A STUDY TO ASSESS THE EFFECTIVENESS OF HEALTH CARE PACKAGE INTERMS OF KNOWLEDGE ON MANAGEMENT OF INFERTILITY AMONG INFERTILE WOMENS OF SELECTED HOSPITALS OF INDORE M.P.

Ms. Parvati, Dr. Anu V Kumar

Abstract

Infertility is not merely a health problem but, it is also a matter of social injustice and inequality. Infertility also complicates with marital dynamics, leading to marital instability, occasionally divorce, polygamy and remarriage. As motherhood is considered a mandatory status, infertile women may be harassed and tormented. Infertility, being a medical condition also has a social dimension. It is a poorly controlled and also a chronic stressor with severe long-lasting negative social and psychological consequences. It is true that some people never want to have children. However, for most people who want children, infertility is devastating. Part of this is a sociological problem. Society encourages couples to have children and looks down upon those that don't, calling them selfish and childless. The suffering of infertility is a product of a pronatal society, which values women largely for their ability to bear children. Source of Data-The infertile women of selected hospitals of C.G. Research approach-Quantitative approach. Research design-Pre - experimental one group pre- test post- test design. Sampling technique- Non probability Purposive Sampling Technique The above table depicts the information regarding association between the age and the pre test knowledge score , and it has been revealed that the value found to be 16.35 at degree of freedom 6 .Thus , it can be concluded that the age is dependent factor of pre test knowledge score. While analyzing the data, regarding the association of education with the samples pre test knowledge score , it has been revealed that the value found to be 41.68 at 9 degree of freedom. Thus the educational level has a significant associating with the pre test knowledge score .

While analyzing the data, regarding the association of reason for infertility with the samples pre test knowledge score , it has been revealed that the value found to be 39.52 at 3 degree of freedom. Thus the reason for infertility level has a significant associating with the pre test knowledge score .Conclusion Thus the above chapter the data analysis regarding the effectiveness of health care package regarding improvement in knowledge , attitude and practice score regarding management of infertility among the infertile women.

KeyWords: Infertility, Indore, Antenatal

Introduction-

Parenthood is a dream of many couples. However they may not plan a pregnancy keeping advancing age and issues pertaining to infertility in mind. Both unplanned pregnancy and infertility occur commonly. Traditionally fertility awareness was considered to be knowledge on female anatomy and physiology and its application to family planning. However, age at first conception is increasing globally, the epidemic of infertility looms large. The global trend in delaying parenthood is being attributed to a number of factors, primarily, pursuit of higher education and career goals, desire for a stable job and delay in finding a suitable partner.

Reproduction is the gift of God to each and every living creations. God created this world for all his living creations to reproduce and fill and flourish it. Each human, on his birth is gifted a life. And each new day is added to his life not only to live but to bring out offspring"s of him and double the happiness of him. Reproduction is that process where a living organism with the union of another of its own kind produces a new young one. Fertility, according to the Longman Dictionary of Contemporary English, refers to the condition or state of being fertile, that is being able to produce many young, fruits or seeds. In the past, fertility was very important to the people. For instance, the people of the Indus Valley in India were believed to have worshipped the Mother Goddess, who was a symbol of fertility. Parenthood is a dream of many couples. However they may not plan a pregnancy keeping advancing age and issues pertaining to infertility in mind. Both unplanned pregnancy and infertility occur commonly. Traditionally -fertility awareness was considered to be knowledge on female anatomy and physiology and its application to family planning. However, age at first conception is increasing globally, the epidemic of infertility looms large. The global trend in delaying parenthood is being attributed to a number of factors, primarily, pursuit of higher education and career goals, desire for a stable job and delay in finding a suitable partner.

Some of the pain of infertility and childlessness is due to the fact that family life is still very much the norm, even if single/career options are there. In most industrialized as well as developing countries the prevalence of infertility is between 2% and 10% of all women. There is no substantial evidence the women emphasize that

they have experienced the problem, but there are no viable solutions at the time when they were young. So they remained childless, but have quite vague memories about trauma emotionally faced by them.2

It has been observed that couples have a basic knowledge of factors affecting fertility, but remain unaware of the impact that advancing age has on a women''s fertility. It is well known that female fertility declines after age of 30 and more rapidly once women turn 35 years. The advent of artificial reproductive treatment (ART) and its widespread availability has helped many couples realize their dream of parenthood.

Need of the study

Growth of science and technology has given rise to rapid advancement in the field of medical and nursing science as well as in the nursing care. The year 1978 was the hallmark for the field of assisted reproductive technology as the first In-Vitro fertilisation baby was born in England, has been the milestone for thousand couple, which until then were not able to realize the dream of completing their family. Since then, science has continued to challenge and exponentially reveal the mysteries of the human genome and reproduction.

Some estimates suggested that worldwide, between 3-7% of all couple or women have an unresolved problem of infertility. The incidence of infertility is 1/6th couples in United States. For IVF in UK roughly ½ fertility problems with the diagnosed cause are due to problem with the man and about ½ with woman and 99% of assisted reproductive treatment used In-Vitro fertilisation. [6]

Most of the studies had focused on knowledge, prevalence and risk factors on infertility mothers. Only a few studies has been conducted on knowledge and depression among infertility mothers in this state, which justifies the need for this study. Infertility mothers need some knowledge on various infertility treatments.

Moreover nurses play an active role in educating the infertile womens regarding knowledge on artificial reproductive treatments and the importance of it by health care package on management of infertility, Hence the researcher has selected this study because nowadays even educated mothers are having less awareness about infertility, its treatments and most of them suffer with depression consequently it leads to physical and mental stress and disturbance. Hence the researcher felt the need to identify the womens who are infertile and educate those regarding management of infertility and improve thier knowledge, attitude and practice on management of infertility at selected hospitals of C.G.

Problem Statement

A study to assess the effectiveness of health care package interms of knowledge, attitude and practice on management of infertility among infertile womens of selected hospitals of C.G.

Objective Of Study-

1. To assess the pre test and post test knowledge regarding management of infertility among infertile womens.

2. To assess the effectiveness of health care package on knowledge regarding management of infertility among infertile womens.

3. To findout the co relation between knowledge, regarding management of infertility among infertile womens.

4. To find an association between pre test knowledge with selected demographic variables.

Hypothesis-

RH$_1$ – There will be significant difference between pre-test and post- test knowledge regarding regarding management of infertility among infertile womens at the level of p≤0.05.

RH$_2$ –There will be significant co-relation between pre-test knowledge regarding regarding management of infertility among infertile womens at the level of p≤0.05.

RH3 – There will be a significant association of pre-test knowledge regarding management of infertility among infertile womens at the level of p≤0.05.

Assumption-

1) Infertile womens may have some knowledge regarding management of infertility.

2) Health care package may be effective among infertile womens to improve knowledge regarding management of infertility.

Delimitation

1. Study is done only in a selected selected hospitals.
2. Study is done only in 300 infertile womens.
3. The study is limited to 6 weeks.

MATERIAL AND METHOD

- **Source of Data-**The infertile women of selected hospitals of C.G.

- **Research approach-**Quantitative approach.

- **Research design-**Pre - experimental one group pre- test post- test design.

  Diagrammatic representation of the design is given below

$$O_1\text{--------------------}X\text{------------------}O_2$$

O_1 : Pre Test assessment of knowledge,attitude and practice

X   : Intervention (Health Care Package)

O_2 : Post Test assessment of knowledge,attitude and practice

Population Population-

➢ **Target Population**: infertile womens

➢ **Accessible Population**: infertile womens of selected hospitals of C.G.

- **Study setting:** Selected hospitals of C.G.

- **Sample and Sample Size-** 300 infertile womens

METHOD OF DATA COLLECTION

- **Sampling technique-**Non probability Purposive Sampling Technique

- **Criteria for selection of sample.**

Inclusion criteria

1. Infertile womens who are about to start thier treatment for infertility.
2. Infertile womens who are having primary infertility
3. Infertile women who are willing to participate in the study.
4. Infertile women who can understand Hindi & English.

Exclusion Criteria

1. Infertile womens who are having secondary infertility
2. Infertile women who are not willing to participate.
3. Infertile women who are not able to read and write Hindi and English.

ORGANISATION OF THE DATA

The data collected were edited, tabulated, analyzed, interpreted and findings obtained were in the form of tables and diagrams represent under the following sections:-

- **Section I:** Frequency and percentage distribution of according to socio demographic variables.
- **Section II:-** Assess the pre test knowledge, score regarding management of infertility among the infertile women.
- **Section III :-** Assess the post test knowledge, score regarding management of infertility among the infertile women.
- **Section IV:-** Evaluate the effectiveness of health care package to improve the knowledge , among the infertile women .
- **Section V:-** Find out the association between pre test knowledge score with selected demographic variable .

SECTION I:

FREQUENCY AND PERCENTAGE DISTRIBUTION OF ACCORDING TO SOCIO DEMOGRAPHIC VARIABLES.

AGE	Frequency (N)	Percent (%)
15-25 years	076	25.4%
26-35 years	189	63%
36-45 years	035	11.7%
Total	**300**	**100.00%**

EDUCATION	Frequency (N)	Percent (%)
Primary & Secondary Level	058	19.3%
Higher & Higher Secondary Level	114	38.0%
Diploma	92	30.6%

Graduation & Post Graduation	036	12.0%
Total	**300**	**100.00%**

MONTHLY INCOME	**Frequency (N)**	**Percent (%)**
<5000Rs	28	09.3%
5001-15000Rs	124	41.4%
15001-30000Rs	64	21.3%
Above 30000Rs	84	28.0%
Total	**300**	**100.00%**

RELIGION	**Frequency (N)**	**Percent (%)**
Hindu	208	69.3%
Muslims	056	18.7%
Christian	21	07%
Others	15	05%
Total	**300**	**100.00%**

LOCATION OF HOUSE	**Frequency (N)**	**Percent (%)**
Rural Area	148	49.3%
Urban Area	117	39.0%
Semi Urban Area	035	11.7%
Total	**300**	**100.00%**

TYPE OF FAMILY	**Frequency (N)**	**Percent (%)**
Nuclear Family	078	26%
Joint Family	145	48.3%

Extended Family	077	25.7%
Total	**300**	**100.00%**

NATURE OF MARRIAGE	Frequency (N)	Percent (%)
Consanguineous	21	07%
Non-Consanguineous	279	93%
Total	**300**	**100.00%**

OCCUPATION	Frequency (N)	Percent (%)
Government Employee	38	12.7%
Private Employee	089	29.6%
Business woman	28	9.3%
Housewife	145	48.4%
Total	**300**	**100.00%**

EXERCISE HABITS	Frequency (N)	Percent (%)
No	189	63%
Yes	111	37%
Total	**300**	**100.00%**

DURATION OF INFERTILITY	Frequency (N)	Percent (%)
Within one year of regular , unprotected intercourse.	169	56.3%
After one year of regular , unprotected intercourse.	131	43.7%
Total	**300**	**100.00%**

REASON FOR INFERTILITY	Frequency (N)	Percent (%)
Female Infertility	211	70.3%
Male Infertility	089	29.7%
Total	**300**	**100.00%**

CO-MORBIDITY	Frequency (N)	Percent (%)
PCOS	146	48.7%
Thyroid Dysfunction	036	12.0%
Obesity	28	9.3%
Cancer	01	0.3%
No comorbidities	89	29.7%
Total	**300**	**100.00%**

FAMILY HISTORY OF INFERTILTIY	Frequency (N)	Percent (%)
Maternal history	03	01.0%
Paternal History	01	0.4%
Do not know	74	24.7%
No History	222	74%
Total	**300**	**100.00%**

Section II:

Assess the pre test knowledge score regarding management of infertility among the infertile women.

S. No.	Knowledge Score	Score	
		No.	**%**
1.	Poor(0-7)	144	48%
2.	Average(8-15)	146	48.7%
3.	Good(16-23)	08	02.7%
4.	Excellent(24-30)	02	0.6%
	Total	300	100.0

Section II

Assess the post test knowledge score regarding management of infertility among the infertile women.

Table No.4.17 Table depicting the comparison between pre test and post test knowledge score regarding management of infertility among the infertile women.

S. No.	Knowledge Score	Pre test Score		Post test Score	
		No.	**%**	**No.**	**%**
1.	Poor(0-7)	144	48%	11	03.7%
2.	Average(8-15)	146	48.7%	64	21.3%
3.	Good(16-23)	08	02.7%	178	59.3%
4.	Excellent(24-30)	02	0.6%	47	15.7%
	Total	**300**	**100.0**	**300**	**100%**

Section III

Evaluate the effectiveness of health care package to improve the knowledge , attitude and practice among the infertile women .

Table No.4.20 Table depicting the effectiveness of health care package to improve the knowledge score among the infertile women .

Knowledge Score	Mean ($\bar{X}$)	S. D. (s)	Mean Diff.	D. F.	t-value	Significance
KNOWLEDGE SCORE						
Pre-test	7.89	2.84			36.54 (t tab=1.96)	Significant
Post-test	19.56	4.12	11.67	299		
Post-test	18.69	4.12				

SECTION –IV:-Co-relation between pre-test knowledge, regarding management of infertility among infertile women's.

Group & Parameter at Baseline		Correlation	Attitude	Practice
Group	**Knowledge**	*R*	0.07	**0.05**$^{\otimes}$
		p-value	**p>0.05**	**p>0.05**

Section V

Find out the association between pre test knowledge score with selected demographic variable.

Particular	Knowledge Score					DOF	χ^2 value	Significant
	Poor	Average	Good	Excellent	total		Calculate	
Age (in years)								
15-25 years	38	36	01	01	**076**	**06**	**16.35**	**Significant**
26-35 years	96	89	03	01	**189**			
36-45 years	10	21	04	00	**035**			
Total	**144**	**146**	**08**	**02**	**300**			
Education								
Primary & Secondary Level	28	25	05	00	**58**			
Higher & Higher Secondary Level	36	76	02	00	**114**	**09**	**41.68**	**Significant**
Diploma	61	29	00	02	**92**			
Graduation	19	14	03	00	**36**			
Total	**144**	**146**	**08**	**02**	**300**			
Monthly Income								
<5000Rs	09	16	03	00	**28**			
5001-15000Rs	57	64	02	01	**124**	**09**	**87.21**	**Significant**
15001-30000Rs	08	54	01	01	**64**			
Above 30000Rs	70	12	02	00	**84**			
Total	**144**	**146**	**08**	**02**	**300**			
Religion								
Hindu	100	103	05	00	**208**			
Muslims	26	29	01	00	**056**	**09**	**25.18**	Significant
Christian	14	04	02	01	**021**			
Others	06	08	00	01	**015**			
Total	**144**	**146**	**08**	**02**	**300**			
Location of House								

Rural Area	104	38	06	00	**148**	**06**	88.009	**Significant**
Urban Area	23	94	00	00	**117**			
Semi-Urban Area	17	14	02	02	**035**			
Total	**144**	**146**	**08**	**02**	**300**			
Type of Family						**06**	19.39	Significant
Nuclear Family	41	36	01	00	**078**			
Joint Family	82	58	04	01	**145**			
Extended Family	21	52	03	01	**077**			
Total	**144**	**146**	**08**	**02**	**300**			
Nature of Marriage						**03**	**31.35**	**Significant**
Consanguineous	11	05	04	01	**21**			
Non-Consanguineous	133	141	04	01	**279**			
Total	**144**	**146**	**08**	**02**	**300**			
Occupation						**09**	**9.12**	**Not Significant**
Government	18	17	02	01	**38**			
Private Employee	42	42	04	01	**89**			
Business woman	11	16	01	00	**28**			
Housewife	73	71	01	00	**145**			
Total	**144**	**146**	**08**	**02**	**300**			
Exercise Habits						**03**	**30.26**	**Significant**
No	68	114	06	01	**189**			
Yes	76	32	02	01	**111**			
Total	**144**	**146**	**08**	**02**	**300**			
Duration of Infertility								
Within one year of regular, unprotected intercourse.	109	58	01	01	**169**	**03**	**44.59**	**Significant**

After one year of regular , unprotected intercourse.	35	88	07	01	131		
Total	**144**	**146**	**08**	**02**	**300**		
Reason For Infertility							
Female Infertility	109	58	06	01	**211**	**03**	**39.52**	**Significant**
Male Infertility	35	88	02	01	**089**			
Total	**144**	**146**	**08**	**02**	**300**			
Co Morbidity								
PCOS	78	67	01	00	**146**	**12**	**165.74**	**Significant**
Thyroid Dysfunction	16	17	03	00	**36**			
Obesity	10	15	02	01	**28**			
Cancer	00	00	00	01	**01**			
No-comorbidities	40	47	02	00	**89**			
Total	**144**	**146**	**08**	**02**	**300**			
Family History of Infertility								
Maternal	01	01	01	00	**03**	**09**	**28.71**	**Significant**
Paternal	00	01	00	00	**01**			
Do not Know	50	21	02	01	**74**			
No History	93	123	05	01	**222**			
Total	**144**	**146**	**08**	**02**	**300**			

CONCLUSION

Thus the above chapter the data analysis regarding the effectiveness of health care package regarding improvement in knowledge , attitude and practice score regarding management of infertility among the infertile women.

List of References

1. Dutta. D.C.(2004) .Textbook of Gynecology including perinatology and contraception(6 Eds).Kolkatta: New central book agency (p) Ltd.

2. Tabong PT, Adongo PB. Infertility and childlessness: a qualitative study of the experiences of infertile couples in Northern Ghana. BMC Pregnancy Childbirth. 2013 Mar 21;13:72. doi: 10.1186/1471-2393-13-72. PMID: 23517021; PMCID: PMC3610195.

3. https://www.census.gov/library/stories/2022/04/fertility-rates-declined-for-younger-women-increased-for-older-women.html

4. Banerjee S, Mathews NM. Fertility Awareness and Perceptions among Procreant Age Group in Western India: An Exploration with Mixed Methodology. J Pharm Bioallied Sci. 2021 Nov;13(Suppl 2):S1551-S1557. doi: 10.4103/jpbs.jpbs_283_21. Epub 2021 Nov 10. PMID: 35018027; PMCID: PMC8686969.

5. Park, K. (2007). Park's Textbook of Preventive and Social Medicine. Jabalpur:Banarsidas Bhanot

6. https://www.who.int/news/item/04-04-2023-1-in-6-people-globally-affected-by-infertility

7. Katole A, Saoji AV. Prevalence of Primary Infertility and its Associated Risk Factors in Urban Population of Central India: A Community-Based Cross-Sectional Study. Indian J Community Med. 2019 Oct-Dec;44(4):337-341. doi: 10.4103/ijcm.IJCM_7_19. PMID: 31802796; PMCID: PMC6881900.

8. Agarwal A, Mulgund A, Hamada A, Chyatte MR. A unique view on male infertility around the globe. Reprod Biol Endocrinol. 2015 Apr 26;13:37. doi: 10.1186/s12958-015-0032-1. PMID: 25928197; PMCID: PMC4424520.

9. https://www.sciencedirect.com/science/article/pii/S221339842030190

10. Liang, S., Chen, Y., Wang, Q. et al. Prevalence and associated factors of infertility among 20–49 year old women in Henan Province, China. Reprod Health 18, 254 (2021). https://doi.org/10.1186/s12978-021-01298-2

11. Katole A, Saoji AV. Prevalence of Primary Infertility and its Associated Risk Factors in Urban Population of Central India: A Community-Based Cross-Sectional Study. Indian J Community Med. 2019 Oct-Dec;44(4):337-341. doi: 10.4103/ijcm.IJCM_7_19. PMID: 31802796; PMCID: PMC6881900.

12. Peivandi S, Razavi A, Shafiei S, Zamaniyan M, Orafaie A, Jafarpour H. Attitudes and Knowledge of Infertile Iranian Couples Among Treatment With Assisted Reproductive