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The Mutaba'ah Study: A cohort profile of the largest mother and child cohort study in the United Arab Emirates

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The effect of early-life exposures on health and development in childhood and adulthood is well established. Investigating maternal and child health determinants is essential, and longitudinal cohort studies are the best approach to fulfill the purpose, thus generating a data repository. The lack of such a database within the UAE led to the conception of the Mutaba'ah Study. Mutaba'ah (meaning follow-up in Arabic) is a large ongoing prospective cohort mother and child study set in Al Ain, conducted from 2017 onwards for the next 20 years, targeting to recruit 17,000 mother and baby pairs. The study aims to secure epidemiological data on maternal and child health from pregnancy until the child reaches 18 years to investigate the mother's health and maternal outcomes and the maternal and early-life determinants of infant, child and adolescent health. Participants are recruited from major public and private hospitals in Al Ain and include pregnant women from the Emirati population aged 18 years and above, preferably in the first trimester, able to provide informed consent, and their offspring. Data is collected via questionnaires, interviews and medical records at various time points. To date, more than 13,000 participants aged 18-54 years have been recruited. The average maternal age was 31 years, and around 29% were primiparous, unemployed (67.4%), had higher than secondary education (53%), and perceived they had sufficient social support (91%). Most initiated antenatal care late in pregnancy (54%) and were worried about birth (65%). The majority had not taken vitamin D (78%), folate (77%) or iron (85%) prenatally. One-third were found to be exposed to passive smoking (34%), whereas nearly one-third of the multigravida women had a history of gestational diabetes (30%).

The Mutaba'ah Study is establishing a valuable and rich scientific database for researchers in the field of maternal and child health. The expected long-term research output will benefit mothers' and children's health and well-being by providing local evidence-based scientific information on the factors affecting maternal health during pregnancy and childbirth and their implications for children's future growth, development and health. This evidence will help in building on the efforts of physicians and public health policymakers to develop and improve health and social services for mothers and children in the UAE.

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