

## PSYCHOLOGICAL INTERVENTION IN INFERTILITY: GUIDELINES FOR A CLINICAL INTERVENTION PROTOCOL

Alejandro Ávila Espada\* and Carmen Moreno-Rosset\*\*

\*Universidad Complutense de Madrid. \*\*Universidad Nacional de Educación a Distancia (UNED)

*The literature supports the efficacy of psychological intervention (psychosocial and psychotherapeutic) for infertile couples. A substantial number of studies show the negative psychological impact of fertility treatments on couples, and the positive effects of psychosocial counselling and other specific psychological interventions for managing anxiety, depression and stress during reproductive technology procedures. Here we present a protocol for guiding clinical intervention, including strategic goals and content. The programme can be used for professional training or for psychological services in infertility units. Finally, some suggestions for professionals working in this field are included, with the aim of promoting good healthcare practices among them, for their clients and for health services.*

**Keywords:** Infertility, Assisted Reproduction, Psychological Intervention, Psychotherapy.

*La literatura apoya la eficacia de la intervención psicológica (psicosocial y psicoterapéutica) con parejas infértiles. Un conjunto amplio de estudios aportan evidencia sobre el notable impacto psicológico negativo de los tratamientos de infertilidad en las parejas, y acerca del efecto positivo de la orientación psicosocial y de las intervenciones psicológicas específicas para gestionar la ansiedad, depresión y estrés durante los procedimientos de la tecnología reproductiva. Se presenta un protocolo de orientación para la intervención clínica que incluye objetivos estratégicos y contenidos de un programa. El programa es utilizable tanto para formar a los profesionales como para ser aplicado en los servicios psicológicos de las clínicas de infertilidad. Finalmente se aportan recomendaciones para los profesionales que trabajan en este ámbito de la salud con el objetivo de promover buenas prácticas de atención tanto para ellos, sus clientes y los servicios de salud.*

**Palabras clave:** Infertilidad, Reproducción Asistida, Intervención Psicológica, Psicoterapia.

### INFERTILITY AS A CONTEXT

Among the elements that characterize society and the family today, one aspect has emerged with an especially high profile in the last few decades: infertility in human couples has become part of the everyday scene, together with other phenomena, such as young people leaving home much later or the delay in the formation of new families –and above all in the decision to have children, which may be left until advanced ages; indeed, among young people there is even some degree of identification with “non-natural” models of fertility, assisted reproduction techniques being considered as an initial option that excludes “complications” such as meeting a suitable sexual partner, or even pregnancy and childbirth. Going beyond the reproductive revolution represented by the FIV<sup>1</sup> (1978) and ICSI<sup>2</sup> (1992) methods, there are

currently as many as 39 reproduction methods that do not involve a normal sexual union (Burns, 2005). The social trend towards delaying the entry into adulthood, with hyper-protective family models, and their corollary, the delay in young people becoming parents, has a reverse side: infertility, a multidimensional crisis that affects all systems (individual, couple, family) and levels (psychophysiological, sense of self, relationship with others, etc.), triggering high levels of stress, with a wide range of negative emotions and feelings and intense interference in the lives of those involved. And obviously it is not only those who have excessively delayed their access to parenthood who find themselves “caught out” by infertility, but also older people attempting to set out on new family and life projects.

For the majority of those affected, infertility is a traumatic situation and results in a significant psychological crisis, in which they are obliged to acknowledge incapacities in a context closely associated with feelings of worth about oneself, involving ideals and social representations, and in which desired but unattainable “children” are seen as representing an irreparable loss of an aspect of the self. In attempting to

*Correspondence:* Alejandro Ávila Espada. Facultad de Psicología. Departamento de Personalidad, Evaluación y Psicología Clínica. Universidad Complutense de Madrid. Campus de Somosaguas. 28223-Madrid. España. E-mail: [avilaespada@psi.ucm.es](mailto:avilaespada@psi.ucm.es)

<sup>1</sup> IFV: In-Vitro Fertilization

<sup>2</sup> ICSI: Intracytoplasmatic Sperm Injection; also with testicular sperm extraction



cope with the situation of infertility, people experience a kind of “internal struggle” between their own capacities and the perception of limitations previously unknown, leading to the breakdown of their bio-hormonal and psychological stability and problems involving the perception of and communication with their partner, their family life, their economic resources and the perception of their social environment. All of these aspects can be negatively affected, moreover, by the impact or the demands of medical treatment for infertility. And even when the medical treatment is completed successfully, those who have undergone it may carry a “traumatic legacy” that marks a “before and after” the treatment.

Consideration of the psychological impact of such treatments is therefore essential. Although it is common for health professionals involved in assisted reproduction services to take into account strategies of psychological and psycho-social counselling and intervention as relevant parts of the process, there has emerged a relatively urgent need to develop intervention protocols requiring the contribution of psychologists (and psychotherapists) to this complex field, on which there is already a large body of potentially useful literature on intervention approaches and experience (Boivin, 2003; Boivin et al., 2001; Boivin & Kentenich, 2002; Bayo-Borràs, Cànovas & Sentís, 2005; Burns, 2005; Lemmens et al., 2004; Llavona & Mora, 2003; Moreno-Rosset, 2003, 2007; Moreno-Rosset, Antequera & Jenaro, 2005; Peterson, Gold & Feingold, 2007; Stammer, Wischmann & Verres, 2002). In turn, the professionals working in this field require specific support for the psychoprophylaxis of the risks involved in their intervention and work context.

### PSYCHOLOGICAL INTERVENTION IN INFERTILITY?

There is a considerable body of work, including substantial reviews, on the psychological processes relevant to human reproduction, their subjective meanings and the social, psychosocial and psychosocial characteristics of infertile couples (Antequera, Moreno-Rosset, Jenaro & Ávila, in this same issue; Wischmann, Stammer, Scherg, Gerhard & Verres, 2001). Research has dealt with the role of physiological Emotion and Regulation, especially in relation to neurotransmitters and the regulatory function of the immunological system; it has also covered the cognitions and psychodynamics involved: schemata, beliefs, self-image, self-concept, defences and coping and its interpersonal expression and regulation, together with the resulting behaviours that

facilitate or hinder the reproductive process (Ávila, 1993). Moreover, there has been extensive research on the most relevant clinical manifestations and aspects: Anxiety and Depression (Carreño et al., 2007; Moreno Rosset, 2000a; Moreno-Rosset & Martín, 2008); Sexual dysfunction and Identity disorders (Peterson et al., 2007); the evolution of emotional adjustment before, during and after the treatments (Gerrity, 2001; Moreno-Rosset, 2000b, 2003, 2007; Verhaak et al., 2005); variability in the difficulties experienced in the treatments (Benyamini, Gozlan & Kokia, 2005); the psychological impact of different IVF strategies (de Klerk et al., 2006), and so on. From the review of these and many other studies it is concluded that for decades a myth has been constructed, without either scientific or clinical support, around “psychogenic infertility”, despite a lack of any demonstration of direct causality. Attempts to demonstrate a psychobiographic causality clearly delimited from other bio-psycho-social factors have failed to go any further than the rational understanding many clinicians can achieve through examining the case history of how the individual organism may express, in its processes of bio-psycho-social integration and adjustment, a “wise” rejection of reproduction in people with precarious psychological equilibrium –though such observations can by no means be given the status of a conclusion.

Even though it is neither possible nor reasonable to consider the “psychological treatment” of infertility, psychotherapeutic counselling and intervention (from the approach of psychodynamics and cognitive strategies) nevertheless provide a highly positive and valuable opportunity to deal appropriately with the experiences of and the complex situations and dilemmas faced by people in situations of infertility. In sum, we can abandon the psychogenic hypothesis, but at the same time advocate and encourage the necessary psychotherapeutic counselling and support (Apfel & Keylor, 2002).

Users demand and employ support services, showing high levels of satisfaction with them (Moreno-Rosset, 2003, 2007; Schmidt, Holstein, Boivin, Blaabjerg, Rasmussen & Andersen, 2003), regardless of the fact that their use has not been proven to influence the improvement of reproductive success rates –a secondary consideration, but nonetheless a desirable one. Psychological support programmes in this context are at the service of the set of needs of assisted reproduction service users, and for facilitating medical treatment compliance, contributing to the construction of the



appropriate psychological and psychosocial conditions, even though the programmes may be of a low-level type, such as telephone counselling. At a clinical level they make obvious contributions: they facilitate the transmission of information and create a counselling context that is usable and which helps to contain and manage anxieties about the situation of infertility. The opinions of researchers and of users coincide: these resources should be incorporated into assisted reproduction services (Bartlam & McLeod, 2000). Kentenich (2002) highlights the importance for fertility clinics of providing psychological counselling and support services, working together with the medical personnel, and identifies four important aspects related to the consultations dealt with by infertility counselling services: a) the focus of the consultation is an unfulfilled desire or life goal, with the existential tension which that implies; b) the desire to have a child may involve ethical conflicts similar to those occurring in the context of adoption, between the "best interests of the child", the wishes of their parents and the characteristics of the family context; such conflicts have to be assessed; c) the repeated cycles of medical treatment commonly necessary over long periods, and successive failures, lead to emotional stress, sometimes intense, which can break down clients' psychological adjustment; and d) diagnostic procedures and medical treatments for infertility have a significant impact on the intimate life of the couple, affecting the dynamics of their relationship, their sexuality, and the capacity to cope with and resolve the stressful situations associated with treatment. In this regard, we have argued in different forums in favour of comprehensive care for infertile couples (Moreno-Rosset, de Castro, Ávila et al., 2005), and we shall continue to argue for it (Moreno-Rosset, Ávila, Antequera, Jenaro, Gómez & Hurtado de Mendoza, 2008).

The inclusion of psychotherapeutic strategies (exploratory and support-oriented) permits the early detection and appropriate management of the 5 typical stages in the emotional evolution of assisted reproduction service users: 1) Denial of the difficulties; 2) Anger on facing the evidence; 3) Negotiation of the possibilities; 4) Depression –reinforced by the probable repeated failures; and finally, 5) Acceptance of possibilities and limits. Works that have become classics in this field include those on psychological intervention in women with a history of failure in assisted reproduction, which involves managing problems of reassignment of meaning to existence, of

restructuring of the self-concept and of the generation of new expectations and projects (Goldenberg, 1997), even possibly within the framework of broad programmes such as those of Mind-Body (Domar & Dreher, 1996). Also, more and more attention is being paid to the specific problem of male infertility, in the context of progressively higher rates of male sterility.

We concur with those researchers who argue that combined intervention strategies are the most productive. In particular, combinations of individual intervention and group intervention guided by professionals and/or self-help groups reduce anxiety levels –in the long waiting or between-treatment phases, for example– and improve medical prescription compliance (Galletly, Clark, Tomlinson & Blaney, 1996). There is an abundance of research reports providing evidence in the same direction on the differential effectiveness of group, individual and couple-based intervention (Liz & Strauss, 2005), with convergent evidence strongly supporting the use of group strategies, either in self-help format or led by professionals (Domar, Clapp et al., 2000; Hoenk Shapiro, 1999; Tarabusi, Volpe & Facchinetti, 2004); indeed, such strategies have even been shown to have a positive effect on reproductive success rates. A strategic combination of a range of treatment modes according to cases (individual, couple, family, self-help groups and awareness-raising groups led by professionals, with either dynamic or cognitive-behavioural orientations) would appear to be the professional's most useful preventive/therapeutic equipment.

Psychosocial counselling and intervention boasts a good cost-effectiveness ratio for the reduction of stress associated with treatment and the reduction of negative affect, though there is no clear or likely relationship with reproductive success rates (Boivin, 2003). In our own context evidence has already been provided that structured support programmes are a useful resource (IPTRA Pilot Programme, Moreno Rosset, 2003, Moreno-Rosset, Antequera & Jenaro, 2005), together with the subsequent adaptation of handbooks, guidelines and training with relaxation CDs (Moreno-Rosset, 2005, 2007); likewise, there are positive reports of the use of psychological support programmes in CD-ROM format for couples undergoing assisted reproduction treatment (Coisenau et al., 2004), and even of internet counselling and participation in medical support *chats* for infertile couples (Epstein, Rosenberg, Grant & Hemenway, 2002).

## PSYCHOLOGICAL SUPPORT IN INFERTILITY: SYNTHESIS OF THE STRATEGIC APPROACHES, TECHNIQUES AND TACTICS OF INTERVENTION

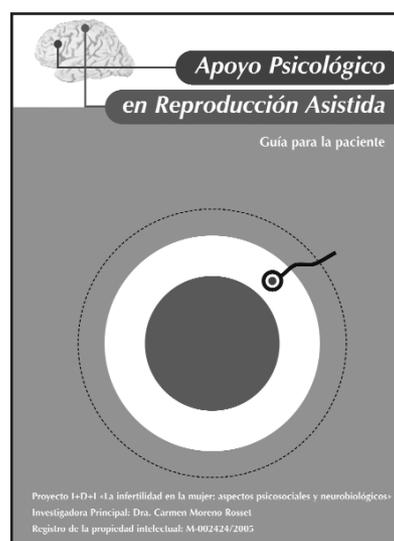
Based on the experience of applying the Pilot Programme of Psychological Intervention in Assisted Reproduction Techniques (*Intervención Psicológica en Técnicas de Reproducción Asistida*, IPTRA: Moreno-Rosset, 2003, Moreno-Rosset, Antequera & Jenaro, 2005) and its later version (Moreno-Rosset, 2005, 2007), in the context of two research projects (Moreno-Rosset, 2003, 2007), respectively, as well as its flexible use in clinical settings, together with the rich contributions of other programmes applied in different contexts (Boivin et al., 2001), an Intervention Programme has been constructed, oriented primarily at structuring the specialized training of professionals in this field, though applicable as a programme of reference in public services and private clinics, made up of the following modules: I) Conceptual; II) Assessment; III) Intervention; and IV) Monitoring and Psychoprophylaxis, in which the professional responsible for intervention in this field should acquire competencies. The core content, materials and goals of each module are described in Tables 1 to 4.

Application of the module materials structured as an intervention programme does not necessarily have to follow a predetermined sequence and duration, mainly because the course of infertility treatment varies considerably from case to case, so that intervention has to be designed accordingly. Gerrity (2001) has described five stages characteristic of infertility treatments, and our experience indeed endorses the fact that users begin the support programme in a variety of phases and situations, so that it is key to choose the most appropriate intervention strategy for each one (see Table 5).

**TABLE 1**  
**MODULE I – CONCEPTUAL**

Goal: To contribute the basic knowledge necessary for the psychologist in order to achieve quality practice in the area of psychological counselling services and consultation in assisted reproduction.
Content: a. Infertility in current society b. Goals of the Programme: Intervention, Prevention, Recovery. c. What the specialist Psychologist needs to know about infertility and assisted reproduction treatments (at the medical, psychological, social and legal levels)

The majority of counselling and support interventions can be programmed via action plans with an average of 12 to 24 work sessions, whose pace can be adjusted to fit the cycles and phases of the medical treatments. Useful in this respect are the recommendations of Bitzer (2002), which can serve as a logical organizer (see Table 6) for structuring the intervention in circular sequences of 10 steps, to be repeated as many times as necessary, according to the treatment. Assessment of whether the characteristics of users, their infertility treatment and the intervention setting are in line with this logic is the responsibility of the professional, who will select the



**TABLE 2**  
**MODULE II – ASSESSMENT**

Goal: To contribute the following instruments and procedures that the professional can use to carry out the initial assessment

Content:

- a. Guide to the Semi-structured Psychological Interview for Intervention in Assisted Reproduction (EPSIRA; Moreno-Rosset, 2001)
- b. Questionnaire on Emotional Maladjustment and Adaptive Resources in infertility (DERA; Moreno-Rosset, Antequera & Jenaro, 2008)
- c. Register of Pleasurable Activities (Moreno-Rosset, 2005)
- d. Complementary instruments that may be of interest to the professional, according to user characteristics.
  - i. Inventory of Interpersonal Problems (IIP; Horowitz, Alden, Wiggins & Pincus, 2000)
  - ii. Adult Attachment Interview (Main, 1991)
  - iii. Questionnaire on Assertiveness in the Couple (ASPA; Carrasco, 1998)
  - iv. Family Satisfaction Questionnaire with adjectives (ESFA; Barraca & López-Yarto, 2003)
  - v. Psychological Well-being of the Couple Scale (EBP; Sánchez-Cánovas, 1998)
  - vi. Inventory of psychological problems in infertility (IPPI; Llavona & Mora, 2006)
  - vii. Questionnaire on psychological adjustment in infertility (CAPI; Llavona & Mora, 2002)

**TABLE 3**  
**MODULE III-INTERVENTION**

Goal: To contribute the strategic approaches, the techniques –and their materials– and the tactics, for both the client and the psychologist.

Content:

**a. User guide: “Psychological Support in Assisted Reproduction”** (Moreno-Rosset, 2005), which includes: (see Figure 1)

- i. Complete informative guide to the two parallel processes.
  - ✓ Medical
  - ✓ Psychological
- ii. Relaxation CD and detailed information on all the stages.
- iii. List of recommendations.
- iv. Protocols for the user to make multiple observations and self-registers.

**b. Psychologist’s intervention protocol:**

- i. **General goals:** To help the professional identify the priorities and set the strategic goals appropriate to each case. According to the case history, not all of them will be equally relevant.
  1. To reduce the intensity of emotional interference that may inhibit or otherwise alter the facilitation of the reproductive process in infertile people.
  2. To facilitate better medical treatment compliance.
  3. To detect/prevent psychological dysfunctions of associated with infertility and its treatment (secondary dysfunctions).
  4. To facilitate the subjective well-being of all those involved in assisted reproduction services (users and professionals)

- ii. **General strategies:** For creating the appropriate conditions to achieve the general and strategic goals, depending on the abilities and skills of the professional
  1. To promote empathic professional-user communication (characterized by authentic interests and genuine understanding), and which will be expressed as emotional harmony with the processes experienced before, during and after the assisted reproduction treatment.
  2. To promote a working link between the professional and the user for the deployment of:
    - ✓ Affirmation/Validation of the subjective experiences involved in the infertility situation
    - ✓ Containment of the negative emotions and anxieties activated before, during and after the process
    - ✓ Mentalization processes for the construction of self-reflexive activity, as a mediator between emotion and action
    - ✓ Re-activation or enhancement of sense of humour and positive emotions that permit the maintenance of adequate contact with the self
    - ✓ Comprehensive, quality communication, with a view to encouraging that same level of communication quality in users in their intimate relationships

- iii. **Intervention levels and techniques:** Multidimensional and combined, with individual and couple-based strategies as principal approaches, and completed with family intervention, where necessary. Moreover, users are normally provided with effective and low-cost complementary resources, such as:
  - ✓ Telephone counselling service, through which users can obtain immediate advice and emotional support, helping to normalize their experiences.
  - ✓ Support DVD/video and/or CD with information and techniques that can be self-applied by the users (relaxation, narrative tasks, self-registers, etc.)
  - ✓ Awareness-raising groups led by professionals [6 group-tasks sessions, one per month: 1) introduction and selection of topics; 2) emotions and infertility; 3) The impact of infertility on the couple’s relationship; 4) Others’ reactions; 5) The place of the desire for a child; 6) The limits of treatment].
  - ✓ Self-health groups, which enrich the autonomy of users, promoting in a natural way proactive and reciprocal support strategies in a context in which previous experiences can be highly important.
  - ✓ Internet chats and forums for users and professionals.

- iv. **Specific techniques:** These are used or indicated by professionals when they consider necessary a structured action at a particular level or in a particular intervention sequence.
  - ✓ Techniques aimed at the reduction of anxiety and stress when their levels are very high, with a view to facilitating the expression of emotions and identification of the causes of distress, providing indications of how to reduce and manage distress.
  - ✓ In-depth exploration of factors associated with the most invasive and high-risk medical treatments, with a view to anticipating them and coping with the most stressful situations.
  - ✓ Intervention with the couple, in relation to their intimate and social communication and their adaptive functioning
  - ✓ Communication strategies in the couple/with one’s partner, and resolution of possible conflicts
  - ✓ Social communication strategies: assertive behaviour techniques
  - ✓ Social skills learning: role-playing about social scenarios of the infertility situation
  - ✓ Specific techniques for particular situations and the most difficult moments, which the professional must help the user to manage
  - ✓ When maternity has to be faced alone
  - ✓ Multiple pregnancy (and the implications of foetal reduction techniques)
  - ✓ Management of previous serious traumas and of the risks of re-traumatization
  - ✓ Management of multiple failures and help with the decision to end fertility treatment
  - ✓ Repeated miscarriages and associated guilt feelings. Repeated loss of donated eggs
  - ✓ Users in situation of immigration
  - ✓ Problem of “third parties” (egg donors, sperm donors, surrogate mothers)

**TABLE 3**  
**MODULE III-INTERVENTION (continuación)**

<p>v. <b>Tactics to be used according to phases and cycles</b></p> <ul style="list-style-type: none"> <li>✓ Giving value to the experiences users go through in the course of assisted reproduction. Such experiences are often difficult, involving high levels of subjective suffering. Recognizing and managing feelings of loneliness, impotence, uncertainty/confusion and existential disorientation (lack of goals in life)</li> <li>✓ De-dramatizing the situation and generating alternative settings for dealing with it</li> <li>✓ Recognizing and containing anxieties about specific current worries</li> <li>✓ Restructuring intense negative thoughts</li> <li>✓ Promoting confidence: Reassignment of meanings and self-confidence (in oneself, in the couple).</li> <li>✓ Facilitating more fluid and empathic communication in the couple (listening to the other; thinking from the other’s point of view; transforming the drama into an experience felt and perceived (cognitively) with the other).</li> <li>✓ Recovering the fun and gratifying side of life in the couple, in relation, for example, to sense of humour and sexuality, through active techniques</li> <li>✓ Promoting expectations of achievement and success. Users should recover the sense of being “Agents” who do whatever is possible, rather than mere “Patients” or “Victims” of the situation.</li> <li>✓ Introducing alternatives (One can live well and enjoy life in other ways; other models to follow and other experiences): Are there alternatives to parenthood? (How can they be discovered and managed?)</li> </ul> <p>vi. <b>Sequentially articulating intervention through cycles with strategic goals, techniques and tactics that would include:</b></p> <ol style="list-style-type: none"> <li>1. Previous assessment of the situation of those seeking help with regard to infertility treatments and of the short- and medium-term needs that can form the basis of strategic goals</li> <li>2. Proposal of participatory tasks for users, promoting a proactive attitude.</li> <li>3. Offer and implementation of support sessions (individual and couple-based) at all key moments of the assisted reproduction treatments</li> <li>4. Indication of group resources available (led by professionals or self-help-based).</li> <li>5. Accessibility for telephone counselling</li> <li>6. Assessment after each intervention cycle (qualitative and quantitative)</li> <li>7. Final process of accompaniment and intervention             <ul style="list-style-type: none"> <li>✓ In the context of success, to take one’s leave and to facilitate the pregnancy, birth and early stages of rearing. Pregnancy after a significant period of infertility can involve problems of adaptation that it is necessary to anticipate.</li> <li>✓ In the context of failure, accompanying users in their grief, with the specific task of opening them to new options and/or alternatives to parenthood, including adoption and the renouncement of parenthood.</li> </ul> </li> </ol>
--

**TABLE 4**  
**MODULE IV: MONITORING AND PSYCHOPROPHYLAXIS**

<p>This is made up of various elements essential for optimizing the efficiency of the intervention.</p> <p>Content:</p> <ul style="list-style-type: none"> <li>✓ Final Assessment</li> <li>✓ Monitoring strategies and procedures, including the use of optional support materials according to the case:             <ul style="list-style-type: none"> <li>✓ Good Life Guide</li> <li>✓ Adoption Guide</li> <li>✓ Guide to Post-infertility Pregnancy and Rearing</li> </ul> </li> <li>✓ Activities for the mental hygiene of the professional in the context of Assisted Reproduction Treatment (principally through group work).</li> </ul>
---

techniques and tactics according to the strategic goals of each phase and cycle, as indicated in Table 5.

Other authors propose structuring the intervention directly as a cognitive-behavioural treatment for addressing the stress associated with or resulting from the medical intervention (see the work by Daniel Campagne in this same number), or as focal psychotherapy with a dynamic approach and of limited duration (Arranz-Lara, Blue-Grynberg & Morales-Carmona, 2001), with global goals similar to those set out in our proposal; on the other hand, it should be borne in mind, in our view, that

**TABLE 6**  
**CIRCULAR ASSESSMENT AND INTERVENTION PROCESS IN INFERTILITY COUNSELLING SERVICES (Bitzer, 2002)**

Step 1	Introduction and initiation of a working alliance
Step 2	Problem assessment and monitoring
Step 3	Clarification about problem definition and negotiation about objectives and priorities
Step 4	Exchange of hypotheses and decision-making concerning diagnostic procedures
Step 5	Investigations, diagnostic procedures
Step 6	Information-giving about results
Step 7	Elaboration of options to resolve infertility problem
Step 8	Decision-making about specific options
Step 9	Treatment procedures
Step 10	Evaluation of outcome

offering treatment or psychotherapy instead of support and orientation leads to resistance factors in those seeking help, who indeed perceive their need for help, but are not seeking “treatment” as such. The direct offer of treatment, after an assessment justifying it, is appropriate for those in the “persistent” phase of medical treatment, as well as for those who find it very difficult to make the decision to

give up the medical treatment, in spite of repeated negative evidence of the possibility of success (Mechanic Braverman, 1997), but probably not in the case of those in the remaining phases.

A special mention is merited by those professionals working in this field who deploy strategies of psychological counselling, support and treatment. There is abundant evidence highlighting the crucial importance of the subjective contribution of professionals (combining technical effectiveness with a capacity for empathy and emotional involvement) in their working relationship with those who consult them (Greenfeld, 1997; Applegarth, 1999).

Continuous work in this area requires a psychoprophylactic strategy both for protecting professionals and for maintaining their sensitivity, accessibility and openness to the emotional states and needs of those seeking help. Our Module IV takes into account some of the typical situations: the therapist's anxiety in relation to the desire for parenthood in him/herself and in clients (Josephs, 2005); the problem of the infertile therapist (Freeman, 2005); negative preconceptions about infertility treatment in the therapist (Applegarth, 2005); how to deal with intense feelings that

may be aroused in the therapist, mainly negative ones (such as anger or cynicism; Kottick, 2005); and more in general, the pertinence of the active use of counter-transference and self-revelation in the treatments (Essig, 2005). However, it is not only psychologists who should be concerned about their adequate preparation and psychoprophylaxis, since it is also highly necessary to consider the problem of the medical specialist, often excessively "hidden" behind the medical technology, as well as the problem of nursing staff (Jackson, 2005; Moreno-Rosset, 2008), who perform a key function throughout the sequence of infertility treatment. And one conclusion that certainly applies to all professionals in this field: the need for special training in the dynamics and emotions of infertility, and their management for the benefit of both users and themselves.

**CONCLUSIONS**

Good practice in public assisted reproduction services and infertility clinics involves something more than just good medical treatment. Clinics should take into account in their routine intervention strategies the psychological and psychosocial aspects that may affect couples using their services. We should be in a position to reply to the question:

**TABLE 5**  
**STAGES OF INFERTILITY TREATMENT AND THE MOST APPROPRIATE INTERVENTION STRATEGIES OF SUPPORT**

Medical treatment stage (Gerrity, 2001)	Psychological support strategies
<b>Pre-diagnostic:</b> Less than one year after suspecting the existence of a problem, still in the phase of diagnostic tests	Prior psychological assessment and initial counselling sessions with the couple
<b>Treatment has begun:</b> The diagnostic stage has been adequately implemented and a treatment plan has been established (normally with less than 2 years of fertility problems, at least one problem detected in the diagnostic phase, and the couple may or may not have already consulted a fertility specialist)	Prior psychological assessment and initial counselling sessions with the couple Participatory tasks (relaxation, self-registers, narratives, games, etc.) Some support sessions (individual and couple-based) planned Telephone support and counselling Awareness-raising and self-help groups recommended
<b>Normal treatment:</b> More than one type of treatment has already been tried, more than two specialists have been consulted, and the couple have been involved in treatments for more than 2 and less than 5 years.	Re-assessment (or assessment, if no assessment has yet been carried out) Support sessions (individual and couple-based) planned with more frequency and in greater numbers Telephone support and counselling Awareness-raising and self-help groups necessary
<b>Persistent:</b> 5 or more years of medical interventions, multiple problems, infertility with no identified cause, consultations with multiple specialists.	Re-assessment (or assessment, if no assessment has yet been carried out) Offer of psychological treatments (individual and couple-based) according to emotional, relationship and personality maladjustments Treatment and self-help groups necessary
<b>Treatment concluded:</b> The medical component of the infertility situation has been completed, and there are no plans to continue. The reasons can include: a) having received a medical diagnosis of unviability; b) Having given birth to a biological child or children; c) having adopted; d) Having decided to remain childless.	Post-Assessment Support intervention (individual and couple-based) planned and focused on work in relation to the new conditions. Participatory tasks appropriate to the user's situation



Why psychological support in all infertility treatments and not only in those cases presenting high levels of stress? Quality of care should be judged both in accordance with cost-effectiveness parameters in relation to effectiveness, efficiency and efficacy (and with the provision of interventions and strategies based on such indicators) and according to qualitative appraisals by users of the services. These users should have sufficient understanding of the implications and scope of the techniques applied to them, and should receive all the emotional support necessary for dealing in a healthy fashion with the treatments for and consequences of infertility. Respecting users' freedom to use the support strategies as they see fit, services should guarantee access to resources for a global intervention that neither ignores nor reduces the importance of essential facets of the biological, psychological and social nature of the human being.

Psychological support and intervention programmes were designed initially for users, but they are in fact at least as important, if not more so, for health professionals working in the contexts considered here. Given that in all settings human beings come up against their limitations, frequently having to confront difficulty and failure, professionals who provide help should restrict their expectations of "omnipotence" and pay special attention to "care for the carer", with a view to maintaining levels of personal and professional efficiency. Infertility is still wild territory, where both professionals and those suffering because of it and their attempts to solve it must find a space for acceptance and for surmounting obstacles. Burns (2005) argues that the only adjustment possible in a situation of infertility is to accept it as unacceptable, internalizing the unacceptable nature of infertility, and that the goal of intervention psychological is to give people the ability to be able to live well accepting the unacceptability of the experience of infertility, giving a personal meaning to the experience, within one's beliefs, and seeing the situation as a potential opportunity to get to know oneself and one's partner better (individually and as a couple) in the context of facing up to limitations and a traumatic situation –that is, to become aware of one's resources, resilience and limits as persons and as a couple. In the structural dynamic of the situation experienced, and for both clients and professionals, what is learnt and discovered in the experience will probably be more important than the results measured in terms of reproductive success rates – for the same reason that the goal is not to have one or

more children, but rather to have the opportunity to exercise parenthood as a facet characteristic of the mature human being (Ávila, 2005), though not the only one (Domar & Dreher, 1996). And there are various possibilities available for human beings to fulfil the parental function, as long as they are in the right condition to experience them.

## REFERENCES

- Apfel, R. J. & Keylor R. G. (2002). Psychoanalysis and infertility. Myths and realities. *International Journal of Psychoanalysis*, 83, 85-104.
- Applegarth, L.D. (1999). Individual counseling and Psychotherapy. In L.H. Burns & S.N. Covington, (Ed.). *Infertility Counseling. A Comprehensive Handbook for Clinicians*. Cap. 5 (pp. 85-101). New York: The Parthenon Publishing Group.
- Applegarth, L.D. (2005). The therapist's negative preconceptions about infertility treatment. In A. Rosen & J. Rosen (Eds.). *Frozen Dreams. Psychodynamic Dimensions of Infertility and Assisted Reproduction*. Cap. 4 (pp. 69-83). Hillsdale, NJ: The Analytic Press.
- Arranz-Lara, L., Blue-Grynberg, B. & Morales-Carmona, F. (2001). El deseo de maternidad en pacientes sujetas a tratamientos de reproducción asistida: una propuesta de psicoterapia [The desire for maternity in patients undergoing assisted reproduction treatment: a proposal for psychotherapy]. *Perinatal Reprod Hum*, 15, 133-138.
- Ávila Espada, A. (1993). Estrés y procesos psicológicos en la infertilidad humana [Stress and psychological processes in human infertility]. In J. Buendía (Coord.). *Estrés y Psicopatología*. Cap. 10 (pp.181-200). Madrid: Ediciones Pirámide, S.A.
- Ávila Espada, A. (2005). La función parental en la adopción [The parental function in adoption]. *Revista Iberoamericana de Diagnóstico y Evaluación Psicológica*. 19 (1), 191-204.
- Barraca, J. & López-Yarto, L. (2003). ESFA. *Escala de Satisfacción familiar por adjetivos* [Family Satisfaction Scale through adjectives]. Premio TEA Ediciones, 1996. Madrid: TEA Ediciones, S.A.
- Bartlam, B. & McLeod, J. (2000). Infertility Counseling: The ISSUE experience of setting up a telephone counselling service. *Patient Education and Counselling*, 41, 313-321.
- Bayo-Borràs, R., Cànovas, G. & Sentís, M. (2005). *Aspectos emocionales de las técnicas de reproducción*



- asistida [Emotional aspects of assisted reproduction]. Barcelona: Colegio Oficial de Psicólogos de Catalunya.
- Benyamini, Y., Gozlan, M. & Kokia, E. (2005). Variability in the difficulties experienced by women undergoing infertility treatments. *Fertility and Sterility*, 83 (2): 275-283.
- Bitzer, J. (2002). Counselling in infertility treatment. In J. Boivin & H. Kantenich, (Eds.). *Guidelines for Counselling in Infertility*. (Seccion 3). ESHRE Monographs: Oxford University Press.
- Boivin, J., Appleto, T.C., Baetens, P., Baron, J., Bitzer, J. et al. (2001). Guidelines for counselling in fertility: Outline version. *Human Reproduction*, 16 (6), 1301-1304.
- Boivin, J. & Kantenich, H. (Eds.). (2002). *Guidelines for Counselling in Infertility*. ESHRE Monographs: Oxford University Press.
- Boivin, J. (2003). A review of psychosocial interventions in infertility. *Social Science Medicine*, 57, 2325-2341.
- Burns, L.H. (2005). Psychological Changes in Infertility Patients. In A. Rosen & J. Rosen (Eds.). *Frozen Dreams. Psychodynamic Dimensions of Infertility and Assisted Reproduction*. Cap. 1 (pp 3-29). Hillsdale, NJ: The Analytic Press
- Burns, L.H. & Covington, S.N. (Ed.) (1999). *Infertility Counseling. A Comprehensive Handbook for Clinicians*. New York: The Parthenon Publishing Group.
- Carrasco, M. J. (1998). ASPA. *Cuestionario de Aserción en la Pareja*. (2ª ed., revisada y ampliada) [Questionnaire on assertion in the couple. 2nd ed., revised and extended]. Madrid: TEA Ediciones, S.A.
- Carreño, J., Morales, F. et al. (2007). Una explicación de los síntomas de depresión y ansiedad en mujeres estériles [An explanation of depression and anxiety symptoms in sterile women]. *Ginecol. Obstet. Mex.*, 75, 133-141.
- Coisena, T.M., Lord, S.E., Seibring, A.R. et al. (2004). A multimedia psychosocial support program for couples receiving infertility treatment: a feasibility study. *Fertility and Sterility*, 81 (3), 532-538.
- de Klerk, C., Heijnen, E.M. et al. (2006). The psychological impact of mild ovarian stimulation combined with single embryo transfer compared with conventional IVF. *Human Reproduction*, 21 (3), 721-727.
- Domar, A.D., Clapp, D. et al. (2000). Impact of group psychological interventions on pregnancy rates in infertile women. *Fertility and Sterility*. 73 (4), 805-811.
- Domar, A.D. & Dreher, H. (1996). Reclaiming your life: Infertility. In Ibid. *Healing Mind, Healthy Woman. Using the Mind-Body Connection to Manage Stress and Take Control of Your Life*. New York: Delta Trade Paperbacks.
- Essig, T. (2005). *Riding the Elephant in the Room: How I use Countertransference in Couples Therapy*. In A. Rosen & J. Rosen (Eds.). *Frozen Dreams. Psychodynamic Dimensions of Infertility and Assisted Reproduction*. Cap. 6 (pp. 103-127). Hillsdale, NJ: The Analytic Press.
- Epstein, Y. M., Rosenberg, H. S., Grant, T. V. & Hemenway, B. A. N. (2002). Use of the internet as the only outlet for talking about infertility. *Fertility and sterility*, 78 (3), 507-514.
- Freeman, N. (2005). When the Therapist is Infertile. In A. Rosen & J. Rosen (Eds.). *Frozen Dreams. Psychodynamic Dimensions of Infertility and Assisted Reproduction*. Cap. 3 (pp. 50-68). Hillsdale, NJ: The Analytic Press.
- Galletly, C., Clark, A., Tomlinson, L., & Blaney, F. (1996). A group program for obese, infertile women: Weight loss and improved psychological health. *Journal of psychosomatic obstetrics and gynaecology*, 17(2), 125-128.
- Gerrity, D.A. (2001). Five Medical Treatment Stages of Infertility: Implications for Counselors. *The Family Journal: Counseling and Therapy for Couples and Families*, 9 (2), 140-150.
- Goldenberg, H. (1997). Who am I, if I am not a mother? In S. du Plock (Ed.), *Case studies in existential psychotherapy and counselling*. (pp. 96-106). Hoboken, NJ, US: John Wiley & Sons Inc.
- Greenfeld, D. A. (1997). Does psychological support and counseling reduce the stress experienced by couples involved in assisted reproductive technology? *Journal of assisted reproduction and genetics*, 14(4), 186-188.
- Hoenk Shapiro, C. (1999). Group Counseling. In L.H. Burns & S.N. Covington (Ed.). *Infertility Counseling. A Comprehensive Handbook for Clinicians*. Cap. 7 (pp. 117-127). New York: The Parthenon Publishing Group.
- Horowitz, L., Alden, L., Wiggins, J. & Pincus, A. (2000). *Inventory of Interpersonal Problems*. New York: The Psychological Corporation.



- Jackson, M. (2005). The Nurse's Perspective in a Reproductive Program. In A. Rosen & J. Rosen (Eds.). *Frozen Dreams. Psychodynamic Dimensions of Infertility and Assisted Reproduction*. Cap. 12 (pp. 249- 264). Hillsdale, NJ: The Analytic Press.
- Josephs, L. (2005). *Therapist Anxiety about Motivation for Parenthood*. In A. Rosen & J. Rosen (Eds.). *Frozen Dreams. Psychodynamic Dimensions of Infertility and Assisted Reproduction*. Cap. 2 (pp. 33-49). Hillsdale, NJ: The Analytic Press.
- Kentenich, H. (2002). Introduction. In J. Boivin & H. Kentenich (Eds.). *Guidelines for Counselling in Infertility*. ESHRE Monographs: Oxford University Press.
- Kottick, J. (2005). Therapist Anger, Despair, Cynicism. In A. Rosen & J. Rosen (Eds.). *Frozen Dreams. Psychodynamic Dimensions of Infertility and Assisted Reproduction*. Cap. 5 (pp. 84-102). Hillsdale, NJ: The Analytic Press.
- Leiblum, S.R. (Ed.). (1997). *Infertility. Psychological Issues and Counseling Strategies*. New York: Wiley.
- Lemmens, G.M.D., Vervaeke, M., Enzlin, P. et al. (2004). Coping with infertility: a body-mind group intervention programme for infertile couples. *Human Reproduction*, 19(8), 1917-1923.
- Liz, T.M. & Strauss, B. (2005). Differential efficacy of group and individual/couple psychotherapy with infertile patients. *Human Reproduction*, 20 (5), 1324-1332.
- Llavona, L. & Mora, R. (2002). *Cuestionario de Ajuste Psicológico en Infertilidad (CAPI)* [Psychological Adjustment in Infertility Questionnaire]. Madrid: Universidad Complutense de Madrid. Registro de la propiedad intelectual 16/2002/2716.
- Llavona, L. & Mora, R. (2003). Atención psicológica a parejas infértiles en tratamiento de reproducción asistida [Psychological attention for infertile couples in assisted reproduction treatment]. In J.M. Ortigosa, M.J. Quiñones & F.J. Mendez (Coords.). *Manual de Psicología de la Salud con niños, adolescentes y familia* [Handbook of the Psychology of Children, Adolescents and Family]. Chap. 13. Madrid: Pirámide.
- Llavona, L. & Mora, R. (2006). *Inventario de Problemas Psicológicos en Infertilidad (IPPI)* [Inventory of Psychological Problems in Infertility]. Madrid: Universidad Complutense de Madrid. Registro de la propiedad intelectual 16/2006/3632.
- Main, M. (1991). Metacognitive Knowledge, Metacognitive Monitoring and Singular vs. Multiple Models of Attachment. In C. Parkes et al. (Eds.). *Attachment across the life cycle*. London: Routledge.
- Mechanic Braverman, A. (1997). When is Enough, Enough? Abandoning Medical Treatment for Infertility. In S. R. Leiblum (Ed.). *Infertility. Psychological Issues and Counseling Strategies*. Cap. 11, (pp. 209-229). New York: Wiley.
- Moreno-Rosset, C. (2000a). Ansiedad y Depresión: Principales trastornos asociados a la Infertilidad [Anxiety and Depression: Principal disorders associated with Infertility]. *Informació Psicològica, Revista Quatrimestral del Col·legi Oficial de Psicòlegs del País Valencià*, 73, 12-19.
- Moreno-Rosset, C. (Dir.). (2000b). *Factores psicológicos de la infertilidad* [Psychological factors of infertility]. Madrid: Sanz y Torres.
- Moreno-Rosset, C. (2001). *Entrevista Psicológica en Infertilidad y Reproducción Asistida (EPSIRA)* [Psychological Interview in Infertility and Assisted Reproduction]. Madrid: UNED. Registro de la Propiedad Intelectual nº 108021.
- Moreno-Rosset C. (2003). *Memoria Final del Proyecto I+D+I Consecuencias psicológicas y psicosociales de los tratamientos de infertilidad en las mujeres: evaluación e intervención* [Final Report on R+D+I Project: Psychological and psychosocial consequences of infertility treatments in women: assessment and intervention] Madrid: Ministerio de Trabajo y Asuntos Sociales. Instituto de la Mujer. Expte. 11/00.
- Moreno-Rosset C. (2005). Guía para la paciente. Apoyo Psicológico en Reproducción Asistida. Proyecto I+D+I La infertilidad en la mujer: aspectos psicosociales y neurobiológicos. Expte. 28/03. Madrid: Registro de la propiedad intelectual de la Guía (31 páginas): M-002424/2005. Registro de la propiedad intelectual del guión del CD de relajación (20 minutos): M-002420/2005, 2005. [Patient guide. Psychological Support in Assisted Reproduction. R+D+I Project – Infertility in women: psychological and neurobiological aspects. Expte. 28/03. Madrid: Intellectual property registration of the Guide (31 pages): M-002424/2005. Intellectual property registration of the script for the relaxation CD (20 minutes): M-002420/2005, 2005.]
- Moreno-Rosset, C. (2007). *Memoria Final del Proyecto I+D+I La infertilidad en la mujer: aspectos psicosociales y neurobiológicos* [Final Report of the



- R+D+I Project: Infertility in women: psychosocial and neurobiological aspects]. Madrid: Ministerio de Trabajo y Asuntos Sociales. Instituto de la Mujer. Expte. 28/03.
- Moreno-Rosset, C. (2008). Aspectos psicológicos de la pareja estéril. Guía para los profesionales de enfermería [Psychological aspects of the sterile couple. Guide for nursing professionals]. In SEF *Tratado de Enfermería*. Madrid: Editorial Panamericana.
- Moreno-Rosset, C., Antequera, R. & Jenaro, C. (2005). The IPTRA: Program of Psychological Intervention in Techniques of Assisted Reproduction. *Communication presented at the 9th European Congress of Psychology*. (Symposium: Psychology and Infertility). Granada: *Actas de Congreso*, 144-145.
- Moreno-Rosset, C., Antequera, R. & Jenaro, C. (2008). DERA. Cuestionario de Desajuste Emocional y Recursos Adaptativos en infertilidad [Questionnaire on Emotional Maladjustment and Adaptive Resources in infertility]. *Premio TEA Ediciones*, 2007. Madrid: TEA Ediciones, S.A.
- Moreno-Rosset, C., Ávila, A., Antequera, R., Jenaro, C., Gómez, Y. & Hurtado de Mendoza, B. (2008). Mujer, infertilidad y reproducción asistida en la sociedad actual. *Mesa redonda n° 1,923 aceptada al 10º Congreso Internacional interdisciplinar sobre las mujeres*. (Área 13-B Salud. Investigación y avances científicos) [Women, infertility and assisted reproduction in current society. *Round table n° 1,923 accepted at 10th International Interdisciplinary Congress on Women* (Area 13-B. Scientific research and progress)]. Madrid: Universidad Complutense.
- Moreno-Rosset, C., de Castro, J.F., Ávila, A. et al. (2005). Integral Attention in Assisted Reproduction: Work by a team of physicians, psychologists, nurses, biologists and jurists. *Round table presented at the 9th European Congress of Psychology*. Granada: *Actas del Congreso*, 176.
- Moreno-Rosset, C. & Martín, M.D. (2008). La ansiedad en parejas fértiles e infértiles [Anxiety in fertile and infertile couples]. *Ansiedad y Estrés*, 14 (in press).
- Peterson, B.D., Gold, L. & Feingold, T. (2007). The experience and influence of Infertility: Considerations for Couple Counselors. *The Family Journal: Counseling and Therapy for Couples and Families*, 15 (3), 251-257.
- Rosen, A. & Rosen, J. (Eds.). (2005). *Frozen Dreams. Psychodynamic Dimensions of Infertility and Assisted Reproduction*. Hillsdale, NJ: The Analytic Press.
- Sánchez-Canovas J. (1998). *Escala de Bienestar Psicológico (EBP)* [Psychological Well-Being Scale]. Madrid: TEA Ediciones, S.A.
- Schmidt L, Holstein BE, Boivin J, Tjorhøj T, Blaabjerg J, Hald F, Rasmussen PE, Andersen A. (2003). High ratings of satisfaction with fertility treatment are common: findings from the Copenhagen Multi-centre Psychosocial Infertility (COMPI) Research Programme. *Human Reproduction*, 18(12), 2638-2646.
- Stammer, H., Wischmann, T. & Verres, R. (2002). Counseling and couple therapy for infertile couples. *Family Process*, 41 (1), 111-122.
- Stanton, A.L. & Dunkel-Schetter, C. (Ed.) (1991). *Infertility. Perspectives from Stress and Coping Research*. New York: Plenum Press.
- Tarabusi, M., Volpe, A. & Facchinetti, F. (2004). Psychological group support attenuates distress of waiting in couples scheduled for assisted reproduction. *Psychosom. Obstet. Gynecol.*, 25, 273-279.
- Verhaak, C.M., Smeenk, J.M.J. et al., (2005). A longitudinal, prospective study on emotional adjustment before, during and after consecutive fertility treatment cycles. *Human Reproduction*, 20 (8), 2253-2260.
- Wischmann, T., Stammer, H., Scherg, H., Gerhard, I. & Verres, R. (2001). Psychosocial characteristics of infertile couples – A study by the "Heidelberg Infertility Consultation Service" Part. I. *Human Reproduction*, 16 (8), 1753-1761.