Mohamad Mahathir Bin Amir Sultan\textsuperscript{1}, Goh Choo Ta\textsuperscript{1}, Peter John Peterson\textsuperscript{1}, Sharifah Ezat Binti Wan Puteh\textsuperscript{2} and Mazlin Bin Mokhtar\textsuperscript{1}

\textsuperscript{1}Research Centre for Sustainability Science & Governance, Institute for Environment and Development (LESTARI), Universiti Kebangsaan Malaysia (UKM) Bangi, 43600, Selangor, Malaysia

\textsuperscript{2}Department of Community Health, Faculty of Medicine, Universiti Kebangsaan Malaysia (UKM), Jalan Yaacob Latiff, Bandar Tun Razak, 56000, Cheras, Selangor, Malaysia

ABSTRACT

The risks of mercury use have prompted the establishment of Minamata Convention on Mercury which placed strong emphasis on management of mercury-added products. This convention aims to reduce and phase out the use, manufacturing and trade of mercury-added products including batteries, switches and non-electronic measuring devices. This commitment will cause significant impacts especially in the developing countries in designing the right approach to achieve it. This is also true for medical industry which is well known for the utilization of mercury-added devices and dental amalgam in its services but had embarked on efforts in eliminating mercury for many years. The experiences learned within a medical facility can be useful in efforts to meet this global ambition of mercury phase out. This paper aims to provide conceptual discussion on the challenges faced by developing countries and lessons learned from medical facility that can helps the formulation of appropriate approaches to manage mercury-added products. The paper adopted medical industry as a case study and used document analysis to discuss the issue. The main challenges identified for developing countries include lacks of capacity, funding, data and newer technologies. Based on analysis of previous studies, this study proposed a mercury management framework in medical facility and identified the recommended practices, namely technological application, policy instrument, capacity building and guidelines development. These identified approaches are found to have specific relationships between cost and potential impacts, hence giving flexibility for adoption based on the available resources in promoting better mercury management system.
Keyword: Mercury-added product; medical facility; mercury management; Developing Countries

Full text (PDF)