



Research article

To assess the pre existing knowledge regarding congenital anomalies from selected community area to evaluate the effectiveness of planned teaching programme related to prevention of congenital anomalies among newly married couples

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Abstract

One of the major factors contributing to the increased risk can lead to infant mortality is Congenital anomalies. Almost 70% of infants die during first month of birth. It is observed that 30-40% of congenital malformation is genetic. The babies of consanguineous parents are at a greater risk of a host of disease like cancer, mental disorders, diabetes mellitus, epilepsy, asthma hypertension, hearing deficit, leukemia, beta thalassemia, congenital and non congenital heart disease. There is need for parents education related to risk factors for delivery of baby with congenital anomalies. Current study was planned with aim to assess the pre existing knowledge regarding Congenital Anomalies from selected community area to evaluate the effectiveness of planned teaching programme related to prevention of Congenital Anomalies among Newly Married couples. The Sampling technique used was probability simple random sampling technique with 70 newly married couples. Structured questionnaire as a tool was used to collect the data and the result revealed that the calculated 'p' value is 0.0001 i.e., it is highly significant as the p value which is less than 0.005, which reveals that there is increase in the knowledge score after planned teaching programme. Hence the planned teaching programme was effective.

Key Words: congenital anomalies, planned teaching programme, thalassemia.

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1. Introduction

The presence of fetal lesions remains an important public health problem. Insufficient knowledge of deficiencies of potential mothers can lead to delayed interventions. The study determined the knowledge of maternal lesions among pregnant women in relation to their sociodemographic profile [1]. Most reports of mothers with a two-handed uterus analyze fertility, reproductive capacity, and pregnancy outcomes. However, very few mention the risk of congenital anomalies in their offspring. Furthermore, according to our knowledge, we have not reported epidemiological studies that calculate the risk of congenital defects and analyzed the type

of anomalies observed in children born to mothers with a two-dimensional uterus [2].

The correct knowledge of risk factors and the prevention of congenital malformations in pregnant women can lead to the prevention of primary diseases. The aim of this study was to investigate the pregnancy knowledge of congenital anomalies, risk factors and preventive measures in relation to their sociodemographic profile [3].

An important cause of death and neonatal mortality are innate anomalies. The incidence of congenital anomalies varies geographically over time.

In India, congenital anomalies were considered the fifth largest cause of neonatal deaths after previous

birth (34.7%), pneumonia (16.3%) and neonatal sepsis (15%) 4 intrapartum complications (19.6%).

It is estimated that congenital anomalies contribute to 60,699 neonatal deaths in India in 2013. Despite this classification, in absolute terms, it represented the highest global load of neonatal mortality due to congenital anomalies [5]. The most common types of congenital anomalies and their impact on health care and neonatal health are needed, especially when India has announced a program for the management of children born with selected birth defects [6]. In India, several studies have attempted to measure the extent of congenital anomalies [7]. Most of them suffer from methodological problems such as the lack of use of standard fallout segments, the release of non-random samples and the lack of evidence of a systematic assessment of children. So there is a big variation in prevalence [8].

2. Methodology

A study to evaluate the effectiveness of the planned educational program related to the prevention of congenital anomalies among the newly married couples of, Miraj and Kupwad. The research project chosen for the current study was before experimental design. In view of the objective of the study, the research chosen for the study was a group before testing after the test (01 x 02).

One group pre-test post-test Experimental Design:

Pre test	Planned teaching	Post test
Day 1	Day 2	Day 7
01	x	02

Key: 01 – Pre-test knowledge score

02 – Post-test knowledge score

X - Planned teaching programme

01 x 02

In this study, the population is composed of newly married couples. The sampling techniques used in the study were probably simple random sampling techniques used. The samples were selected according to the criteria after obtaining permission from the head of the selected hospitals in the areas of Sangli, Miraj and Kupwad. The study consisted of 70 new couples. The reliability of the instrument was determined by the method of test test with a 5-day interval. Reliability was calculated using the Karl person method. The reliability coefficient "r" in the questionnaire was 0.8, which is more than 0.7, which proves to be reliable. A pilot study is a small scale or proof of the large study. The pilot study was conducted at Kamanves, Isryel Nagar and Bethel

Nagar, community area. The pilot study for current research was conducted from 25/09/17 to 1/10/2017 to evaluate the feasibility of the study. The pilot study studies were excluded from the final study.

10 new married couples have been selected for the pilot study. The sample was selected using simple random sampling techniques. The investigator chose the mothers individually and explained the purpose of the study, clarified their doubts and received written consent from them for participation in the study. The instrument was given to each pair and asked to fill it immediately. The final study test was given on 15 October 2017. The scheduled instruction was administered on the same day and the test was performed on 21 October 2017. After verification, the data were analyzed using a birth test. The results showed that the planned education was effective to increase the knowledge of couples.

3. Result

Table no. 1: Frequency and percentage distribution of demographic variables

n=70

		Frequency	%
Age	18 to 25 years	39	56
	26 to 30 yrs	28	40
	31 to 35 years	3	4
	36 to 40 years	0	0
Education	Illiterate	3	4
	Primary education	38	54
	Secondary education	24	35
	Higher Secondary	5	7
	Graduation & above	0	0
Religion	Hindu	47	67
	Muslim	15	21
	Christian	8	12
	Other	0	0
Type of family	Nuclear	20	29
	Joint	50	71
Consageneous marraiage	Yes	22	31
	No	48	69

Table no. 1 results, in demographic variables: -56% belong to the age of 18-25 years, 40% of the samples belong to the age of 26-30 years and 4% of the tests have t 31-35 years. In education: -54% of mothers had primary education and 35% of mothers had higher education, where 7% of mothers had upper secondary education and 4% of mothers were illiterate.

In religion: -67% of mothers came from the Hindu religion, 21% of mothers were Muslim and 12% of mothers were of Christian religion.

From family forms: -29% of mothers came from the nuclear family and 71% of mothers belonged to the common family.

Marriage involved: 31% of couples had marital marriages and 69% of couples did not have marital marriages.

Analysis of pre-test and post-test knowledge score.

Table no. 2- Frequency and percentage distribution pre-test knowledge score

Pre test knowledge n=70

Grading	Frequency	Percentage (%)
Poor (0-5)	48	69
Average (6 - 10)	22	31
Good (11 - 15)	0	0

Table no.2 shows that, It was observed that in pre-test Newly Married couples had 69% Poor knowledge and 31 % had Average knowledge about Congenital Anomalies.

Table no.3: Frequency and percentage distribution post-test level of knowledge score n=70

Grading	Frequency	Percentage (%)
Poor (0-5)	0	0
Average (6 - 10)	29	41
Good (11 - 15)	41	59

Table no.3 shows, After planned teaching programme it was found that in post-test Newly Married couples had 41% Average knowledge ,and 59% had Good knowledge regarding Congenital Anomalies.

4. Discussion

The analysis of the present study was discussed with reference to the objectives and hypothesis. The results of a study show the effectiveness of the planned training program on the prevention of congenital anomalies among newly married couples from selected cities of Sangli.

The newly married couples need to be knowledge about to prevention of congenital anomalies. If they will take care of early stage, then the later stages they will not have problems in delivery like, cleft palate, cleft lip, any congenital abnormalities etc.

Congenital abnormalities Prevention has reached optimal levels and coverage in newly married

couples, but knowledge about the prevention of congenital anomalies is poor according to WHO, UNICEF.

Instruction on the prevention of congenital anomalies are most necessary for pregnant and newly married couples, as well as for all members of society. Therefore, plan health education for them. Orientation, counseling and reinforcement are important activities to keep the married couple in pursuit of the practice. Recent information with practice should be introduced to newly married couples and to the mother ANC.

The nurse administrator must plan, implement and evaluate the service training program, both in society and in hospitals.

The nursing director should strive to guide and provide competent information and provide A.V. helps healthcare professionals to implement the health program efficiently and effectively.

The nurse administrator can plan a health field for the diagnosis of congenital anomalies for newly married couples.

Conclusion

The aim of the study was to evaluate the knowledge on the prevention of congenital anomalies among newly married couples in a selected sangli city. The newly married couples need to get the knowledge for prevention of congenital anomalies. If they will take care in early stage, then the later stages they will not have problems to deliver the baby with congenital abnormalities etc. Nurse works in various setting like hospital, community health centers etc. and they should make use of the in imparting the knowledge to the newly married couples and reduce the incidence of the delivery of babies with congenital anomalies'.

References

- 1) Wilson RD, Davies G, Desilets V, Reid GJ, Summers A, Wyatt P, Young D. The use of folic acid for the prevention of neural tube defects and other congenital anomalies. Journal of obstetrics and gynaecology Canada: JOGC= Journal d'obstetrique et gyencology du Canada:JOGC. 2003 Nov;25(11):959-73.
- 2) Berry RJ, Li Z, Erickson JD, Li S, Moore CA, Wang H, Mulinare J, Zhao P, Wong LY, Gindler J, Hong SX. Prevention of neural-tube defects with folic acid in China. New England Journal of Medicine. 1999 Nov 11;341(20):1485-90.
- 3) Botto LD, Correa A, Erickson JD. Racial and temporal variations in the prevalence of heart defects. Pediatrics. 2001 Mar 1;107(3):e32-.
- 4) Gilboa SM, Ailes EC, Rai RP, Anderson JA, Honein MA. Antihistamines and birth defects: a systematic review of the literature. Expert opinion on drug safety. 2014 Dec 1;13(12):1667-98.

- 5) Masoumeh P, Vahid K, Hamid AM, Khosheh K, Samira K. Knowledge of pregnant women about congenital anomalies: A cross-sectional study in north of Iran. *Indian Journal of Health Sciences and Biomedical Research (KLEU)*. 2015 Jan 1;8(1):41.
 - 6) De Jong J, Garne E, Wang H. The risk of specific congenital anomalies in relation to newer antiepileptic drugs: a literature review. *Drugs-real world outcomes*. 2016 Jun 1;3(2):131-43.
 - 7) Interrante JD, Ailes EC, Lind JN, Anderka M, Feldkamp ML, Werler MM, Taylor LG, Trinidad J, Gilboa SM, Broussard CS, Study TN. Risk comparison for prenatal use of analgesics and selected birth defects, National Birth Defects Prevention Study 1997–2011. *Annals of epidemiology*. 2017 Oct 1;27(10):645-53.
 - 8) Yildiz PD, Ayers S, Phillips L. The prevalence of posttraumatic stress disorder in pregnancy and after birth: a systematic review and meta-analysis. *Journal of affective disorders*. 2017 Jan 15;208:634-45.
- Landon MB, Spong CY, Thom E, Carpenter MW, Ramin SM, Casey B, Wapner RJ, Varner MW, Rouse DJ, Thorp Jr JM, Sciscione A. A multicenter, randomized trial of treatment for mild gestational diabetes. *New England Journal of Medicine*. 2009 Oct 1;361(14):1339-48.