UN children's agency stressed that the opportunity cost of lack of access to water disproportionately falls on women. According to Sanjay Wijesekera, the director of water, sanitation, and hygiene for UNICEF worldwide if a lady started in the Stone Age with an empty bucket and didn't bring water home until 2016. Consider how far the world has come since then. Consider all that women could have accomplished at that time. He continued that, when water is not piped to the home, the duty of obtaining waterfalls falls disproportionately on women and children, especially girls. Women and girls who are largely paying their time and losing their chances. A study of sub-Saharan countries revealed that when the collection time is more than 30 minutes, an estimated 3.36 million children and 13.54 million adult females were responsible for water collection (Mondal, S *et al* 2022) ^[24]. In Malawi, the UN estimates that women who collect water spend 54 minutes on average, while men spent only 6 minutes (Moser. *et al*, 1993) ^[23]. In Guinea and the United Republic of Tanzania average collection times for women were 20 minutes. For women, the opportunity costs of collecting water are high, with far-reaching effects (Fauconnier *et al*, 2009). It considerably shortens the time they have available to spend with their families, on child care, other household tasks, or even in leisure activities.

Education

Women's abilities to gather water have been observed to improve with education. Higher-educated women are more likely to have access to water sources that are safer and more hygienic, like pipes and water points, as well as superior water safety and sanitation skills (Hennegan J *et al* 2009). For both boys and girls, water collection can take time away from their education and sometimes even prevent them from attending school altogether (Iven S, 2008) ^[12]. Education also gives women the power to participate more fully in household and community decision-making, which can result in better access to water and sanitation. Higher salaries, which can enable women to buy more advanced water-collecting equipment like pumps and pipes and even hire others to collect water for them, are another benefit of higher education (World Economic Forum, 2018). Last but not least, education can assist women in understanding their

rights and gaining access to services like social protection. Fetching water for drinking needs is a gendered task for families mainly, particularly in developing countries like India. Every day women and girls have to walk several kilometers to get to their nearest source of water. Their education is often not considered necessary compared to their male counterparts. Studies show that women in rural areas spend up to four hours daily collecting water for their families. About 22 % increase in school dropout rates has been reported in the drought-affected states as people have to walk for kilometers to get water. Even then, the possibility of getting clean and enough water remains slim. Also, carrying water is a physically demanding task that leaves girls with little to no energy to return home and concentrate on their studies. For women, the opportunity costs of collecting water are high, with far-reaching effects (Joshi. *Et al*, 2005) ^[16, 17]. It considerably shortens the time they have available to spend with their families, on child care, other household tasks, or even in leisure activities. In most cases, this can affect girls' chances of being enrolled in school as studies have shown that a one-hour time reduction in water collection can increase the rate of girls' school enrolment. In many cases, it means that, during this time, girls have to miss school, and women are sometimes forced to stay home, missing out on a day's income. Women in India are usually treated as second-class citizens. This crisis of water only puts them at a higher risk of vulnerability. Fetching water in India has been perceived as a woman's job for centuries. Women, especially in rural areas, walk miles to collect water from the nearest wells, ponds, and tanks, these are drying up as groundwater resources come under increasing pressure due to over-reliance and unsustainable consumption. This has escalated the water crisis and placed an even greater burden on accessing water on women (Moser, C. *et al*, 1993) ^[23]. The idea that household chores are a duty for an 'ideal woman' and that she must arrange water for the family, has persisted for centuries due to Indian patriarchy (Bhattacharjee. SS *et al*, 2014) ^[3]. The ultimate depletion and pollution of groundwater as well as major sources of water puts pressure on women to get their 'job' done. Often, fulfilling these roles precludes any other occupation or participation in education.

Health

As water scarcity, heat waves, and droughts have become more widespread, women and girls find themselves walking greater distances to fetch water. Women in many parts of the world bear the burden of fetching heavy water from distant sources. This is a problem that causes numerous health issues for women and girls, including physical and mental stress (Mitra A. *et al*, 2019) ^[25]. Physically, carrying heavy water buckets can cause stress on the lower back and neck, as well as muscle fatigue. Over time, this can lead to chronic pain and physical disabilities. Women also face an increased risk of falls, fractures, and musculoskeletal injuries from carrying heavy loads. In addition, exposure to the elements can lead to skin and eye irritation. Mentally, the burden of fetching heavy water can lead to feelings of stress, frustration, and low self-esteem (Moser C. *et al*, 1993) ^[23]. Fetching water is a physically demanding task. A typical jerry can (a popular container for carrying water from pump to home) holds more than 22 liters of water and will weigh 18 kilos when full. That's hard enough to carry for several miles especially for aged women, especially as

many carry the jugs on their heads which can lead to back and spine issues over time. The physical and health-related realities of this task for many women go beyond the lifting itself: Carrying in extreme heat can lead to dehydration or sunstroke (Joshi, D *et al* 2001) ^[15]. Expectant mothers are at a higher risk for injury or complications with their pregnancy. Most doctors agree that pregnant women should limit everyday lifting work to 10 kilograms (Sommer M *et al*, 2016) ^[29]. Without the strength to lift these cans safely, it can lead to lifelong health issues. Among the surveyed, 13 percent of respondents were found to have reported some sort of injury while collecting water (Lidonde, R. *et al*, 2004) ^[19]. Injuries such as fractures, dislocations, falls, and those on the lower limbs are most common (Johnson *et al*, 2004) ^[14]. A new study reveals that dangers including falls, traffic accidents, animal attacks, and fights, which can result in broken bones, spinal injuries, lacerations, and other physical injuries (IFAD, 2003) ^[20]. General fatigue is common. Many women in my study complained of headaches, breathlessness, and pains in the chest, neck, back, and waist. Some said they got so tired carrying water that they fell sick (Denton F *et al* 2002) ^[5].

Discussion

Despite the adoption of the MDGs and the Dublin Principles, many millions of women still do not have access to water for even the most basic household and dietary requirements. Sub-Saharan Africa and South Asia are the regions with the most poverty. In Africa, it is estimated that women spend 40 billion hours a year carrying water (Jain, D., 2005) ^[13]. This burden has significant negative effects on the economy and health. Even though there is ample evidence to support the fact that women are effective and productive farmers, many of them are denied official usufruct rights to water, particularly irrigation water. Some women can nevertheless get access to water through questionable, unofficial methods. International and numerous national organizations have taken the stance that including women in water investments and decisions would allow them to voice their water demands, give them additional forms of empowerment, and contribute to more effective and productive uses of water. Yet, because it is uncertain how participation affects women's workloads and well-being, it is a topic of discussion. There is much discussion over whether the policy should be focused more on women's agency through access to water resources.

Recommendation

Women who risk their lives to fetch water should be provided with safe and reliable water sources closer to their homes. To ensure this, governments and local authorities should invest in water infrastructure, such as water pipes and pumps. Additionally, governments should invest in educational programs to raise awareness of the importance of safe and clean water. Education programs should focus on the health risks associated with using contaminated water, as well as ways to keep water sources clean and safe. Governments should also work with local communities to create solutions that are tailored to their needs, such as water storage tanks, rainwater harvesting systems, or water conservation. Throughout, women's participation must be maintained. This entails putting policies in place to guarantee that women can spend time regularly. It's crucial to evaluate women's engagement regarding how much of

their unpaid labor goes beyond what was specified in the project or program design. The gender analysis should be directly linked to this assessment. Women's unpaid labor must not be further exploited, and if participation turns out to be more time-consuming than anticipated, consideration for paying women for their time must be given. It can also be argued that showing a sincere desire to recognize and value the contributions of women, as well as reflecting on their priorities while revisiting the design during the intervention, can significantly improve their education and abilities. Aside from that, diseases like arthritis, back pain, and bone degeneration in young children can be avoided by reducing the distance that water is carried every day.

Conclusion

Based on the study's findings, it is clear that it is far from simple to translate international standards for the local exercise of the human right to water (Humphrey, J. *et al*, 2007) ^[11]. The right itself may be re-interpreted in the local communities by the right-holders, both women and men, so explicit international recognition may have no practical impact on the lives of women who manage home water supplies. The study convincingly shows that the right-holders' realization of their water right is not guaranteed by the simple acceptance of a normative framework at the international level and the adoption of state measures through policies and programs (Miles, M. *et al*, 1994) ^[22]. The socio-cultural background of the women who hold the rights has a significant impact and makes the rights exercise unfair and ineffective. In conclusion, effective local action that takes into account the socio-cultural context is crucial for promoting more equity and effectiveness in helping rural women realize their right to safe water (Gender and Water Alliance, 2003) ^[7].

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