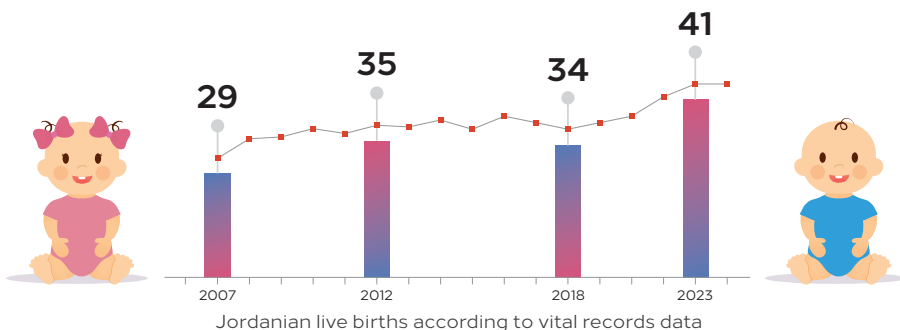


Twin Births in Jordan



The "surge" in twin births: from 29 to 41 per 1,000 live births over 16 years



How do maternal age and assisted reproductive technologies affect the chances of multiple pregnancies?



The Impact of Maternal Age

Mean age of mothers at first birth among women aged 25-49

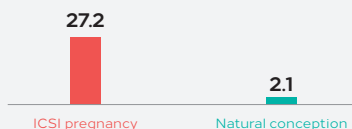


As maternal age advances, the likelihood of twin births increases due to hormonal changes that may trigger the release of multiple eggs



The Impact of Assisted Reproductive Technologies (ART)

Percentage of women who delivered twins by pregnancy type



With the use of ICSI (Intracytoplasmic Sperm Injection), the percentage of women who delivered multiples increased to 27.2%, compared to just 2.1% among women with natural conception

Risks of Twin Pregnancies via Assisted Reproductive Technologies (ART) Compared to Natural Pregnancy



Risks to Maternal Health

- Higher susceptibility to preterm birth before 34 weeks and also before 37 weeks.
- Increased risk of hypertensive disorders during pregnancy.
- Increased risk of gestational diabetes mellitus.
- Increased risk of antepartum hemorrhage and postpartum hemorrhage.
- Cesarean delivery rates are significantly higher.



Risks to Neonatal Health

- Birth weight discordance >25% between twins.
- Higher susceptibility to neonatal intensive care unit (NICU) admission.
- Increased risk of respiratory distress syndrome (RDS).
- Increased risk of neurological complications.

Shemoon Marleen and others, Maternal and perinatal outcomes in twin pregnancies following assisted reproduction, Human Reproduction Update, 32–309, (3)30, 2024

Risks of Twin Pregnancies on Maternal Health Compared to Singleton Pregnancies

%6.8
Singleton Pregnancy



%15.2
Twin Pregnancy

Mothers who experienced health complications

Complications according to the World Health Organization classification

- ♥ Risk of Life-Threatening Maternal Complications:
The rate in twin pregnancies is double that of singleton pregnancies.
- ♥ Risk of Maternal Near-Miss Complications:
The incidence in twin pregnancies is triple that of singleton pregnancies.
- ♥ Maternal Mortality Risk (Pregnancy to 42 Days Postpartum):
Twin pregnancies show a fourfold increase compared to singletons.

Therefore, consult your doctor regularly.

Danielly S. Santana, and others, Perinatal outcomes in twin pregnancies complicated by maternal morbidity, BMC Pregnancy and Childbirth (2018).

According to the National Maternal Mortality Surveillance and Response System

Three pregnant women carrying twins died in Jordan during 2022-2023, out of 101 total maternal deaths.

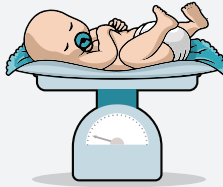


Risks of Twin Pregnancies on Neonatal Health Compared to Singleton Pregnancies

Lower birth weight among twin neonates

%56.7

Percentage of low birth weight in twin neonates at delivery



%12.3

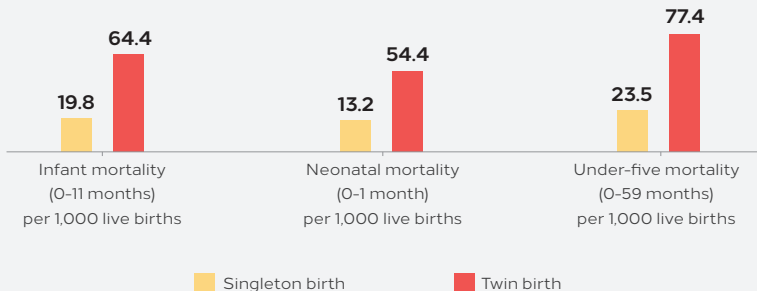
Percentage of low birth weight in singleton neonates at delivery

Twin neonates are more likely to have low birth weight
Data from the Population and Family Health Survey 2012

According to a 20-country study including Jordan, low birth weight in twins was significantly associated with higher neonatal mortality risk compared to singletons.

Thus, early care saves lives.

Twin births are associated with increased risk of infant and under-five mortality



M. Mazharul Islam and Uzma Marium, Twin births in Jordan: incidence, trends, risk factors and implications for under-five mortality: evidence from the 2012 Jordan Population and Family Health Survey

Fetal mortality in twins at or after 24 weeks of gestation is three times higher than in singletons

8.7 stillbirths

per 1,000 total singleton deliveries

24 stillbirths

per 1,000 total twin deliveries

Jordanian study, Khulood Al-Shatrat & others. 2020

The Financial and Psychological Challenges of Raising Twins

Higher Financial Costs

- The expenses for twins during the first year are five times higher than those for a single child.
- Parents of multiples are more likely to report financial stress compared to parents of singletons.

Health Risks for Twins

- Lower rates of breastfeeding, with higher likelihood of early discontinuation.
- Parents of multiples may face specific health challenges concerning their twins.

Psychological and Physical Challenges

- Parents of twins experience greater sleep deprivation compared to parents of singletons.
- Mothers of multiples exhibit: 3 times higher anxiety rates, 5 times greater depression rates, 9 times increased likelihood of debilitating fatigue, when compared to mothers of singleton children.
- Fathers show: double the anxiety levels, 4-fold higher depression rates, 5 times greater prevalence of impaired daily functioning, relative to fathers of singletons.

Michael D'Rosario, Multiples Matter, Investigating the Support Needs of Multiple Birth Families, AMBA, Per Capita



Recommendations

- 1 Manage twin pregnancies as high-risk cases through more specialized care for women carrying twins. Raise awareness about the importance of medical follow-up to ensure early detection of any complications.
- 2 Reduce multiple pregnancies in assisted reproduction: implement strict medical protocols for ovulation-stimulating medications to minimize risks of multiple pregnancies, and adopt a Single Embryo Transfer (SET) policy in IVF procedures to reduce the number of embryos transferred to the uterus.
- 3 Counsel for women seeking Assisted Reproductive Technologies (ART) on twin pregnancy risks.
- 4 Provide financial & emotional support programs for twin-bearing families, parental leave reform, advocate for extended parental leave.

