

Perspectives

Caring for Early Pregnancy, Empowering Healthy Beginnings: Strengthening the Health Foundation of Youth Fertility in China on World Population Day 2026

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ABSTRACT

Aligning with the 2026 World Population Day theme that emphasizes "Realizing the Hopes and Aspirations of Young People — Today and for the Future," the Chinese national theme specifically focuses on "Caring for Early Pregnancy, Empowering Healthy Beginnings" (*he hu zao yun, guan ai fu neng*) to address declining birth rates. Early pregnancy is the critical golden window for preventing birth defects and mitigating maternal risks, yet historical care models disproportionately focus on later gestational stages. This article examines structural gaps in early pregnancy care, including unequal resource distribution, insufficient mental health services, and limited social support networks. These challenges are closely interconnected and collectively limit the effectiveness, accessibility, and continuity of early pregnancy care. To address these challenges, we propose reconstructing a multidimensional collaborative support network. Key strategies include establishing standardized multidisciplinary clinics, leveraging digital health technologies for equitable access, and integrating medical care with supportive national social policies. Strengthening early pregnancy care through coordinated physiological, psychological, and social support can not only improve pregnancy outcomes but also help alleviate fertility anxiety among young couples, contributing to healthier families and high-quality population dynamics during China's demographic transition.

Introduction: Youth Aspirations and the Imperative of Early Pregnancy Care in a Period of Demographic Transition

July 11, 2026, marks the 37th World Population Day. The United Nations Population Fund (UNFPA)

designated the theme as "Realizing the Hopes and Aspirations of Young People — Today and for the Future" (1), highlighting the urgency of safeguarding young people's reproductive health and developmental rights amid dramatic global demographic changes (2). China adopted the national theme "Caring for Early Pregnancy, Empowering Healthy Beginnings" (*he hu zao yun, guan ai fu neng*) (3), directly addressing one of the central issues currently confronting the country's population development.

According to the National Bureau of Statistics of China, the number of births in 2025 was around 7.9 million, marking the fourth consecutive year below 10 million since 2022, while the natural population growth rate remained negative (4). Alongside the shrinking number of women of childbearing age and delayed marriage, high housing costs, childcare burdens, and health-related anxieties have become major factors suppressing young people's fertility intentions (5). Amidst these challenges, early pregnancy (before 12 weeks of gestation), which represents the initial stage of fetal organogenesis and maternal physiological adaptation (6), has acquired renewed significance.

The World Health Organization (WHO) has emphasized that antenatal care is not merely a medical service but also a public health intervention aimed at protecting women's dignity and reproductive rights. However, maternal and child health services in China have historically focused on the second and third trimesters as well as childbirth, while early pregnancy management has remained relatively weak (7). The launch of the "Early Pregnancy Care Initiative" in late 2024 by the National Health Commission marked a transition in China's maternal and child health services toward promoting development and quality (8). In this context, strengthening early pregnancy care represents not only an important clinical priority but also a strategic opportunity to enhance reproductive health, support young people's reproductive aspirations, and contribute to the development of a fertility-friendly

society.

Vulnerability at the Beginning of Life: The "Golden Window" of Early Pregnancy Health Management

Early pregnancy is the most sensitive and vulnerable stage of embryonic development. From the first day of the last menstrual period to the end of the 12th gestational week, the embryo undergoes critical processes ranging from implantation to the establishment of the primordial structures of major organs (6). Health management during this period directly determines pregnancy outcomes and the quality of newborns.

First, early pregnancy represents the "golden window" for primary prevention of birth defects. Neural tube closure occurs between 21 and 28 days after conception, at a time when most women are still unaware of their pregnancy. Landmark studies published in the *New England Journal of Medicine* and subsequent Cochrane systematic reviews have conclusively demonstrated that periconceptional folic acid supplementation significantly reduces the incidence of neural tube defects (9). In addition, infections during early pregnancy, such as rubella and cytomegalovirus, as well as exposure to environmental toxins including PM_{2.5} and heavy metals, are high-risk factors for congenital structural abnormalities such as congenital heart disease (10).

Second, early pregnancy is the period with the highest incidence of spontaneous miscarriage and ectopic pregnancy (11). Approximately 80% of spontaneous miscarriages occur before 12 weeks of gestation, with most associated with chromosomal abnormalities in the embryo (12–13). Untreated ectopic pregnancy can directly threaten maternal life (14). Therefore, early dynamic monitoring of human chorionic gonadotropin (HCG) levels and ultrasound examinations are not only clinical diagnostic tools but also essential public health measures for reducing reproductive health risks.

The vulnerability of life at its beginning is often exacerbated by insufficient health literacy among young people. Some young women lack awareness regarding preconception folic acid supplementation, teratogenic risks of medications, and environmental protection (15). Furthermore, fragmented and misleading information available on the internet has amplified health risks during early pregnancy (16). This reality requires a paradigm shift from passive

treatment to proactive prevention through earlier health education interventions.

Current Challenges: Key Areas for Improvement in the Transition Toward Comprehensive Reproductive Health Care

Although China has established a nationwide maternal and child health service network, with prenatal examination coverage reaching 98.3% in 2023 (17), the early pregnancy care system still needs improvement in several important areas during the transition more holistic and comprehensive reproductive health management (18). Unequal healthcare resources constrain timely access to quality services; insufficient psychological support reduces the comprehensiveness of care; and fragmented social support weakens continuity of care beyond the healthcare setting. These challenges are not independent of one another. Rather, they represent interconnected structural barriers operating at the healthcare system, individual, and societal levels. Together, these barriers limit the effectiveness of early pregnancy management and ultimately reduce its potential contribution to improving reproductive health and supporting fertility intentions.

Unequal distribution of primary healthcare resources

High-quality maternal and child healthcare resources remain concentrated in urban areas and the developed regions of eastern China. In some central, western, and rural areas, primary healthcare institutions face shortages of obstetricians and gynecologists, outdated ultrasound equipment, and inadequate genetic counseling services, limiting their capacity to provide systematic early pregnancy risk assessment and intervention (18–19). In addition, migrant women often experience interruptions in care during early pregnancy due to difficulties in transferring medical insurance and frequent mobility, creating gaps in the three-tiered birth defect prevention system (20).

Beyond disparities in healthcare resources, comprehensive early pregnancy care also requires greater attention to women's psychological well-being. Even where medical services are available, insufficient integration of mental health assessment and counseling may reduce the overall quality and effectiveness of care.

Insufficient integration of mental health support into early pregnancy care

Early pregnancy is not only a period of profound physiological change but also a high-risk period for psychological crises. A notable review published in *The Lancet* reported that the

prevalence of non-psychotic perinatal mental disorders, including anxiety and depression, ranges from 10% to 20%, and these conditions are closely associated with preterm birth, low birth weight, and long-term behavioral problems in children (21). Biaggi et al. (22) further identified lack of social support, economic pressure, and a history of mental illness as key risk factors for antenatal depression.

Currently, most early pregnancy clinics in China still focus primarily on physiological screening and lack standardized psychological assessment tools and professional intervention resources (23). When confronted with concerns about career interruption and the financial burden of childrearing, many young women experience psychological distress without sufficient support (24).

Psychological well-being during early pregnancy is influenced not only by clinical care but also by the broader social environment. Consequently, improving mental health services alone is insufficient without complementary social policies that reduce the practical and economic pressures associated with childbearing.

Limited coordination between social support networks and the healthcare system Childbearing is not merely a biological process but also a deeply social phenomenon. Young people's fertility anxiety arises not only from fears regarding pregnancy risks but also from concerns about the overall costs of childbirth, parenting, and education (5,23,25). Current early pregnancy care services largely remain confined within the healthcare system and have not been effectively integrated with employment protection, childcare services, and family support policies. The lack of multidimensional social support has made it difficult for the goal of care and empowerment to be fully realized (26–27).

Strengthening and Expanding: Building a Multidimensional Collaborative Support Network for Early Pregnancy Care

To achieve the goal of "Caring for Early Pregnancy, Empowering Healthy Beginnings," it is necessary to move beyond a purely clinical perspective and establish a multidimensional support network integrating physiological, psychological, and social dimensions.

Promoting standardized early pregnancy clinics and multidisciplinary collaboration Building upon the National Health Commission's ten core messages of the 2024 "Early Pregnancy Care Initiative," China should accelerate the establishment of unified national

standards for early pregnancy clinics. Services should expand beyond simple pregnancy confirmation to include high-risk assessment, nutritional counseling, genetic counseling, psychological screening, and post-abortion care. Multidisciplinary collaboration across the departments of obstetrics and gynecology, reproductive endocrinology, psychology, nutrition, and social work should be strengthened to provide comprehensive and compassionate "one-stop" services for young women experiencing unintended pregnancies, high-risk pregnancies, or psychological distress.

Empowering care through digital health technologies

Mobile health (mHealth) technologies offer promising solutions for improving the accessibility of early pregnancy care. Recent evidence suggests that digital maternal health interventions, including smartphone applications, teleconsultation, and WeChat-based services, can improve health education, self-management, patient engagement, and communication between pregnant women and healthcare providers while increasing healthcare efficiency (28–29). China should rely on national maternal and child health information platforms to develop integrated "Internet + Early Pregnancy Care" applications that provide risk alerts, online genetic counseling, psychological self-assessment, and personalized nutritional guidance. Through cross-regional recognition of electronic health records, continuity of care for migrant populations can be strengthened and high-quality healthcare resources can be delivered to primary care institutions through cloud-based systems.

Integrating early pregnancy care into the construction of a fertility-friendly society

The ultimate objective of care and empowerment is to alleviate young people's concerns regarding childbearing. Governments, enterprises, and society must work collaboratively. At the policy level, fertility subsidies, universal childcare services, and anti-discrimination mechanisms for women's employment should be strengthened to reduce both explicit and implicit costs of childbearing (30). Meanwhile, coordination among health authorities, employers, community organizations, and family support services should be strengthened so that medical care can be seamlessly connected with broader social protection measures throughout early pregnancy. At the community level, early pregnancy care should be incorporated into family health support systems, encouraging partners and family members to participate in pregnancy-related health education and

creating a supportive family-centered environment. Only when society fully respects and institutionally safeguards women's reproductive rights can the medical value of early pregnancy care be transformed into broader social benefits that enhance fertility intentions.

Conclusion

The theme of World Population Day 2026 is not only a macro-level response to global demographic trends but also a reflection of concern for the life planning and well-being of every young individual. As the beginning of human life, early pregnancy directly affects the quality of population development. Specifically, the Chinese national theme "Caring for early pregnancy, empowering healthy beginnings" serves as a timely call to shift the focus from conventional obstetric management toward a more comprehensive model that integrates physiological, psychological, and social support throughout early pregnancy. Such an integrated approach has the potential to improve pregnancy outcomes, reduce fertility-related anxiety, and strengthen the health foundation for future generations. This perspective article aims to stimulate discussion on strengthening early pregnancy care rather than to provide a comprehensive evidence synthesis. Future research should evaluate the effectiveness and cost-effectiveness of multidisciplinary early pregnancy care models, assess the implementation of digital health innovations across diverse settings, and generate more evidence on how integrated healthcare and social support policies can improve reproductive health outcomes and contribute to fertility-friendly societies.

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