



Review Article

Surrogacy- Does It Affect Physiology of Bonding Between Surrogate Mother-Fetus and Biological Mother- New Born?

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Received: 06/02/2015

Revised: 27/02/2015

Accepted: 02/03/2015

ABSTRACT

Surrogacy refers to a method of reproduction whereby a woman, known as surrogate, carries a pregnancy and gives birth as a substitute for the contracted party/ies. Women, due to poverty, joblessness, patriarchal social and family structures and low educational levels, opt for becoming surrogates considering the financial gain through surrogacy. There are many odds of an adverse reaction and risks involved. Mothers who do not want pregnancy have lower quality bonding with the child. Childbirth and breastfeeding causes production of oxytocin which increases parasympathetic activity, thus reducing anxiety and fostering bonding as surrogate mother knows that she is only the carrier for the fetus thus she may have lower quality bonding with the fetus as compared to the biological mother and also there will be low quality bonding between the biological mother and the new born as she does not experience the processes of childbearing, childbirth and breastfeeding which play important role in fostering mother- child bonding.

Key words: surrogacy, mother- fetus bonding, wombs for rent, outsourced pregnancies, baby farms

INTRODUCTION

Surrogacy refers to a method of reproduction whereby a woman, known as surrogate, carries a pregnancy and gives birth as a substitute for the contracted party/ies. Surrogacy may be Natural (Traditional/Straight) or Gestational. ^[1]

Natural (Traditional/Straight) surrogacy

Surrogacy is termed traditional when the surrogate is pregnant with her own biological child; however, she intends to surrender this child to be raised by others such as the biological father and possibly his spouse or partner. The child is genetically related to the surrogate mother. In this process, the child may be conceived via

sexual intercourse, artificial insemination using fresh or frozen sperm or impregnated via intrauterine insemination (IUI), or intracervical insemination (ICI). Sperm may be used from the male partner of the 'commissioning couple' or from a sperm donor. [1]

Gestational surrogacy

When a surrogate is only a carrier/female host who is not genetically or biologically related to the child, the surrogacy is termed as gestational. The surrogate is implanted with an embryo that is not her own. In this case, the sperm and oocytes of the 'genetic couple', or 'commissioning couple' may be used and following IVF, the resulting embryos are transferred to the host. [2] After birth, the surrogate relinquishes the child to the biological mother and/or father to raise. The surrogate mother may be called a gestational carrier in this scenario.

Commercial surrogacy

Commercial surrogacy refers to a scenario where a gestational carrier is paid to carry a child in her womb. This type of surrogacy may also be termed as 'wombs for rent', 'outsourced pregnancies' or 'baby farms'. [3]

Social and psychological context of surrogacy

Women, due to poverty, joblessness, patriarchal social and family structures and low educational levels, opt for becoming surrogates considering the financial gain through surrogacy. Since these women belong to economically weaker sections of the society and opt to become a surrogate for monetary reasons, it becomes easy for the middlemen and agents of the commissioning parents to exploit these women. [4]

Health concerns associated with surrogacy

Mostly implantation of maximum 3 embryos is recommended, but surrogates are implanted with 5–6 embryos so as to

increase the chances of pregnancy⁴. Implantation of such a large number of embryos exposes the babies and the mother to increased health risks, like multiple pregnancies. Multiple pregnancies can lead to premature births, which renders the babies prone to health problems later in life. Chances of post-partum depression are high for surrogates; the mental health of these women is significantly compromised. Pregnancy, birth and the post-partum period may be associated with complications such as pre-eclampsia and eclampsia, urinary tract infections, stress incontinence, haemorrhoids, gestational diabetes, life-threatening haemorrhage and pulmonary embolism. Multiple pregnancy increases the odds of requiring a caesarean section. A surrogate of advanced age has heightened risk of perinatal mortality, perinatal death, intrauterine fetal death and neonatal death. Risk of pregnancy-induced hypertension, stroke and placental abruption is also there. Many women undergoing artificial insemination are subject to fertility treatments. This may increase the odds of an adverse reaction and risks involved with the procedure. [5]

Bonding with fetus and new born

Mothers who do not want pregnancy have lower quality bonding with the child and suffer with post partum depression or other mental problems and are less likely to breast feed the infant. [6]

Childbirth and breastfeeding causes production of oxytocin which increases parasympathetic activity, thus reducing anxiety and fostering bonding, thus it is generally understood that maternal oxytocin circulation predispose women to form bonds and show bonding behaviour. Breastfeeding is believed to foster the early post- partum maternal bond via touch, response and mutual gazing. [6]

Hypothesis

Thus considering the above studies it is hypothesised that as surrogate mother knows that she is only the carrier for the fetus thus she may have lower quality bonding with the fetus as compared to the biological mother and also there will be low quality bonding between the biological mother and the new born as she does not experience the processes of childbearing, childbirth and breastfeeding which play important role in fostering mother- child bonding due to the role of oxytocin. Further studies are required in this respect.

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How to cite this article: Tyagi P, Singh AK, Tomar S et. al. Surrogacy- does it affect physiology of bonding between surrogate mother- fetus and biological mother- new born? Int J Health Sci Res. 2015; 5(3):321-323.
