

# Gender and medical waste in the time of COVID-19

Globally, unmanaged medical waste exposes millions of people to life-threatening diseases<sup>1</sup>. The risk of exposure disproportionately affects certain population groups including healthcare and sanitary workers, people living in proximity to landfills and/or waste treatment plants and the poor. The COVID-19 pandemic has exacerbated not only the size and scale of the medical waste problem but has put existing institutions and systems under immense strain. Worldwide, around 70 per cent of healthcare workers are women, including support staff<sup>2</sup>.

## Women's exposure to healthcare waste is often through:

- **Paid care work:** Jobs that are low-waged and considered unskilled are dominated by women<sup>3</sup>. They also continue to dominate in the formal care sector, but face continued poor regulation and protection<sup>4</sup>.
- **Informal caregiving roles:** Globally, women undertake most of the unpaid care work including taking care of children, the elderly and the sick. As primary care providers, they carry the burden of and risk from household medical waste.
- **Informal waste management:** Women form a significant part of the waste collection and management system, about 80 per cent of which is informal<sup>5</sup>, such as rag picking and scavenging<sup>6</sup>.



## Impact of COVID-19 on the healthcare waste system:

- **National guidelines have limited reach:** Despite being in patients, there is limited dissemination of national guidelines across geographies, languages, socio-economic groups and the urban-rural divide.
- **Hospital capacity strain:** The stress and scale of COVID-19 related hospitalizations and the sheer volume of waste produced puts healthcare workers and support staff – many of whom are female – at great risk.
- **Increased exposure at home:** Lack of knowledge on good practices to dispose of household medical waste exacerbates the exposure risk to women. For example, preliminary evidence from countries like Nepal shows that the segregation of healthcare waste (and waste in general) remains minimal, even during the COVID-19 pandemic leading to high likelihood of exposure<sup>7</sup>.

## The waste management sector has seen significant impacts from the burgeoning COVID-19 waste problem including:

- **Severe limitation of waste management systems:** Recent studies argue that the pandemic has compromised the legislative progress against single-use plastic<sup>8</sup> and recycling programs stopped due to the risk of transmission in many contexts<sup>9</sup>.
- **High risk of exposure to informal waste workers:** In many developing nations, waste management is predominately informal and run purely on market dynamics, leading to low-wage, unprotected collection. Improper disposal of various products like masks, gloves, syringes etc. can lead to high risk of exposure for informal workers, many of whom are women, as they do not wear any safety or protective gear<sup>10</sup>.
- **Increased exposure to formal waste workers:** Lack of adequate segregation of medical waste can lead to exposure. Particularly in developing countries, where the access to Personal Protective Equipment (PPE) for formal waste handlers is often limited.

## Women's participation in informal waste management

Informal waste management – activities and operations that work outside of any formal regulatory framework – is a part of the societal fabric in many developing countries. While at a first glance it may seem to be a gender-neutral space of operations, the participation of women reflects existing societal norms that persist in the country. There is evidence to show women are mostly limited to lower-wage tasks such as waste picking, sweeping and waste separation, whereas ownership of businesses and infrastructure and other authoritative positions often remains with men.

In Nepal, Bhutan and Mongolia, the sector sees greater participation of women than men, but typically in these low-paying jobs. Similarly in India, women are more present as low-income

free-roaming bag-on-shoulder pickers collecting from streets and dump sites than the higher-income cart-based collectors. In the Philippines, waste sector workers (street recycling pickers) at dumpsites were found to be primarily women and children who live in nearby informal settlements. In Vietnam, women see an increased participation in the workforce. Many of these women are employed by private collectors and family members, often male. A similar situation can be observed among plastic collectors in Nigeria – while there is abundant representation of women in the informal plastics collection space, along with growing entrepreneurial opportunities, but many customers/households prefer working with male-led businesses as men are perceived to be more 'assertive'.

## To ensure the most vulnerable groups are adequately protected, it is important to mainstream gender into COVID-19 related strategy and planning, resource allocation and institutional development. This could include:

- **Collection of gender disaggregated data:** A conscious effort is needed to track gendered experiences of the pandemic, particularly for informal and low-income groups that face exposure due to the nature of their work – this should be reflected in disaggregated data collection, socio-economic surveys and waste characterization including the handling before and after disposal.
- **Increased female representation:** All planning and resource mobilization efforts at local, regional and national level should have adequate representation of women, particularly those from vulnerable communities.
- **Development of targeted awareness raising and capacity building:** Women should be considered a key target audience for awareness raising and capacity building on good practices for medical waste handling, particularly on the segregation of medical waste, avoiding cross-contamination of

other waste streams and use of PPE while handling medical waste.

- **Provision of training and access to support systems:** Groups at high risk of exposure, such as informal waste collectors, should be provided adequate training, safety gear and support systems (such as financial aid)<sup>11</sup>.

The interlinkage of gender and medical waste management sits at the intersection of key Sustainable Development Goals (SDGs), such as gender equality (SDG 5), good health and well-being (SDG 3), clean water and sanitation (SDG 6) and reduced inequalities (SDG 10). Along with impacts on other SDGs such as sustainable cities (SDG 11) and zero poverty (SDG 1).

### As the world unites to respond to a global pandemic, it is important to remember the 'Leave No One Behind' agenda of the SDGs.

#### Women are disproportionately at risk due to medical waste

- Dominate in the care economy
- Often responsible for household care work and waste management
- Likely to have low-wage jobs in informal waste management

#### Covid-19 waste management needs to mainstream gender

- All planning at all levels should have gender-based representation
- Women should be a target audience for awareness campaigns
- Resource allocation (like budgeting) should be gender-conscious
- Training campaigns, safety gear, support should be provided to formal and informal waste handlers

#### Intersection of gender & medical waste can be linked to multiple SDGs



## Sources:

- <https://oceanconservancy.org/wp-content/uploads/2019/06/The-Role-of-Gender-in-Waste-Management.pdf>
- <https://www.unep.org/resources/report/gender-and-waste-nexus-experiences-bhutan-mongolia-and-nepal#:~:text=The%20United%20Nations%20Environment%20Programme,waste%20sector%20in%20these%20countries.>
- <https://www.jstor.org/stable/10.13169/workorgalaboglob.9.2.0051>

- 
- 1 <https://www.thedailystar.net/editorial/news/poor-medical-waste-management-will-increase-infections-1909561>
  - 2 In hot spots such as China's Hubei Province and the United States, they make up 90 per cent and 78 per cent respectively <https://unfounda tion.org/blog/post/shadow-pandemic-how-covid19-crisis-exacerbating-gender-inequality/>
  - 3 [https://www.ilo.org/wcmsp5/groups/public/---ed\\_dialogue/---act\\_emp/documents/publication/wcms\\_735953.pdf](https://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---act_emp/documents/publication/wcms_735953.pdf)
  - 4 <https://www.ilo.org/infostories/en-GB/Stories/Employment/barriers-women#bridging-gap>
  - 5 ILO, "Sustainable development, decent work and green jobs," Report V, 102nd Session, International Labour Conference, International Labour Office, Geneva (2013).
  - 6 <https://www.jstor.org/stable/10.13169/workorgalaboglob.9.2.0051>  
<https://oceanconservancy.org/wp-content/uploads/2019/06/The-Role-of-Gender-in-Waste-Management.pdf>  
<https://www.unep.org/resources/report/gender-and-waste-nexus-experiences-bhutan-mongolia-and-nepal#:~:text=The%20United%20Na tions%20Environment%20Programme,waste%20sector%20in%20these%20countries.>
  - 7 Acharya, A., Bastola, G., Modi, B., Marhatta, A., Belbase, S., Lamichhane, G., ... Dahal, R. K. (2021). The impact of COVID-19 outbreak and perceptions of people towards household waste management chain in Nepal. *Geoenvironmental Disasters*, 8(1). doi:10.1186/s40677-021-00188-w; <https://www.frontiersin.org/articles/10.3389/fpubh.2020.592345/full>; <https://www.sciencedirect.com/science/article/pii/S2590051X20300228>
  - 8 <https://www.sciencedirect.com/science/article/pii/S0048969720340870?via%3Dihub>
  - 9 <https://www.sciencedirect.com/science/article/pii/S0048969720323305?via%3Dihub>
  - 10 <https://oceanconservancy.org/wp-content/uploads/2019/06/The-Role-of-Gender-in-Waste-Management.pdf>
  - 11 <https://www.unep.org/ietc/resources/report/waste-management-during-covid-19-pandemic-response-recovery>



**International Environmental Technology Centre (IETC)**

**Economy Division**

**United Nations Environment Programme (UNEP)**

2-110 Ryokuchi koen, Tsurumi-ku, Osaka 538-0036, Japan

Tel: +81-(0)6-6915-4581

Email: [ietc@un.org](mailto:ietc@un.org)

<https://www.unep.org/ietc/> • This material was prepared for IETC by Deepali Sinha Khetriwal as an independent consultant.