





REGIONAL COMMITTEE FOR THE EASTERN MEDITERRANEAN Sixty-fifth Session Khartoum, Sudan, 15–18 October 2018

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## OPTIMIZING THE USE OF CAESAREAN SECTION TO IMPROVE MATERNAL AND NEWBORN HEALTH IN THE REGION

## Objectives of the event

The objectives of the event are to brief Member States on the:

- current status of caesarean section in countries of the Eastern Mediterranean Region, including the factors/determinants leading to its overuse;
- importance of adopting the updated WHO Robson classification (2017) to optimize the use of caesarean section;
- essential non-clinical interventions based on WHO recommendations to reduce rates of unnecessary caesarean sections at health facilities.

## **Background**

Caesarean section is a surgical procedure that can effectively prevent maternal and newborn mortality when used for medically indicated reasons. In aiming to decrease disparity among nations in the number of caesarean sections performed, in 1985 WHO set an optimal rate of 10–15% to optimize maternal and child health. The potential benefits of caesarean section in saving maternal and infant lives in emergency situations have been accepted globally in medical practice but there is no evidence, to date, showing the benefits of the procedure for women or infants when it is not required. Despite all the evidence regarding its risks and benefits, worldwide variation in the frequency of its practice is still reported.

The increasing rates of caesarean section have not been accompanied by significant maternal or perinatal benefits. On the contrary, there is evidence that beyond a certain threshold, increasing caesarean section rates may be associated with increased maternal and perinatal morbidity. Caesarean birth is associated with short-and long-term risks which can extend many years beyond the current delivery and affect the health of the woman, the child and future pregnancies. High rates of caesarean section are also associated with significant health care costs. Caesarean section increases the probability of requiring a blood transfusion, the risk of complications from anaesthesia, organ injury, infection, thromboembolic disease, neonatal respiratory distress, among other short-term complications. In addition, in the long term, caesarean section has been associated with complications, such as uterine rupture, placenta accreta, ectopic pregnancy, infertility, hysterectomy and intra-abdominal adhesions, in the following pregnancy.

According to WHO data from 150 countries between 1999 and 2014, 19% of all births occur by caesarean section, ranging from 6% to 27.5% in the least and most developed regions, respectively. In WHO's Eastern Mediterranean Region, the average rate of caesarean section is 21%, and ranges from 52% in Egypt, which is one of the highest in the world, to 2% in Somalia, which is the lowest. The classification of the 22 countries of the Region showed the existence of three groups when measured against the WHO recommended rate of 10–15%. Fourteen per cent (14%) of countries in the Region have caesarean section rates within the WHO recommended range, 18% of countries have caesarean section rates below 10% underlining inequitable access to caesarean section in remote areas, and 68% of countries have a caesarean section rate of more than 15%. Such irrational use of this procedure, in spite of surgical and obstetric advances, has resulted in increased rates

of complication associated with it. In fact, three of the six leading causes of maternal death – haemorrhage, infection and complication of anesthesia – are now linked with caesarean section.

The factors contributing to the rise in caesarean section rates are complex and identifying the interventions to reduce this rate is challenging; factors include: increase in the prevalence of obesity, multiple pregnancies, an increase in the proportion of older women becoming pregnant, primiparity, physician factors, and increasing fear of medical litigation, among others.

In the Eastern Mediterranean Region, barriers to optimizing the use of caesarean section include: lack of national policy/guidelines regarding child birth practice; profit-motivated private medical settings; improper management of normal labour; irrational use of obstetric interventions; lack of communication between health care professionals and expectant mothers; and reduced midwifery input in the childbirth process. These barriers have been identified as responsible factors for the high rates of caesarean section in countries such as Egypt, Islamic Republic of Iran and Lebanon. Meanwhile, many countries in the Region are recording inequitable high caesarean section rates in the private sector with no reporting of the indications.

Cognizant of Sustainable Development Goal target 3.1 "to reduce the global maternal mortality ratio to less than 70 per 100 000 live births" and concerned with the medical consequences of this situation, clinicians, hospital administrators, policy-makers and governments are in need of evidence-based guidance to address the increasing use of caesarean section without medical indication. Unlike clinical interventions, there were no previous WHO guidelines on non-clinical interventions intended to reduce caesarean births. To address this gap in knowledge WHO has developed and will publish in 2018 the WHO recommendations on non-clinical interventions to reduce unnecessary caesarean sections proposing interventions to be adopted at the level of the individual, communities, health professionals and health facilities. These guidelines focus on context-specific recommendations to be adopted in settings where rigorous research can be conducted. They include recommendations to be adopted only with targeted monitoring and evaluation to ensure the effectiveness and acceptability of the non-clinical interventions to reduce the use of caesarean section.

WHO also recommends the adoption of updated Robson classification, including its 10 categories, and to ensure its implementation at health facilities as a tool to facilitate the classification system to monitor and compare caesarean section rates at facility level in a standardized, reliable, consistent and action-oriented manner.

The Regional Office for the Eastern Mediterranean has arranged an informal consultative meeting from 26 to 27 September 2018 to review the quality and strength of existing evidence on the high prevalence of caesarean sections in the Region and underlying determinants of the practice with the aim of proposing the conducting of further qualitative research to optimize its use in the Region. Member States have been requested to disseminate and build on the WHO recommendations and adopt the guidelines as the basis to develop national and subnational policies for use by clinicians and other health professionals to optimize use of rational caesarean delivery and ultimately improve the quality of care for mothers and newborns during childbirth.

## **Expected outcomes**

- 1. Representatives fully briefed on the current status of cesarean section in the Region, factors contributing to its increased use, its determinants and unhealthy outcomes as a consequence.
- 2. Consensus and agreement reached on the need to adopt the updated WHO Robson classification to optimize the use of caesarean section.
- 3. Commitment of Member States elicited to adopt the *WHO recommendations on non-clinical interventions to reduce unnecessary caesarean sections* to form the basis for the development of national or subnational policies for implementation by clinicians and other health professionals to optimize use of rational caesarean delivery and ultimately improve the quality of care for mothers and newborns during childbirth.