

INTRODUCTION

Recent advances in the development and administration of anticancer therapies have prolonged patients’ lives. However, with the increasing number of cancer survivors, most of them had been exposed to neurotic agents and these agents causes neurological symptoms. Chemotherapy induced Peripheral Neuropathy(CIPN) can limit therapeutic options for patients and result in reduction of doses and in the aftermath of treatment which has been found to have intense alterations in the Quality of Life (QoL) of Cancer patients. . Even though studies from other settings have shown that the prevalence of Chemotherapy induced Peripheral Neuropathy (CIPN) is between 30-90% depending on the time of reporting ,the burden and the risk factors for the population understudy is not well-known.This study aim was to assess the prevalence of CIPN, risk factors and its effects on patients’ Quality of Life (QoL).

Specific objectives:

- i. Determine the prevalence of Chemotherapy-Induced Peripheral Neuropathy among Cancer patients who have had or undergoing chemotherapy.

ii. Identify the factors that are associated with Chemotherapy induced peripheral neuropathy among cancer patients who have had or undergoing chemotherapy.

iii.Examine the effect of CIPN on the Physical Wellbeing. cancer patients who have had chemotherapy or undergoing chemotherapy.

iv.To assess the impact of CIPN on the Psychological Wellbeing of cancer patients who have had chemotherapy or undergoing chemotherapy.

v. To analyse the effect of CIPN on the Social Wellbeing of cancer patients who have had chemotherapy or undergoing chemotherapy.

vi. To find out about the effect of CIPN on the Spiritual Wellbeing of cancer patients who have had chemotherapy or undergoing chemotherapy.

METHODS

A cross-sectional study was done and the target population were the cancer patients receiving chemotherapy at the National Radiotherapy Oncology and Nuclear Medicine Centre,Korle Bu Teaching Hospital. The study looked at the CIPN and its effect on the quality of life of cancer patients. As part of the study the City of Hope Quality of Life model was used as a guiding framework to organise the study.

Using the Cochrane formula, sample size was calculated making 124 participants including 10% attrition rate. Out of 124 ,113 patients consented to participate in the study.

Ethics approval was sought from the Institutional Review Board of the study site. Convenience sampling was employed. The data collection tool was patient subjective outcome questionnaire comprising of the socio-demographics, clinical characteristics and the Functional Assessment of Cancer Therapy/Gynaecologic Oncologic Group-Neurotoxicity Scale (the **FACT/GOG-NTX-13-Version 4**) and Functional Assessment of Cancer Therapy Spiritual wellbeing scale (**FACT-SPWB-12**)

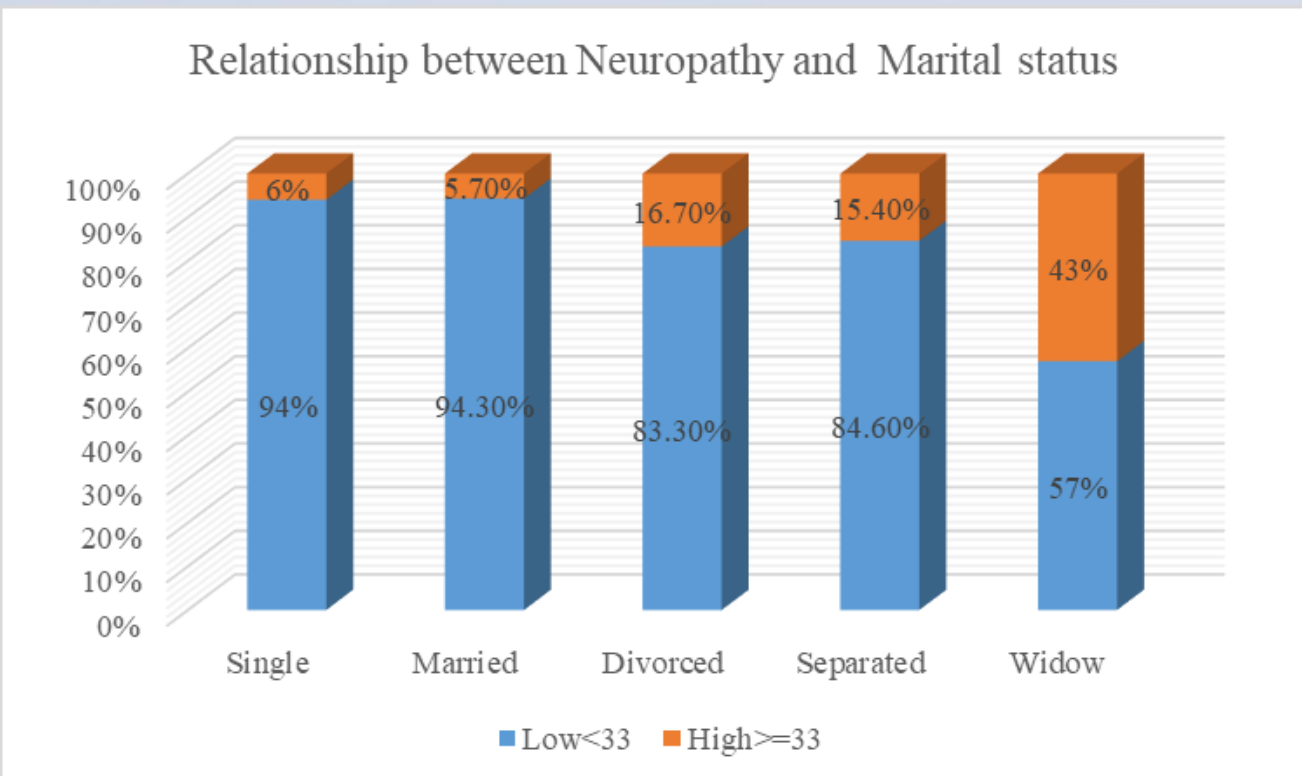
RESULTS

The results showed that CIPN was present in the participants (99.12%). The most reported symptoms were in the upper and lower extremities; numbness and tingling sensation in hand and feet (73.4%, 72.6%) and discomfort in both hands and feet (70.8%, 70.8%). Participants also had their daily activities affected by having trouble buttoning buttons (39.8%), trouble with feeling of shapes and objects (23.8%) and trouble walking (54%). All wellbeing subscales were low but functional (8 -SD, 7.17, range 0-28, r=-0.27,p=0.004) , social (15.5 SD 7.27,range0- 28,r=-0.22,p =0.02) and spiritual (34.5 sd10.49,range 0-48,r=-0.49,p=0.00) were correlated and highly significantly affected by CIPN. Also the total quality of life was generally low (87.7, SD 24.41, range 0-156, r=-0.38, p=0.000027) and was also highly significant.

Table 4.10 Relationship between CIPN and Quality of life Subscales

Neuropathy (Correlation)		
Variable	Correlation Coefficient	P-Value
Physical Well-being	-0.47	0.622
Social Well-being	-0.215	*0.022
Functional Well-being	-0.269	*0.004
Spiritual Well-being	-0.496	*0.000
Emotional Well-being	-0.059	0.538
Content with quality of life	-0.198	*0.036
Total QoL	-0.384	*0.000027

Figure 4.1. Showing the relationship between Neuropathy and Marital status



CONCLUSIONS

Chemotherapy induced peripheral Neuropathy is present in patients receiving chemotherapy and it significantly impact on the quality of life, so there is the need to draw up an interventional program using a multidisciplinary approach to monitor, identify it early and intervene for maximum outcome.

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