## P-407 Early pregnancy in the Emergency Department; presentation, management, outcome and the effect of COVID-19 S. Boyd<sup>1</sup>, K. O'Donoghue<sup>1,2</sup>, S. Meaney<sup>1,2</sup>

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**Study question:** Has the COVID-19 pandemic and public health guidance impacted referrals, outcome and management of early pregnancy in the emergency room?

Summary answer: COVID-19 changed the way in which women sought guidance and accessed services in early pregnancy.

What is known already: Spontaneous miscarriage is the most common complication of pregnancy I. Experiencing an early pregnancy loss is often an unexpected and difficult time that can be physically traumatising2. A previous study looking at the experience of a miscarriage from both the female and male point of view identified that long waiting times surrounded by other pregnant women in the Emergency Department (ED) was particularly difficult part of the experience2. The COVID-19 pandemic had a significant impact on both hospital and community services. Public health advice also changed the way women accessed healthcare.

**Study design, size, duration:** Retrospective audit was performed over two six-month periods – July to December 2019 and March to August 2020. Two groups of data were collected; women who contacted the ED with concerns related to early pregnancy (under thirteen weeks gestation) and those who attended the ED with the same complaints. Information was cross referenced to see how many women contacted the ED prior to arrival and what, if any advice was given.

**Participants/materials, setting, methods:** All women under thirteen weeks gestation with a complaint of bleeding per vaginum (PV) or pain related to early pregnancy who presented to the ED in a large tertiary maternity unit were included in the audit. All women meeting the same criteria who contacted the ED by telephone were also included.

**Main results and the role of chance:** Over the twelve months of data collection, 1274 women had their first visit to the ED. There were 270 further visits within the early pregnancy period recorded for the same cohort of women. Additionally, 1452 phone calls were recorded. There was a 38% (n=293) decrease in women attending the emergency room in early pregnancy in 2020 during the first wave of COVID-19. There was a 16% (n=110) increase in women contacting the ED for advice in early pregnancy in the same period in 2020. Women were more like likely to have been referred to the ED by their General Practitioner (GP) (OR 0.62, 95%CI 0.48-0.80) and to have phoned in advance of arrival (OR 1.55, 95%CI 1.17-2.04) in 2020. They were also more likely to have already had a previous ultrasound scan in the current pregnancy (OR 0.64, 95%CI 0.48-0.93). There was a significantly shorter waiting time for an appointment in the early pregnancy clinic in 2020 compared with 2019 (3.5 days versus 2.4 days, p=0.002). There was no change in the number of women admitted (OR 1.19, 95%CI 0.81-1.74).

**Limitations, reasons for caution:** Single centre audit. Pregnancies only followed to booking visit/dating scan and outcome noted at that stage.

Wider implications of the findings: The COVID-19 pandemic highlighted the need for more education around early pregnancy. Easily accessible information about local early pregnancy services gives women autonomy. Phone triage allowing referral of women to appropriate services, reduces ED visits. Standard training in early pregnancy ultrasound could reduce follow up referrals and admission rates.

**Trial registration number:** not applicable