

# Pregnancy in Women Above Age 35: An Emerging Concern for the Health Sector

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**Abstract:** The development and growth of the Indian economy, along with the need and desire to work, are factors which are facilitating women to enter the workforce in large numbers. Women start working in formal workplaces anywhere between the age bracket of 21 and 26 years. The primary objective of most women in the next few years is to establish themselves in their respective fields. This very often leads to late marriages and delayed pregnancies. The latter are sometimes seen as hindrance to career advancement and are postponed until the third decade of a working woman's life. This paper attempts to bring out the impacts of late pregnancy on the health of women and the fate of their children. The paper highlights the various pregnancy related risks to which women expose themselves by delaying pregnancy beyond 35 years. The need for raising awareness among young women about this issue and adopting women-friendly policies by workplaces has been found to be the need of the hour.

**Keywords:** maternal health, age, pregnancy risks, workplace

The proportion of women who are delaying childbearing beyond the age of 35 years has greatly increased in the present day (Mathews and Hamilton, 2014). Increasing opportunities for higher education, inclination towards career and economic independence combined with availability of highly effective contraception are all factors leading to more and more women delaying their first child birth beyond the age of 30 years. Most women are falsely reassured by popular beliefs that advances in reproductive technologies can compensate for age-related decline in fertility. This is despite the fact that clinical research guideline state that assisted reproductive

technology success (except in the case of egg donation) is significantly lower for women who are in their late 30s and beyond (Liu and Case, 2011). Advancing maternal age has consequences such as increased risk in assisted conception as well as in the outcome of normal/spontaneous pregnancy. Despite such risks, most women remain unaware of the potential consequences of delayed childbearing.

The association between increasing maternal age and perinatal complications is emerging to be a significant challenge for the healthcare sector. There is thus a need for information dissemination on the consequences of delayed childbearing and the simultaneous maternal and obstetric care that it requires. It needs to be clarified here that many women who are delaying pregnancy well into their 30s and beyond are indeed delivering healthy babies. However, women must be made aware and sensitized about the increased risks associated with pregnancy during advanced age. A question often asked with regards to the latter is that how advanced is too advanced? An immediate answer often given is 35 years. However, the biological clock is a fact of life and there is nothing unique about age 35. It is simply an age at which various risks become worth exploring (Heffner, 2004; TPCASRM, 2006). Age 35 was first designated as the threshold for being labelled as *elderly* while pregnant during a National Institutes of Health (NIH) Conference in 1978 (Horsager-Boehrer, 2015). The risk associated with pregnancies over age 35 is shared equally with both the mother and the baby.

As per existing studies, the optimal maternal age with the least risks of maternal, pregnancy, and neonatal complications is 25.0 to 29.9 years. Short-term neonatal outcomes are most favourable for women aged 25.0 to 29.9 years. There is an increased rate of adverse maternal outcomes at both extremes of maternal age, younger than 20 years and 35 years or older (Timofeev et al., 2013). A

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woman is born with a limited number of eggs which are required for conception. As she reaches late or mid-thirties, her eggs decrease in quantity and quality. Hence there is a difficulty in conceiving which sometimes leads to infertility (Mathew and Hamilton, 2014; ESHRE, 2005). In many instances, older women become pregnant through fertility treatments. These treatments can lead to multiple births, which presents additional challenges and higher rates of complications (Timofeev, 2013). With age, faults in egg leads to increase incidence of chromosomal abnormalities in the baby, e.g. Down's syndrome. Following are the rates of having a baby born with Down's syndrome with progressing age: 1 in 1,250 at age 25, 1 in 1000 at age 30, 1 in 400 at age 35, 1 in 100 at age 40 and 1 in 35 at age 45 (ACOG, 2005).

Women over 35 are more likely to develop gestational diabetes or high blood pressure during pregnancy. These conditions can also lead to premature birth, low birth weight or other complications during child birth (Luke and Mortran, 2007; Cleary-Goldman et al., 2005). There is also a higher chance for women in this age group to have underlying health problems, such as obesity or heart disease. Becoming pregnant with these medical conditions puts the mother at more risk of complications than younger women without them. A women with older age is more likely to have premature babies and babies with low birth weight, both of which can increase death rate in newborn (Bell et al, 2001).

Older mothers have a higher risk of pregnancy-related complications that can lead to greater chances of a C-section delivery (Cleary-Goldman et al., 2005; Bell et al., 2001; Le Ray et al., 2006). Placenta praevia is a common example of such a complication in which the placenta blocks the cervix. The risk of pregnancy loss - by miscarriage (death of foetus in uterus which is less than 20 weeks) and stillbirth (death of fetus in uterus which is more than 20 weeks) - increases as a woman get older, due to pre-existing medical conditions or foetal chromosomal abnormalities. The rate of spontaneous miscarriage climbs gradually with age, from an 8.7% miscarriage rate among 22 years old women, to 18% among 30 years old women, 20% at age 35, 40% at age 40 and 84% at age 48 (Nybo et al., 2000). Studies have also established that older women are more likely to have a stillbirth than younger women (Table 1).

Postpartum hemorrhage (excess bleeding from genital tract after delivery) and particularly the risk of postpartum hysterectomy (removal of uterus after delivery) also have an association with maternal age. This is mostly due to the association of these complications with the strongest

**Table 1.** Stillbirth rates for women of different ages giving birth for the first time (Source: Reddy et al., 2006).

Age Group	Stillbirth Rates	
	First pregnancy	Later Pregnancy
Under 35	3.72	1.29
Between 35-39	6.41	1.99
Above 40	8.65	3.29

All stillbirth rates are per 1,000 ongoing pregnancies.

predictors of risk, i.e. multiparity, abnormal placentation and history of cesarean section (Luke and Mortran, 2007; Rossi et al., 2010). There is a strong trend of increasing maternal mortality in women of older age in all developed countries (Wildman et al., 2004). The risk of death during delivery is twice as high if the woman is 35 to 44 years old than if she is younger than 35 years. However, in actual occurrence it has been found to be 1 in 10,000 for woman aged 35 years or elder. Hence it is recommended that women in their 20s and 30s should be counselled about age related risk of infertility as part of their primary well-woman care. Reproductive-age women should be aware that natural fertility and assisted reproductive technology success (except with egg donation) is significantly lower for women in their late 30s and 40s. Because of the decline in fertility and the increased time to conception that occurs after the age of 35, women above the age of 35 years should consult their doctors after 6 months of trying to naturally conceive.

There is need for generating awareness among women about the risk of spontaneous pregnancy loss and chromosomal abnormalities, both of which increase with age. Women should be counselled about the need and importance of appropriate prenatal screening, once pregnancy is established. The aforementioned is especially important for women above the age of 35 years. Pre-conception counselling regarding the risks of pregnancy with advanced maternal age, promotion of the importance of maintaining optimal health and weight and screening for concurrent medical conditions such as hypertension and diabetes should be made essential for all women and particularly for those above the age of 40 (SOGC, 2011).

Strategies need to be designed and implemented in our country to improve informed decision-making by prospective parents. This is because more and more women are now entering the work force in India each year. Barriers to healthy reproduction, including workplace policies, should be reviewed to optimize the likelihood of healthy pregnancies. The recent amendment

to the Maternity Benefit Act, providing 26 weeks of maternity leave (as against 12 weeks) certainly seems to be a suitable step to achieve the goal of healthy motherhood and therefore a healthy nation. The amendment also provides an enabling provision of 12 weeks of *work from home* for nursing mothers. In addition, it has made it mandatory for firms with 50 employees or more to have crèche arrangements for its work force. Just this one amendment stands to benefit 1.8 million women who are engaged in the organised sector. However, the above discussed provisions for working women should not be seen as all that is, but should actually be adopted as the first step in the direction of ensuring healthy mothers and a healthy future generation which continues to contribute for India's growth and development.

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