

## Abstract

### Background

Chemotherapy is considered the cornerstone in the treatment of many cancers, but it also comes with its challenges. The distress experienced by patients at the commencement of chemotherapy is a critical aspect of their cancer journey, with profound implications for their overall well-being and treatment outcomes. This study aimed to assess the prevalence and determinants of distress before the first dose of chemotherapy among adult cancer patients in two tertiary hospitals in Kenya.

### Methodology

This was a cross-sectional study. A total of 438 patients who were scheduled for the first dose of chemotherapy were interviewed using a structured questionnaire. Those who were not able to give consent, those who were only on oral chemotherapy and those who were not chemotherapy naïve were excluded. Distress was measured using the Distress thermometer with a cutoff point of four. Data analysis was performed using SPSS V26.

### Results

The study participants interviewed were predominantly women (63%), older than 50 (53%), unemployed (87%), married (65%), Christian (99%), lived less than 100 Kilometers (55%), lived with family (90%), educated up to the primary level (49%), and had insurance (92%). The most prevalent cancers were reproductive organ tumours, and 43% of the participants had stage four disease. A total of 89 % of the participants were clinically distressed ( $DT \geq 4$ ). In a chi-square analysis, there was a significant relationship between unemployment ( $P=0.003$ ), residence ( $P=0.002$ ), income level ( $P=0.001$ ), insurance status ( $P= 0.004$ ), living conditions ( $P=0.003$ ), education level ( $P=0.001$ ), tumour type ( $P=0.004$ ), goal of therapy ( $P=0.001$ ) and stage of disease ( $P=0.000$ ) with clinical distress. On a multi-variate regression analysis, the strongest predictors were the cancer stage with (aOR: 8.4  $P=0.000$ ), education level (aOR: 8.3  $P=0.001$ ) along with unemployment (aOR: 4.1  $P=0.003$ ) and goal of therapy (aOR: 6.32  $P=0.001$ )

### Conclusion

The prevalence of distress at the start of chemotherapy is high, and interventions should be initiated before chemotherapy. Sociodemographic and disease characteristics should be considered when developing targeted interventions to manage distress among patients starting chemotherapy.

