

4.4-O4**Maternal health in refugee camps in Sicily: Mobile health to improve and standardize antenatal care visits***J Sormani¹, T Grandi², L Barcellini³, G Stancanelli⁴, B Kaiser¹*¹Haute Ecole de Santé, Switzerland²London School of Economics, United Kingdom³Ospedale San Raffaele, Italy⁴AISPO, Milan, Italy

In the context of migration, pregnant women are particularly vulnerable because of a combination of physical and psychological factors. So far, there is a lack of data regarding the demographic and clinical characteristics of pregnant migrants. However, studies have shown that asylum seekers experience up to a fourfold increase in the risk of maternal and neonatal mortality. In this setting, the provision, planning and implementation of adequate healthcare remains a challenge.

In response to this deficit, an antenatal care (ANC) project has been running since 2014 within the centre for asylum seekers in Mineo, Italy. The initiative provides on-the-spot ANC visits using the PANDA (Pregnancy And New-born Diagnostic Assessment) mHealth system, which combines smartphone technologies in one easy-to-use, cheap, robust and portable diagnostic tool.

The system includes three components:

- Smartphone application to perform standardized ANC visits. The data collected is sent wirelessly to the Medical Unit.
- Solar backpack containing the clinical items needed to perform the visits.
- Medical Unit based within the referral hospital enabling doctors to monitor and implement follow-up.

To date, 200 women have taken part, enabling health providers to collect a huge array of demographic and clinical data, such as the points included below:

- 10% of high-risk pregnancy
- 44% of anaemia
- 20% of gestational diabetes
- 10% of hypertension (3 eclampsia cases)

- 38% of genital mutilations
- 4% of HIV+
- 30% experienced sexual violence during the journey.

PANDA facilitates data collection, enabling the creation of electronic patient records. The digital format increases health providers' adherence to ANC recommendations and the graphic interface overcomes most language barriers, facilitating women's engagement for health education.

PANDA is therefore an efficient tool for providing comprehensive, high-quality antenatal care amongst migrants, facilitating the continuity of care for a population undergoing frequent relocations.