Visibility in Global Health Supply Chains

Authors
Natalie Privett and David Gonsalvez

Abstract
Health systems play key roles in all phases of disaster management. Global public health is particularly important as the majority of disaster and crisis victims reside in developing countries. Yet information on these supply chains remains scarce, contained mainly in individual experiences and technical reports. This research aims to assemble and leverage the knowledge of global health supply chain experts through interviews and surveys to describe the current state and key challenges of health and humanitarian supply chains and prioritize their most significant issues based upon influencing delivery to patients and saving lives. Results identify the following top ten global health supply chain issues: (1) lack of coordination, (2) inventory management, (3) absent demand information, (4) human resource dependency, (5) order management, (6) shortage avoidance, (7) expiration, (8) warehouse management, (9) temperature control and failure, and (10) shipment visibility. Based on importance ratings and dependence analysis, it is recommended that future research, interventions, and technology give special attention to the top four global health issues as they constitute root cause and linchpin issues underlying all of the top ten issues. These include the lack of coordination of the current system, inventory management, demand information, and development of human resources. These conclusions draw attention to the need and opportunities for development in global health and humanitarian operations management while providing direction for future research.