

A Comparative Study to Assess the Psychosocial Problems Among Infertile Males and Infertile Females Attending in Selected Infertility Clinics at Bilaspur, Chhattisgarh, in View to Develop Information Booklet

Padmani Sinha^{*}

Nursing Officer, CIMS Hospital, Bilaspur, Chhattisgarh, India

Abstract: Infertility remains an important problem worldwide. Infertility affects men and women equally. In India, one in five couples is childless. Twenty per cent of the women who get married, get pregnant in the first month and another 40 by the end of six months. Of the remaining, 25 per cent get pregnant in two years' time while 15 per cent remain childless and need help of those needing help, 25-30 per cent will require assisted reproductive technology to conceive while the rest can be treated using simple interventions. Objective of the Study: 1) To find out the psychosocial problem among infertile male and infertile female. 2) To compare psychosocial problems among infertile male and infertile female. 3) Infertile male and infertile female with selected socio-demographic variables. Hypothesis: To find out the association between psychosocial problem among the study. H1 -There will be significant difference in psychosocial problem between infertile male and infertile female. H2 - There will be significant association in psychosocial problem between infertile male and infertile female with selected socio demographic variables. Outcome: Descriptive research design will used conceptual framework is based on E. Peplau's interpersonal theory. The tool were socio-demographic variables and selfstructure questionnaire psychosocial problem inventory regarding infertility. An extensive review literature was done. Content validity of the tool was ensured by verifying it with experts. spearmen's rank correlation coefficient formula was used for testing reliability of tool. The checklist was found reliable. A piolet study was conducted on 5 infertile males & 5 infertile females attending in infertility clinic. The main study was conducted in Makhija test tube baby center., Bilaspur and purposive sampling was done. Data collection was analyzed by a study reveals that there was find out between psychosocial problem in infertile male and infertile female attending in selected in fertility clinic reveals that stress in male, total mean was 13.93, (SD =2.318), mean percent was 46.43% and stress in female score mean was 13.57, (SD = 2.54), mean percent was 2.45 and anxiety in male mean was - 14.06, (SD = 2.61), mean percent was 46.86 %. Anxiety in female mean 14.66, (SD = 2.45) mean percent was 48.86%. Depression in male sum score was 435, mean was 14.5, (SD = 2.064), mean percent was 46.86 %, depression score in female sum score was 436, mean was 14.53, (SD = 2.446), mean percent was 48.43%. The man Whitney u test compare the psycho social problem in infertile male and infertile male the result was 0.4802 is more than

the tabulated value at 0.05 level of significance hence it was effective.

Keywords: Psychosocial Problem, Infertility.



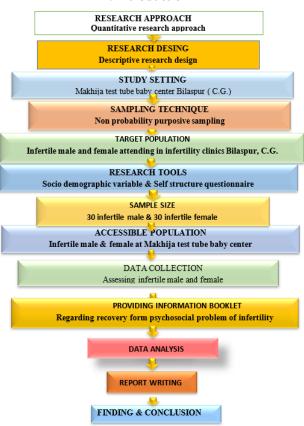


Fig. 1. Schematic presentation of research design

The basic function of the living organism is its capacity to reproduce its own kind. Fertility has been one of man's desired

^{*}Corresponding author: pammysinha92@gmail.com

attributes since the beginning of recorded history and remains a driving need for young couples today. In any society as well as any culture, children is considered as the natural result of love and marriage. But unfortunately, many couples are not experiencing the joy of parenthood. They focus their attention on what they have failed to accomplish to conceive & soon start neglecting other goals and needs in their lives. Infertility is defined as the inability to achieve pregnancy after one year of unprotected intercourse. An estimated 15% of couples meet this criterion and are considered infertile. Conditions of the male alone are now estimated to account for nearly 30% of infertile couples, and conditions of both the female and the male account for another 20%.

2. Result and Discussion

Organization of Data: The finding of the study were discussion under four section sated below.

The basic function of the living organism is its capacity to reproduce its own kind. Fertility has been one of man's desired attributes since the beginning of recorded history and remains a driving need for young couples today. In any society as well as any culture, children is considered as the natural result of love and marriage. But unfortunately, many couples are not

Section-I: Socio demographic data would be analyzed using descriptive statistics that is frequency and percentage.

Section-II: Find out the psychosocial problem among infertile male and infertile female with mean, mean percentage, mean difference, standard deviation.

Section-III: Evaluation of data to compare psychosocial problems among infertile male and infertile female. Evaluation of data related to level of psychosocial problem using "MANN WHITNY U TEST".

Section-IV: Association between selected socio demographic variables with psychosocial problem among infertile male and female, with Using "Chi Square Test". The majority of male 36% (18) belong to the age group of 41-50 years, 32% (16) belong to age group of 20-30 years, 22% (11) belongs to age group of 31-40 years & 10% (5) belongs to 51-60 years., Majority of subjects 78% (39) are female and 22% (11), Majority of teachers are married 64 % (32), and 36% (18) are unmarried, Majority of teachers are post graduate 46% (23), and B.Ed. is 30% (15) and graduate are 24% (12), The majority of subjects 90% (45) are belong to Hindu, 6% (3) belong to Muslim & belong to Christian 4% (2), The majority of subjects 60 % (30) are belong to 25000-35000, 28% (14) are belongs to more than 45000, 12% (6) belongs to 36000-45000, majority of subjects 70% (35) are belong to urban & 30% (15) are belong to rural, majority of subjects are belong to higher secondary school 52% (26), 28% (14) belong to high school & 20% (10) belong to middle school, majority of subjects 48% (24) are belong to less than 5 years, 24% (12) belongs to more than 15year, 14% (7) belongs to 6-10 year & 14% (7) belongs to 11-15 year.

A. Section-II: Find out the psychosocial problem among infertile male and infertile female with mean, mean percentage, mean difference, standard deviation

Analysis of psychosocial problem score in infertility clinic mean, mean percent, standard deviation, & mean difference among infertile males and infertile females, males (n = 30) females (n = 30) of selected infertility clinic. The stress score was 418 in male and 407 in female, mean was 13.93 in male and 13.57 in female, standard deviation was 2.318 in male and 2.473 in female, total mean percent 13 46.43 % in male and 45.23% in female, mean difference was 1.2.

The male anxiety score was 422 in male and 440 in female, mean was 14.06 in male and 14.66 in female, standard deviation was 2.612 in male and 2.454 in female, total mean percent 46.86 % in male and 48.86 % female, mean difference was 02.

Depression score was 435 in male and 436 in female, total mean was 14.5in male and 14.53 in female, standard deviation was 2.064 in male and 2.446 in female, total mean percent 48.33 % in male and 48.43 % female, mean difference was 0.1.

So H1 hypothesis is accepted with regards to knowledge (There is significant difference between infertile male and female regarding psychosocial problem in selected infertility clinic at Bilaspur (C. G.).

B. Section-III: To compare psychosocial problems among infertile male and infertile female "Mann Whitney u test"

There was a mean 42.71 is combined mean male & female, standard deviation 5.19 in male 5.04 in female, mean rank is 29.40 in male 31.60 female, sum of rank 888 in male 942 in male, & significant difference between infertile male & infertile female regarding psychosocial problem as calculated value in man Whitney u test is 0.4802 is greater than table value 0.250 is 0.05 level of significance.

C. Section-IV: Association between selected socio demographic variable regarding psychosocial problem in infertile male using chi squire test

There is significant association between infertile male regarding psychosocial problem with their selected sociodemographic variables using a non-parametric x². There was no significant association found between psychosocial problem of infertile male age ($x^2 = 9.34$) (P>12.59), gender ($x^2 = 3.72$) (P >5.99), education ($x^2 = 2.46$), (P >9.49), occupation ($x^2 = 4.98$), (P > 9.49), religion ($x^2 = 5.49$), (P > 12.59) type of family ($x^2 = 4.66$) (P >5.99), history of infertility ($x^2=3.95$) (P >5.99), who motivated to attend the clinic ($x^2=9.15$) (P>15.51), systemic disorder ($x^2=13.66$) (P>15.51), exercise habit ($x^2 = 5.76$) (P >12.59) is lesser than table value at 0.05 level of significance.

There was significant association between male locality ($x^2 = 6.13$), (P > 5.99), income ($x^2 = 40.09$), (P >12.59) marriage age, ($x^228.47$) (12.59) marriage duration, ($x^2 = 57.70$) (P > 12.59), nature of marriage ($x^2 = 6.41$) (P >5.99) is greater than the table value at 0.05 level of significance.

The above stated results were supported by Dr. Tooba., Mehrannia. in the study on "The effect of cigarette smoking on semen quality of infertile men". Objective of the study was to evaluate the effects of cigarette smoking on semen quality of infertile men. Results of the study was the quality of spermatozoa obtained from smokers were much lower than non-smokers (P<0.01). The sperm concentration, viability and forward progression were negatively correlated with cigarette smoking (P<0.01).

D. Section-IV: Association between selected socio demographic variable regarding psychosocial problem in infertile female using chi squire test

there is significant association between infertile female regarding psychosocial problem with their selected sociodemographic variables gender ($x^2 = 3.59$) (P >5.99), education ($x^2 = 5.97$), (P >9.49), occupation ($x^2 = 7.66$), (P > 9.49), religion ($x^2 = 3.78$), (P > 12.59) history of infertility ($x^{2}=3.99$) (P>5.99), who motivated to attend the clinic ($x^{2}=12.74$) (P>15.51), systemic disorder ($x^{2}=10.53$) (P>15.51), exercise habit ($x^2 = 5.70$) (P >12.59) is lesser than table value at 0.05 level of significance.

There was significant association between psychosocial problem & female age ($x^2 = 12.69$) (P>12.59), type of family (9.53) (P>5.99) marriage age, ($x^2 = 12.74$) (P>12.59) marriage duration, ($x^2 = 12.64$) (P>12.59) is greater than the table value at 0.05 level of significance.

Hence H2 is accepted (There is significant association between infertile male and female regarding psychosocial problem with their selected demographic variables).

3. Conclusion

Over all result in this study revealed that infertile females who are coming in infertility center for treatment, are more affected from psychosocial problems as compare to infertile males. Infertile females are having high level of anxiety, which is more than infertile males. At the same time infertile males are more stressed as compare to infertile females and depression is more prominent in infertile females then infertile males.

References

- D.C Dutta, (2000), "Text book of Gynecology," 2nd edition, New Central book agency, Calcutta, pp. 209-235.
- [2] Lila A. Wallis, (1999), "Text book of women's health," Lippincott, Newyork, 1998, pp. 680.
- [3] M. Resalakshy, (2000), "Text book of sociology," Vora medical publishers, Mumbai, pp. 194-200.
- [4] Linford Rees, (1993), "A short text book of Psychiatry," 2nd edition, pg. 67.
- [5] Polit D.F. & Hungler B.P., (2005), "Nursing research principles and methods" 6th edition, 6, Lippincott Philadelphia.
- [6] V. Ruth Bennett, "Myles textbook for midwives,"13th Churchill Livingstone, London, pp. 156-160.
- [7] Andrews F.M & Abbey A, "Is fertility problem stress different-the dynamics of stress in fertile and infertile couples", Journal of fertility and sterility, 57, Jan. 1999, pp. 1247-1253.
- [8] A. Piero & S. Boggio, (2002), "Anxiety, Depression & Anger suppression in infertile couple, a controlled study" Journal of human reproduction, vol. 17, no. 11, Nov. 2002, pp. 2986-2994.

- [9] Aliyeh G & Laya F, (2004), "Impact of infertility in quality of life," Journal of human reproduction, June 2004.
- [10] AM Pottinger; & C. McKenzie, "Gender difference in coping with infertility among couples undergoing counseling for IVF treatment," West Indian medical journal, vol. 55, no. 4, Sept. 2006.
- [11] Ashkani H & Akbari T, "Epidemiology of depression among infertile & fertile couple in Iran," Indian journal of medical sciences, vol. 60, no. 10, 2006, pp. 399- 406.
- [12] Bringhenti F & Martinell. F, "Psychological adjustment of infertile women entering IVF treatment, differentiating aspects, 7 influencing factors," Acta obstetrical and gynecological scandal, 76, May 1999, pp. 431-437.
- [13] Bala Chauhan, (2005), "Are modern lifestyle causing infertility," Deccan, Herald, Friday, Aug., WHO, studies on Infertility in India 2004, Nov. 5, <u>http://searo.who./Reporductive_Health_Profile_infertility</u>
- [14] Bellone. M & Cottencin. O, (2005), "Study on psychiatric disorders and defensive process assessed by the "defense style questionnaire" in sterile male's sample consulting in andrology", encephala, Jul.-Aug. 2005, 31(4), pp. 414-425.
- [15] J. Odens, (1999), "Psychosocial experiences in women facing infertility problems- a comparative survey," Journal of human reproduction, vol. 14, no. 1, Jan. 1999, pp. 255-261.
- [16] Connolly K. J, (1999), "Impact of infertility on psychological functioning", journal of psychosomatic research, 36(5), July 1999, pp. 459-468.
- [17] Chai SE& Lim ST, (2000), "Factors associated with male infertility-a case control study "international journal of obstetrics and gynecology, Jan. 2000, 107, pp. 55-61.
- [18] Douglas A. Rund, (1990), "Emergency psychiatry," Jaypee brothers, New Delhi, 1st edition, 1990, pp. 128-140.
- [19] K. Lalitha, (1995), "Mental health and psychiatric nursing," Gajanana book publishers, Bangalore, 1995, pp. 85-100.
- [20] Dhillon. R & Cumming C.E, (2000), "Psychological wellbeing and coping patterns in infertile men," Journal of infertility sterility,7 4, Oct-2000, pp. 702-706.
- [21] D.K. James, (2001), "High risk pregnancy, management options", 2nd, W.B. Saunders, London, pg. 931.
- [22] Dhaliwal L. K. & Gupta K. R, (2004), "Psychological aspects of infertility due to various causes-prospective study," International journal of fertile women's medicine, Jan-Feb 2004, 49(1), pp. 44-48.
- [23] Tooba Mehrannia, (2007), "The effect of cigarette smoking on semen quality on infertile men", Pakistan journal of medical sciences, vol. 23, Oct-Nov. 2007, no. 5, pp. 717-719.
- [24] Fassino S & Garzaro L, "Temperament and character in couple with fertility disorders, a double–blind, controlled study", Journal of fertility sterility, 77, Jan. 2002, pp. 1233-1243.
- [25] Gupta Sadhana (2007), "Infertility problems in couples with temporarily migrant male partner in India," The journal of obstetrics and gynecology of India, vol. 57, no. 1, Jan-Feb. 2007, pp. 64-68.
- [26] Hirsch A.M & Hirsch S.M, (2003), "The long-term psychosocial effect of infertility", Journal of obstetrics and gynaecology, Jul-Aug 2003.
- [27] Jacky Boivin & Laura Bunting, (2007), "International estimates of infertility prevalence and treatment seeking," journal of human reproduction, March 2007, pp. 46.
- [28] J.E. Takefman & W. Brender, "Sexual and emotional adjustment of couples undergoing infertility investigation & the effectiveness of preparatory information", Journal of psychosomatic obstetrics and gynecology, vol. 11, no. 4, Dec. 2000, pp. 275-290.
- [29] Julia B. George, "Nursing theories, the base for professional nursing practice", 2nd edition, prentice – hall international, Inc, London, pp. 50.
- [30] Kelly Weeder S & Cox C L, (2004), "The impact of lifestyle risk factors on female fertility," Journal of women's health, 44(4), pp. 1-23.
- [31] Kuldeep Sing, (2004), "Ultrasound in infertility" Jaypee Brothers, Delhi, pp. 22-28.
- [32] Mary C. Townsend, "Psychiatric mental health nursing, concepts of care" F.A. Davis company, Philadelphia, 1993, pp. 341-376.
- [33] Mitchell P. Dombrowski & S. Gene Mcneeley, (2000), "Practical strategies in Obstetrics & Gynecology" W.B. Saunders company, Philadelphia, pp. 609.