Fear of pregnancy and childbirth

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Pregnancy is a major life event for all women. However, when a psychiatric disorder is added to or exacerbated by the pregnancy then the problem requires expert knowledge from more than one area of medicine. This paper looks at pregnancy and the relationship with depression, eating disorders, and pathological fear of childbirth or tokophobia. It also examines the outcome for these women and their babies. Mental illness is a serious concern. It is now recognised that death from suicide is the leading cause of maternal death overall. Research in these areas is relatively sparse but an attempt is made to collate what is known.

Although the state of pregnancy is both normal for, and often desired by, women in early adulthood, it is not uncommon to experience anxiety at the physical and emotional consequences of the gravid state. It is not the purpose of this paper to comment on psychiatric and psychological descriptions of the “normal” pregnant woman but concentrate on some pathological psychiatric conditions that may affect pregnant women. Anxiety and fear of pregnancy and childbirth are documented features of eating disorders, mood disorders, and pathological dread and avoidance of childbirth or tokophobia.

There are disorders in which anxiety is the primary symptom of a pathological mental state. First medically described by Marcé in the 18th century, the disorders of anxiety during pregnancy, especially those in the first trimester have profound features of turmoil. Paradoxically, some women with a pre gravid anxiety disorder have a decrease of symptoms in the first trimester. Some level of anxiety may be protective and a portrait of the primiparous woman most likely to have a positive birth experience was proposed as anxious and realistically fearful, yet competent in her knowledge of labour and delivery.

DEPRESSION RELATED TO PREGNANCY AND CHILDBIRTH

Although depressive illness is often perceived as a disorder of postnatal mothers it is, in fact, as common in pregnant women. Postnatal depression has become a focus of concern and the consequences to the child, mother, and family may include neglect of the child, family breakdown, self harm, and suicide. Research also suggests that the babies may develop emotional or behavioural problems or cognitive delays in childhood.

In contrast, depression during pregnancy has been relatively neglected. Indeed, pregnancy has been thought to protect against depression. Studies of antenatal psychopathology have mostly examined antenatal mood as a predictor of postnatal depression.

Watson et al found that in 23% of those with postnatal depression, this had started during pregnancy. Depressed mood during pregnancy has also been associated with poor attendance at antenatal clinic, substance misuse, low birth weight, and preterm delivery. Psychopathological symptoms during pregnancy have physiological consequences for the fetus and this may explain some of these effects.

There is good research, dating back to that of Esquirol in 1818, describing all pregnancy related mental illness. He called this “puerperal insanity” and included recurrent prenatal depression. More recent studies, such as those by Menzies and Knauer, have reinforced the extent and severity of prenatal depression. Evans et al suggest that the proportion of women rating themselves as severely depressed was similar before and after childbirth. They suggest that postnatal depression is not a distinct syndrome. Their data suggest that childbirth is less likely than the events of pregnancy to be followed by depression in women who are not depressed. Furthermore, depressed women are more likely to improve after childbirth. These conclusions have been challenged.

Ramrakha et al identified an increased probability of “risky sex” across a range of mental health diagnoses. Even clinical depression was associated with increased rates of “risky sex”, sexually transmitted diseases, and early sexual experience. With regard to sexual initiation, other questions arise, such as the role of sexual abuse—also a major precursor to mental health disorder. Risk taking may represent an indirect expression of anger or a mechanism for exerting control over one’s life. For a depressed young person, sexual activity and the associated risks may be seen as a diversion, a relief of tension or a salve of affection seeking—a self medication with sex.

Depression is never trivial in mothers. The severity of the illness can have catastrophic consequences. It is a tragedy that some women die in the aftermath of childbirth. In fact, when all deaths in the year after delivery are taken into account, the Confidential Enquiry into Maternal Deaths showed that deaths from suicide are not only the leading cause of indirect death, but also the leading cause of maternal death overall. For some the fatal outcome may have been avoided.

INFANTICIDE

Although the deliberate killing of a child by the mother has been described from ancient times, it is probably more reasonable to consider this act in two forms. These are the customary neonaticide...
of unwanted newborn babies and the killing of children for other reasons. Neonaticide has often been focused on the differential killing of female children. This has led to a substantial shift in the number of reported male births to female births, figures sometimes exceeding 3:1. Although this is less common as contraception becomes more available, there are still areas of the world in which female babies are deliberately killed.

It is not the purpose of this article to look at the psychopathological causes for infanticide, nor the law surrounding it. However, the reader may wish to review the excellent chapter in *Motherhood and Mental Health* by Emeritus Professor Brockington (see additional reading).

**EATING DISORDERS**

**Anorexia nervosa**

Eating disorders or disordered eating behaviours frequently occur in the childbearing years. The defining psychopathology of anorexia nervosa is a phobic avoidance of normal body weight. There are comments in the literature, often repeated, that there is an “antagonism” between anorexia nervosa and reproduction, because of the cessation of menstruation in active cases of anorexia nervosa. Pregnancy is rare in active anorexia nervosa except where ovulation has been induced.41 There are several studies that look at the outcome of pregnancy after recovery from the disorder.22–24 There are also case reports of pregnancy occurring in women who had not yet recovered. At follow up, the babies born to these women have, as a group, abnormally low birth weights.42 A higher rate of stillbirths is reported.43 These women may have more premature births and caesarean sections. Research suggests no difference between those with active and remitted symptoms of anorexia nervosa as a variable.25

**Bulimia nervosa**

Bulimia nervosa is characterised by a loss of control over eating, with self perpetuating cycles of bingeing and purging. It is aetiological.44 cited difficulties in heterosexual relationships as core subversion of appetitive behaviour. Balakrishna and Crisp have suggested that anorexia nervosa represents an avoidance response to the sexual thrust of puberty,45 while Tuiten et al have argued that changes in sexuality are solely due to the hypogonadism of emaciation.46 There are apparent differences in psychosexual histories between patients with restrictive anorexia nervosa, purging anorexia nervosa, and bulimia nervosa. Purging anorectics report more past sexual history than restrictive anorectics,47 while women with bulimia are generally more sexually active and experienced than even women without an eating disorder, with greater lifetime numbers of sexual partners and higher rates of induced abortion.48 Oral contraceptives are inappropriate and unreliable in the presence of regular self induced vomiting.49 High levels of childhood sexual abuse are reported to be associated with eating disorders.50

**MISCARRIAGE**

It has historically been very difficult to accurately estimate the rate of miscarriage in comparison to completed pregnancies. Research has discussed the estimated rates between 1845 and 1933 before readily available termination.42 More recently, diagnosing pregnancy using radioimmunoassay showed that 43% of all pregnancies were lost by spontaneous abortion,51 a large percentage of these not recognised by the woman. There are well documented psychological and psychiatric consequences to a miscarriage.52 Seven percent of all miscarriages occur in women who have recurrent spontaneous abortion,53 although more recently the likelihood of successful subsequent pregnancy is much better.54

**TERMINATION OF PREGNANCY**

The psychological and psychiatric effects of termination are complex and often related to the reason for that termination. In the large study of Ekblad the author came to a conclusion that was subsequently often repeated, that is, “The greater the psychiatric indication the greater the risk of adverse sequelae”.55 In addition, it should be noted that all the postpartum psychiatric complications may also occur after termination of pregnancy. Some women have intense and vivid fantasies of “killing the baby” for over a year.56 It has been suggested that “almost every woman who entertained the thought of obtaining a termination, however briefly, became depressed in pregnancy or after delivery”.57 In one study two women terminated a pregnancy because they were too terrified to endure a delivery.58 Termination may be requested by women who suffer from tokophobia, dearly want a baby, but are unable to understand their own aversion to parturition. In the absence of an empathic professional carer or relevant medical literature their only choice may be to terminate the pregnancy and live with the psychological impact of that decision.

Psychological maladjustments after abortion are significantly associated with a history of depression. It has been suggested that prior psychological state is equally predictive of subsequent depression among women with unintended pregnancies regardless of whether they abort or carry to term.59 Reardon and Cougle challenge this.60 They suggest that married women who carry an unplanned pregnancy to term were at less risk of depression than married women who aborted. Single women, however, had high depression scores independent of outcome.

**PATHOLOGICAL DREAD AND AVOIDANCE OF CHILDBIRTH (TOKOPHOBIA)**

**Prevalence of fear of pregnancy and childbirth**

Fear of childbirth is common and more intense in pregnant nulliparous women than in pregnant parous women.61 Over 20% of pregnant women report fear and 6% describe a fear...
that is disabling.\textsuperscript{,}\textsuperscript{,}4\textsuperscript{,}5\textsuperscript{,}71\textsuperscript{,}72 Altogether 13% of non-gravid women report fear of childbirth sufficient to postpone or avoid pregnancy.\textsuperscript{,}7\textsuperscript{,}4\textsuperscript{,}72\textsuperscript{,}73\textsuperscript{,}74 It is well known that pregnancy may be a time of considerable anxiety with symptoms escalating in the third trimester.\textsuperscript{,}75 Women still suffer from the fear of death during delivery.\textsuperscript{,}76 When this specific anxiety or fear of death during parturition precedes pregnancy and is so intense that tokos (childbirth) is avoided whenever possible, this is a phobic state called “tokophobia”. Tokophobia may effect women from childhood into old age.

**Prevalence of anxiety**

In 1941 Sontag warned that a woman’s emotional state could effect her pregnancy.\textsuperscript{,}77 He stated “deeply disturbed maternal emotion produces a marked increase in activity of the fetus”. Many researchers have subsequently studied the causes and consequences of maternal anxiety and fear. Fear of pain is often reported as the reason for fearing delivery. Fearful women with free access to analgesic drugs during labour were still more likely to experience childbirth negatively and suffer severe emotional imbalance postpartum. Thus “fear of pain in a Western society may be a culturally accepted way of expressing something more complex.”\textsuperscript{,}78 More recently, pregnant women fearful of childbirth reported a lack of trust in the obstetric team, fear of their own incompetence and fear of dying.\textsuperscript{,}79 Other studies have suggested that the greatest fear was of delivering a physically damaged or congenitally malformed child.\textsuperscript{,}80 Women who have suffered childhood sexual abuse or rape fear the experience of childbirth will revisit the distress and helplessness of abuse. Women who have already suffered during childbirth are afraid of retraumatisation.\textsuperscript{,}81

**Treatment studies for fear of childbirth**

Women with dread of childbirth are vulnerable to increased surgical intervention and subsequent psychological complications. Studies investigating the alleviation of fear of childbirth date back to the 1920s.\textsuperscript{,}82 Psychoprophylaxis was investigated in the 1950s\textsuperscript{,}83 and more recently the benefits of hypnosis.\textsuperscript{,}84 A psychoprophylactic preparation course offered to pregnant women afraid of childbirth made no significant difference to obstetric outcome.\textsuperscript{,}85 Psychological outcomes were not investigated. Important research has been conducted in Sweden. Ryding, an obstetrician and psychotherapist, offered either counselling or short term psychotherapy to pregnant women demanding a caesarean section that the obstetrician thought unnecessary.\textsuperscript{,}86 At term, half these women chose vaginal delivery. Sjogren investigated 72 women with severe anxiety about childbirth.\textsuperscript{,}87 They were offered psychological intervention or short term psychotherapy. Subsequently, some women chose a vaginal delivery. These women experienced the delivery as positively as a reference group. Tokophobic women who strongly desired a surgical delivery and were refused suffered greater psychological morbidity than those granted their chosen delivery method.\textsuperscript{,}88 The number of women demanding elective caesarean section because of tokophobia is not known. The National Sentinel Caesarean Section Audit was published in October 2001. The audit found that one in five (21.5%) of births in England and Wales were by caesarean section; 7% of these were at the mother’s request with no medical reason.\textsuperscript{,}89

**TOKOPHOBIA CLASSIFICATION**

Tokophobia has been classified as follows:

- **Primary**—nulliparous.
- **Secondary**—previous traumatic deliveries.
- **Secondary** to depressive illness in pregnancy.

**Primary tokophobia**

When dread of childbirth predates the first conception, this is primary tokophobia. The dread of childbirth may start in adolescence or early adulthood. Although sexual relations may be

**Secondary tokophobia**

Some women develop a dread and avoidance of childbirth after a traumatic obstetric event in a previous pregnancy. Most typically this is a “traumatic” delivery but it could also occur after an obstetrically normal delivery, a miscarriage, a stillbirth, or a termination of pregnancy. Some women feel so traumatised they avoid a further pregnancy even when a baby is desperately wanted.
normal, contraceptive use is often scrupulous. Pregnancy is avoided to prevent parturition. In some tragic cases, a woman is so terrified of childbirth, she will terminate a wanted pregnancy rather than go through childbirth. Some women will actively seek out an obstetrician who will perform an elective caesarean section before becoming pregnant for the first time. Some women never overcome their fear of childbirth and remain childless and some adopt. Many feel shame at their perceived inadequacy. Some women enter the menopause having never delivered a much desired baby and grieve this loss into old age.

Aetiology of primary tokophobia
The aetiology of primary tokophobia is likely to be multifaceted. Psychological and social considerations have been postulated.89

A. Social culture
Fear of childbirth may transmit over generations90 and this can produce a second generation effect of a mother’s own unresolved frightening experience.91 It is suggested that women’s reproductive adaptation is like their mother’s. This suggests a psychological heredity.92 This may be further highlighted for girls when their parents have a negative attitude towards sexuality.93 Women accurately recall details of childbirth 20 years later.94

B. Anxiety theories
A phobia is an avoidance response. It may be learnt through frightening experiences, vicariously by seeing others’ fearful responses, or through instruction.95 Zar96 used the work of Lazarus97 to investigate fear of childbirth. She suggested a pregnant woman’s expectations of the delivery are relevant to her experiences of and behaviour during delivery. Furthermore, the appraisal of the last delivery will include the anxiety associated with it and indicate the level of fear for a future delivery.

Fear of childbirth has been associated with anxiety proneness in general98 and may belong to the family of anxiety disorders.

C. Trauma and abuse
Baker and Duncan reported that 12% of women described being sexually abused before the age of 16.99 Psychological morbidity secondary to childhood sexual abuse may be immense and diverse with increased rates of sexual dysfunction,100 anorexia,101 and PTSD.102

A history of childhood sexual abuse could be associated with an aversion to gynaecological examinations including routine smears or obstetric care. The trauma of vaginal delivery, or even the contemplation of it, may cause a resurgence of distressing memories. This can lead to dread and avoidance of childbirth even when a woman wants a baby.103

(3) Tokophobia as a symptom of depression
Less commonly, prenatal depression may present with tokophobia. With this, there is no morbid dread of childbirth and this fear is in stark contrast to the woman’s prepregnancy and predepression beliefs.11

CONCLUSION
Psychological morbidity is common in women during their childbearing years. However, conditions such as PTSD and tokophobia may not have any obvious preceding cause and may be unrecognised. The outcome of all of the conditions considered in this paper is less good than the outcome for other mothers. There is a need for psychiatrists and obstetricians to work together to improve this under-recognised and under-treated group of women and babies.

ANSWERS
1. (A) T, (B) T, (C) T, (D) T; 2. (A) T, (B) T, (C) F, (D) F; 3. (A) T, (B) F, (C) T, (D) F; 4. (A) T, (B) T, (C) F, (D) F; 5. (A) F, (B) T, (C) F, (D) F; 6. (A) T, (B) F, (C) T, (D) T.