Role of life habits and environment on ovarian stimulation strategies.

PSYCHOLOGICAL DISTRESS

Corinne Palatchi Cohen

Instituto para el Estudio de la Concepcion Humana
Monterrey, Mexico.
Involuntary childlessness:

“A universally stigmatizing condition that has the potential to affect the stability and well-being of individuals, couples and communities.”
Stress is a complex concept

- Stress is psychological
- Stress is physical
- There is good stress & bad stress
- Positive / Negative
- Individual perceives or experiences an event.
- Distress- negative stress
Psychosocial and biomedical factors contribute to the emotional response to infertility and physiological response to stress.

Impact of distress on treatment outcome has a complex interplay and/or interconnectedness between mind and body.
Research has told us

- Infertility was rated second as a stress only after divorce and death of a family member (Baram, 1998)

- Depression and anxiety in infertile women to be equal to women patients diagnosed with heart disease, cancer and HIV (Domar, 1993)
Infertility is stressful, being an unpredictable experience, which is negative, uncontrollable and ambiguous.

Emotional Rollercoaster
Constant cycle of hope and disappointment.
Greater risk of anxiety, distress and grief.
Infertility and Its Impact

- Self esteem
- Body image
- Ability to plan
- Finances
- Sex life
- Career

- Relationship with partner
- Family relationships
- Relationships with friends
- Social life
Feelings Related to Infertility: Part of the formula of distress

- Anger
- Sadness
- Loss
- Fear
- Guilt
- Confusion
- Resolution….
Other stresses to consider

Language of infertility such as:

“poor mucus”
“low motility”
“inadequate cervix”
“failed cycle”
“poor responder”

How we are viewed such as:

“How do you have any children”

Privacy versus perception
Family dynamics

Language of the world around us such as:

“shooting blanks”
What is Stressful to the Patient?

- Being in a medical setting.
- Taking medication.
- Ultrasounds.
- Producing specimens.
- Public nature of a private event.
- Financial aspects.
- Being around pregnant women.
- Social events.
- Christenings, baby namings, etc.
- Holidays.
- Malls.
- Partner's reactions.
- Mallisate event.
Gender Differences Exist

Stress may be experienced and handled differently.

Different coping approaches and strategies.

Infertility has different stresses on men and women

(daily monitoring vs. the stress of specimens on demand).
Research has been done

**Women** have shown higher levels of distress through higher levels of anxiety and depression.

**Men** experience greater distress when cause is male factor.
Research has been done

Negative psychological traits and mood states have more pronounced effect in women. More likely when the source of stress is personal or marital than social.

(Boivin and Schmidt 2005)
Research has been done

Male stress does play a role in treatment failure, but weaker one. **Difference:** Men report fewer sources of stress and less intense level.

(Boivin and Schmidt 2005)
Positive thoughts about ability to manage demands of infertility and treatment have been related to positive adjustment and better treatment outcomes.
Optimism prior to an ART treatment cycle were found to be predictive of less distress following a failed first treatment cycle. (Verhaak, Smeenk, Van Minnen (2005).

Optimism found to be associated with greater number of oocytes and embryos transferred. Kollonoff-Cohen (2001).
Major confounds that occur while considering psychological distress and pregnancy outcome:

- Relationship distress - anxiety/depression.
- Influences of diagnosis.
- Influence of Information.
- Attitudes of medical team.
- Habituation effect of chronic stress.
- Other life stressors.
- Coping styles.
- Baseline psychological issues.
Stress and pregnancy outcome inquiry must focus:

Stress is causative of factors which would prohibit pregnancy or it is the diagnosis and/or treatment of infertility which causes stress?
There is some evidence

**Interventions:** relaxation response, mind and body programs are beneficial in improving fertility rates and/or treatment outcomes.  
*(Domar 1999)*

**Conclusion:** most research conducted with women undergoing ART treatment supports that emotional distress is associated with treatment success.

**Notes:** limitations of studies- lack of control groups, small samples.  
*(Domar 2000)*
Despite the conflicting literature, it is generally concluded:

- Stress does have an impact on the body.  

- Stress has also an impact on energy level, optimism, patience and perseverance, mediated by coping styles.

- Coping with stress may assist to conception through stress reduction.  
  Braverman, 2009.
It is generally concluded:

Converging evidence: negative psychological traits and mood states are associated with treatment failure.

Shown with diverse measures: anxiety, depression, infertility specific distress, etc

As well as diverse biological indicators of stress (reactivity, hormonal and immunological factors)

Natural cycles- longer cycles and lower pregnancy

Treatment cycles- poorer biological response, lower pregnancy and live birth rate.

Boivin and Schmith 2005
Why personal stress, anxiety, negative emotional states reduces chances of pregnancy?

1. Activation of hypothalamic-pituitary-adrenal (HPA) axis during stress interferes gonadotropin releasing hormone (GnRH) pulse generator which causes a cascade of hormonal events that undermine reproductive function.

2. Stress associated behavioral or lifestyle decisions compromising fertility.

Future research identifying what conditions reproductive suppressions occurs and what pathways mediate this effect.

Boivin and Schmith 2005
It is generally concluded:

Effective coping strategies reduces treatment termination.

Improved coping strategies reduces stress and improve communication and sense of well-being.

Research has yet to disentangle and adequate address relationship between stress and infertility.

Braverman, A., 2009
Recently, studies turned their attention from relationship-stress, depression and pregnancy outcome:

- **Focus:** causes of discontinuation of treatment and treatment perseverance.
- Drop out—psychological factors.
- Treatment persistence gives optimizes biological potential—opportunity to achieve pregnancy.
The Best Coping Strategy Is:

Information & Communication
We should encourage to improve overall quality of life:

Maintaining individual health and well-being:
- Exercise.
- Abstinence of tobacco and alcohol.

Nurturing the couple's relationship:
- Communication.
- Intimacy.
- Humor.