Sharing the medical resource: the feasibility and benefit of Global Medical Instruments Support and Service

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Abstract

High cost of advanced medical technology and medical equipments has impeded the usage and access of these equipments for most people in the world, especially in developing countries. How to share the medical equipments widely and cost-effectively is an urgent topic for global public health. We launched a project to relocate the used or spare medical instruments via Global Medical Instruments Support and Service (GMISS) program.

The purpose of GMISS program, supported by the Office of International Cooperation, Ministry of Health and Welfare, Taiwan, is to provide essential medical equipment to other countries to help improve their health care and medical services. With the cooperation with medical centers and hospitals in Taiwan and the clinical engineers in the National Taiwan University Hospital (NTUH), we have provided many usable medical equipments and facilities to many area and countries freely. All equipment and instruments are well maintained and fully functional before being shipped to the recipients. GMISS also provides hospitals in Taiwan with a chance of sharing their used medical equipments and experiences.

Up to now, enthusiastic donations from the hospitals, manufacturers or research institutes across Taiwan have enabled the GMISS program to benefit 32 countries and accomplish more than 80 donations successfully, including Guatemala, Haiti, Paraguay, Belize, Marshall Islands, Vietnam, Mongolia, Burkina Faso, Indonesia, Sao Tome and Principe, Saint Vincent and the Grenadines, and the Philippines etc. The donation items included dental X-ray systems, mammography, electrocardiographs, ECG machines, ENT chairs, anesthesia units, infant incubators, ICU patient beds, defibrillators cardiac, bedside monitors, hemodialysis units, diagnostic tables, cast saws, phototherapy units, oxygen tents, diagnosis lamps, surgery tables, infant intensive care systems, ambulances, microscopes etc., amounting to several hundreds of items worth about 30 million U.S. dollars. Cost-effectiveness analysis was done by using QALY gained.

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