

**Effect of Counseling versus Self Instructional
Brochure on Preparing Infertile Couple to Cope
with the In-Vitro Fertilization Procedures**

Dissertation

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Effect of Counseling versus Self Instructional Brochure on Preparing Infertile Couple to Cope with the In-Vitro Fertilization Procedures

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ABSTRACT

In vitro fertilization (IVF) is an involved fertility treatment, which incorporates multiple steps including injections, blood and ultrasound testing, surgery, and anesthesia. Despite recent improvements in success rates, IVF remains a physically and emotionally stressful experience to infertile couples. The present study was aiming to evaluate the effect of counseling versus self instructional brochure on preparing infertile couple to cope with the first-time IVF procedures. This aim was achieved through preparing couples: Group (1) by three sessions of counseling before, during and on conclusion of the first treatment cycle. Group (2) was prepared by using self instructional brochure designed by the researcher. Comparison was done between the effect of both intervention methods on couples' knowledge, practices, complications, outcomes and stressors. An intervention study design was used. The sample consisted of 80 infertile couples, based on criterion they were simple randomly divided into two equal studied groups. The study was conducted at El Nakheel Center for Assisted Reproductive Treatment (ART). The tools used for data collection were: A structured interviewing questionnaire, pre /post test, anxiety assessment sheet and a follow up card .The study revealed that counseling intervention and self instructional brochure were effective in preparing infertile couples undergoing IVF to cope with procedures and their implications. Counseling was more effective than self instructional brochure in preparing couple by improving their knowledge and providing support during the procedure. The couples suffered different types of stressors physiological, psychological, and socioeconomic. However, wives suffer from stressors more than their husbands. The study recommended that counseling for in- vitro fertilization procedures should be given for infertile couples undergoing IVF especially for first trial starting treatment.

Key words: In-vitro fertilization - Counseling - Self instructional brochure

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The candidate
Fatma Abou Elkhair

LIST OF ABBREVIATION

ACOG	American Collage of Obstetricians and Gynecologists
ART	Artificial Reproductive Technology
BFS	British Fertility Society
FSH	Follicle Stimulating Hormone
GIFT	Gamete Intrafallopian Transfer
GIT	Gastro-intestinal
GnRH	Gonadotrophin-Releasing Hormone
HCG	Human Chorionic Gonadotrophin
HIV	Human Immunodeficiency Virus
HFEA	Human Fertilization and Embryology Act
IVF	In- Vito Fertilization
ICSI	Intra cytoplasm sperm injection
LH	Luteinizing Hormone
LH-RH	Luteinizing Hormone - Releasing Hormone
NIMH	National Institute of Mental Health
OB/GYN	Obstetric and Gynecology
OHSS	Ovarian Hyper Stimulation Syndrome
WHO	World Health Organization
WMHA	Women Health Association
ZIFT	Zygote Intrafallopian Transfer

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INTRODUCTION

Reproduction is the most basic human needs, propelled by powerful biological and psychological drives. When the ability to reproduce is affected, a crisis ensues and impacts life goals, social roles, and sense of self actualization. The in ability to reproduce affects between 15-49 % of couples worldwide, varying in prevalence between countries and regions. In Egypt, the Egyptian IVF registry estimates the figure to be around 15%. **(Seibel & Taymor 2008).**

In-vitro fertilization (IVF) literally means " the fertilization of eggs with sperm in the laboratory." An IVF cycle consists of several discrete phases, as Ovarian stimulation phase, oocyte retrieval phase, embryo culture phase, embryo transfer phase and post transfer and pregnancy phase. In-vitro fertilization IVF was first successfully performed in Oldham, England, in 1978, resulting in the birth of Louise Brown. Since then, more than 1 million children have been born using IVF. The introduction of this technique completely changed and greatly improved to treat even the most difficult cases of infertility, many of which were previously untreatable. **(IVF Nile Badrawi, 2008).**

Since its introduction 20 years ago, in-vitro fertilization (IVF) has become a commonly performed infertility treatment. The IVF clinics are found in almost every country worldwide. Obviously the chances for success will vary from couple to couple. Although the very best that IVF and Intra-cytoplasm sperm injection (ICSI) can do for a couple under the age of 35 for a pregnancy rate of approximately 60%. That means that even for the best possible prognosis couples, there is still a 40% chance that the technology will not result in a pregnancy from first trial. For couples who are over the age of 35, or who have other relevant issues which may impair the chances of success (*Seymour, et al., 2007*).

Within IVF treatment cycle, couples view the procedure as series of stages, which must be successfully completed before moving onto the next phase of treatment: monitoring, oocyte retrieval, fertilization, embryo transfer, waiting period, and pregnancy test. The level of stress, anxiety, and anticipation raises with each stage. A lot of methods for transferring knowledge and teaching skills along IVF cycle can be used by couples to provide consistency in the IVF cycle orientation and reduce couples' stressors. Books, leaflets, mass media instructions, individuals, couples and group counseling are very

important to prepare infertile couples for a very hopeful's infertility treatment (*Olds & Davidson, 2004*).

Counseling help couples to explore, understand and resolve issues arising from infertility and infertility treatment and to clarify ways of dealing with the problem more effectively. The counseling process should consider the needs of the partner and the decisions that have to be made. Counseling may have different functions and/or goals depending on the life situation of the couples and the treatment desired. Counseling is quite rightly an important requirement of the legislation controlling all assisted conception treatments. It encourages couples to discuss their feelings and the implications of the steps they are taking in their treatment cycle, personal problems and relationships. Three main types of counseling: implications, support and therapeutic are very important in preparing infertile couple for especially first IVF cycle (*Milne, 2008*).

Nurses working with infertile couples undergoing assisted reproductive technology (ART) should be empowered with knowledge, skills and attitude to help infertile couples to achieve their hopes and wishes to become parents. The nurse should encourage couples to participate in their treatment by

knowledge, skills, regular follow up and enhancing their coping mechanism to reduce level of stress, as appropriate nursing intervention promotes their safety and well being (*American College of Obstetricians & Gynecologists, 2004*).

Justification of the problem:

The first In-vitro fertilization treatment cycle has been found to be the most stressful for couples, with high levels of confusion, bewilderment, and anxiety. This may be due to inexperience with the process or possibly inadequate preparation of the couple by staff in terms of information and discussion of care. The IVF process, from preliminary testing to the completion of a cycle, can last up to two months and requires a significant commitment of time and energy from everyone involved. To make this process easier, medical team especially the nurses have to guide and support couples through each step of their treatment plan. Counseling sessions' help infertile couples and prepare them physically and emotionally for the challenges of the treatment ahead and to minimize the effects associated with stress and anxiety. It gives couples opportunity to map out their own treatment program implications, stressors and their management plan to improve their procedure outcome.

AIM OF THE STUDY

The aim of this study was to evaluate the effect of counseling versus self instructional brochure on preparing infertile couple to cope with the IVF procedures.

Through:

- Preparing couples by using a designed self instructional brochure.(Group 1)
- Preparing other couples by counseling sessions pre, during and after the procedure (Group 2)
- Comparing between the effectiveness of two intervention methods on couples' knowledge, practices, stressors procedure complications and outcome of their IVF treatment cycle.

Research hypothesis:

Counseling is more effective than self instruction brochure on preparing infertile couple to cope with the IVF procedures.