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## Prevalence of nausea and vomiting among children with cancer treatment

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### ABSTRACT

*Cancer, when diagnosed in children, is a stressful experience for the child and family members. Cancer treatment is advancing and the treatment-related side effects are very common among children. The prevalence of nausea, vomiting and retching is very frequent in children with chemotherapy. It is very essential to assess the children for any side effects of drugs. The study was conducted using descriptive study design on 125 children who met the inclusion criteria using purposive sampling technique. Data was collected using Demographic and clinical variables Proforma and nausea, vomiting and retching were assessed using RHODES Index. The findings revealed about 80.8% of children were in the age group of 6- 10 years, the majority were males (68.8%) and a majority 68% of children had severe nausea and vomiting and feeling of retching during cancer treatment.*

**Keywords**— Prevalence, Cancer, Nausea, Vomiting, Cancer treatment

### 1. INTRODUCTION

Cancer is the term which is always associated with long term treatment and painful treatment. The cancer treatment is improving day by day and we have many new therapies for cancer. The most common and well known therapy is chemotherapy for many types of cancer. Chemotherapy has side effects of nausea, vomiting, fatigue and many more. It is very important to know the prevalence of nausea, vomiting and retching among children to prevent many treatment related side effects.

In a prospective observational study on 24 physicians and nurses and 298 patients receiving chemotherapy were studied from 6 countries. Study reveals more than 35% of them experienced acute nausea and 13% of them had acute emesis. It was also noted that there was delayed nausea and emesis observed in 60% and 50% in patients with highly emetogenic chemotherapy, while 52% and 28% were seen among patients with moderately emetogenic chemotherapy. It also shows that physicians and nurses underestimated the incidence of delayed nausea and vomiting.<sup>1</sup>

In a study on 151 cancer patients who were with the first cycle of chemotherapy were selected as participants. The participants were asked to record the chemotherapy induced nausea and vomiting for the initial 8 days. During the first chemotherapy cycle, 33% had neither acute nor delayed Chemotherapy Induced Nausea and Vomiting (CINV), 36% had acute and 8% had delayed CINV. This shows that patients on chemotherapy experience nausea and vomiting either as acute or delayed.<sup>2</sup>

In a study on 40 children, different types of cancer were interviewed along with their parents for the prevalence of nausea and vomiting before and after chemotherapy. About 28.8% reported anticipatory nausea and 20% reported anticipatory vomiting.<sup>3</sup>

### 2. STATEMENT OF THE PROBLEM

A Descriptive Study to Assess the Prevalence of Nausea and Vomiting among Children with Cancer Treatment at Selected Hospitals, Chennai.

### 3. OBJECTIVES OF THE STUDY

To assess the level of nausea, vomiting and retching experienced by children undergoing cancer treatment.

### 4. MATERIALS AND METHODS

A descriptive design was adopted to conduct the study at Selected Hospitals, Chennai, India after prior permission is obtained from the concerned authority. One hundred and twenty-five children with cancer treatment were selected by purposive sampling technique. After a formal introduction, the researcher obtained consent from the participants of the study. The data by the participants were kept confidentially.

## 5. INSTRUMENTS

The baseline data was collected using the Demographic Variable Proforma, Clinical Variable Proforma and RHODES Index for measuring nausea, vomiting and retching among children with cancer treatment. The scores ranged from 0- None, 1-10- Mild, 11-20- Moderate and 21-32- Severe. The maximum score was 32 and the minimum score 0.

## 6. DATA COLLECTION

The researcher collected the demographic and clinical variables with a set of predetermined questions by interviewing the children and parents. Nausea, vomiting and retching were assessed using RHODES Index from children on cancer treatment.

## 7. RESULTS

The study findings reveal that about 80.8% of children were in the age group of 6- 10 years, the majority were males (68.8%) and a majority 68% of children had severe nausea and vomiting and feeling of retching during cancer treatment.

**Table 1: Frequency and Percentage Distribution of Level of Symptoms Nausea, Vomiting and Retching among Children with cancer treatment, (N= 125)**

Level of Nausea, Vomiting and Retching	f	%
None (0)	0	0
Mild (1-10)	2	16
Moderate (11-20)	38	30.4
Severe (21-32)	85	68

Table 1 reveals that a majority of children 68% had severe nausea, vomiting and retching.

## 8. DISCUSSION

The study findings reveal that about 80.8% of children were in the age group of 6- 10 years, the majority were males (68.8%) and about 68% of children had severe nausea and vomiting and feeling of retching during cancer treatment. To support the present findings a study done on 225 patients 47 (21%) had experienced nausea and vomiting before the treatment was initiated. This indicates that we can anticipate the occurrence of nausea and vomiting.<sup>4</sup> In another study, 20% of children developed nausea before chemotherapy and 25-30% had after the fourth cycle.<sup>5</sup>

## 9. CONCLUSION

The children with cancer experience many side effects related to cancer treatment and the most common one experienced is nausea and vomiting. This study shows that there is severe nausea, vomiting and retching experienced by children with cancer treatment. It is very important to assess the physical discomforts of children under cancer treatment. This assessment can help in preventing the occurrence of nausea and vomiting.

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