International Federation of Gynecology and Obstetrics
The FIGO Fertility Toolbox™

“Reproductive rights are human rights—the right to found a family”

David Adamson, MD
Past Chair
FIGO Committee on Reproductive Medicine
Who should use it?
Anybody who wants to help infertile people! It was designed in the first instance for healthcare workers, but others who want to make a difference in the lives of infertile people may also find it useful. The Toolbox is available in hard copy but also an electronic version for computers and mobile devices.

What’s in the Toolbox?
Seven Tools to help you tackle the disease/disability of infertility. Each Tool provides information on how to manage a particular aspect of infertility:
What’s in the Toolbox?
The Tools Pyramid
How does the Toolbox work?

The Levels Pyramid

There are 3 levels of Tools:

**The Basic Tools™** contain information that is purposely succinct--just a simple statement or brief summary of the Daisy and each of the six Actions Pyramids. The Basic Tools are coloured orange.

**The Support Tools™** provide more information and detail so that you know what to do to take action. Support Tools are coloured green.

**The Reference Tools™** are lists of references that provide evidence for the information and recommended actions in the Basic and Support Tools. Reference Tools are coloured white.
How does the Toolbox work?

The Levels Pyramid
How do I use the tools? 
The Actions Pyramids

Higher resource and More Difficult Actions are towards the top of each Actions Pyramid.

Lower resource and Easier Actions are towards the bottom of each Actions Pyramid.
Tool 1

FIGO Fertility Daisy

- Resources
- Quality of Life
- Burden of Disease
- STI/HIV Prevention
- Value of Children
- Family Planning
- Non-Discrimination
- Political Commitment
Tool 1
The FIGO Fertility Daisy
Why Care?

BASIC TOOL

1. **Quality of Life**: Infertility reduces quality of life, especially through negative psychosocial consequences. These range from fear and depression to stigmatization and lost dignity in death. The negative consequences of childlessness are more frequent and more severe in developing countries.

2. **Burden of Disease**: Globally an estimated 9% of women of reproductive age suffer from infertility. This equates to approximately 80 Million women and equivalent number of men.

3. **Value of Children**: Children are highly valued in all countries and cultures. They play many important roles in families and communities, especially in developing countries.

4. **Political Commitment**: Nations around the world have committed to the Millennium Development Goals (MDG). Absence of infertility treatment is a relevant barrier to universal access to reproductive health (MDG 5).
Tool 1
The FIGO Fertility Daisy
Why Care?

**BASIC TOOL**

5. **Non-discrimination**: Children can thrive or suffer in all social classes. The rich are not more deserving of reproduction than the poor. Infertile people are as deserving of health care as those with other diseases.

6. **Family Planning**: The integration of infertility management into Family Planning/Reproductive Health/Women’s Health services mutually strengthens these services.

7. **STI/HIV Prevention**: Infertility is a risk factor for STI/HIV acquisition. Infertility management helps to combat the STI/HIV pandemic.

8. **Resources**: Many health systems, provided they have the political will, have sufficient resources to offer at least low cost effective infertility interventions. Lack of effective interventions fosters the use of ineffective interventions. Ineffective interventions waste precious resources of health systems and households.
SUPPORT TOOL 1: WHY SHOULD I CARE

THE FIGO FERTILITY DAISY—WHY SHOULD I CARE?
Infertility is a disease/disability that is poorly understood or appreciated by most people who have not suffered from it. As a result, there is generally not much emotional or other support for women and men with infertility, and commonly not much empathy. This causes the distress and burden of infertility to be even greater for the infertile and results in them usually having to deal with this crisis in their life emotionally isolated and without familial or societal support. Furthermore, society as a whole generally does not provide financial support for diagnosis and treatment, so that solving the problem is even more unlikely.

However, infertility is a very significant disease/disability that deserves recognition and support from society. Each individual and society should care about infertility and infertile women and men for many reasons which are described in this tool.

www.fertilitytool.com
Tool 1—Why Care?
Action 1: Quality of Life

SUPPORT TOOL

Quality of Life: Infertility reduces quality of life, especially through negative psychosocial consequences. These range from fear and depression to stigmatization and lost dignity in death. The negative consequences of childlessness are more frequent and more severe in developing countries.

Infertility is both a health problem and a social problem. WHO has defined infertility as a disease, thereby recognizing that infertility seriously affects a person's health (ICMART and WHO, 2009). Unfortunately, many people and countries continue to think of infertility as a mere personal wish and, as such, give it little priority in their health systems (ESHRE Taskforce Ethics & Law, 2009). Infertility has also many negative psychological and social consequences including marital instability, anxiety, depression, social isolation and deprivation, loss of social status, loss of gender identity, ostracism and abuse (Hammarberg, 2013, Nahar, 2011). Most religions place a high value on children, and infertility may affect a person's religious or spiritual well-being in life and even after death (Dyer, 2007; van Balen and Bos, 2009). Social consequences such as marital conflict or deprivation may in turn impact on health (for example through exposure to sexually transmitted disease or poverty-related illness) thus creating a vicious cycle between social and health consequences secondary to infertility.

To some extent these consequences are rooted in the fact that, especially in developing countries, infertility violates a social norm of having (many) children. The violation of a social norm, even if unintended, results in stigmatization. Others may think of an infertile person as having less worth as a woman, a man or an adult, and infertile people may think of themselves as being inferior to somebody with children. This can cause loss of self-esteem and self-worth and give rise to ostracism, neglect, deprivation and abuse.
Support Tool 1 – Why Care
Action 1 (cont’d): Quality of Life

The many negative psychological, social and cultural consequences have been classified into six stages (Daar and Merali, 2002). These levels reflect both the continuum and the multiplicity of harm inflicted by infertility.

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Guilt, self-blame, fear</th>
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<tbody>
<tr>
<td>Level 2</td>
<td>Marital stress, economic stress, helplessness, depression</td>
</tr>
<tr>
<td>Level 3</td>
<td>Mild marital or social violence and abuse, serious economic hardship, social alienation</td>
</tr>
<tr>
<td>Level 4</td>
<td>Moderate to severe marital or social violence and abuse, severe economic deprivation</td>
</tr>
<tr>
<td>Level 5</td>
<td>Death through violence-induced suicide, starvation, disease</td>
</tr>
<tr>
<td>Level 6</td>
<td>Lost dignities in death</td>
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</table>

Increasingly, health-systems focus on quality of life and well-being, and not only on morbidity and mortality. Several instruments exist which seek to measure quality of life (QoL) and compare QoL between people living with different diseases. At present many of these instruments do not capture the true extent of the experience of infertility. It is important that researchers find a way to appropriately document the QoL of people suffering from infertility and to inform health politicians and planners of the finding. In this way, limited resources can be allocated more fairly and equitably.
Tool 2
Overcome Personal Barriers

- Integrate infertility services with other health services
- Educate patients and the public
- Educate professionals, NGOs, and governments
- Identify accessible, affordable treatment options and funds
- Describe best options for tests and treatments
- Recognise personal barriers to accessing care
- Detail cost barriers
- Address distance barriers
- Identify family and community barriers

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Tool 3
Overcome Societal Barriers

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Tool 4
Diagnose

www.fertilitytool.com
Tool 6
Refer/Resolve

- Provide ethical closure counseling
- Refer for further fertility treatment
- Refer for management of other medical and social problems
- Providers self-learn about referral resources, including adoption
- Follow-up treatment outcomes and reassess prognosis
- Perform ongoing assessment of self and fertility services

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Tool 7

Prevent

- Reduce infertility prevalence by prevention and education
- Use contraception
- Promote healthy baby and mother care
- Refer for safe abortion
- Prevent HIV and STIs
- Promote safe pregnancy
- Educate about reproductive health and age
- Educate about sex and birth control
- Educate about healthy lifestyle
- Educate and practise ethically

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REFERENCES


Endometriosis fertility index: the new, validated endometriosis staging system

G. David Adamson, M.D. and David J. Pasta, M.S.
Fertility Physicians of Northern California, Palo Alto and San Jose, California

Objective: To develop a clinical tool that predicts pregnancy rates (PRs) in patients with surgically documented endometriosis who attempt non-IVF conception.

Design: Prospective data collection on 579 patients and comprehensive statistical analysis to derive a new staging system—the endometriosis fertility index (EFI)—from data rather than a priori assumptions, followed by testing the EFI prospectively on 222 additional patients for correlation of predicted and actual outcomes.

Setting: Private reproductive endocrinology practice.

Patient(s): A total of 801 consecutively diagnosed and treated infertile patients with endometriosis.

Intervention(s): Surgical diagnosis and treatment followed by non-IVF fertility management.

Main Outcome Measure(s): The EFI and life table PRs.

Result(s): A statistically significant variable used to create the EFI was the least function score (i.e., the sum of those scores determined intraoperatively after surgical intervention that describe the function of the tube, fimbria, and ovary on both sides). Sensitivity analysis showed that the EFI varies little, even with variation in the assignment of functional scores, and predicted PRs.

Conclusion(s): The EFI is a simple, robust, and validated clinical tool that predicts PRs after endometriosis surgical staging. Its use provides reassurance to those patients with good prognoses and avoids wasted time and treatment for those with poor prognoses. (Fertil Steril® 2010;94:1609–15. ©2010 by American Society for Reproductive Medicine.)

Key Words: Endometriosis, fertility, index, infertility, surgery, predict, prognosis, statistics, staging, laparoscopy
Endometriosis fertility index: the new, validated endometriosis staging system

G. David Achermann, M.D. and David J. Press, M.D.

Objective: To develop a clinical and the postoperative pregnancy rates (EFS) in patients with surgically-determined endometriosis severity that is easy to use.

Methods: Data collected on 137 patients and comprehensive statistical analysis to determine an optimal staging system for the endometriosis fertility index (EFI). The data were collected on 137 patients for correlation of predicted and actual outcomes.

Setting: Private reproductive endocrinology practice.

Population: A total of 156 endometriosis patients were selected for the study.

Results: A total of 156 patients were selected for the study. The study was conducted over a 5-year period and included patients with endometriosis stages 1-4.

Conclusion: The EFI score was determined to be the most effective in predicting pregnancy rates as compared to other staging systems. The EFI score was found to be highly correlated with the postoperative pregnancy rates.

Key Words: Endometriosis, infertility, surgery, laparoscopy, women's health, pregnancy, infertility, surgery, laparoscopy, women's health, pregnancy.

Endometriosis remains a major disease. Our continued focus is in improving the clinical presentation and impact on related pain and infertility outcomes across all medical specialties. This study presents the results that confirm our hypothesis that the EFI score is a superior tool for predicting pregnancy rates in patients with endometriosis.

Esparrago, A. A., and many other investigators (1-5) have validated staging systems that have been criticized for multiple reasons, including their inability to predict clinical outcomes, especially pregnancy rates (4, 5) in the patients. In 1974, the American Fertility Society (AFS) created the American Society for Reproductive Medicine, or ASRM, to develop a classification system that could better predict pregnancy rates in patients with endometriosis. The EFI system has been validated in multiple studies, including a recent study that found the EFI score to be the most accurate predictor of pregnancy rates in patients with endometriosis.

MATERIALS AND METHODS

Study Design

Since 1990, data has been prospectively collected at the clinic of a single surgeon (GPA) who has performed more than 1,000 cases of laparoscopic surgery for endometriosis. This study was conducted at a single institution and included patients who underwent laparoscopic surgery for the treatment of endometriosis. The study included patients with mild (stage 1), moderate (stage 2), and severe (stage 3) endometriosis. The study was designed to determine the effectiveness of the EFI score in predicting pregnancy rates in patients with endometriosis.

The EFI score was determined to be the most effective in predicting pregnancy rates as compared to other staging systems. The EFI score was found to be highly correlated with the postoperative pregnancy rates. The study was conducted over a 5-year period and included patients with endometriosis stages 1-4.

Key Words: Endometriosis, infertility, surgery, laparoscopy, women's health, pregnancy, infertility, surgery, laparoscopy, women's health, pregnancy.

CONTACT INFORMATION

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The FIGO Fertility Toolbox Manuscripts
### Glossaries

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tbody>
<tr>
<td>AIDS</td>
<td>acquired immunodeficiency syndrome</td>
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<tr>
<td>ART</td>
<td>assisted reproductive technology</td>
</tr>
<tr>
<td>ASPIRE</td>
<td>Initiative on Reproduction</td>
</tr>
<tr>
<td>ASRM</td>
<td>American Society for Reproductive Medicine</td>
</tr>
<tr>
<td>CRM</td>
<td>Committee on Reproductive Medicine</td>
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**SPECIAL CONTRIBUTION**

International Committee for Monitoring Assisted Reproductive Technology (ICMART) and the World Health Organization (WHO) revised glossary of ART terminology, 2009*

*Currently updating with ~ 300 terms

Organization References (15)
The FIGO Fertility Toolbox

Additional Features

The FIGO Fertility Toolbox Blog

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What if I want to adapt a Tool?

Email: fertilitytoolbox@figo.org

WHO Fertility Guidelines & Glossary Global Program
FIGO REI COMMITTEE 2015 - 2018

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