

Prevalence of factor causing infertility and psychological wellbeing among infertile women attending infertility clinics of selected hospital of Bagalakot

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Abstract: Background infertility is a medical condition that can cause psychological, physical, mental, spiritual, and medical detriments to the patient. The unique quality of this medical condition involves affecting both the patient and the patient's partner as a couple. Objective: find the prevalence, of factor causing infertility and psychological well being among infertile women. Methods: A Descriptive cross sectional design with a sample of 100 infertile women, selected infertility clinics of Bagalkot. and the data were collected by using Hospital records. Tolls used for data collection were; socio demographic questionnaire, RYFF scale was used to assess the data regarding prevalence of factor causing infertility and psychological well being. The data was entered in MS excel sheet and transferred to SPSS 18 for analysis. Results: Finding revels thata significant association found between age ,(p=1.0000) Education(0.0181). of psychological well being and with their demographic variables and there is no association found between occupation, Family monthly income, type of family, type of diet, age at menarche, age at marriage, of psychological well being with their selected socio demographic variables. Conclusion: Interventions aimed at treating the prevalence of factors causing infertile women would result in enhancement their psychological well being.

Keywords: prevalence of factors causing infertility and psychological well being.

Introduction

infertility is a medical condition that can cause psychological, physical, mental, spiritual, and medical detriments to the patient¹. Infertility as childlessness in a population of women of reproductive age," whereas the epidemiological definition refers to "trying for" or "time to" a pregnancy, generally in a population of women exposed to a probability of conception². A female is most fertile within 24 hours of ovulation. Male fertility peaks usually in young adulthood and declines after age 40.³ Historically, the main causes of infertility were infections such as gonorrhoea and sexually transmitted diseases, but today, they have been replaced by stress, male factor⁴ A woman's fertility peaks in the early and mid 20, after which, with this decline being accelerated after age. However, the exact estimates of the chances of a woman to conceive after a certain age are not clear⁵. Psychological well-being at a most basic level is quite similar to other terms that refer to positive mental states, such as happiness or satisfaction⁶. In India it is estimated that around 13-19 million couples are expected to be infertile at a given point of time.⁷ Globally between 50 to 80 million couples at some extent reproductive period of life suffers from infertility problems⁸.

Indian Society of Assisted Reproduction. However, there is a little open discussion about the situations mounting concerns and widespread ignorance of it. One in every fifteen Indian Couples struggles with infertility⁹. Women are mainly blamed for infertility which is associated with lower quality of life¹⁰ marital conflicts and more significant psychosocial consequences for Generally, Indian couples are expected to conceive within the first year of marriage¹¹.

Methods

It was a descriptive cross sectional study with an aim to assess the prevalence of factor causing infertility and psychological well being among infertile women attending infertility clinics of selected hospital Bagalkot. A sample of 100 infertile women was selected by purposive sampling technique. The tool was developed after an extensive review of literature, internet search experts opinion. It helped the investigator to select most suitable RYFF scale. and also used Hospita Records, demographic quetionnare.

Study participants: The study participants were The sample for the present study was infertile women with unprotected sex for one year who are attending infertility clinics of selected hospitals of Bagalkot during the study period. From them, only those who qualified the inclusion criteria will be included for the analysis.

Sample size calculation: The final sample size determined with the help of power analysis. The sample size was calculated considering the following criteria, $Z = 1.96$ (95% confidence level), margin of error (e) =5% (0.05), Population proportion (P) = 0.5. The population of infertile women Bagalkot in Bagalkot district was considered around 4.8%. The calculated sample size was 100. The researcher enrolled 100 subjects Data was obtained from 100 subject.

Setting of the study: the study was conducted in infertility clinics of selected hospitals of Bagalkot . Researcher enrolled 100 infertile women from selected infertility clinics.**Data collection Instrument:** The data were collected using Hospitals records Tools used for data collection were; socio-demographic questionnaire, of infertile women.The data regarding prevalence and factors causing infertility Ryff's scale, 18-item scale that assesses the wellbeing of individuals. All items are answered on a 1 to 7 response scale. Overall scores range between 18 (minimum) and 126 (maximum), hence higher the score, more wellbeing. The scale was validated at various setting across the globe including in India. **Validity, reliability and translation of data collection instruments:** Ryff's scale, 18-item scale that assesses the wellbeing of individuals . The scale was validated at various setting across the globe including in India... The instruments were translated to Kannada language and then retranslated to English language and the similarity between original and translated tool were ascertained by Linguistic experts. The reliability was established by administering the tool to 10 infertile women. Cronbach's alpha was calculated using SPSS package. The alpha coefficient value was 0.05 suggesting the tool was reliable for data collection.

Ethical clearance: Ethical clearance certificate was obtained from Institutional ethical clearance committee, B.V.V.S Sajjalashree Institute of Nursing sciences, Bagalkot (ref No. BVVS/SIONS-IEC/2022-23/188. Dt: 09/05/2022) Written consent of participation was obtained from participants and their parents before data collection.

Statistical analysis: the data was analysed using SPSS version 25. The obtained data was entered in MS excel sheet. The data was edited for accuracy and completeness. The categorical responses were coded with numerical codes. The data was presented with frequency and percentage distribution tables and diagrams. The description of substance abuse was presented with Arithmetic mean, range and standard deviation.chi square test were used to associate the spciodemographic variables.

Data collection Procedure: The data was collected in June 2022. Prior permissions were taken from the gynecologist of selected infertility clinics. The gynecologist given permission and also supported a lot to collect the data from hospital records and from infertile women so that the infertile women should feel free to express their experience. All the participants were explained about the purpose of study and that the data or information provided from them will be kept confidential and their identity will not be revealed. They were informed to avoid discussion with other fellow mates. The instruments were given according to their preferred language (English or Kannada). Instructions were given regarding content of data collection instruments. The researcher attained and clarified the doubts of participants during data collection. The filled tools were collected from the participants. On an average infertile women took 20 to 30 minutes to fill the tools and the whole process was completed in 1 hour. Researcher thanked all the participants and concerned teachers and Gynecologists.

Results

The mean of psychological well being of the sample was 7.8 ± 4.67 . Among 100 infertile women the prevalence of factors causing infertility was (22%) were diagnosed with PCOD and (12%) tubal block , 9% were having PID and Thyroid problem, the 7% of infertile women were suffers ovarian cyst and endometriosis and 6% of infertile women having failure of ovulation among 5% of women were with irregular MC about 3%of women with threatened abortion and PCOS and about 2% of women with cervical mucoid problem, implantation failure and ovarian cancer the 1%of women were concernedof to much prolactin, thrombophilia,endometrial cyst.

Table I: Description of prevalence of factors causing infertility among infertile Women

n=100

SI NO	GYNACOLOGICAL DIAGNOSED CAUSE FOR INFERTILITY	FREQUECYN	PERCENTAGE (%)
1	PCOD	22	22%
2	TUBAL BLOCK	12	12%
3	PID	9	9%
4	THYROID PROBLEM	9	9%
5	OVERIAN CYST	7	7%
6	ENDOMETRIOSIS	7	7%
7	FAILURE OF OVULATION	6	6%
8	IRREGULAR MENSTRUAL CYCLE	5	5%
9	POST ECTOIC PREGNANCY	4	4%
10	UTERINE FIBROID	4	4%
11	THRETENED ABORTION	3	3%
12	PCOS	3	3%
13	IMPLANTATION FAILURE	2	2%
14	CERVICAL MUCOID PROBLEM	2	2%
15	OVERIAN CA	2	2%
16	TO MUCH PROLACTINE	1	1%
17	THROMBOPHILIA	1	1%

18	ENDOMETRIAL CYST	1	1%
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Abbreviations: **F**: Frequency, **%**: Percentage

majority (54%) of infertile women were in the age of (26-33)years. riligion depicts that the majority (85%)of infertile women were in the religion of Hindu, 2% of infertile women were in the religion of Christian. The 53% of infertile women have completed SSLC, and 7%of infertile women are illiterate. the majority 45% of infertile women were house wife and 12% of infertile women were agriculture In this the majority 56% of infertile women ,were having with income (5000-10000)Rs and 4% of infertile women were having the (1600-above) the of 69% of infertile women, were from nuclear family 31% of infertile women, were from joint family and the 48% of infertile women ,were having mixed and the remaining 9% having the non veg, the majority 63% of infertile women were in the age at menarche (9-11)year, and 5% of infertile women were in the age at menarche (<9year).the(77%) of infertile women in the age group of (18-23) years of marriage and 0% of infertile women in the age group of 30

Table2 : Description of socio demographic characterstics of infertile women .

n=100

SI No	Variables	Frequency	Percentage%
1)	Age 1) 18 – 25 2) 26 – 33 3) 34 – 41	 32 54 14	 32% 54% 14%
2)	Religion 1)Hindu 2)Muslium 3)Christian 4)Others	 85 11 2 2	 85% 11% 2% 2%
3)	Education 1)Illiterate 2)SSLC 3)PUC 4)Degree&Above	 7 53 28 12	 7% 53% 28% 12%
4)	Occupation 1)House wife 2)Employee	 45 30	 45% 30%

	3)Coolie	13	13%
	4)Agriculture	12	12%
5)	Income		
	1)5000-10000	56	56%
	2)1100-16000	40	40%
	3)16000-above	4	4%
6)	Family		
	1)Nuclear 2)Joint	69	69%
		31	31%
7)	Diet		
	1)Veg 2)Nonveg	43	43%
	3)Mixed	9	9%
		48	48%
8)	Age at menarche		
	1)18-23	5	5%
	2)24-29	63	63%
	3)30- above	32	32%
9)	Age at marriage		
	1)18-23	77	77%
	2)24-29	23	23%
	3)30-above	0	0%

As per the findings presented in, majority (76%) of infertile women had moderately wellbeing and remaining 24% of them had good in psychological well being.

Table 3: Description of psychological well being of infertile women.

n=100

Levels	Range of Score	Frequency	%
Poor	18 to 42	0%	0%
Moderate	43 to 84	76%	76%
Good	above 84	24%	24%

Above table shows that, Mean and SD of psychological wellbeing of infertile women score is 7.8 ± 4.64

Table 4: Mean and SD of Psychological wellbeing of infertile women.

Variable	Mean	SD
psychological well being of infertile women	78	7.8

The

association of psychological well being score with selected demographic variability. The obtained χ^2 value of age 5.578 at 1(df), religion was fishers exact p value is 1.0000, education was 5.587 (df)1, and occupation was 0.096 with (df)1, Family monthly income is 0.177 with (df)1 and type of family 0.200 with (df)1, and Type of diet 0.182 with (df)1, Age at menarche 1.809 with (df)1 and age at marriage fishers exact p value is 0.2646.

Table 4: Association of demographic variables with with psychological well being

SI. No	DEMOGRAPHIC VARIABLES	CHI-SQUARE VALUE	P VALUE
1	Age	5.587	0.0181*
2	Religion		Fishers exact p value 1.0000*
3	Education	5.587	0.0181*
4	Occupation	0.096	0.7562
5	Family monthly income	0.177	0.6736
6	Type of family	0.200	0.6549
7	Type of diet	0.182	0.6692
8	Age at menarche	1.809	0.1787
9	Age at marriage		Fishers exact p value 0.2646

- Significant P = < 0.05

Discussion:

It was a descriptive cross sectional study aimed to determine the prevalence, of factor causing infertility and psychological well being among infertile women attending infertility clinics of selected hospital. infertile women were selected from selected infertility clinics. **Seyed, Alireza, vol-7 doi:18502, 2019** The cross sectional quasi experimental study is to conducted to improving the psychological well being of the participants of experimental and control group (p=0.007) and the concluded that teaching of self compassion is effect of their psychological well being¹². The socio demographic data and determinants were assessed by using a structured close ended

questionnaire prepared by researcher and the prevalence and factors causing infertility were assessed by hospital records and psychological well being assessed by using RYFF scale. The same instrument was used in many research studies with similar purpose,¹⁵⁻¹⁶. A sample of 100 infertile women was selected by purposive sampling technique, the prevalence of factors causing infertility was (22%) were diagnosed with PCOD Kousta E, white DM, cela M, Majority of 83% women were having PCO¹³. and (12%) tubal block Ketki A, Sandhya P, Anjali C, majority of 30 to 40% of women were having tubal block.¹⁴, 9% were having PID and Thyroid problem, Indu v, Renuka S untreated hypothyroidism will lead the infertility¹⁷, the 7% of infertile women were suffers ovarian cyst and endometriosis and 6% of infertile women having failure of ovulation among 5% of women were with irregular MC about 3% of women with threatened abortion and PCOS and about 2% of women with cervical mucoid problem, implantation failure and ovarian cancer the 1% of women were concerned of too much prolactin, thrombophilia, endometrial cyst. Majority (54%) of infertile women were in the age of (26-33) years. Ashwini k. Ajeet S the majority of infertile women (39.3%) belonged to 25–29 years of age group¹⁵. were belongs to religion depicts that the majority (85%) of infertile women were in the religion of Hindu, 2% of infertile women were in the religion of Christian. The 53% of infertile women have completed SSLC, and 7% of infertile women are illiterate. the majority 45% of infertile women were house wife and 12% of infertile women were agriculture In this the majority 56% of infertile women were having with income (5000-10000)Rs and 4% of infertile women were having the (1600-above) the of 69% of infertile women, were from nuclear family 31% of infertile women, were from joint family and the 48% of infertile women, were having mixed and the remaining 9% having the non veg, the majority 63% of infertile women were in the age at menarche (9-11) year, and 5% of infertile women were in the age at menarche (<9 year). Jianping C · Chunli Zhong majority 85% women experienced their menarche 13 years.¹⁸ the (85%) of infertile women were in the religion of Hindu, and 0% of infertile women in the age group of 30.

the (76%) of infertile women had moderately wellbeing and remaining 24% of them had good in psychological well being Syed A, Azade A, estimated mean scores for improving the psychological well-being of the participants. The association of psychological well being score with selected demographic variability. The obtained χ^2 value of age 5.578 at, religion was fishers exact p value is 1.0000, education was 5.587, and occupation was 0.096 with, Family monthly income is 0.177 with 1 and type of family 0.200 with, and Type of diet 0.182 with, Age at menarche 1.809 with 1 and age at marriage fishers exact p value is 0.2646. significant association was found between age ($p=0.0181$), religion, ($p=1.0000$) Education (0.0181) of psychological well being and with their demographic variables and there is no association found between occupation, Family monthly income, type of family, type of diet, age at menarche, age at marriage, of psychological well being with their selected socio demographic variable.

Conclusion and Recommendation

The results obtained from the study reflects prevalence of polycystic ovarian disease among 22% and tubal block 12% infertile women (85%) of infertile women were in the religion of Hindu, (85%) of infertile women were in the religion of Hindu, (76%) of infertile women had moderately wellbeing and remaining 24% of them had good in psychological well being. association of psychological well being score with selected Demographic variability. The obtained χ^2 value of age 5.578 religion was fishers exact p value is 1.0000, education was 5.587, and occupation was 0.096 with, Family monthly income is 0.177 with and type of family 0.200 with, an Type of diet 0.182 with, Age at menarche 1.809 with (df) 1 and age at marriage fishers exact p value is 0.2646 The study recommends that the factors causing infertility leads more problems to the infertile women in Bagalkot. The psychological well being was strongly linked with infertility with infertile women the observation of this study has grave practical importance from the Indian perspective. The result of the present study urges that in treating the infertile women in the field of infertility, more attention be paid to factors causing infertility variables in order to improve the efficiency and effectiveness of the interventions carried out.

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