**Artificial intelligence in gynecologic and obstetric emergencies**

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**Background and aim:** Artificial intelligence (AI) uses a process by which machines perform human-like functions such as automated clinical decisions. This may operate efficiently in gynecologic and obstetric emergencies. We aimed to review the role and applications of AI in gynecologic and obstetric emergencies.

**Methods:** A literature search was carried out in November 2023 in PubMed, Cochrane Library and Google Scholar using the keywords combination of “artificial intelligence, gynecology and obstetrics”. Relevant articles were selected and read. Reference lists of the selected articles were also searched.

**Results:** The literature demonstrated the role of AI to improve healthcare in emergency settings in several aspects such as diagnostic imaging, improving predictions in emergencies, and improving planning and resource allocation for emergency services. AI works objectively, overcoming human biases in decision-making. Creating interconnected data registries for AI will likely enhance its performance. Validation research in emergency settings has shown that AI-prediction tools perform more accurately compared with the estimation of risk and outcomes by gynecologists and obstetricians in emergency situations including endometriosis and acute abdominal pain. There was acceptance of AI and its potential benefits. Ethical dilemmas of using AI include data governance, responsibility for errors, and security issues. Providing training on AI to healthcare professionals working in emergency departments is needed.

**Conclusions:** Healthcare professionals should educate themselves about the anticipated role of AI in gynecologic and obstetric emergencies, its indications, limitations, and ethical considerations so that they can take steps towards its application in their future practice using defined guidelines.