Conference Abstract

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W.H.O. Global Database on Blood Safety: Challenges, Impact, and Role of Data Management in Blood Transfusion Service Policy Decision Making

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The WHO Global Database on Blood Safety (GDBS), initiated in 1998, aims to address the global need for strategic data on blood availability, safety, and accessibility. By collecting and analyzing comprehensive data from national health authorities, the GDBS supports policy formulation and promotes safer blood transfusion practices worldwide. This global initiative aligns with key resolutions like WHA63.12, emphasizing sustainable and nationally coordinated blood programmes to achieve self-sufficiency.

Despite the significance of WHO GDBS, managing comprehensive data on blood safety comes with challenges that impact its effectiveness in guiding policy decisions. Challenges in data collection for the GDBS are significant, particularly in low- and middle-income countries where systems are often decentralized or involve multiple stakeholders. Common issues include incomplete, inaccurate, and delayed data reporting, further complicated by varying interpretations of data indicators. Poor infrastructure, limited training, and resource constraints exacerbate these challenges, impacting the reliability and comprehensiveness of data submissions. Despite these hurdles, the GDBS serves as an invaluable resource for assessing country-specific needs and guiding investments aimed at improving blood safety. The database enables monitoring of global trends in blood collection, screening, and transfusion-transmissible infection (TTI) rates, highlighting disparities between developed and developing regions. High discard rates due to TTI-positive blood units remain a persistent issue in resource-limited settings.

To overcome data challenges, WHO has undertaken initiatives to support national reporting systems through capacity building, technical assistance, and the development of data management guidelines. Standardized data collection tools, available in multiple languages and formats, facilitate more accurate reporting and comprehensive analysis. Leveraging technology, such as automated data verification systems, can further mitigate human error and streamline the process.The database's impact is amplified when data is translated into actionable insights, promoting better resource allocation, strategic planning, and evidence-based interventions. By strengthening data management practices, the WHO Global Database on Blood Safety supports the development of policies that safeguard public health, ensure equity in blood transfusion services, and ultimately contribute to global health resilience.

Disclosure

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