

**“A STUDY TO ASSESS THE EFFECTIVENESS OF BEETROOT EXTRACT ON
REDUCING ANEMIA AMONG ANTENATAL MOTHERS AT SELECTED
COMMUNITY AREA AT BANGALURU.”**



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IV Year B.Sc Nursing (2020-2024)

**Research project submitted to
SMT. Nagarathamma College of Nursing**

Under the guidance of

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**Dissertation submitted to the
RAJIV GANDHI UNIVERSITY OF HEALTH SCIENCES,
BANGALURU, KARNATAKA**

**In partial fulfilment of the requirement for the degree of
BACHELOR OF SCIENCE IN NURSING**

**Under the guidance of
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2020 – 2024**

DECLARATION BY THE CANDIDATE

I hereby declare that this project entitled "**A Study to assess the effectiveness of beetroot extract on reducing anemia among antenatal mothers at selected community area at Bengaluru.**" is a bonafide and genuine research work carried out by Ms. Megha S, Ms. Megha Manoj L, Mr. Ajmal A, Mr. Mohammad Nidhan PP, under the guidance of **Mrs. Nagammal M**, Assistant Professor, Obstetrics and gynaecological Nursing, Smt. Nagarathnamma College of Nursing, 69/80, Acharya Institute, Dr Sarvepalli Radhakrishnan Road, Soladevanahalli, Bengaluru-560107.

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CERTIFICATE BY THE GUIDE

This is to certify that this project work entitled " **A Study to assess the effectiveness of beetroot extract on reducing anemia among antenatal mothers at selected community area at Bengaluru** " is a bonafide and genuine research work carried out by Ms. Megha S, Ms. Megha Manoj L, Mr. Ajmal A, Mr. Mohammad Nidhan PP in partial fulfillment of the requirement for the basic BSc. Nursing.

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ENDORSEMENT BY THE PRINCIPAL

This is to certify that the research project entitled “” **A Study to assess the effectiveness of beetroot extract on reducing anemia among antenatal mothers at selected community area at Bengaluru** ” is a bonafide research work done by Ms. Megha S, Ms. Megha Manoj L, Mr. Ajmal A, Mr. Mohammad Nidhan PP , as a partial fulfillment of the requirement for the degree Bachelor of Science in Nursing under the guidance of Mrs. Nagammal M, Assistant Professor, Department of Obstetrics and Gynaecological Nursing, Smt. Nagarathamma College of Nursing.

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ABSTRACT

STATEMENT OF THE PROBLEM

"A study to assess the effectiveness of beetroot extract on reducing anemia among antenatal mothers at selected community area at Bengaluru."

BACKGROUND OF THE STUDY

Anemia is a prevalent health issue among antenatal mothers, particularly in developing regions, contributing to significant maternal and neonatal morbidity and mortality. Nutritional interventions are crucial in managing anemia during pregnancy. Beetroot is rich in iron and other nutrients that may play a role in reducing anemia.

OBJECTIVES

- ❖ To monitor the hemoglobin level among the antenatal mothers in the experimental and control group.
- ❖ To re monitor the hemoglobin level among antenatal mothers of experimental and control group.
- ❖ To compare the level of hemoglobin before and after administration of beetroot extract among antenatal mothers in the experimental group.
- ❖ To find out the association between the level of hemoglobin with demographic variable among antenatal mothers.

METHODS

The sample size of the present study was 60 antenatal mother residing in community area at bengaluru, out of which 30 samples belongs to experimental group and 30 samples belongs to control group. Non-probability convenient sampling technique was used for selecting the samples.

Section A: Demographic variable consists of 7 items

Section B: Sahli's Hemoglobinometer

RESULTS

Before the administration of beetroot extract, the hemoglobin levels of the control and experimental groups were found to be statistically similar, with no significant difference between them (calculated value = 0.365, table value = 1.671 at 58 degrees of freedom and 0.05% level of significance). This indicated that the groups were homogeneous prior to the intervention.

However, after the administration of beetroot extract, a significant increase in hemoglobin levels was observed in the experimental group (calculated value = -0.280, table value = 1.671 at 58 degrees of freedom and 0.05% level of significance). These results demonstrate that beetroot extract was effective in reducing anemia among antenatal mothers in the experimental group.

CONCLUSION

The study concludes that beetroot extract is an effective intervention for improving hemoglobin levels and reducing anemia among antenatal mothers. The significant increase in hemoglobin levels in the experimental group after administration of beetroot extract highlights its potential as a natural, accessible, and cost-effective nutritional supplement for managing anemia during pregnancy. This intervention could be particularly beneficial in community settings with limited resources.

TABLE OF CONTENT

NO./CHAPTERS	CONTENT	PAGE NO.
1	INTRODUCTION	1-11
2	OBJECTIVES	12-14
3	REVIEW OF LITERATURE	15-27
4	METHODOLOGY	28-36
5	RESULT	37-56
6	DISCUSSION	57-59
7	CONCLUSION	60-63
8	SUMMARY	64-65
9	BIBILOGRAPHY	66-70
10	ANNEXURE	71-81