

KNOWLEDGE REGARDING CORD BLOOD SAMPLING AMONG NURSING STUDENTS

Abstract

Cord blood sampling contains substantive number of stem cells, which is widely used for storage, donation, and transplantation and for treatment process. The aim of the study was assess the knowledge regarding cord blood sampling among B.Sc., (N) students. Qualitative approach and the descriptive research design were adopted. 70 nursing students were selected by using convenient sampling technique. Self Structured questionnaire was used. The study finding revealed that 56% of nursing students had moderate level of knowledge and 44% of nursing students had inadequate knowledge.

Keywords: Cord blood sampling, haemopoietic stem cells, leukaemias, lymphomas

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I. INTRODUCTION

Umbilical cord blood (UCB) is an alternative source of progenitor cells and haemopoietic stem cells. These cells can cure some of the malignant and non-malignant diseases such as immunodeficiency diseases, metabolic diseases, tumors, genetic defects, leukaemias, lymphomas and other failure syndromes. In 1988, the first umbilical cord blood sampling was done to a patient in Paris by Eliane Gluckman. The study conducted by Louiza Z. Karagiorgou., et al result states that 48% of the people had full knowledge regarding cord blood sampling, 95% had gathered further information, 84% of the people stored their children cord blood and 6% had favor to store/donate their cord blood. They states that the significant source of the information were media (35%) and doctors (25%). Dinç H, Sahin NH conducted the study to 334 pregnant women concluded that, the mothers were lack in knowledge about cord blood sampling. Bhandari R et al concluded that the women were in lack of knowledge. Fernandez CV et al states that the mothers were poor in the knowledge level regarding cord blood sampling and most of the women supported for donation of cord blood and for potential transplantation and future research.

II. STATEMENT OF THE PROBLEM

A study to assess the knowledge regarding umbilical cord blood sampling among B.Sc., Nursing students at College of nursing, Erode.

III. OBJECTIVES

1. To assess the level of knowledge regarding umbilical cord blood sampling among B.Sc., Nursing students.
2. To find the association between the pretest level of knowledge regarding umbilical cord blood sampling with their selected demographic variables among B.Sc., Nursing students.

IV. METHODOLOGY

Quantitative approach – Non experimental descriptive research design was adopted. The study was conducted in College of Nursing at Erode. The study samples were nursing students who fulfilled the inclusion criteria. Non probability convenience sampling technique was used to select the subjects.

V. DESCRIPTION OF THE TOOL

The tool consist of 2 sections,

Part I: It consists of demographic variables.

Part II: It consists of 25 structured questions related to knowledge on cord blood sampling.

VI. SCORING AND INTERPRETATION

The highest possible score of the tool is 25. Each correct answer carries one mark.

Level of knowledge	Scores	Percentage
Inadequate	1 - 8	32%
Moderate	9- 16	64%
Adequate	17- 25	100%

VII. DATA COLLECTION PROCEDURE

The study was conducted in College of Nursing. The investigators obtained oral consent from the head of the institution and participants. The purpose of the study was explained to the participants and about 70 nursing students were participated. The questionnaire was given individually. 20 minutes were allotted to answer the questionnaire. The collected data were descriptively analyzed.

VIII. RESULTS

The study results revealed that, the mean and standard deviation score were 8.9 (SD \pm 2.076). The majority 56% of nursing had moderate level of knowledge and 44% of nursing students were inadequate level of knowledge regarding cord blood sampling.

IX. IMPLICATIONS

- 1. Nursing Education:** Public awareness on umbilical cord sampling has to be motivated. Nurses are in best position to create positive attitude towards umbilical cord blood sampling.
- 2. Nursing Practice:** The nurse should update themselves on knowledge regarding umbilical cord blood sampling to promote the life of the future children.
- 3. Nursing Administration:** The nurse administrators can initiate the safe practice of cord blood sampling storage and donation in their working institutions.

X. RECOMMENDATIONS

1. Similar study can be replicated on a large sample.
2. The study can be conduct to staff nurses, public and antenatal mothers.
3. A comparative study can be conduct among professional and non-professionals.

XI. CONCLUSION

Cord blood or umbilical blood is the blood that remains in the umbilical cord, after the delivery of the fetus. It is rich in stem cells and cells for the immune system. There are numerous advantages in cord blood banking, which is easy to collect without pain to the mother and baby and mainly helps in regenerative therapies. The knowledge regarding cord blood sampling and banking is significant for the nurses to involve themselves in the futuristic therapies and technologies.

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