ISSN- O: 2458 - 868X, ISSN–P: 2458 – 8687
National Library of Medicine - ID: 101731606

International Journal of Medical Science and Innovative Research (IJMSIR)
IJMSIR : A Medical Publication Hub
Available Online at: www.ijmsir.com
Volume – 9, Issue – 3, June – 2024 , Page No. : 14 – 20

A study to assess the effectiveness of structured teaching programme on knowledge regarding causes of infertility among the women age group between 25 to 40 years in selected community area at Bangalore

[1]Ms. C. Sharmila, M.Sc. Nursing, Department of Community Health Nursing, National College of Nursing, Bangalore - 560091

Corresponding Author: Ms. C. Sharmila, M.Sc. Nursing, Department of Community Health Nursing, National College of Nursing, Bangalore - 560091

Citation this Article: Ms. C. Sharmila, "A study to assess the effectiveness of structured teaching programme on knowledge regarding causes of infertility among the women age group between 25 to 40 years in selected community area at Bangalore", IJMSIR - June - 2024, Vol – 9, Issue - 3, P. No. 14 – 20.

Type of Publication: Original Research Article

Conflicts of Interest: Nil

Abstract

Background of the study: Infertility has a varied impact on multiple dimensions of health and functioning of women. In medical condition that causes psychological, physical, mental, spiritual, and medical determinants to the affected women. The unique quality of this medical condition involves affecting both the life partner as a couple. Important part of any infertility discussion, this thesis will review the detailed causes, and minimal review of evaluation, management, and treatment of female infertility by showing the great effect of structured teaching programme on increasing the level of knowledge among the participants.

Objectives

1. To assess the Pre-test knowledge score regarding causes of infertility among women age group between 25 to 40 years in selected community area.
2. To determine the effectiveness of structured teaching programme on knowledge regarding causes of infertility among women among age group between 25 to 40 years in selected community area.
3. To find out the association between the pre-test knowledge scores with selected demographic variables regarding knowledge on causes of infertility among women age group between 25 to 40 years in selected community area.

Materials and methods

This chapter deals with the methodology selected by investigator to assess the effectiveness of structured teaching programme on improving the knowledge regarding causes of infertility among the women age group between 25 to 40 years in selected community, at Bangalore. Non-probability convenient sampling technique was used to select the samples. Data was collected by using socio-demographic profile(age, marital status, religion, educational status, occupation, family income) and structured teaching program. The data was analysed by using descriptive and inferential statistics.

Results: The overall findings revealed that the structured teaching programme is effective in increasing the knowledge regarding the causes of infertility among the women age group between 25 to 40 years. The mean

post-test knowledge score (20.63) is higher than the pre-test knowledge score (14.4). That obtained 't' value (17.6) was found to be greater than the tabled value at P<0.05 level of significance. Hence the null hypothesis was rejected and the research hypothesis was accepted. Hence it is concluded that structured teaching programme regarding the knowledge on causes of infertility among the women age group between 25 to 40 years in Hegganahali, Bangalore.

Conclusions: The study was based on the fact that 'improving the psychological competencies of the women by educating them about the current knowledge on causes of female infertility is very essential''. This study could be considered as a part of continuing professional development of females. Structured teaching programme regarding the knowledge on causes of infertility among the women age group between 25 to 40 years and it was shown a great effect in increasing the knowledge of the participants.

Keywords: Infertility, Structured, Teaching Program

Introduction

According to a report by the World Health Organization (WHO), one in every four couples in developing countries is affected by infertility. The magnitude of the problem calls for urgent action, particularly when the majority of cases of infertility is avoidable. India is a country with a wide diversity. There is diversity in customs, traditions, quality of living, accessibility to health-care systems, and also climatic conditions. Due to these factors, infertility rate varies widely not only among various states but also across tribe and castes within the same region of India. In addition, the definition used to define infertility varies between various studies, making it difficult to compare prevalence among them. Moreover, data regarding infertility are limited in India and none from Central India. In addition to the core prevalence of infertility due to physiological conditions, additional cases are caused by the incidence of preventable conditions such as infection, menstrual hygiene, lifestyle factors, advancing maternal age, age at marriage, postponement in childbearing for more than 1 year or more, socioeconomic status, and occupational hazards. Hence, we planned this study with the primary objective of estimation of prevalence rate of primary infertility among women of the reproductive age group in urban population of Central India. Secondary objective was to analysed its association with socio demographic factors in urban population of Central India. 9

Materials & Methods

A. Study Design: The study used pre experimental design, with one group pre-test and post-test design.

B. Variables

1. **Independent variable** is structured teaching programme regarding causes of infertility in women.
2. **Dependent variable** is the knowledge regarding the causes of infertility among the women age group between 25 to 40 years
3. **Extraneous variable** are age, marital status, educational status , religion, occupation, and family income.

C. Setting of the Study

The study was carried out in the urban community area at Bangalore.

D. Sample Size: 60 Women in the age group of 25-40 years.

E. Sampling Technique: Non- probability convenient sampling technique was used to select samples based on selection criteria.

F. Inclusion and exclusion criteria

Inclusion criteria

- The study is limited among the women age group between 25 to 40 years of age group. women residing in the selected community area, Bangalore.
- Both married and unmarried women.
- Women having children and not having children both are also included

Exclusion criteria

- Women with obesity problems.
- Women with Multiple termination of pregnancy

G. Development of the tool

Structured teaching programme regarding the causes of infertility among the women age group between 25 to 40 years was developed after reviewing the literature, seeking opinion of the experts.

The steps involved in the development of structured teaching programme were,

- Preparation of the lesson plan for structured teaching programme.
- Lesson plan was downloaded and discussed with experts for use

H. Validity

The validity of the tool was done by 7 experts, as per the suggestions given by the expert's modification and changes were made in the final tool.

I. Reliability of the tool: In order to establish reliability, the knowledge questionnaire tool was administered to six women residing in a selected community at a Bangalore after taking administrative permission. The reliability coefficient was calculated and tool was found to be reliable(r=0.74&0.98).

J. Ethical Clearance: Ethical clearance was obtained from Ethics Committee of the institution.

K. Pilot Study: Pilot study was conducted at urban community area at Bangalore. A total 06 samples were selected for the study, on completion of pilot study it was found that it was feasible to undertake the main study.

L. Data Collection Procedure

Informed consent from the research committee will be obtained. And formal administrative permission will be obtained from the concerned authority of selected community to conduct the study, the informed consent from the study participants will be obtained prior to the data collection. A structured questionnaire will be used to collect information from the study participants in selected community area regarding causes of infertility and structured teaching programme will be conducted to the study participants on the same day of pre-test and post-test will be conducted after seven days by using same structured questionnaires to the same study participants.

Statistical Method

Descriptive Statistics: Frequency and percentage distribution were used to describe the sociodemographic variables. Mean and standard deviation were used to describe the bio-physiological measurements.

Inferential statistics

Paired t-test will be used to compare the pre-test and post-test knowledge scores.

The association between the pre-test knowledge score and demographic variables will be calculated by chi-square test (X2).

Results

The collected data was analysed according to the objectives of the study, the findings are presented below.

Subjects according to age shows that 16 (26.7%) were belongs to 25-28 Years, 24 (40.0%) belongs to 29-32 Years of Age, 12 (20.0%) belongs to 33-36 Years of Age and 8 (13.3%).

Subjects according to Marital Status shows that 52 (86.7%) were married and 8 (13.3%) of the subject belongs to be single

Subjects according to Religion shows that 49 (81.7%) were belongs to Hindu Religion, 9 (15.0%) were belongs to Christianity, 2 (3.3%) Belongs to Muslims.

Subjects according to Educational Status shows that 2 (3.3%) were belongs to Primary Education, 40 (66.7 %) were belongs to Secondary Education, 13 (21.7%) Belongs to PUC and 5 (8.3%) were graduated.

Occupational Status shows that 5 (85.0%) were belongs to Unemployed, 2 (3.3%) were belongs to Self Employment, 7 (11.7%) Belongs to Private Employment family income shows that 2 (3.3%) were belongs to Rs20000/-25000/ month, were 52 (86.7%) Belongs to Rs25000/- to 30000/- month and 6 (10.0%) belongs to more than Rs30000/- month of family income.

Pre-test knowledge scores Majority of subjects 31(51.7%) were having moderate knowledge 50-75%, 29(48.3%) were having inadequate knowledge <50%, and no one are in the range of adequate level of knowledge >75%. The overall mean value is (14.4) , with SD (1.7) and mean% is (48).

overall post-test knowledge score revealed the majority 50(83.3%) of subjects have moderate knowledge >50-75% and minority 10(16.7%) subjects have adequate knowledge >75%, and no subjects are in the range of inadequate level of knowledge <50%.The mean value is significantly increased after STP (20.63) , with increased SD (1.9) and also with increased mean% is (68.8).

The study reveals that there is significant association between pre-test knowledge score and selected demographic variables such as age, marital status, religion, educational status, occupation, family income, source of information at 0.01 only educational status and occupational status are having level of significance. And selected demographic variables such as age, marital status, religion, family income is not significance at 0.01 level.

Discussion

The collected data was analysed according to the objectives of the study, the findings are presented below.

Objective: To assess the pre-test knowledge scores regarding knowledge on causes of infertility among the women age group between 25 to 40 years.

Majority of subjects 31(51.7%) were having moderate knowledge 50-75%, 29(48.3%) were having inadequate knowledge <50%, and no one are in the range of adequate level of knowledge >75%.

Objective: To determine the effectiveness of structured teaching program on knowledge regarding the causes of infertility among the women age group between 25 yrs to 40 yrs in selected community area.

The table revealed the majority 50(83.3%) of subjects have moderate knowledge >50-75% and minority 10(16.7%) subjects have adequate knowledge >75%, and no subjects are in the range of inadequate level of knowledge <50%.mean, SD, mean% of post-test level of knowledge among the subjects. The overall mean value is significantly increased after STP (20.63) , with increased SD (1.9) and also with increased mean% is (68.8). The mean post-test knowledge (21) is higher than the mean pre-test knowledge score (14.4). The obtained‘t’ value (t) was found greater than the tabled valued. The paired‘t’ value is 17.6 which is highly significant at P<0.05 and it was found to be greater than table value 1.67 at P< 0.05. Hence the null hypothesis was rejected and the research hypothesis was accepted. Hence concluded that structured teaching programme is effective with increasing the knowledge regarding causes of infertility among the women age group between 25 to 40 years.

Objective: To find out the association between the pre-test knowledge scores with selected demographic variables regarding knowledge on causes of infertility

among women age group between 25 to 40 years in selected community area.

The study reveals that there is significant association between pre-test knowledge score and selected demographic variables such as age, marital status, religion, educational status, occupation, family income, source of information at 0.01 only educational status and occupational status are having level of significance. And selected demographic variables such as age, marital status, religion, family income is not significance at 0.01 level.

Conclusion

The present study is to assess the knowledge regarding the causes of infertility among the women age group between 25 to 40 years in selected community area. The investigator analyzed the data and had come to the conclusion, majority of women are having inadequate knowledge regarding causes of infertility. The knowledge of the subjects regarding causes of infertility among the women were influenced by selected demographic variables. The hypothesis stated that there is a significant relation between knowledge with selected demographic variables is proved by computing chi square test were accepted. Finally following the conclusion was drawn there was an inadequate knowledge among women regarding causes of infertility in women.

References

1. ACOG practice Bulletin. Management of infertility of infertility caused by ovulatory dysfunction. Number 34, feb 2002. https://en.wikipedia.org/wiki/Human_reproduction
2. Lowder Milk ,"Text Book of Maternity & Women's Health Care", 8 th edition, Mosby, Page no 246-264.
3. https://www.reproductivefacts.org/news-and-publications/patient-fact-sheets-and-booklets/documents/fact-sheets-and-info-booklets/defining-infertility/
4. https://www.virkinfertilitycentre.com/introduction-to-infertility/
5. https://medlineplus.gov/ency/article/001191.htm
6. https://www.who.int/news-room/fact-sheets/detail/infertility
7. https://www.cdc.gov/reproductivehealth/infertility/index.htm
8. http://www.journalcra.com/sites/default/files/issue-pdf/14742.pd
9. DLHS 2007-08 Karnataka. http://www.journalcra.com/sites/default/files/issue-pdf/14742.pd
10. Marzieh Rostami Dovom, B.Sc. Fahimeh Ramezani Tehrani, et all A population-based study on infertility and its influencing factors in four selected provinces in Iran ,2014 Aug; 12(8): 561–566 available from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4233315/
11. https://webcache.googleusercontent.com/search?q=cache:VkhY1cPnxM0J:https://bmcwomenshealth.biomedcentral.com/articles/10.1186/s1 2905 – 018 - 0669 y + & cd = 1 & hl = en & ct = clnk & gl = in & lr=lang_id%7Clang_en
12. Sujata Ganguly and Sayeed Unisa Trends of Infertility and Childlessness in India Findings from NFHS Data.F, V & V IN OBGYN. 2010; 2 (2) 131-8
13. Elena Ricci , Paola Viganò et al,Coffee and caffeine intake and male infertility: a systematic review. 2017 Jun 24;16(1):37. doi: 10.1186/s12937-017-0257-2, available at: https: // pubmed. ncbi. nlm. nih. Gov /28646871/
14. Dimitrios Karayiannis , Meropi D Kontogianni ,et al, Adherence to the Mediterranean diet and IVF success rate among non-obese women attempting fertility.

2018 Mar 1;33(3):494-502. doi: 10.1093/humrep/dey003.available at: https :// pubmed. ncbi.nlm.nih.gov/29390148/

15. Rakesh Sharma, Kelly R Biedenharn,et al, Lifestyle factors and reproductive health: taking control of your fertility Published online 2013 Jul doi: 10.1186/1477-7827-11-66 .available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3717046/
16. Samaneh Youseflu , Shahideh Jahanian Sadatmahalleh et al ,Effects of endometriosis on sleep quality of women: does life style factor make a difference?2020 Aug 10;20(1):168. doi:10.1186/s12905-020-01036-z. avaialble at : https://pubmed.ncbi.nlm.nih.gov/32778090/
17. Kamil Gill , Joanna Jakubik , Michal Kups, et al ,The impact of sedentary work on sperm nuclear DNA integrity. 2019;57(1):15-22. doi: 10.5603/FHC.a2019.0002. Epub 2019 Mar 14.available at: https: //pubmed. Ncbi.nlm.nih. gov/30869154/
18. Akiko Kubo , Keiichi Koido, Mari Sawada,et al, Survey on oncologists-provided information on treatment-related infertility to breast cancer patients. 2012 Mar;39(3):399-403. Available at:https://pubmed.ncbi.nlm.nih.gov/22421767/
19. Daniele Santi , Silvia Vezzani , Antonio Rm Granata et al,Sperm quality and environment: A retrospective, cohort study in a Northern province of Italy. 2016 Oct;150:144-153. doi: 10.1016/j.envres.2016.05.053. Epub 2016 Jun 8. Available at: https://pubmed.ncbi.nlm.nih.gov/27288912/
20. Jia-Yu Xia , Wei Tian , Gui-Hua Yin , Hua Yan et al, Association of Rs13405728, Rs12478601, and Rs2479106 single nucleotide polymorphisms and in vitro fertilization and embryo transfer efficacy in patients with polycystic ovarian syndrome: A case control genome-wide association study. 2019 Jan;35(1): 49-55.doi: 10.1002/kjm2.12008. available at: https://pubmed.ncbi.nlm.nih.gov/30844144
21. Jehn-Hsiahn Yang , Chin-Der Chen et al, Factors Influencing the Recurrence Potential of Benign Endometrial Polyps after Hysteroscopic Polypectomy. 2015 Dec 11;10(12):e0144857. doi: 10.1371/journal.pone.0144857.Collection 2015. Available at: https: //pubmed. ncbi.nlm. nih.gov /26660149/
22. Yaqin Gao , Yuhong Li , Liu Zhang et al,An psychoeducation programme based on self-efficacy theory to improve experience of natural birth for primigravid women: Study protocol for a randomised controlled trial. 2020 Jun 13. doi: 10.1111/jocn.15370. Online ahead of print. Available at:https://pubmed.ncbi.nlm.nih.gov/32533742/
23. Olufunmilade Akinfolarin Omisanjo , Stephen Odunayo Ikuerowo,et al, Use of Exogenous Testosterone for the Treatment of Male Factor Infertility: A Survey of Nigerian Doctors. 2017;2017:4607623. doi: 10.1155/2017/4607623. Epub 2017 Aug 29.Available at: https://pubmed.ncbi.nlm.nih.gov/28951884/
24. T D Pache 1 , F H de Jong, W C Hop, B C Fause et al, Association between ovarian changes assessed by transvaginal sonography and clinical and endocrine signs of the polycystic ovary syndrome. 1993 Mar; 59(3):544-9. doi: 10.1016/s0015-0282(16)55797-5. Available at: https: // pubmed. ncbi.nlm.nih.gov/8458455
25. Turkish online journal of qualitative inquiry (TOJQ), VOLUME 12, ISSUE 8, JULY 2021:1469-1480.
26. journal of emerging technologies and innovative research(JETIR),ms. sindhu jhin msc(n) in

community health nursing, december 2021, volume8,issue 12

27. Asian journal of nursing education and research , ravina patel,divya rohit, DOI:10.5958\2349,2021.
28. Subramani.r, thesis of causes of infertility , medical>obstetric and gynaecology . available at http\\repository-tnmgrmu.ac.in\id\eprint\8887.
29. Banikarim C, Chacko M D, Kelder S H. Prevalence and impact of physiological changes on female adolescents. Archieves of obstetrics and Adolescent Medicine 2000; 154, 1226-29.
30. Basavanthappa BT. Nursing Research.2nd ed. New Delhi: Jaypee Brothers medical publishers; 2007. George JB. Nursing theories, the base for profeesions.
31. Ash Monga, Stephen Dobbs, et., al Gynaecology by ten teachers, 19th edition, Taylor & Francis Ltd 2011, 152-155.
32. Jermy J.N .Oats, Suzanna Abraham Liewellyn–Jones Fundamentals of Obstetrics & Gynaecology, Elsevier health sciences, 10th edition 2016.
33. Enise, polit, Hungler. P., "Nursing Researh Principles and methods‖, 1st edition, Philadalphia , Lippincot company.
34. Mahajan., (1991) "Methods in Biostatistics" , New Delhi: Jaypee brothers, Medical Publishers Pvt. Ltd.