

# Psychological aspects of infertility

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The role of reproductive systems in explaining the gender differences reported in mental illness has been the subject of much debate<sup>1</sup>. A substantial literature exists which has delineated a range of psychiatric conditions in women related to reproductive function<sup>2</sup>, specifically in the postpartum period<sup>3</sup>. Whilst much has been written about conditions affecting women during the reproductive cycle, consideration needs to be given to women (and men) who cannot or struggle to reproduce at a time when they are of an age to do so i.e. during the reproductive cycle.

Infertility is thought to affect 5-6 million couples in the United States of America<sup>4,5</sup>, about 10% of the reproductive population<sup>6</sup>. It is assumed that world wide rates are comparable<sup>5</sup>. In 35% of cases infertility is caused by female reproductive problems, with a further 35% caused by male infertility problems<sup>5</sup>. Whilst a number of options exist for couples confronted with infertility (medical, adoption, fostering, alternative medicine, focusing on other life goals), a study of choices amongst infertile couples found that 80% opted for a medical approach with this choice being made quickly and motivated by the desire to have a child<sup>6</sup>. Motivation is clearly an issue that requires careful elucidation as this may have implications for suitability of a couple to proceed with treatment.

Assisted reproductive technology (ART) gives infertile couples 12 different pregnancy producing options<sup>5</sup>. Such approaches make pregnancy possible for more than half the couples pursuing treatment<sup>7</sup>. Whilst these advances may provide hope for infertile couples, they also induce emotional stress and appear to have outpaced psychological preparedness of patients<sup>8</sup>. The treatment process involves uncertainty as well as lack of control and exposes the couple to the possibility of successive failure<sup>9</sup>, which may have significant psychological consequences.

Psychological aspects of infertility may be divided into two groups i.e. psychological problems as a cause of infertility (psychogenic hypothesis) or infertility as a cause of psychological problems (psychological consequences hypothesis)<sup>10</sup>. Whilst the psychogenic hypothesis has been questioned, it has been found that stress reduction<sup>11</sup>, as well as the treatment of depressive illness which precedes the onset of unexplained fertility with both pharmacotherapy and psychotherapy<sup>12</sup> resulted in improved rates of pregnancy. Whilst anxiety appears to be the major psychological consequence during the process of infertility treatment, couples whose treatment was unsuccessful are at risk for depression<sup>13</sup>. In this regard, careful pre-treatment screening should assess vulnerability. Studies comparing psychopathology between fertile and infertile groups generally find no differences. However, when measures of stress and self esteem are used then significant differences emerge<sup>10</sup>. For women, both pregnancy and motherhood are significant developmental milestones which are highly emphasised in our culture<sup>14</sup>. Whilst most research concludes that the experience of infertility is more stressful for women than men<sup>10</sup>, it has been found that infertility is stressful for both men and women with one study finding women more likely to experience depression and men more likely to experience repressed anxiety placing them at greater risk for psychosomatic complaints<sup>15</sup>. Psychological problems appear to occur in both partners, irrespective of which partner the aetiological problem was found in<sup>10,15</sup>. Whilst the levels of psychological distress generally fall short of severe emotional disturbance<sup>15</sup>, it has been found that the psychological symptoms of infertile women are comparable to those experienced in women with other serious medical conditions such as hypertension and cancer as well as women undergoing cardiac rehabilitation<sup>16</sup>. Whilst levels of depression are predictably higher amongst infertile compared to fertile women, it has been found that amongst infertile women the levels of depression are highest in those women with a 2-3 year history of infertility when compared to women with a history of less than 1 year or more than 6 years. In addition, women with an identified cause of infertility are more likely to be depressed than those whose infertility is unexplained<sup>17</sup>. Long-term infertile couples (both women and men) tend to have significant problems dealing with their childlessness<sup>18</sup>, although when compared to fertile controls the differences are more pronounced for women than men. Specific factors associated with impaired wellbeing include strong negative feelings about being infertile (both men and women) as well as being

the infertile partner (among men) and still pursuing medical treatment (among women)<sup>19</sup>.

A number of studies have focussed on various aspects of treatment outcome utilising group psychotherapeutic approaches. Both distress<sup>20</sup> and pregnancy rates were found to improve<sup>21,22</sup>, with a cognitive-behavioural approach most helpful in reducing distress<sup>20</sup> and higher levels of pre-therapy distress and younger age being significantly associated with higher rates of viable pregnancies<sup>22</sup>. Interventions should aim to diminish guilt associated with past sexual activities, sexually transmitted diseases or abortions and allow for catharsis within an empathic milieu that also seeks to promote optimism and decrease feelings of isolation and loneliness<sup>23</sup>. Whilst the treatment of infertility is dominated by technical, medical approaches there appears to be an important role for psychological interventions. As the demand for infertility treatment grows, so too will the need for appropriately informed and skilled mental health professionals.

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