

and depression during the waiting period for fertility treatments. Therefore, these interventions are suggested in the care programs of infertile women and part of the training program of health care providers in infertility treatment centers so that infertile women can be helped to cope with the medical waiting period of assisted reproductive treatments.

**Key words:** Infertility, Anxiety, Stress, Waiting period.

#### P-65

### The relationship between sleep disturbance and in vitro fertilization outcomes in infertile women: A systematic review and meta-analysis

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**Background:** Infertility is characterized by the inability to conceive after 1 yr of regular unprotected sex. In vitro, fertilization is the main type of assisted reproductive treatment, and its use is steadily increasing due to safe perinatal outcomes. Stress and anxiety are inextricably linked to sleep disorders, and these relationships affect infertility and infertility treatment.

**Objective:** In the present study, we intend to examine the relationship between sleep disorders and the results of in vitro fertilization in infertile people.

**Materials and Methods:** Disregarding language and time limits, the authors searched PubMed, Embase, Cochrane Library, ProQuest, and ISI Web of Science databases for articles until April 2023. The Newcastle-Ottawa scale was employed to assess the methodological quality of the studies included in this review. The researchers evaluated the heterogeneity of the data using the I-square test (I<sup>2</sup>). We used the random effect model and STATA software 11 to present the OR with 95% CI. Finally, they applied Begg's test and funnel plot to examine publication bias and sensitivity analysis to determine the impact of each study on the final result.

**Results:** In the initial search, 425 studies were found; however, after the exclusion of the papers, 8 articles were included, and finally, 5 articles were included in the meta-analysis. 2 articles are cross-sectional, and 3 are cohort studies. The findings demonstrate that sleep disorders are more common in people undergoing IVF

treatment than in the general population. In addition, sleep disorders are associated with getting pregnant, oocyte retrieval, ovulation cycle, live birth, and fetal weight. After combining the reported ORs in the cross-sectional studies with CI 95% based on the I-square test: (OR = 0.42, CI 95% = [0.23, 0.60], I<sup>2</sup> = 0.0%) and heterogeneity:  $p = 0.901$  based on the fixed effect model, the relationship between sleep and pregnancy has been confirmed. And after combining the reported ORs in the cohort studies with CI 95% based on the I-square test: (OR = 1.02, CI 95% = [0.86, 1.18], I<sup>2</sup> = 77.9%) and heterogeneity:  $p = 0.011$  based on the random effect model, the relationship between sleep and pregnancy has not been confirmed.

**Conclusion:** In conclusion, sleep can affect the results of in vitro fertilization as an adjustable parameter. Therefore, health policymakers must design and implement effective and needed interventions in line with population youth and childbearing policies to correct the factor.

**Key words:** Sleep disorders, Infertility, Assisted reproduction, In vitro fertilization.

#### P-66

### Challenges of treatment with donated sperm in infertile men: A narrative review

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Infertility is associated with psychological, emotional, economic, and social stresses affecting a person's life. However, treatment with donated sperm in infertile couples has some challenges. This study aimed to review the challenges of sperm donation treatment in infertile men. Articles related to the study by searching the Key words such as men, infertility, sperm donation, and alternative fertility treatments were extracted from articles related to qualitative and quantitative studies indexed in databases such as ProQuest, Science Direct, Springer, Google Scholar, Scopus, Iran doc, SID, Iran Medex and Noor Mags in English and Persian language. In all, 47 articles were extracted, and after reviewing the articles and their quality assessment, 11 articles published between 2018 and 2023 were analyzed by the thematic analysis method. The present study's findings led to the classification of challenges of sperm donation treatment in infertile men in the following 5 main areas and nineteen sub-areas. 1) Challenges in accepting treatment, with 5 sub-areas: being judged by society and family, belief in donation methods depending on Sharia permission, fear caused by religious issues and being forbidden, mental burden about the imagination of life without children, and wife's dissatisfaction about accepting the donated sperm. 2) Intellectual and emotional challenges affecting the common life, with 4

sub-areas: decrease in self-confidence and feeling of worthlessness, emptiness in life, increase in anxiety and stress, isolation, and being motiveless in marriage. 3) Challenges related to sexual issues affecting the marriage with 4 sub-areas: decreased sexual desire, erectile dysfunction, premature ejaculation, and orgasm disorder. 4) Economic challenges in treating infertility, with 3 sub-areas: couple's financial problems, lack of health insurance support, and lack of aid and employment support. 5) Concerns about the treatment process, with 3 sub-areas: preterm delivery, abnormal baby, and abortion. Infertile men experience many worries and difficulties in the treatment process with donated sperm. They need to receive special attention and support, so it is suggested that health care service providers and population policymakers reduce the psychological burden of these people and, to solve the population crisis in the country, prioritize in their services the planning for specific care such as psychological counseling, couple counseling, moral counseling, legal counseling, and financial support.

**Key words:** Men, Infertility, Sperm donation, Alternative treatment.

#### P-67

### The psychiatric aspects of infertility treatments applied on couples: A systematic review

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**Background:** Infertility is not only a social disease but also a condition that negatively affects couples, especially women, biologically, physically, and psychosocially. At the same time, infertility treatments are psychologically challenging, emotionally stressful, and economically expensive for couples. It is a crisis that can negatively affect spouse relationships.

**Objective:** This study investigated the psychiatric aspects of infertility treatments applied to couples.

**Materials and Methods:** This study reviewed the findings of the studies conducted at home and abroad and from the articles published from 2001 to 2022 in Iranian journals such as SID, Magician and international databases of Science Direct, PubMed, and Google Scholar through searching keywords such as "the psychiatric aspects of infertility treatments applied on couples."

**Results:** According to the results obtained, it is reported that the most important reason underlying the high level of stress and anxiety in infertile women is the loss of motherhood due to infertility, loss of fecundability, loss of self-esteem, and loss of genetic survival. It has been determined that infertile women experience anxiety, fatigue, helplessness, depression, anxiety, practical obsessive tendencies, and hopelessness more intensely. Social isolation in infertile women is more common.

Women with infertility problems stated that they felt excluded and thought society would accept them if they had a child. Women said they did not find themselves attractive because sexuality was perceived as a duty. It has been determined that sexual function problems and related depression are more common in infertile men. In this process, infertile women may experience loss of control, guilt, deterioration in femininity, and self-perception due to diagnosis and treatment procedures, long and painful treatment, and unsuccessful treatment. They reported that after the failure of ART, sexual desire and interest levels decreased (sexual problems such as frigidity, impotence, and orgasm). It is stated that mothers who become pregnant with ART have higher concerns about the development of health problems in their babies during the intrauterine period.

**Conclusion:** In the field of infertility, the adverse effects of ART can be reduced with counseling, education, and social support by midwives, nurses, and psychologists.

**Key words:** Assisted reproductive techniques, Infertility, Psychiatric aspects.

#### P-68

### Investigating the effectiveness of motivational interviewing on reducing anxiety and fear of delivery in infertile women undergoing treatment

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**Background:** Infertility is considered a critical and stressful period for many couples, and it is a serious medical problem affecting the quality of life. Infertility considerably affects psychological factors and causes anxiety and depression, so the created disorders can also increase the duration of infertility. Therefore, a cure can be obtained after psychological assessment at the suitable individual level, couple/family level, support group, or therapy group.

**Objective:** This study investigated the effectiveness of motivational interviewing in reducing anxiety and fear of delivery in infertile women undergoing treatment in Ardabil.

**Materials and Methods:** In this semi-experienced study with a pre-test design, 30 infertile women referred to the medical centers of Ardabil by available sampling were enrolled in 2 experiments (n = 15) and control groups (n = 15). The experimental group received a motivational interview for 3 sessions of 90 min once a week, but the control group did not benefit from the interview. To collect data in the pre-test and post-test, Beck's anxiety questionnaire, which had 21-item with an internal consistency coefficient (alpha coefficient) of 0.92 and its reliability with the retest method at a 1-wk