

Evaluate the Knowledge and Effects of Fetal Outcome on Consanguineous and Non Consanguineous Married Women

(Mrs. S. Rajathi, Dr .R. Shankar Shanmugam, Dr.A.Vengatesan.)

¹.S.Rajathi Ph.D Scholar, The Tamil Nadu Dr. M.G.R. Medical University, Guindy, Chennai-32.

².Dr.R.Shankar Shanmugam, Senior Nursing Tutor, Chengalpattu Medical College, Chengalpattu.

³. Dr.A. Vengatesan , DDME(Statistics), Directorate Of Medical Education. Kilpauk, Chennai.

Abstract: Consanguineous marriage is account for 20% to 50% of the general population. While assessing the consequence of consanguineous and non consanguineous, consanguinity leads to many problems to newborn and infant health. A non experimental comparative research design was used to evaluate the knowledge and effects of fetal **outcome** on consanguineous and non consanguineous married women. Among 120 samples, there is no much difference in knowledge aspects for both groups. Regarding the effects of fetal outcome, 25% of women had severe effects in consanguineous group and 13% in non consanguineous group. It reveals that consanguineous children were more affected than the non consanguineous children. The impact of development in social domain difference was statistically not significant i.e., $X^2=2.81, P=0.09$, whereas cognitive and health domain difference were statistically significant i.e., $X^2=8.63, 8.41$ at $P=0.01$. It shows that consanguineous children were more affected in the cognitive and health aspects than the non consanguineous group.

Key words: Consanguineous, Non consanguineous, Effects, Fetal outcome.

I. Introduction

Family begins with marriage, when following for a happy marriage for their son or daughter parents are having a vital role in selecting the matches. Marriage in Indian society is a religious and customary practice. Consanguineous marriage occurs in varying degrees throughout the world. While assessing the consequence of consanguineous and non consanguineous, several scientific studies have shown that consanguinity leads to birth defects, genetic disease including blindness, blood cancer (acute lymphocytic leukemia) breathing problems for children at birth (apnea) and increased susceptibility to disease, etc., The National and family health survey statistics reveals that, South India has highly concentrated consanguinity practice which is 29.2% the highest value when compare to the other regions of India. It Comprises of Tamil Nadu, Andhra Pradesh, Karnataka and Kerala.

II. Need For Study

In modern era , the safe maternal and child health care of genetic science serves the human society by providing the best solutions in health related outcomes. In this regard nurses are in need to promote maternal and child health, especially concern about the effects of fetal outcome. This study, will helps the human society, to create an awareness about the effects consanguineous marriage and prevent genetic disorders in future.

III. Statement Of Problem:

A study to evaluate the knowledge and effects of fetal outcome on consanguineous and non consanguineous married women at Kovillampakkam, Kancheepuram District.

IV. Objectives Of The Study:

1. To assess the knowledge among women on consanguineous and non consanguineous marriage.
2. To compare the level of knowledge among consanguineous and non consanguineous married women.
3. To evaluate the effects of fetal outcome on consanguineous and non consanguineous married women.
4. To compare the level of effects of fetal outcome on consanguineous and non consanguineous married women.
5. To identify the impact of development on consanguineous and non consanguineous children.

V. Operational Definitions:

1. Knowledge: It refers to the women awareness about consanguineous marriage.

2. Effects of fetal outcome:- It includes, abortion ,still birth ,neonatal complications, preterm and low birth weight of newborns and impact of development in social, cognitive and health domain aspects in children.

3. **Consanguineous marriage:** Blood related marriages includes,
 - a. Her own brother (1st degree)
 - b. Her mother’s own brother (2nd degree)
 - c. Her mother’s own brother’s son (3rd degree)
 - d. Her Grand mother’s own brother’s son (4th degree)
 - e. Her Grand mother’s own brother’s grand son (5th degree)
4. **Non consanguineous marriage:** Women’s marrying not blood related persons

VI. Methodology:

Descriptive-comparative research design was adopted. The study was conducted at Kovilampakkam Panchayat- Kanchipuram District, having total population of 20,500 in that women under the reproductive age group is around 2500. Based on inclusion criteria , Non randomized convenient sampling technique was used to select the samples of 120 women, 60 women were had consanguineous marriage and 60 women were had non-consanguineous marriage.

Tools and Score Interpretation:

It consists of four sections with 30 multiple choice questions.

Section I :It deals with the demographic variables of the subject

Section II : It consists of 10 multiple choice questions in knowledge aspects of consanguineous, ,the score interpreted as, for correct answer ‘1’ and for wrong answer ‘0’ score.

Section III: It had 10 multiple choice questions , to evaluate the effects of fetal outcomes. The score mentioned as, No effects – “1” and any effects ‘0’ score.

Section IV: It includes 10 multiple choice questions, to identify impact of development in consanguineous and non consanguineous children. According to the performance of the child in cognitive , social and health aspects the scores were given as, Participated or involved in performance - ‘1’, not interested to participate or absent - ‘0’ score .

VII. Date Collection Procedure:

The necessary administrative Permission was obtained for conducting the Pilot study and main study. After getting the informed consent, the data were collected by using structured interview schedule. The mothers were interviewed separately without having the possible interactions with other sample respondents. An average time limit of 15 to 30 minutes were taken for each sample.

VIII. Data Analysis And Interpretation:

The data were interpreted under the following sections.

Section I: Compare the overall level of knowledge of consanguineous and non consanguineous married women.

Section II: Compare the overall level of effects of fetal out come on consanguineous and non consanguineous married women.

Section III : Evaluate the impact of development in consanguineous and non consanguineous children.

IX. Major Findings Of The Study:

Table 1: shows distribution of overall level of knowledge among women on consanguineous marriage

S. No.	Overall knowledge	Inadequate <40%		Moderate 40-60%		Adequate >60%		Chi Square value
		No	%	No	%	No	%	
1.	Consanguineous group	50	83.3	6	10	4	6.7	X ² = 0.49 P=0.72 DF=2 Non Significant
2.	Non- Consanguineous group	47	78.3	8	13.3	5	8.3	

The overall knowledge among women on consanguineous marriage, shows that 6.7% of women had adequate knowledge in consanguineous group ,and 8% in non consanguineous group. The difference is statistically not significant i.e., X²=0.49, P=0.72. It shows that there is no much difference in knowledge aspects of consanguineous marriage in both the groups.

Table 2 : Shows the overall level of effects of fetal outcome on consanguineous & non consanguineous married women.

S. No.	Level of effects	consanguineous		Non consanguineous		Chi Square value
		No	%	No	%	
1.	Mild effect <40%	13	21.7	32	53.3	$X^2=12.92$ $P=0.01^{**}$ DF=2 Significant
2.	Moderate effect 40-60%	32	53.3	20	33.3	
3.	Severe effect >60%	15	25.0	8	13.4	

Regarding the effects of fetal outcome, 25% of women had severe effects in consanguineous group and 13% in non consanguineous group. The difference is statistically significant i.e., $X^2=12.92$, $P=0.01^{**}$. It shows that consanguineous group of children were more affected than the non consanguineous group.

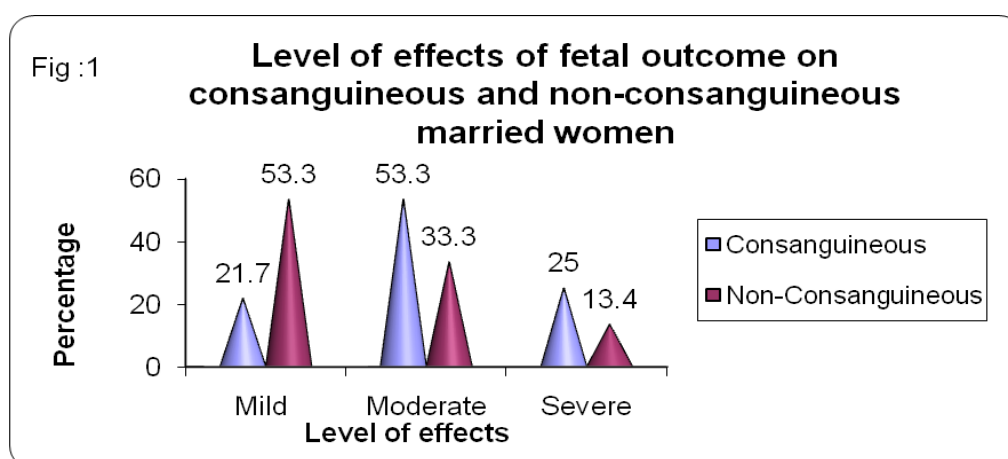


Table 3- shows the impact of development in consanguineous and non consanguineous children.

S.No.	Group	Social				Cognitive				Health Status			
		Present		Absent		Present		Absent		Present		Absent	
		No	%	No	%	No	%	No	%	No	%	No	%
1.	Consanguineous	7	8.4	80	91.6	15	17.2	72	82.8	58	66.7	29	33.3
2.	Non consanguineous	2	2.4	83	97.6	3	3.5	82	96.5	38	44.7	47	55.3
3	Chi square value	$X^2=2.81$ $DF=1$ $P=0.09$, Non Significant				$X^2=8.63$ $DF=1$ $P=0.01^*$ Significant				$X^2=8.41$ $DF=1$ $P=0.01^*$ Significant			

Regarding the impact of development, social aspects was statistically not significant i.e., $X^2=2.81$, where as cognitive and health aspects were statistically significant i.e., $X^2=8.63$, 8.41 at $P=0.01$. It shows that consanguineous children were more affected in the cognitive and health aspects than the non consanguineous group.

X. Conclusion

This study, strongly supports the importance of teaching the women in various aspects of health includes maternal and child health. The main key for reducing the outcome of fetal effects will need to public awareness about consanguineous marriage and importance of genetic counseling in consanguineous married women. As, we are the nurses, educate and create the public awareness will help to reduce the neonatal, infant mortality and morbidity rate, in order to be a healthy India in future.

Bibliography

Books:

- [1]. Adele Pillitteri, Maternal and Child health Nursing, 5th ed, Philadelphia. 2007:147 – 164.
- [2]. Carole Kenner, Judy Weight Lott, Comprehensive Neonatal Nursing, 3rd ed. Soundars Company, Philadelphia:2004
- [3]. Patwari, A.k., H.P.S. Sachdev Frontiers in Social Paediatrics. Jaypee brothers medical publishers (P) ltd, New Delhi:2002
- [4]. Polit and Hungelr, Nursing Research. 5th ed, J.P. Lippincott publishers, Philadelphia:1999
- [5]. Ronald. S. Illing worth. The Development of the infant and young child “Normal and abnormal” 9th ed, Churchill Livingstone, London: 2004

Journals:

- [6]. Anand k Sagar et al., Consanguinity and child health. Community Genetics. 2008;32:431-437..
- [7]. Antony D.K. Enabling mothers to ensure health of new borns. Health Action. Nov 2002:9-12.
- [8]. Bittles, A. H., & Black, M.L. The impact of consanguinity on neonatal and infant health. Early Human Development. 2010;86(11): 737-741
- [9]. Gowda, R. S., & Ramachandra, N.B. Parental consanguinity increases congenital heart diseases in South India, Annals of human biology. 2006;33 (5-6): 519-528.
- [10]. Oehler J.M, Hannan.T et al., Maternal views of preterm infants and responsiveness to social interaction. Neonatology Network; 2004 Sep: 12(6); 67-74
- [11]. Partridge J.C. Martinez .A.M. International comparison of care for preterm infants; parents perceptions of counseling and decision making. Journal of pediatrics; 2005: Aug : 116(2); 263-71
- [12]. Preyde. M. Ardal .F. Effectiveness of a parent “Buddy” Program for mothers of very preterm infants in a NICU. Indian academic of paediatrics. 2006;5;168(8); 968-73.
- [13]. Slusher.T, Hampton. R et al., Promoting care for hospitalized low birth weight and preterm infants in Nigeria-A feasibility study. Pediatrics Today; 2005:19(2)191-198.
- [14]. WHO. The World Health Report: 2010; Geneva: World Health Organization. Yunis, K., El Rafei, et al., Peri natal outcomes and prevention-a view from the Middle East. Neo Reviews: 2008;9(2):59.