Burgeoning Plastic Footprint: Who Is Responsible?

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Today, the world is witnessing the Covid-19 pandemic, accompanied by other pandemics like the information pandemic (infodemic) and the Covid-19 waste pandemic. The burgeoning consumption and improper disposal practices of face masks by the community worldwide have given rise to a new environmental challenge. These materials are getting into waterways from where they reach the freshwater and marine environment, adding to the burden of plastics in the aquatic medium. For instance, OceansAsia, an organization committed to advocacy and research on marine pollution, reported in February 2020 that the ocean is being cluttered with new forms of plastic, i.e., face masks of different types and colours in Hong Kong (Oceanasia, 2020). The collection of face masks was also spotted along highways and drainage in many other parts of the world (Fadare & Okoffo, 2020).

This new form of plastic waste has emerged as an environmental litter in terrestrial and aquatic ecosystems. Thereby acting as a piece of evidence that the global pandemic has further increased the challenge of plastic pollution across the world (Prata et al., 2020).

Single-use polymeric materials have been identified as a significant source of plastics and plastic particle pollution in the environment. Like other single-use plastics (bottles), these medical face masks are also typically made up of polypropylene, polyurethane, polyacrylonitrile, polyethylene, or polyester(Fadare & Okoffo, 2020). In turn, making these disposable face masks (single use) and PPE's an emerging new source of microplastic fibres, as these plastics, can break down into smaller particles size of less than 5 mm under environmental conditions (Fadare & Okoffo, 2020).

The UN Environment also highlighted the issue in its report stating that the general public is producing more waste than usual. Along with domestic waste, biomedical waste such as masks, gloves, and PPEs are prevalent due to a lack of awareness (COVID-19 Waste Management Factsheet, n.d.). As per a recent Central Pollution Control Board (CPCB) report, 146 tonnes of COVID-19 related waste were generated in the year 2020 in India alone (Kumar, 2021). Already 150 million tons of plastic waste were said to float in the ocean; if the trend continues, by 2050, there will be more plastic by weight than fish in the ocean (Ford, 2020). Additionally, fish and other animals are getting intoxicated because of plastics.

Ultimately, consuming such fishes and animals is causing plastics to enter our food chain, threatening human health (Andrews, 2012).

Therefore, proper waste management responsibility not only falls on the healthcare institutions but also on the citizens to effectively use and dispose of these single-use masks to protect themselves, others, and the environment. The public should be made aware about the plastic footprint created due to the irrational use of face masks and the long-term consequences that can arise if the situation is not controlled in time.

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Sources

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