COMPERATIVE STUDY OF COMPREHENSIVE GERIATRIC ASSESSMENT VERSUS STANDARD ONCOLOGY CARE ON TOLERANCE TO PALLIATIVE CHEMOTHERAPY IN GERIATRIC CANCER PATIENTS

NOOR ESRATE

Background: Aging is one of the strongest and unmodifiable risk factors for the development of cancers. There is delay in diagnosis and usually present with advanced stage of malignancy in elderly people and needs palliative treatment. Patients who receiving palliative chemotherapy, Clinical judgement and performance status (PS) scales are widely used in standard oncology care (SOC). However, these tools have limitations to evaluate detailed health status or vulnerabilities in elderly people with cancer. Comprehensive geriatric assessment (CGA) is a coordinated multidisciplinary assessment that identifies various problems and leads to relevant interventions in elderly cancer patients. The aim of the study was compare the effectiveness of CGA and SOC on tolerance to palliative chemotherapy in elderly cancer patients. **Methods:** Quasi-experimental study which was held at Medical Oncology Department, National Institute of Cancer Research and Hospital (NICRH), Dhaka, Bangladesh from 1st July 2023 to 31st December 2024. Patients were assigned into two arms: Arm A received CGA before, after 3 months and after 6 months of starting palliative chemotherapy. Arm B received SOC, but no specific structured CGA. Assessments including toxicities, physical performance by Eastern Cooperative Oncology Group (ECOG) PS scale and unplanned hospital admissions were done. **Results:** In this study mean age was 67.07 ± 5.30 years and male: female ratio was 1.44:1 among all patients. Pretreatment baseline characteristics were almost similar in both arms; differences were not statistically significant ($p<0.05$). Chemotherapy induced toxicities were more in Arm B in comparison with Arm A (grade 3 or 4 toxicities in Arm A 54.54% vs, in Arm B 78.78% respectively, $p<0.05$). Performance status declined in both arms but more in Arm B (after 6 months in Arm A 39.39% had PS2, 12.12% had PS3 and in Arm B PS2 belongs to 30.30% and PS3 belongs to 51.51%). The unplanned hospital admissions were significantly lower in Arm A compared with Arm B (24.24% in Arm A and 54.54% in Arm B, $p<0.05$). **Conclusion:** Comprehensive geriatric assessment with interventions in oncology practice significantly reduces chemotherapy toxicities, prevents physical performance decline and decreases unplanned hospital admissions eventually improves tolerance to palliative chemotherapy in elderly patients.

Keywords: Comprehensive geriatric assessment (CGA), Palliative chemotherapy, Elderly cancer patients

Date of submission: *11.04.2026*
Date of acceptance: *29.04.2026*
DOI: *https://doi.org/10.3329/bjm.v37i20.89258*
Citation: *Esrate N. Comparative Study of Comprehensive Geriatric Assessment versus Standard Oncology Care on tolerance to Palliative Chemotherapy in Geriatric Cancer Patients. Bangladesh J Medicine 2026; Vol. 37, No. 2(1): pp. 225-226*

Affiliations:

1. *Resident, MD Medical Oncology, National Institute of Cancer Research & Hospital (NICRH), Dhaka, Bangladesh. E-mail: dr.nooresrate19@gmail.com*