ISWA COVID-19

Awareness Paper

Future Challenges and Solutions

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Background

More than half of the world's population have been placed under lockdown in the past few months in an attempt to stop the spread of COVID-19. This has become a public health emergency that has claimed hundreds of thousands of lives and had significant global influence on each and every aspect of what we perceived as “normal way of living.”

The healthcare sector was, and still is, one of the most affected, striving to manage massive increases in the volume of medical waste generated. There is still uncertainty as scientists and healthcare professionals try to understand the future whilst dealing with the challenges of the present. This uncertainty follows through into the management of healthcare waste and the impact it will have on the sector. The scientists and medical professionals are still working out how to beat this pandemic. It is difficult to imagine what changes will be made in the healthcare sector once we win this fight.

As this is being written, there are plans for some countries to gradually relax some of the COVID-19 restrictions and reopen their education facilities, businesses, industries, trade, transport and travel, to return to a new normality. This means that the healthcare sector will have to return to regular operations and services, many of which were interrupted and converted to manage large numbers of patients who were infected with COVID-19. Additionally, there are many cases where wide population testing is accepted as national programs for fight and control against COVID-19.

Position of the Working Group on Healthcare Waste

As a group of professionals who serve the international healthcare sector for all aspects of healthcare waste management, as well as health and safety and the prevention of infection, we think that this is the right time to think of the possibilities and use what we learn today to prepare for the future.

A discussion among members of the Healthcare Waste Working Group was initiated to focus on what has been learned from the pandemic so far and what to expect in the future. Once healthcare sectors around the world restart their “business as usual,” while still fighting to care
for patients with COVID-19, it is expected that the volume of healthcare waste will significantly increase, thereby augmenting the level of operations for healthcare waste management. This will include the need for increased capacities for segregation (to reduce volume), logistics, storage, and treatment. This requires the whole healthcare sector, and treatment facility operators, to prepare themselves and implement the most applicable, corrective measures to handle the waste appropriately. One important aspect that must be kept in mind is that there are still inherent other risks from healthcare waste. Other healthcare waste such as; more robust pathogens like Hepatitis and HIV, sharps, and pharmaceuticals still require correct management and treatment. It is too easy to focus solely on the treatment of COVID-19 contaminated wastes and forget about other hazards that are contained within the medical waste. Therefore, proper management of such waste is not only legal but also a moral and social responsibility of the healthcare institution and must be implemented regardless of the specific circumstances.

In summary, the professional opinion of the group is where good, safe practices with respect to handling and treating medical waste are established, there is no need to change procedures in handling. The common practices for segregation, packing and labeling, collection, storage, transport, treatment of the waste and Occupational Health and Safety are established in healthcare facilities, based on the core principles of infection control and therefore should continue. However, the working group recommends that improvement of the practices and investment in the operational and treatment capacities, as well as the personal protection of the waste management workers, should be a constant activity which will lead to achievement of the best results in control of the infections.

**Engagement of key stakeholders**

The role of medical staff is crucial in this process. Their knowledge, attitudes and practices regarding healthcare waste management are vital in preventing the risks associated with this type of waste. Continuous refresher training and education of staff, even as a reminder of the procedures, is of great importance to ensure sustainability and further improvement.

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1. One observed, immediate impact from the treatment of patients with COVID-19 is that while the volume of medical wastes have increased, the weight has decreased due to the quantity of disposed PPE.
2. This includes exploring on-site treatment as a way to increase treatment capacity and reduce transportation needs. Furthermore, reinforcing the use of non-incineration based, greener solutions, and promoting innovation for healthcare waste initiatives.
Furthermore, proper awareness amongst general public via strong dissemination of information and knowledge is important to further reduce risk of infection. Technical guidance and awareness material may be sourced from the WHO website or ISWA website. Finally, continuous cooperation of all parties including healthcare waste experts, representatives of public health institutions, representatives of the Ministries of Health, policymakers, news media representatives, and citizens, is crucial in the realization of achieving objectives and keeping the community safe.

Environmental Impact

The healthcare waste management sector has been constantly challenged by previous epidemics and pandemics and for every new one, best practices are identified and adopted. The lessons learned from the COVID-19 pandemic, will identify the path for continuing improvement of the overall waste management practices.

As countries start lifting quarantine measures, regular activities will refocus on preserving people’s health by rethinking new ways to manage the virus. Applied measures might differ from country to country, but the use of PPEs currently seems to be a common denominator. The use of huge quantities of plastic items in healthcare and related services is already posing a new challenge to the environment. We are likely to prove that our reliance on plastic has actually increased and that our environment is in greater danger than before the pandemic. It is a reality that some countries, where they have previously implemented plastic bans, have suspended these policies for an unlimited time period.

Conclusions

The ISWA Working Group on Healthcare Waste calls on professionals worldwide to apply all measures to counter a potential second round in the spread of the disease while seeking solutions that will not pose a threat to the environment by the inconsiderate use and mismanagement of PPEs, and the disruption of proper and sustainable waste management regulations already in place.

For some, this global pandemic has been an opportunity to reflect and re-engage with nature and the environment, for others, there have been unprecedented challenges to plan and manage increasing volumes of healthcare waste whilst also keeping everyone safe and healthy. There has
been a tragic loss of life across the world as the result of the way this pathogen spreads. Members of the ISWA Working Group on Healthcare Waste have worked tirelessly to ensure that any risks associated with medical waste have been kept to an absolute minimum. It would appear that this pathogen is here to stay for the foreseeable future, so we must ensure that the lessons that have been learned are not forgotten.