

# Chemotherapy near the End-of-Life – A Review of the Literature

## Hamilton IJ\*

Researcher, Institute of Health and Wellbeing, University of Glasgow, UK

\*Corresponding author: Hamilton IJ, Researcher, Institute of Health and Wellbeing, University of Glasgow, Institute of Health and Wellbeing, 1 Lilybank Gardens, Glasgow, G12 8RZ, UK; Tel: 07799745900; E-mail: ijdhamilton@doctors.org.uk

#### Received date: Mar 29, 2016; Accepted date: Apr 25, 2016; Published date: Apr 28, 2016

Copyright: © 2016 Hamilton IJ. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

**Keywords** Chemotherapy; End of life care; Palliative Care; Cancer care

advised caution highlighting ethical issues involved in limiting treatment at the end of life.

# Discussion

Chemotherapy near the end-of-life is controversial. The et al. [1] in a study of lung cancer patients found that initial optimism about recovery tended to vanish when the tumour recurred after chemotherapy and they suggested collusion was occurring between doctor and patient with the doctor not wanting to pronounce a "death sentence" and the patient not wanting to hear it. Matsuyoma et al. [2] in a literature review showed that patients were willing to undergo treatment which had little benefit but major toxicity and suggested that honest unbiased sources were needed to inform them of their prognosis, choices, consequences, typical outcomes and ways to make decisions. Harrington and Smith [3] commented that patients faced difficult decisions about near end-of-life chemotherapy which may prolong survival or reduce symptoms but prevents them from engaging in meaningful life review and preparation for death. Earle et al. [4] estimated that 20% of cancer patients were still receiving chemotherapy in the last 2 weeks of life and suggested aggressive treatment near the end-of-life was a quality-of-care issue. Buiting et al. [5] in a study of health care professionals found greater use of chemotherapy near the end of life could be explained by the doctor and patient mutually reinforcing an attitude of "not giving up" and the doctor interpreting quality of life in terms of "they would be taking away hope" by withholding treatment. Braga [6] in a case study poignantly asked "why are we not ceasing chemotherapy when it is useless, toxic, logistically complex and expensive".

Zdenowski et al. [7] reported wide variations in the use of chemotherapy in the last 30 days of life and Pacetti et al. [8] in a study of advanced cancer patients found 24 per cent of patients received their last chemotherapy regimen within one month of death. Wright et al. [9] demonstrated that chemotherapy in the last months of life was associated with an increased risk of undergoing cardiopulmonary resuscitation, mechanical ventilation or both and of dying in an intensive care unit and Prigerson et al. [10] stated that quality of death (QOD) for end-stage cancer was being harmed by near end-of-life chemotherapy. Fujisawa et al. [11] demonstrated anxiety, depression and poor psychological quality of life was associated with chemotherapy at the end of life and Wijnhoven et al. [12] showed that patients receiving chemotherapy during the incurable phase of cancer had more difficulty in accepting the incurable nature of their disease. Pirl et al. [13] stated that administering chemotherapy close to death was poor quality care and Mohammed et al. [14] suggested guidelines were required to ensure the appropriate use of palliative chemotherapy. Massa et al. [15] called for a reduction in the number of patients who start chemotherapy in the last 30 days of life but Schildmann et al. [16]

Luthy et al. [17] suggested a supportive care programme assessing risks and benefits of chemotherapy could help prevent aggressive care near death and Jang et al. [18] in a study of advanced pancreatic cancer patients demonstrated that consulting patients and providing more palliative care resulted in less aggressive treatment near death. Amano et al. [19] and Zakhour et al. [20] also showed that early palliative referral and end-of-life discussions with patients was associated with less aggressive end-of-life care.

### References

- The A, Hak T, Koeter G, Wal G (2000) Collusion in doctor-patient communication about imminent death: an ethnographic study. BMJ 321:1376.
- Matsuyoma R, Reddy S, Smith JT (2006) Why do patients choose chemotherapy near the end-of-life? A review of the perspective of those facing death from cancer. J Clin Oncol 24: 3490-3496.
- 3. Harrington E, Smith TJ (2008) The Role of Chemotherapy at the End of Life. "When is Enough, Enough?" JAMA 299: 2667-2678.
- 4. Earle CC, Landrum MB, Souza JM, Neville BA, Weeks JC, et al. (2008) Aggressiveness of cancer care near the end of life: Is it a quality-of-care issue? J Clin Oncol 26: 3860-3866.
- Buiting H, Rurup M, Wijsbek H, Zuylen L, Hartogh G (2011) Understanding provision of Chemotherapy to patients with end stage cancer: qualitative interview study. BMJ 342: d1933.
- 6. Braga S (2011) Why do our patients get chemotherapy until the end of life? Ann Oncol 22: 2345-2348.
- Zdenkowski N, Cavenagh J, Ku YC, Bisquera A, Bonaventura A (2013) Administration of chemotherapy with palliative intent in the last 30 days of life: the balance between palliation and chemotherapy. Intern Med J 43: 1191-1198.
- Pacetti P, Paganini G, Orlando M, Mambrini A, Pennucci MC, et al. (2015) Chemotherapy in the last 30 days of life of advanced cancer. Support Care Cancer 23: 3277-3280.
- Wright AA, Zhang B, Keating NL, Weeks JC, Prigerson HG (2014) Associations between palliative chemotherapy and adult cancer patients' end of life care and place of death: prospective cohort study. BMJ 348: g1219.
- Prigerson HG, Yuhua B, Shah MA, Paulk ME, LeBlanc TW, et al. (2015) Chemotherapy use, performance status and quality of life at the end of life. JAMA Oncol 1: 778-784.
- 11. Fujisawa D, Temel JS, Taeger L, Greer JA, Lennes IT (2015) Psychological factors at early stage of treatment as predictors of receiving chemotherapy at the end of life. Psycho-Oncology 24: 1731-1737.
- 12. Wijnhoven M, Terpstra W, Buiting H, Haazer C, Gunnink-Boonstra N, et al. (2015) Bereaved relatives' experiences during the incurable phase of cancer: a qualitative interview study. BMJ Open 5: 11.
- 13. Pirl WF, Greer JA, Irwin K, Lennes IT, Jackson VA et al. (2015) Process of discontinuing chemotherapy for metastatic non-small cell lung cancer at end of life. J of Oncol Prac.

Page 2 of 2

- Mohammed AA, Al Zahrani AS, Ghanem HM, et al. (2015) End of life palliative chemotherapy: where do we stand? J Egypt Natl Canc Inst 27: 35-39.
- 15. Massa I, Malton M, Foca F (2015) Chemotherapy near end-of-life: aiming for appropriateness at the Cancer Institute of Romagna. Ann Oncol 26.
- Schildman J, Baumann A, Mahmat C, Salloch S, Vollmann J (2015) Decisions about limiting treatment in cancer patients: A systematic review and clinical ethical analysis of reported variables. J Palliat Med 18: 884-892.
- Luthy C, Pugliosi E, Rapiti M, Kossovsky M, Dietrich PY, et al. (2015) Aggressiveness of cancer treatment in patients hospitalized in a supportive care unit. Support Care Cancer 23: 325-331.
- Jang RW, Krzyzanowska MK, Zimmermann C, Taback N, Alibhai SMH (2015) Palliative care and the aggressiveness of end-of-life care in patients with advanced pancreatic cancer. J Natl Cancer Inst pp: 107.
- 19. Amano KA, Morita T, Tatara R (2015) Early palliative referrals associated with less aggressive EOL care. J Palliat Med 18: 270-273.
- 20. Zakhour M, LaBrant L, Rimel BJ, Walsh CS, Li AJ, et al. (2015) Too much too late: Aggressive measures and the timing of end of life care in women with gynaecologic malignancies. Gynecol Oncol 138: 383-387.