

MATERNAL MORTALITY RATE AND THE MAIN CAUSES OF MATERNAL DEATH IN TUNIS

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Objective: The aims of your study were to determine the Maternal Mortality Ratio (MMR) in the governorate of Tunis and to identify the main causes of maternal death.

Design: This was a descriptive retrospective study included maternal deaths between January 2017 and December 2023 in the governorate of Tunis.

Methods: We included all maternal deaths reported to the Tunis Regional Health Directorate. The data collected included the MMR per 100000 live birth, sociodemographic characteristics, causes of death, and circumstances of death.

Results: During the study period, 61 maternal deaths were recorded, but 13 records lacked data related to the circumstances of the death. Thus, this work focused on 48 records of maternal deaths. The average of MMR was 46, 88 per 100000 live births. Two peaks in the MMR were noted in 2017 and 2020.



Figure 1: Evolution of the maternal mortality ratio (MMR) in Tunis between 2017 and 2023

The average age of the patients was 34, 1 years (± 5.1), with extremes ranging from 20 to 46 years. In 47, 9% of cases, the deceased women were aged between 30 and 34 years. We noted that 43, 75 % of the patients were not residents of the governorate of Tunis. A percentage of 83.33% (n=40) of the women had no medical history. Heart disease was the most reported pathology, found in 6.25% (n=3) of studied women. The average parity of the patients was 2, 02 with extremes from 0 to 5. We noted that 70, 83% (n=34) of the deceased women had two or more children. A history of cesarean delivery was noted in 58% of cases (n=19). Sixty percent (n=29) of the deceased women had received proper follow-up during their last pregnancy. We noted that 87, 5 % (n=35) of the deceased women had no pathology during the last pregnancy. The postpartum period was the most critical. In fact, 83, 33 % of maternal deaths occurred postpartum. For women who died in postpartum (n=40), delivery was by cesarean section in 87, 5% (n=35) of cases. The causes of maternal death were direct in 62.5% of cases (n=30) and indirect in 35, 4% of cases (n=17). Hemorrhage was the main etiology in 20.8% of cases. The second cause was COVID- 19 complications in 16, 6% of cases.

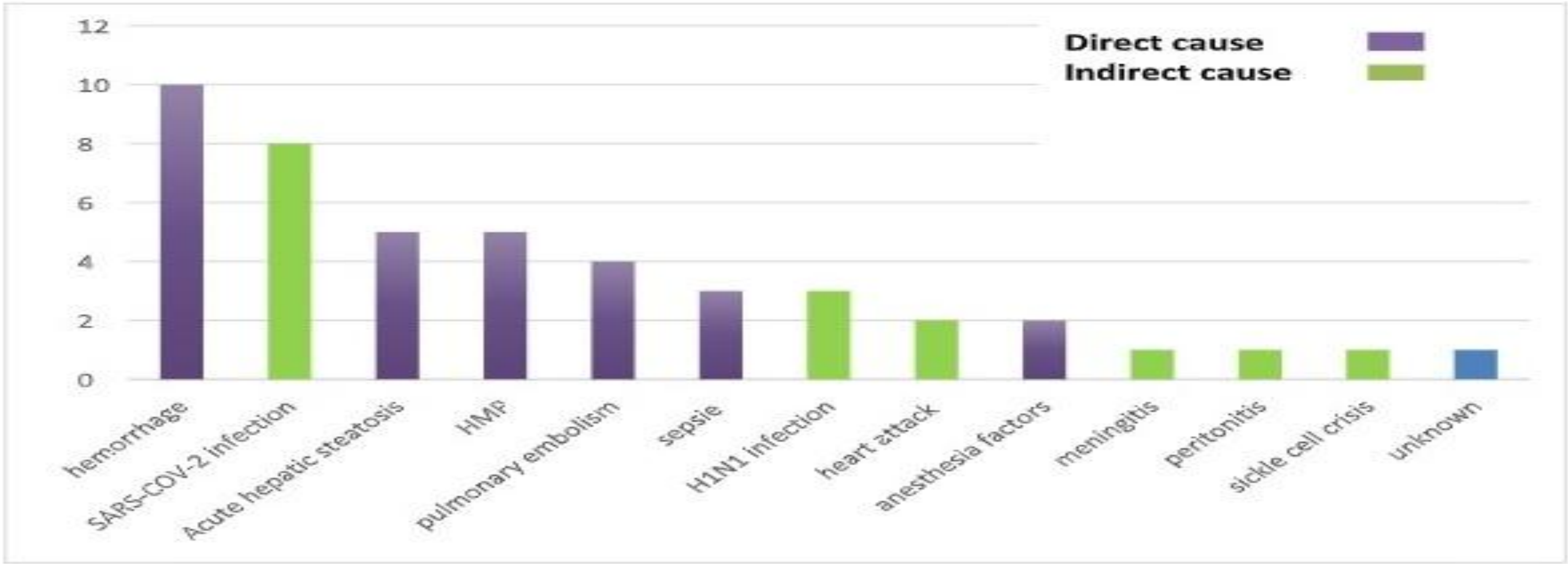


Figure 2: the causes of maternal deaths in Tunis between 2017 and 2023

Conclusion: Maternal mortality rates remain high in Tunis. Most maternal deaths occurred post partum after cesarean section. Hemorrhage continues to be the leading direct cause of maternal mortality, followed by COVID-19 infection.