

## Adoption of Electronic Logistics Management Information System for Life-Saving Maternal, Neonatal and Child Health Medicines: A Bangladesh Perspective

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**Abstract :** Maternal, neonatal, and child health (MNCH) holds one of the prime focuses in Bangladesh's national healthcare system. To save the lives of mothers and children, knowing the stock of MNCH medicines in different healthcare facilities and when to replenish them are essential. A robust information system not only facilitates efficient management of the essential MNCH medicines but also helps effective allocation of scarce resources. In Bangladesh, Supply chain management of the 25-essential life-saving medicines are currently tracked and monitored via an electronic logistics management information system (eLMIS). Our aim was to conduct a cross-sectional study with a year (2020) worth of data from 24 districts of Bangladesh to evaluate how eLMIS is helping the Government and other stakeholders in efficient supply chain management. Data were collected from 4711 healthcare facilities ranging from primary to secondary levels within a district. About 90% (4143) are community clinics which are considered primary health care facilities in Bangladesh. After eLMIS implementation, the average reporting rate across the districts has been increased (> 97%). The month of stock (MOS) of zinc is an average 6 months compared to Inj. Magnesium Sulphate which will take 2.5 years to consume according to the current average monthly consumption (AMC). Due to first approaching expiry, Tab. Misoprostol, 7.1% Chlorhexidine and Inj. Oxytocin may become unusable. Moreover, Inj. Oxytocin is temperature sensitive and may reduce its efficacy if it is stocked for a longer period. In contrast, Zinc should be sufficiently stocked to prevent sporadic stockouts. To understand how data are collected, transmitted, processed, and aggregated for MNCH medicines in a faster and timely manner, an electronic logistics management information system (eLMIS) is necessary. We recommend the use of such a system in developing countries like Bangladesh for efficient supply chain management of essential MNCH medicines.

**Keywords :** adaption, eLMIS, MNCH, live-saving medicines

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