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PERSONAL PROTECTIVE EQUIPMENT (PPE) DURING THE COVID-19 CRISIS: A REVIEW OF CURRENT KNOWLEDGE AND FUTURE DIRECTIONS

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Abstract

The COVID-19 pandemic significantly altered everyday life, making Personal Protective Equipment (PPE) a mandatory “social norm” worldwide. While PPE serves a critical protective function, it also has a controversial dark side related to environmental pollution. The release of contaminated plastic into the environment threatens the achievement of fundamental Sustainable Development Goals. This study is based on a comprehensive bibliographic analysis of existing literature on PPE, with a focus on face masks as a primary component. The aim of our research is to highlight the significant environmental impact of increased usage and improper disposal of PPE, leading to plastic pollution. In addition to consolidating existing knowledge on PPE, this paper explores the magnitude of the issue and reviews potential solutions, such as the development of biodegradable PPE, the use of cloth masks, effective waste management practices, and recycling and reusing methods. These steps are crucial in preparing for future health crises.

Key words: Covid-19 pandemic, environmental waste, face masks, Personal Protective Equipment (PPE), plastic pollution

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