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RESEARCH ARTICLE

A cross sectional survey: Knowledge on conception among women with primary idiopathic infertility.

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Abstract

Knowledge on conception helps to allay the anxiety among women with primary idiopathic infertility. Thus, a cross sectional study was conducted to evaluate their knowledge towards conception. A questionnaire comprising of 23 questions was designed and a total 50 women participated in the study. Responses to each question were statistically analyzed and the associations between different variables were established. According to the results, majority (96%) of the women had inadequate knowledge. A significant association ($P<0.05$) was found between the knowledge and age of the women. A significant association ($P<0.05$) was also found between the knowledge and occupation of the women. Thus, the study emphasizes on the need of education towards conception among the couple seeking infertility treatment.

Introduction

Genesis tells adults to "be fruitful and multiply." Having children is seen as part of ordinary adult life: peers expect one another to join in parenthood, and parents want the joy of becoming grandparents. Having children naturally follows growing up and getting married.Since the dawn of civilization, religious, cultural, social, and personal values all have placed value on fertility (Mahlstedt, 2000).

The emotionally normal woman wants children, because they represent one of the major goals of womanhood (Wilson, 1998). According to Erickson's stages of development theory, the task of middle adulthood is generativity. Generativity is the task of guiding and helping children (Blenner, 1999).

Mahlstedt (2000) stated that children are, after all, the natural result of love and marriage. After several months of anticipation, most of the couples get conceived, proudly announce their accomplishment to their family and friends; enthusiastically shop for maternity clothes and baby toys; and they begin to prepare themselves, emotionally for the changes pregnancy and children will bring to their lives.

Malhotra (2004) stated that in 35% of couples the reason for infertility lies with the male partner. In 35% cases the female factors are responsible, in 20% couples it is a combination of both and, finally, in 10% cases the cause of infertility is idiopathic.

Hampton (2013) expressed that poor-fertility-awareness may be a contributing cause of infertility among women seeking fertility assistance.

Blake (1997) quoted that more clients benefit from information about fertility awareness. Fertility awareness is far more than just basic reproductive anatomy & Physiology; fertility awareness involves understanding basic information about fertility & reproduction, being able to apply it to oneself, and being due to discuss it with a partner or with a health professional. Fertility awareness is fundamental to understanding and making informed decisions about reproductive health and sexual health. If clients have a better understanding of fertility awareness, they are in a stranger position to make informed decisions about how they wish to manage their reproductive and sexual health, for example: fertility awareness information is used to help couples to plan

pregnancies. This can be helpful to couples who are having difficulty conceiving, for the timing of intercourse or for the timing of some of the sub-fertility investigations. These couples often do not have adequate information about fertility awareness. Advances in technology and the understandings of ovulation, ovum and sperm survival have confirmed that the guidelines used to teach fertility awareness helps them to identify the fertile phase of the menstrual cycle. Ultrasound studies have also shown that subjective observations of the alteration in cervical mucus and the basal body temperature rise are accurate indicators of the fertile phase. As per the study by Weinberg, (1994), the timing of sexual intercourse, in relation to ovulation, strongly influences the chance of conception. The main indicators of fertility are: observing the cervical mucus, recording the basal body temperature, and calculation based on cycle length. For this, the women need adequate knowledge on conception. Hence, this study undertaken with the objective to assess their knowledge on conception. Thus the study will be helpful in providing the insights into the need of educating the couple attending infertility clinic on conception.

METHODOLOGY

A cross-sectional survey was conducted in infertility clinic of a tertiary care center.The study consisted of 50 women with primary idiopathic infertility.**Inclusion criteria** included, women with primary idiopathic infertility attending infertility clinic, who live with their spouse, who were willing to participate, who know Tamil/English and with age upto 40 years. **Exclusion criteria** included women with secondary infertility and those with duration of infertility more than 20 years. **Sampling:** Simple random sampling was used. **Instruments:** subject data sheet had a set of questions that was oriented to the demographic and clinical data of subjects. Knowledge on conception was assessed by using a questionnaire. The questionnaire had 23 multiple choice questions. **Data collection procedure:** Data collection was started after getting ethical committee permission & permission from hospital authority. Informed consent was taken from study participants. Subject data sheet information and knowledge on conception was collected by the investigator through structured interview schedule. The time duration to complete the questionnaire was 25-30 minutes. **Ethical considerations:** Research proposal was approved by Institute Ethical Committee and permission from hospital authority was obtained. Informed consent was taken from study participants. Assurance was given to the subjects that anonymity and confidentiality will be maintained. **Data analysis:** The distribution of background variables was expressed as frequencies and percentage. The knowledge levels were expressed as mean with standard deviation. The correlation of mean knowledge score with different variables were evaluated using the kruskalwallis test.

Results:

- Of the 50 women participated in the study, 32% were between 31-40 years. As far as religion is concerned most of them (96%) were hindus.Regarding residence, 38% were from Urban. With regard to family system, 50% were from nuclear family. The educational status of the women revealed that 18% had collegiate education. Regarding the occupational status, the analysis showed that half the number of the participants (52%) were housewives and 12% were self employed.
- majority (82%) of the women attained menarche between 13-15 years.With regard to age at marriage, 82% got married between 21-25 years. As far as menstrual cycle is concerned, 100% had regular menstrual cycle. With regard to duration of menstrual cycle, 52% had 26-30 days cycle.About the amount of menstrual flow, 60% had normal flow. Among 13 women, who had the history of dysmenorrhea, 61.5% used analgesics for dysmenorrhea
- With regard to the family history of infertility, majority of women (84%) had no family history of infertility.Spouses were cited as the social support by majority of the women (88%). Among 58% of the women, the in-laws were responsible for initiating the treatment.All the women (100%) were living together with their husbands and they had adequate privacy at home. As far as duration of treatment is concerned, 50% were taking treatment for 1-2 years, and none had taken any traditional treatment before.
- Majority of the women (96%) had inadequate knowledge and only 4% had moderately adequate knowledge.
- There was a negative association between the age and mean knowledge score of the women. As the age increased, the mean knowledge score decreased and the P-value inferred that the association was statistically significant at <.05 level.
- There was no association between the education and mean knowledge score of the women. This showed that women knowledge on conception was less, irrespective of their educational level.
- There was a positive association between the occupation and mean knowledge score of the women. The P-value inferred that the association was statistically significant at <.05 level.

Table – 1
Demographic Characteristics of the Women with Primary IdiopathicInfertility
(N = 50)

Variables	Sub-Variables	Number (n=50)	Percentage (%)
Age	15-20 Years	0	0
	21-30 Years	34	68
	31-40 Years	16	32
Religion	Hindu	48	96
	Christian	1	2
	Muslim	1	2
Residence	Urban	19	38
	Rural	17	34
	Semi Urban	14	28
Family System	Nuclear	25	50
	Joint	25	50
	Extended	0	0
Educational Status	Non-literate	7	14
	Primary	17	34
	Secondary	17	34
	College	9	18
Occupation	Home Maker	26	52
	Labourer	10	20
	Self-employed	6	12
	Government employee	3	6
	Working in Private company	5	10
Body Mass Index	$\leq$ 19	0	0
	19-24	20	40
	25-29	30	60
	$\geq$ 29	0	0
Type of Diet	Balanced	50	100
	Unbalanced	0	0

Table – 2
Knowledge Levels Of The Women With Primary Idiopathic Infertility
(N = 50)

Level of Knowledge	Number (n=50)	Percentage (%)	Mean	SD
Inadequate (< 50%)	48	96	8.42	2.15
Moderately adequate (50% - 75%)	2	4		

Adequate (>75%)	0	0		

Table –3
Correlation of Mean Knowledge Score with age of theWomen with Primary Idiopathic Infertility (N=50)

Age	Number (N=50)	Knowledge Score		K-W Test Value	P- Value
		Mean	SD		
21-30 Yrs.	34	8.82	2.18	4.862	0.027**
31-40 Yrs	16	7.56	1.89		

** P<0.05

Table–4
Correlation of Mean Knowledge Score with Education of theWomen with Primary Idiopathic Infertility N=50

Education	Number (n=50)	Knowledge Score		K-W Test Value	P- Value
		Mean	SD		
Non-literate	17	8.42	1.511	5.373	0.146
Primary	17	8.23	2.35		
Secondary	17	8.05	2.16		
College	9	9.44	2.18		

Table -5
Correlation of Mean Knowledge Score with occupationof the Women with Primary Idiopathic Infertility (N=50)

Occupation	Number (N=50)	Knowledge Score		K-W Test Value	P- Value
		Mean	SD		
House wife	26	7.96	2.18	10.044	0.040*
Labourer	10	8.00	1.69		
Self-employed	6	8.66	1.96		
Government employee	3	9.33	0.577		
Working in private company	5	10.80	2.48		

* P<0.05

Discussion:

This study findings showed that 96% of women had inadequate knowledge, 4% had moderately adequate and none had adequate knowledge. There was an association between the mean knowledge score with occupation & age of the women, and other variables did not have the association.

The above findings were supported by the following studies:

Blake D, Smith D conducted a study to identify the fertility awareness in women attending a fertility clinic.80 women attending for consultation at a tertiary referral fertility unit over a 3 month period were surveyed for their knowledge of fertility awareness & how they used this information to enchance their chances of conception. A questionnaire was completed anonymously by each subject and these were scored in 3 categories for fertility awareness.Scores ranged from 0 for women who had no concept of fertility awareness, to 6 for women who were highly aware. The results showed that 26% (N=21) of subjects had a score of 4 or greater which was considered as having an adequate understanding. It was hypothesized that less than 50% of the subjects had an adequate understanding. The hypothesis was accepted, giving reason for concern about the effectiveness of consumer education at all levels of fertility investigation.

Swift BE, Link E did a cross-sectional survey to identify the fertility awareness of women.Age of participants in the study was 23 years to 44 years. Total participants were 140 women. Fertility awareness was calculated as the percentage of correct responses to the survey questions. The mean fertility awareness was 49.9% and this ranged from the lowest score of 9.1% to the highest score of the 90.9% correct. Women waiting for longer than 2 years to seek medical help for had lower fertility awareness (P=0.038). In addition, fertility awareness was greater in women who had previously sought medical help for infertility from a family doctor or another fertility clinic (P=0.001). Higher fertility awareness correlated with a higher level of education (linear trend P<0.001). Finally, fertility awareness also varied with ethnicity (ANOVA P=0.025).

Conclusion:

The study concluded that most of the women with primary idiopathic infertility had inadequate knowledge on conception. To rectify this problem, the infertility clinic should have adequate fertility information handouts to distribute to the couple, and also a counselor should be there to clarify their doubts regarding infertility. The infertility clinic should install televisions to provide information about fertility.

Reference:

1. Blake, D., Smith D. (1997). Fertility awareness in women attending a fertility clinic. AustNz J ObstetGynaecol; 37(3): 350-52.
2. Bunting, L., Baivin J. (2010). Development and preliminary validation of the fertility status awareness tool: FertiSTAT. Hum Reprod; 25(7): 1722-33.
3. Bunting, L., Beivin J. (2013). Fertility knowledge & beliefs about fertility treatment: findings from the international fertility decision-making study. Human reproduction; 28(2): 385-97.
4. Daniluk, J.C., Koert E. (2013). The otherside of the fertility coin: a comparison of childness men's and women's knowledge of fertility and assisted reproductive technology.FertilSteril; 99: 839-46.
5. Erimaedaetal (2015). A cross sectional study on fertility knowledge in Japan, measured with the Japanese version of Cardiff fertility knowledge scale (CFKS-J). Reproductive health; 12(2): 383-85.
6. Hampton, K., Mazza, D., Newton J.M. (2013). Fertility-awareness knowledge, attitude and practices of women seeking fertility assistance. J. Adv Nurse; 69(5): 1076-86.
7. Williamson, LE., Lawson, KL., Docone, PJ., Pierson, RA. (2014). Informed reproductive decision-making: the impact of providing fertility information on fertility knowledge and intentions to delay childbearing. J. obstetGynaecalCan; 36: 400-5.