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## A interventional study to assess the effectiveness of vitamin b6 and ginger in treatment of pregnancy induce nausea and vomiting among Antenatl women (SMCH)

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### Abstract

Pregnancy is an experience full of growth change enrichment and challenge. Fear and expectations about becoming parents. The present study was aim to evaluate the effectiveness of vitamin b6 and ginger juice among antenatal mother's in saveetha medical college and hospital. A quantitative approach with Soloman 4group research design was adopted for the present study. In samples 60 antenatal women among which one group (30) is experimental group and other 30 is control group by using probability purposive sampling technique. An experimental first group received a vitamin b640 mg and second group received a 125 mg of

ginger juice for 3weeks a self - structured questionnaire method was used to collect the demographic data And nausea and vomiting was assessed using pregnancy unique quantification of emesis and nausea (PUQE) the study results show significant improvement in nausea and vomiting among antenatal women experimental group and control group after the intervention at the level of  $p < 0.001$ .this reveals that vitamin b6 and ginger is highly significant in the experimental group because it's reduce nausea and vomiting in antenatal women this indicates that vitamin and ginger is the effective and easy method to reduce nausea and vomiting.

**Keywords:** vitamin b6, ginger juice, nausea, vomiting Antenatal women

### Introduction

Prenatal care, also known as antenatal care, is a type of preventive healthcare the provision of medical information such as maternal physiological changes in pregnancy the mother and child's health alike pregnancy and child birth are the events in the life of a women who anxiously expected not only by her <sup>[1]</sup>. Nausea and ejection in physiological state are also called "Morning Sickness". Morning Sickness is nausea that happens during pregnancy it always begins between the fourth and 7th weeks in 80% of pregnant girls and resolves by the twentieth week of gestation. It's usually a mild, seldom nausea is thus severe that it's classified as vomit Gravidarum <sup>[2]</sup>. Pregnancy-related nausea and vomiting are common in family medicine, According to a recent study, up to 63% of women experience nausea and vomiting for up to 24 weeks <sup>[3]</sup>. Pregnancy. Although only 0.3% to 2% of these cases are classified as severe (so-called hyperemes <sup>[4]</sup>). The idea that ginger can be effective for nausea and vomiting is supported by several lines of evidence. Animated experiments suggest that ginger has antiemetic activity <sup>[5]</sup> when nausea is induced by cisplatin <sup>[6]</sup>. Or cyclophosphamide <sup>[7]</sup>. Studies in healthy volunteers suggest that ginger reduces experimentally induced nausea. Randomized, non-placebo-controlled studies suggest an antiemetic effect in human patients <sup>[8,9]</sup>. However, these data are insufficient to be able to judge whether ginger is really effective in treating clinical nausea and vomiting <sup>[10]</sup>. Ginger (*Zingiber officinale*) has been used for healthful purposes since antiquity <sup>[11]</sup>. Vitamin B6 for sickness greatly improves nausea, although not vomiting, for several pregnant women. A typical dose of vitamin B6 for morning sickness is ten mg to twenty five mg, three times a day<sup>[12]</sup>Ginger has been simpler than placebo in reducing pregnancy nausea. In some studies, effectiveness of ginger has been rumored to be equivalent to or over that of nutrition B6 <sup>[13]</sup>. The aim of this study is to check the effectiveness of B-complex vitamin (40 mg doubly a day) and ginger (250 mg fourfold a day) in treatment of physiological condition nausea <sup>[14]</sup>.

**Methods and material**

A cross - sectional study was conducted at selected hospital at saveetha medical college and hospital in thandalam quantitative approach with soloman 4group design was used to conduct the study in thandalam 60 samples were selected by using purposive sampling technique. The criteria for sample selection. An antenatal women above 18- 35 years, the client who are having the nausea and vomiting. The exclusion criteria for the sample are antenatal women with specific disease or problem such as high blood pressure, epilepsy, diabetes, know sensitivity to ginger the data collection period was done with prior permission From the head of the hospital and ethical clearance was obtained from the institution(SMATS).demographic data were collected using a semi structured interview questionnaire and the nausea and vomiting was assessed using pregnancy unique quantification of emesis and nausea scale.

**Results and Discussion**

The calculated student independent ‘t’ test value of t = 10.051 between Experimental Group I (Ginger Juice) and Control Group II was found to be statistically highly significant at p<0.001 level. This clearly infers that Ginger Juice administered to antenatal women was found to be effective in reducing the level of nausea and vomiting in the Experimental Group I than the Control Group II. The calculated student independent ‘t’ test value of t = 12.458 between Experimental Group II (Vitamin B6) and Control Group I was found to be statistically highly significant at p<0.001 level. This clearly infers that Vitamin B6 administered to antenatal women was found to be effective in reducing the level of nausea and vomiting in the Experimental Group II than the Control Group I. N = 60(15+15+15+15).

**Table 1**

Knowledge	Experimental Group I (Ginger Juice)		Control Group I		Experimental Group II (Vitamin B6)		Control Group II	
	No.	%	No.	%	No.	%	No.	%
Mild(≤6)	15	100.0	0	0	15	100.0	1	6.67
Moderate(7–12)	0	0	15	100.0	0	0	14	93.33
Severe(≥13)	0	0	0	0	0	0	0	0

The above present study shows that in the experimental group I (Ginger Juice), all 15(100%) had mild level of nausea and vomiting and in control group I, all 15(100%) had moderate level of nausea and vomiting. The present study also shows that experimental group II (Vitamin B6), all 15(100%) had

mild level of nausea & vomiting and in control group II, 14(93.33%) had moderate level of nausea & vomiting and 1(6.67%) had mild level of nausea and vomiting. N = 60(15+15+15+15)

**Table 2**

Nausea and Vomiting	Mean	S.D	Student Independent ‘t’ test Value
Experimental Group I (Ginger Juice)	3.93	0.70	t=14.321
Control Group I	8.00	0.85	p=0.0001
			S***
Experimental Group II (Vitamin B6)	4.07	0.88	t=9.241
Control Group II	8.13	1.46	p=0.0001
			S***
Experimental Group I (Ginger Juice)	3.93	0.70	t=0.457
Experimental Group II (Vitamin B6)	4.07	0.88	p=0.651
			N.S
Experimental Group I (Ginger Juice)	3.93	0.70	t=10.051
Control Group II	8.13	1.46	p=0.0001
			S***

\*\*\*p<0.001, S – Significant, N.S- Not Significant

The present shows depicts that the mean score of nausea and vomiting in the Experimental group I (Ginger Juice) was 3.93 with standard deviation 0.70.

The mean score of nausea and vomiting in the Experimental group II (Vitamin B6) was 4.07 with standard deviation 0.88.

**Conclusion**

In our study, there was no significant difference between effectiveness of ginger and vitamin B6 in reducing the symptoms of pregnancy-induced nausea, and both were similarly effective. Vitamin B6 was more effective in reducing retches; however, this effectiveness was not significant. Both medications were equally effective in reducing occurrence of vomiting and duration of nausea. No side effects were observed in either of the two groups. However, a study with longer treatment duration is recommended to check the possible side effects.

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