

## **Timing of referral to inpatient palliative care services for advanced cancer patients and earlier referral predictors in mainland China**

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**BACKGROUND:** Routine early integration of palliative care with advanced cancer management is not yet a part of standard practice in many countries, including mainland China. Whether patients in China suffering from advanced cancer are referred to palliative care services in a timely manner remains unclear. We sought to investigate the timing of palliative care referral of Chinese cancer patients at our center and its predictors.

**HYPOTHESIS:** Our findings demonstrate that Chinese cancer patients are referred relatively late in the course of their disease to inpatient palliative care services. To overcome the barriers to early integration of palliative care into a patient's treatment plan, accurate information about palliative care must be provided to both oncologists and patients via comprehensive and systematic educational programs.

**METHODS:** Retrospective medical data including demographic characteristics and referral information were collected for analysis. A total of 759 patients referred to our palliative care unit (PCU) from January of 2007 to December of 2013 were included in the final analysis.

**RESULTS:** The mean age of the 759 patients included in the study was 62.89 years (range 61.95–63.82). Some 369 patients (48.6%) were male and 559 (73.6%) Shanghainese(indigenous). Lung cancer (17.9%) was the most common diagnosis. The time interval since enrollment into the PCU until a patient's death (length of stay, LOS) was calculated. A longer LOS indicated earlier referral to inpatient PC services. The median LOS was 21 days (CI95%=19.79–22.21). Multivariate analysis showed that whether or not the patient was indigenous ( $p = 0.002$ ) and younger than 65 ( $p = 0.031$ ) were independent factors for a longer LOS. Such other characteristics as gender and primary cancer type bore no relationship to LOS.