

A STUDY TO ASSESS THE EFFECTIVENESS OF GINGER JUICE IN PREVENTION OF NAUSEA AND VOMITING IN EARLY PREGNANCY

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Abstract: A quasi- experimental study was conducted to assess the effectiveness of ginger juice intake on decreasing the Nausea and Vomiting level among antenatal mothers. The study was undertaken in Saravana Hospital Cuddalore. The study objectives were to assess the pre test and post test level of Nausea and Vomiting among antenatal mothers, to determine the effect of ginger juice on Nausea and Vomiting among antenatal mothers, to associate the pre- level of Nausea and Vomiting with selective demographic variables. The convenience sampling technique was chosen for selection of samples. The sample size was thirty the pretest level of Nausea and Vomiting assessed. The ginger juice preparation was given for the period of one week in twice a day and after a week post test level of Nausea and Vomiting assessed. The data were analyzed by using descriptive and inferential statistics. The result indicated that in pre test out of 30 samples, majority of 20(66.7%) of antenatal mothers had great level of Nausea and Vomiting and 6(20%) of antenatal mothers had severe level of Nausea and Vomiting. In post test 17(56.7%) antenatal mothers had mild level of Nausea and Vomiting and 13(43.3%) of antenatal mothers had moderate level of Nausea and Vomiting. In pre test mean was 21.03 with SD 4.089 after the administration of ginger juice preparation the mean was 7.867 with SD 3.401. The paired t' value was 26.917 at the level of $p < 0.001$. The study result of the study was concluded that ginger juice intake was effective in decrease the Nausea and Vomiting level among antenatal mothers.

Keywords: Antenatal Mothers, Ginger juice, Nausea, pregnancy, Primi Mother, Vomiting.

1. INTRODUCTION

Motherhood is an inequitable part of a women's life. It's natural law that women should carry her baby in her womb for 9 months and undergo the process of labor. From the time the mother starts conceiving the baby, it is called pregnancy and the mother elicits describable and undifferentiated changes in the physical and psychological process of life. The mother experiences some signs and symptoms right from the first trimester of pregnancy. As each women are present different signs and symptoms and it is not a must that all women should have the same manifestations.

Ginger (ginger officinal) is a commonly used ingredient found in many recipes all over the world. It is also been used throughout history for its medical benefits. This plant is now cultivated throughout the humid tropics including India, being the largest producer ginger was used as a flavoring agent long before history was formally recorded. Ginger contains anti-viral, anti-toxic and anti-fungal properties. Which are responsible for beneficial health properties .Its strong odor over the centuries ginger has been taken to treat cold and digestive tract disease. Eating ginger in pregnancy helps to maintaining cholesterol level, adequate blood supply for the baby. Mainly it helps in reliving nausea and vomiting during early pregnancy and helps in absorption of nutrients to treat inflammation. A moderate quantity of ginger can cause no harm to your body.

STATEMENT OF THE PROBLEM

A study to assess the effectiveness of ginger juice in prevention of Nausea and Vomiting in early pregnancy at Saravana Hospital, Cuddalore.

OBJECTIVES

- To assess the pretest level of Nausea and Vomiting in early pregnancy.
- To assess the post-test level of Nausea and Vomiting in early pregnancy.
- To determine the effect of ginger juice on Nausea and Vomiting in early pregnancy.
- To find out association between the pretest level of Nausea and Vomiting with selective demographic variables.

HYPOTHESES

H1- There will be significant difference in Nausea and vomiting in posttest level than in pretest level.

H2- There will be significant association between pre - test level of Nausea and Vomiting with selective demographic variables.

2. METHODS

Research design for the present study was pre experimental research design. (One group pretest/posttest design) was chosen. A Study population was antenatal mothers who were willing to participate in the study and thirty Samples were selected based on Convenience sampling technique with antenatal mothers who fulfill the inclusion of criteria. Inclusion criteria were Mothers who were primi mothers with nausea and vomiting and willing to participate in the study. Exclusion criteria Mothers who were hyperemesis gravidarum, medical problem with pregnancy. Data collection was done for two weeks. The permission was obtained from the Saravana Hospital at Cuddalore. The data collection procedure was explained to the samples and consent was obtained from samples. The pre level of Nausea and vomiting assessed followed by the post level of Nausea and Vomiting assessed after seven days of administration of ginger juice.

3. RESULTS

TABLE NO:1 DISTRIBUTION OF FREQUENCY AND PERCENTAGE OF DEMOGRAPHIC VARIABLES IN EARLY PREGNANCY

n=30

Sl. No	Demographic Variables	Frequency	Percentage %
1	Age in years		
	a. 20-25 years	11	36.7
	b. 26-30 Years	15	50
	c. 31-35 Years	4	13.3
	d. Above 35 Years	0	0
2	Education status		
	a. Illiterate	0	0
	b. Primary	6	20
	c. Higher secondary	17	56.7
	d. Graduate	7	23.3
3	Area of residence		
	a. Urban	16	53.3
	b. Rural	14	46.7
4	Menstrual history		
	a. 28-30 days cycle	20	66.7
	b. Below 28 days	7	23.3
	c. Above 30 days	3	10
5	Family history of vomiting		
	a. Mother	13	43.3
	b. Sister	14	46.7
	c. Other relatives	3	10

6	Number of pregnancy		
	a. 1	29	96.7
	b. 2	1	3.3
	c. 3	0	0
	d. More than 3	0	0

Table No 1 result shows that out of 30 samples 11 (36.7%) antenatal mothers were belongs to the age group 20-25 years, 15 (50%) antenatal mothers were belongs to the age group 26-30 years and 4 (13.3%) antenatal mothers were belongs to the age group 31-35 years. Regarding educated, 6 (20%) antenatal mothers had Primary educated, 17 (56.7%) antenatal mothers had higher secondary educated and 7 (23.3%) antenatal mothers were graduated.

Regarding residence, 16 (53.3%) antenatal mothers were residing at urban area and 14 (46.7%) of antenatal mothers were residing at rural area.

Regarding menstrual cycle, 20 (66.7%) antenatal mothers had menstrual cycle of 28-30 days cycle, 7 (23.3%) of antenatal mothers had menstrual cycle of below 28 days and 3 (10%) of antenatal mothers had menstrual cycle of above 30 days. Regarding history of vomiting, 13 (43.3%) antenatal mothers had history of the sister had vomiting of mother, 14 (46.7%) of antenatal mothers had history and 3 (10%) of antenatal mothers had history of. Regarding number of pregnancy, 29 (96.7%) antenatal mothers had only one pregnancy 1 (3.3%) of antenatal mother had number of two pregnancy.

TABLE NO 2: PRE LEVEL OF NAUSEA AND VOMITING IN EARLY PREGNANCY

n=30

PERCENTAGE %	PRE LEVEL	FREQUENCY	
0	Mild	0	
2.	Moderate	4	13.3
3.	Great	20	66.7
4.	Severe	6	20

Table no 2 result shows that, 4 (13.3%) antenatal mothers had moderate level of Nausea and Vomiting, 20 (66.7%) of antenatal mothers had great level of Nausea and Vomiting and 6 (20%) of antenatal mothers had severe level of Nausea and Vomiting.

TABLE NO 3: POST LEVEL OF NAUSEA AND VOMITING IN EARLY PREGNANCY

n=30

SL.NO.	POST LEVEL	FREQUENCY	PERCENTAGE %
1.	Mild	17	56.7
2.	Moderate	13	43.3
3.	Great	0	0
4.	Severe	0	0

Table no 3 shows that 17 (56.7%) antenatal mothers had mild level of Nausea and Vomiting and 13 (43.3%) of antenatal mothers had moderate level of Nausea and Vomiting.

TABLE NO 4: EFFECTIVENESS OF GINGER JUICE ON LEVEL OF NAUSEA AND VOMITING IN EARLY PREGNANCY

n=30

SL. NO	LEVEL	PRE TEST		POST TEST		CHI-SQUARE VALUE	P VALUE
		F	%	F	%		
1.	Mild	0	0%	17	56.7%	47.765	<0.001*
2.	Moderate	4	13.3%	13	43.3%		
3.	Great	20	66.7%	0	0%		
4.	Severe	6	20%	0	0%		

*-Significant

Table no 4 result shows that, chi-square value was 47.765 with p value <0.001. The value indicates that ginger juice significantly reduces the level of Nausea and Vomiting among primi mothers in post level. It concluded that ginger juice was more effective in reduction of Nausea and Vomiting during

TABLE NO 5: MEAN AND SD OF PRE AND POST LEVEL OF NAUSEA AND VOMITING IN EARLY PREGNANCY

n=30

Level	Mean	SD	"t" Value	P- Value
Pre test	21.03	4.089	26.917	<0.001*
Post test	7.867	3.401		

*-Significant

Table no 5 result shows that, In pre test, the mean was 21.03 with SD was 4.089. Where as In posttest mean was 7.867 with SD of 3.401. The comparison is done by paired' test the t value was 26.917 with p value <0.001. The result shows that there was a significant reduction in level of Nausea and Vomiting among primi mothers was a after administration of ginger juice.

TABLE NO 6: ASSOCIATION BETWEEN THE PRE LEVEL OF NAUSEA AND VOMITING IN EARLY PREGNANCY WITH SELECTED DEMOGRAPHIC VARIABLES

n=30

Sl. No	Demographic Variables	Moderate		Great		Severe		Chi-Square Value	'p' Value
		F	%	F	%	F	%		
1	Age in years	3	10%	7	23.3%	1	3.3%	3.731	0.444 (NS)
	a. 20-25 years	1	3.3%	10	33.3%	4	13.3%		
	b. 26-30 Years	0	0%	3	10%	1	3.3%		
	c. 31-35 Years	0	0%	0	0%	0	0%		
2	Education status	0	0%	0	0%	0	0%	19.487	<0.001 (S)*
	a. Illiterate	4	13.3%	2	6.7%	0	0%		
	b. Primary	0	0%	12	40%	5	16.7%		
	c. Higher secondary	0	0%	6	20%	1	3.3%		
3	Occupation	3	10%	15	50%	3	10%	4.295	0.637 (NS)
	a. Home maker	1	3.3%	1	3.3%	1	3.3%		
	b. Coolie	0	0%	3	10%	2	6.7%		
	c. Private employee	0	0%	1	3.3%	0	0%		
4	Monthly income in rupees	1	3.3%	5	16.7%	0	0%	4.425	0.619 (NS)
	a. Rs. 1000-5000	3	10%	9	30%	3	10%		
	b. Rs. 5001-10000	0	0%	3	10%	2	6.7%		
	c. Rs. 10001-15000	0	0%	3	10%	1	3.3%		
5	Type of family	4	13.3%	9	30%	4	13.3%	4.412	0.11 (NS)
	a. Nuclear family	0	0%	11	36.7%	2	6.7%		
	b. Joint family	0	0%	0	0%	0	0%		
	c. Extended family	0	0%	0	0%	0	0%		
	d. Others	0	0%	0	0%	0	0%		

6	Religion							5.464	0.243 (NS)
	a. Hindu	2	6.7%	16	53.3%	3	10%		
	b. Christian	1	3.3%	4	13.3%	2	6.7%		
	c. Muslim	1	3.3%	0	0%	1	3.3%		
	d. Others	0	0%	0	0%	0	0%		
7	Area of residence							3.549	0.17 (NS)
	a. Urban	1	3.3%	10	33.3%	5	16.7%		
	b. Rural	3	10%	10	33.3%	1	3.3%		
8	Menstrual history							4.254	0.373 (NS)
	a. 28-30 days cycle	1	3.3%	14	46.7%	5	16.7%		
	b. Below 28 days	2	6.7%	4	13.3%	1	3.3%		
	c. Above 30 days	1	3.3%	2	6.7%	0	0%		
9	Family history of vomiting							2.213	0.697 (NS)
	a. Mother	1	3.3%	10	33.3%	2	6.7%		
	b. Sister	3	10%	8	26.7%	3	10%		
	c. Other relatives	0	0%	2	6.7%	1	3.3%		
10	Number of pregnancy							0.517	0.772 (NS)
	a. one	4	13.3%	19	63.3%	6	20%		
	b. two	0	0%	1	3.3%	0	0%		
	c. three	0	0%	0	0%	0	0%		
	d. More than 3	0	0%	0	0%	0	0%		

*(S) – Significant, NS – Not Significant)

The table 6 depicts that educational status had significant relationship with the pre level of Nausea and Vomiting in early pregnancy. Rest of the demographic variables did not have significant relationship with the pre level of Nausea and Vomiting among antenatal mothers since the 'p' value is greater than 0.05.

4. DISCUSSION

The study objective was to assess the posttest level of Nausea and vomiting among primi mothers. This study result shows that, In post test level of Nausea and Vomiting, 17(56.7%) of mothers had mild level of Nausea and Vomiting and 13(43.3%) of mothers had moderate level of Nausea and Vomiting. No great and severe level of Nausea and Vomiting. The result of the score indicates the ginger juice was effective to the primi mothers.

The next objective was to determine the effect of ginger juice on Nausea and vomiting among primi mothers. This study results shows that, In chi-square value was 47.765 with p value <0.001. The value indicates that ginger juice significantly reduces the level of Nausea and Vomiting among primi mothers in post level. It concluded that ginger juice was more effective in reduction of Nausea and Vomiting during pregnancy. The result of the score indicates the ginger juice was effective to the primi mothers.

5. CONCLUSION

The study results were concluded that the ginger preparation to reduce the Nausea and Vomiting among the antenatal mothers in early pregnancy.

NURSING IMPLICATION:

NURSING PRACTICE

- Awareness programs to be implemented for the decreasing of Nausea and Vomiting among antenatal mothers through nutrition education.
- Visual aids on decreasing of Nausea and Vomiting among antenatal mothers can be exhibited in outpatient departments in obstetric clinics.

- Pamphlets regarding the benefits of ginger intake and education of Nausea and Vomiting can be issued at the reception.

NURSING RESEARCH

- A simple study can be done on large samples.
- An experimental study can be conducted with experimental and control group.
- A descriptive study can be conducted.

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