Egypt had become a safer place to live and do business, and to achieve Egypt's Vision 2030, the country has begun to adopt artificial intelligence and technology in various sectors.Hence, nurse leaders need to foster positive attitudes towards AI technologies (Ronquillo et al., 2021), and to assist AI"s beneficial deployment in future health care there are clear needs to understand nurse leaders" and developers" current perceptions of AI. This would provide insights into how AI could be developed to best serve health care organizations, clinicians" workflows and patient care. Such insights would be highly valuable for developers of AI, health care organizations and decision makers seeking to develop and implement effective AI-based solutions.Artificial intelligence refers broadly to computing technologies which resemble processes related to human intelligence, as reasoning, adaptation and learning, sensory understanding and interaction (Hassanzadeh, et al., 2018). The developing use cases of artificial intelligence in the sector of healthcare might be shown as technologies collection which enable machines to perceive, understand, act and learn in order to carry out healthcare administrative and clinical functions, in addition to be enrolled in research and for clinical learning activities. For the last time, Artificial intelligence has increased productivity and its extensive widespread into daily life is increasing at a rapid pace (Taei,2020)AI has been divided into many subdisciplines, focusing on very distinct problems (such as vision, problem solving, language comprehension, learning, etc.) (Lai et al., 2020). Artificial intelligence (AI) is also defined as a collection of technologies that uses complex algorithms and software to emulate human cognition in the analysis, interpretation and understanding of complex healthcare data. AI can enhance the ability for nurses to better grasp the day-to-day patterns and needs of their patients. According to Eric Topol, (2019), the promise of AI is to provide a complete, panoramic view of an individual"s health information; to improve decision making; to eliminate errors such as misdiagnosis and unnecessary procedures; to assist with ordering and interpreting appropriate tests; and to recommend treatment.The AIT includes numerous healthcare technologies that can alter nurses' roles and improve patients' care, including robots, algorithms, risk prediction, speech recognition, and clinical decision support (Robert, 2019; Pailaha, 2023).Artificial Intelligence (AI) has been transformative for many public and private industries, and we are currently observing an AI-led revolution in healthcare.Risk factors for adverse maternal health outcomes during pregnancy can include a variety of factors such as age, pre-existing medical conditions, lifestyle factors, and socioeconomic status (Londero et al., 2019; Crear-Perry et al., 2021).Artificial Intelligence Technology (AIT) is a branch of computer science designed to imitating of by human brain by realizing tasks or solving problems also used in nursing care of patient, and automating various processes, including learning and decision-making (Maddox et al., 2019).Nowadays, the healthcare world endorses a fast technological evolution, including emerging artificial intelligence technology (AIT).Also, AI has been used in predicting the onset of pregnancy conditions such as preeclampsia, and gestational diabetes mellitus, and in the management of diseases such as ectopic pregnancy (Abuelezz et al., 2022).Identifying high-risk pregnancies is a critical step in ensuring maternal and fetal health, but it can be a challenging task due to the complexity and variability of the factors involved.Artificial intelligence has many applications in healthcare, including assisting in disease assessment, diagnosis, and solving various clinical problems, reducing lost data, enhancing good nursing communication skills, improving inpatient care management,

diminish nurse workload, and improving patient safety (Zhou et al.,2022).As well, Liu et al. (2022),clarified that nursing intervention canadvantage from AI-based medical information processing.Perception toward artificial intelligence is defined as the integration of sensory impressions into information that is psychologically meaningful (Kundaliya et al., 2022).So, nurses have to be immersed in conceptualizing, developing, and implementing AIT.Additionally, Artificial intelligence technologieshave the capability advance nursing performance and make it possible for nurses to give their patients more individualized, evidence - based care through improvingnurses' professional and helping in solving the problems (Abd ElMonem, 2023).In addition to shifting from paper to mostly digital patient records, other tools such as wearable technology, mobile apps, smart beds, and mobile monitoring devices have been added to the nursing toolkit and have been identified as significant recent technological advancements in nursing practice.This lack of knowledge may increase anxiety and arouse conflicting emotions in clinical staff which may affect their perceptions of AI (Abdullah & Fakieh, 2020)Attitudes toward artificial intelligence is defined as a learned association in memory between artificial intelligence and a positive or negative evaluation of artificial intelligence, and attitude strength is equivalent to the strength of this association (Brown, 2022).Various health care professionals, particularly clinicians, reportedly have mixed attitudes towards AI (Abdullah & Fakieh, 2020), and it has been claimed that they understand neither) how AI uses algorithms nor the inner workings of algorithms (RomeroBrufau et al., 2020).The vast majority of these deaths (94%) occurred in low-resource settings, and most could have been prevented (WHO, 2019).In recent years, artificial intelligence (AI) has emerged as a powerful tool in healthcare, offering new ways to analyze and interpret complex medical data.A study by Akazawa and Hashimoto (Akazawa and Hashimoto, 2022) evaluated the accuracy of AI in predicting preterm birth in pregnancy, in a bid to increase preparedness and reduce neonatal deaths.The common predictive values used were electrohysterogram images, the metabolic panels in amniotic fluid or maternal blood, obstetric ultrasound images of the cervix, and biological profiles of mothers.or to the offspring such as prematurity, perinatal asphyxia, congenital anomalies and even cardiovascular abnormalities in adulthood (Majella et al., 2019; Yoon, 2021).These models can help healthcare providers make more accurate and timely decisions; and when it refers to maternal health care in pregnancy, it can ultimately improve maternal and fetal health outcomes.AI offers novel approaches to prediction modeling, diagnosis as well as early detection of pregnancies at risk (Ramakrishnan et al., 2021).regarding an Egyptian society powered by artificial intelligence and robotics, the government has set a general target of 7.7% of Egypt's Gross Domestic Product to be derived from artificial intelligence and robotics by 2030 (Egypt's Artificial Intelligence Future, 2020).Nursing practice has become more standardized than in the past, which requires nurses to make more important decisions.Despite advances in medical science, maternal mortality remains a significant problem in many countries, particularly in developing nations (Olonade et al., 2019; Musarandega et al., 2021).So, it is necessary to adapt the traditional role of nurses to take into account these technological advancements (Boothet al., 2021).Maternal health is a crucial aspect of public health as it directly affects the wellbeing of both mother and child.AI-based models can analyze vast amounts of health data, both structured and unstructured, to identify patients who may be at high risk for adverse outcomes.AI-based

models have shown promising results in various clinical applications, including disease diagnosis, treatment planning, and patient monitoring.Pregnancy can be graded into low, moderate, and high risk based on risk factors that have been shown to contribute to the occurrence of pregnancy complications (Al-Hindi et al., 2020).Maternal and childhood mortality remains a major global health concern and a key indicator for the United Nations Sustainable Development Goal 3 (SDG 3).