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## Commentary

# Timely care for extrauterine pregnancies during the COVID-19 pandemic is needed

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Having arrived in the second wave of the COVID-19 pandemic, it is reasonable to ask whether the pandemic has changed patients' behaviour to seeking timely emergency care for other conditions. Ectopic pregnancy, a pregnancy that occurs outside of the uterine cavity, is one such condition requiring emergency care. It happens in approximately 2% of pregnancies with the most common ectopic implantation site being the fallopian tubes [1]. When a fallopian tube ruptures, significant internal abdominal bleeding may cause a life-threatening condition that requires prompt surgical intervention.

Anteby and colleagues compared early pregnancy visits and gynaecological emergencies during the COVID-19 pandemic with historical data at a large university-affiliated, tertiary medical centre in Tel Aviv, Israel [2] to understand whether the pandemic has changed patients' behaviour in seeking timely emergency care for gynaecological emergencies. The primary outcome was the number (rate) of patients with a ruptured extrauterine pregnancy. The authors found that during the first wave of the COVID-19 pandemic, there was a 28.3% reduction in women seeking emergency medical care due to gynaecological disease or complications in early pregnancy. The number of visits in the emergency department due to suspected extrauterine pregnancy was unchanged but the rate of ruptured extrauterine pregnancies was significantly higher during the COVID-19 pandemic (OR 2.40 (1.27–4.54),  $p = 0.006$ ). The rate of surgically treated (laparoscopic salpingectomy) extrauterine pregnancies was similar between groups (OR 1.07 (0.66–1.73),  $p = 0.439$ ). Also, during the pandemic, patients admitted due to extrauterine pregnancy were significantly more symptomatic on arrival at the

emergency department and had more blood loss. There were no government regulations or prohibitions regarding seeking emergent medical care that could explain the delay. The authors concluded that the COVID-19 pandemic had taken a toll on early pregnancy emergency care, presumably due to patients fear of socializing, and that physicians should expect delayed presentation and act accordingly.

Although a retrospective study, it is robust enough to point out a very important and serious change in the condition of women with extrauterine pregnancy when they arrived at the emergency department during the pandemic. There is no obvious reason to believe that the women included during the pandemic had a higher risk of bleeding per se compared to the historic controls. The most likely reason for the findings by Anteby and colleagues is a delay in arrival at the emergency department [2]. This corresponds to studies reporting significant increase in perforated and gangrenous appendicitis due to delay in seeking care during the COVID-19 pandemic [3, 4].

The pandemic took the world by surprise and the prospects of consequences of the pandemic regarding non-COVID-19 diseases for the health care systems and the populations are enormous and we are likely just seeing the top of the iceberg. At a WHO European Regional Session, worrying interruptions to health services in the European Region during the COVID-19 pandemic was outlined, and 68% of Member States had reported on disruptions to services for noncommunicable diseases [5].

In order for doctors to give timely care to patients with early pregnancy complications, it is important for health care personal and emergency centres as well as for politicians, policy and campaign makers to understand the underlying reasons why patients with early pregnancy symptoms postpone seeking medical care for their symptoms. Is this due to a fear of socializing and the accompanying increased risk of contracting COVID-19 - a fear that may be more significant during pregnancy? Or is it due to a well-meaning desire not to jeopardise an already overburdened health care system? These questions remain unanswered.

During the COVID-19 pandemic much information has been provided on how people should avoid socializing to help stop the spread of SARS-CoV-2. Also, news media have reported on how hospital staff struggle to help the patients with severe COVID-19. The adverse implication may be that people with severe symptoms different from COVID-19 do not seek timely care. Governments should be aware of

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the findings by Anteby et al. and ensure their citizens are informed that in case of acute severe none-COVID-19 illness they should still seek help and medical care irrespective of the COVID-19 situation. Meanwhile, healthcare professionals must be aware that patients may arrive at the emergency department in a worse condition than could be expected before the pandemic.

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NF wrote the first draft of the commentary. HSN revised the draft critically.

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