

Reducing maternal mortality: the case for availability and safety of blood supply

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Maternal health is one of the main public health concerns globally and in the World Health Organization (WHO) Eastern Mediterranean Region. An estimated 303 000 maternal deaths occurred worldwide in 2015; most of which were avoidable (1). Three quarters of the countries with maternal mortality ratios (MMRs) > 300 per 100 000 live births are fragile states. Some countries in the Region, including those with humanitarian emergencies, such as Afghanistan, Somalia and Yemen, are among those with the highest MMRs in the world (2). As a result of sustained efforts of governments and partners, including WHO, United Nations Children's Fund, United Nations Population Fund, and World Bank Group, the global MMR decreased by 43.9% from 385 deaths per 100 000 live births in 1990 to 216 in 2015 (1). By the end of 2015, much progress had been made towards achieving Millennium Development Goal 5 in the Region. Between 1990 and 2015, MMR decreased by 54% although the decline has been uneven between and within countries (3).

Haemorrhage remains the leading direct cause of maternal death worldwide, representing 27% of maternal deaths; of which, more than two thirds are due to postpartum haemorrhage (4). The prevention and treatment of postpartum haemorrhage requires a multiplicity of interventions, including rapid recognition of warning signs of blood loss, vigorous resuscitation with fluids, and timely blood transfusion (5,6). At least one quarter of all maternal deaths due to haemorrhage could be prevented by rapid access to safe blood transfusion (7). However, data collected from countries in the Region indicate that rapid availability and access to safe blood transfusion for patients in need remain a challenge. In 2013, ~7 million units of whole blood were collected. Blood donation rates vary among countries, ranging from 0.7 (Yemen) to 29.0 (Lebanon) units per 1000 population. Six countries, including those with a high burden of

maternal mortality, have inadequate blood supplies, with donation rates < 10 units per 1000 population (8). Despite the vital role of blood transfusion in the implementation of essential interventions for maternal health, such as management of postpartum haemorrhage, and delivery of universal health coverage, inadequate attention is given to blood transfusion services and their linkage to maternal health programmes.

In January 2016, the global development community committed to the 2030 agenda for Sustainable Development Goals (SDGs), with new targets including 1 that focuses on reducing maternal mortality (9). SDG Target 3 challenges governments and partners to reduce the global maternal mortality ratio to < 70 per 100 000 live births by 2030, with no country having a maternal mortality rate of more than twice the global average (9). The increasing global attention on the SDGs and the set targets provide much needed impetus to focus on proven interventions in reducing MMR, which cannot be ensured without significant investment to ensure the availability and safety of blood transfusion (7). This requires identifying gaps through an in-depth analysis of factors affecting access to safe blood and implementing interventions, in line with the Regional Strategic Framework for Blood Safety and Availability 2016–2025 (10).

In view of this, it is critical to encourage ministries of health, particularly in countries with high rates of maternal mortality to take concrete steps towards improving timely availability and access to safe blood transfusion as part of a comprehensive approach to reduce maternal mortality. This will require strengthening partnerships between maternal health programmes and blood transfusion services to improve access to and ensure safety of blood in order to contribute to achieving SDG targets and deliver universal health coverage.

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