

<https://doi.org/10.33472/AFJBS.6.7.2024.486-490>



African Journal of Biological Sciences

Journal homepage: <http://www.afjbs.com>



Research Paper

Open Access

“Effectiveness of Planned Teaching Program on Knowledge Regarding Effect of Mobile Radiation on Male Fertility Among the Degree College Students.”

Vishal Ghorpade^{1*}, Jesica Dileep Mali²

^{1*}Assistant professor MSc (Medical Surgical Nursing), Bharati Vidyapeeth (Deemed to Be University), College of Nursing, Sangli, Maharashtra,

²Clinical instructor, MSc (Medical Surgical Nursing), Bharati Vidyapeeth (Deemed to Be University), College of Nursing, Sangli, Maharashtra,

Corresponding author: Mr. Vishal Ghorpade

Assistant professor MSc (Medical Surgical Nursing), Bharati Vidyapeeth (Deemed to Be University), College Of Nursing, Sangli, Maharashtra,

Article Info

Volume 6, Issue 6, May 2024

Received: 03 March 2024

Accepted: 11 April 2024

Published: 08 May 2024

[doi: 10.33472/AFJBS.6.6.2024.486-490](https://doi.org/10.33472/AFJBS.6.6.2024.486-490)

ABSTRACT:

Background: Male infertility is a condition in which a man is unable to conceive a child. Infertility can be caused by a variety of factors, including problems with the sperm production, delivery, or function. Male infertility is diagnosed when a man has been unable to conceive a child after one year of unprotected intercourse. **Methodology:** Pre-experimental one group pre-test post test was conducted to assess the knowledge regarding effect of mobile radiation on male fertility among the degree college students at selected colleges of Sangli, Miraj, Kupwad corporation area”. The reliability coefficient ‘r’ of the questionnaire was 0.88, hence it was found reliable. Total 100 samples were selected by random sampling technique. A Structured questionnaire was administered to collect data. Pre-test was given on the 1st day followed by planned teaching and Post-test was administering done on 7th day. **Result:** Before giving planned teaching, college students were unaware of the knowledge regarding effect of mobile radiation on male fertility. It was found maximum college students had good knowledge. A study to assess the effectiveness planned teaching program on knowledge regarding effect of mobile radiation on male fertility among the college students. The pre-test average score was 4.95 with standard deviation of 2.085. The post-test average score was 15.71 with standard deviation of 2.82. The test statistics value of the paired t test was -34.50 with p value 0.00 Shows that calculated value is more than table value there was significant difference in the average knowledge score, at 5%level of significance. **Conclusion:** Thus, it was concluded that, the study clearly indicated that there are changes in pre-test and post-test knowledge score.

Keywords: Evaluate, Effect, Planned teaching Programme, Knowledge, Male infertility, Students.

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1. Introduction

Male infertility is a condition in which a man is unable to conceive a child. Infertility can be caused by a variety of factors, including problems with the sperm production, delivery, or function. Male infertility is diagnosed when a man has been unable to conceive a child after one year of unprotected intercourse.⁷ the use of mobile phones is now widespread. A great debate exists about the possible damage that the radiofrequency electromagnetic radiation (RF-EMR) emitted by mobile phones exerts on different organs and apparatuses.⁸ Results showed that human spermatozoa exposed to RF-EMR have decreased motility, morphometric abnormalities, and increased oxidative stress, whereas men using mobile phones have decreased sperm concentration, decreased motility (particularly rapid progressive motility), normal morphology, and decreased viability. These abnormalities seem to be directly related to the duration of mobile phone use.¹ they also argue that we do not yet know the long-term effects of exposure to mobile radiation.² the impact of mobile device radiation on male infertility is that the subject of recent interest and investigation.³ exploration into various studies done by researcher showed that effect of radiofrequency on male fertility when exposed over a longer period. This study tries to provide enough knowledge regarding effect of mobile radiation on male fertility study objectives are, 1. To assess the existing knowledge of students regarding effect of mobile radiation on male fertility 2. To assess the knowledge of students regarding effect of mobile radiation on male fertility after planned teaching programme,3. To compare the pre-test and post-test knowledge score.

2. Methods and Materials

A present study was conducted by using a quantitative experimental research approach with A Pre-experimental, one group pre-test and post-test design.¹⁰ The reliability was done by using split half method 'r' was calculated by using Karl Pearson's formula coefficient 'r' of the questionnaire was 0.88, which is more than 0.70.⁹ Validity was done from 25 experts. Proposal with tool presented in front of ethical committee for permission. Total 100 samples were selected by Non probability convenient sampling technique. Pilot study was conducted with 10 samples and the study was found feasible. Final study conducted with same data collection tool. Data collection tool had the questionnaires on effect of mobile radiation on male fertility.⁵

3. Result

Before giving planned teaching, college students were unaware of the knowledge regarding effect of mobile radiation on male fertility. It was found maximum college students had good knowledge. A study to assess the effectiveness planned teaching program on knowledge regarding effect of mobile radiation on male fertility among the college students. The pre-test average score was 4.95 with standard deviation of 2.085. The post-test average score was 15.71 with standard deviation of 2.82. The test statistics value of the paired 't' test was -34.50 with p value 0.00 Shows that calculated value is more than table value there was significant difference in the average knowledge score, at 5% level of significance.⁶

Figures and Tables

Section I:

Table no-1 Frequency and percentage distribution of demographic variable
n=100

Sr. No.	Category		Frequency	Percentage
1	Age	19year	50	50%
		20year	30	30%
		21year	20	20%
2	Duration of mobile use	0-2	10	10%
		2-4	50	50%
		4-6	40	40%
3	Family income	10000-20000	20	20%
		20000-30000	50	50%
		Above 30000	30	30%

The study findings revealed that, out of 100 students, majority 50% of the sample were in the age 19 years whereas less students 20% of the sample were in the age 21 years. The family income of children revealed that out of 100 students, 50% of the sample were having family income between Rs.20,000 -30,000 and 30% of the sample were having income above 30,000 and 20% were having income between 10,000-20,000. According to the duration of mobile use (in hours) per day, 50% were using 2-4 hours and 40% were between 4-6 hours and 10% student using in between 0-2 hours.

Section II

Table no-2 Frequency and percentage distribution of pre-test knowledge. n=100

Level of knowledge	Frequency	Percentage %
(15 to 20) Excellent Knowledge	0	0
(10 to 15) Good Knowledge	0	0
(5 to 10) Average Knowledge	36	36%
(0 to 5) Poor Knowledge	64	64%

Result: The above table shows that, 36% students have average knowledge and 64% have Poor knowledge. Conclusion: None of the children have a good knowledge regarding the effect of mobile Radiation on male fertility.

Table -3 Frequency and Percentage Distribution of Post-Test knowledge
n=100

Level of knowledge	Frequency	Percentage %
(15 to 20) Excellent Knowledge	75%	75%
(10 to 15) Good Knowledge	25%	25%
(5 to 10) Average Knowledge	0	0
(0 to 5) Poor Knowledge	0	0

Result: The above table shows that, majority of the students 75% have very good knowledge and 25% have good knowledge. Conclusion: None of the students have average and poor knowledge regarding effect of mobile radiation on male fertility. This reveals that after the planned teaching program the knowledge level of the students has increased.

Table No. 4: Effectiveness of planned teaching programme on knowledge regarding Effect of mobile radiation on male fertility.
n=100

Aspects	Mean	d. f.	Paired t- test	p- value
Pre- test	4.95	99	-34.50946	0.00001
Post- test	15.71			

Result: The above table shows that, according to knowledge level, the mean score of knowledge before giving planned teaching programme was 4.95 and the mean score of knowledge after giving planned teaching programme was 15.71, t – value is -34.50946 and p – value is 0.00001 < 0.05 (at 5 % level of significance).

4. Discussion:

The present study intended to find out the effectiveness of planned teaching program on the effect of mobile radiation on male fertility among the degree college students. The findings of the present study are discussed with reference of the objectives, hypothesis stated and with findings of other similar studies. The study shows that there is increase in knowledge of students. Studies were conducted on the basis of effect of mobile radiation on male fertility by B. Senthil Kumar, uploaded in International Journals of Current Research and Review (IJCRR) 2021.

5. Conclusion:

Before giving planned teaching, college students were unaware of the knowledge regarding effect of mobile radiation on male fertility. It was found maximum college students had good knowledge. A study to assess the effectiveness planned teaching program on knowledge regarding effect of mobile radiation on male fertility among the college students. The pre-test average score was 4.95 with standard deviation of 2.085. The post-test average score was 15.71 with standard deviation of 2.82. The test statistics value of the paired' t test was -34.50 with p value 0.00 Shows that calculated value is more than table value there was significant difference in the average knowledge score, at 5% level of significance.

Conflict of Interest

The author declare that they have no conflict of interest.

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