6TH BMSS ARYEH SHANDER LECTURE: DEVELOPING A CASE FOR BLOODLESS SURGERY IN DEVELOPING COUNTRIES

Christopher Simutowe, FRCSI, FRCSEd

Luanshya Mine Hospital, Luanshya, Zambia

Surgery often involves making incisions to repair or remove diseased parts of the body, typically leading to some degree of bleeding. In developing countries, hospitals range from well-equipped urban facilities to rural centers that often lack necessary resources and specialized staff. Blood transfusions are common in major surgeries such as cesarean sections, hysterectomies, laparotomies, and emergency trauma cases.

However, blood transfusions come with risks, including acute hemolytic reactions, allergic reactions, transfusion-related acute lung injury (TRALI), transfusion-associated circulatory overload (TACO), and septic reactions. The World Health Organization (WHO) issued a policy in 2021 urging countries to adopt patient blood management (PBM) to minimize reliance on transfusions. PBM is a patient-centered, evidence-based approach that aims to improve outcomes by preserving patients' own blood and enhancing patient safety.

PBM is structured around three pillars: (1) screening and treating anemia, (2) minimizing blood loss during surgery, and (3) supporting patients while appropriate treatment is initiated. These strategies form the foundation of bloodless surgery, which seeks to provide quality surgical care without the use of allogeneic blood transfusions, thereby improving clinical outcomes and respecting patient autonomy.

In developing countries, where anemia is prevalent and equipment is often limited, bloodless surgical programs can be a game-changer. By assembling multidisciplinary teams, establishing clear protocols, and focusing on PBM, these programs aim to enhance patient care. An example of this is the bloodless surgical program at the University of Calabar Teaching Hospital in Nigeria, which demonstrates the potential for such initiatives in resource-limited settings.

Corresponding author: Christopher Simutowe, (FRCSI, FRCSEd), Consultant General Surgeon, Luanshya Mine Hospital, Luanshya, Zambia

Email: christophersimutowe@gmail.com