

Plenary session: Early detection

12:35 - EARLY/LATE DIAGNOSIS PATTERNS IN OLDER PATIENTS WITH BREAST, LUNG, AND COLORECTAL CANCERS: POPULATION-BASED EVIDENCE TO INFORM NAEDI INITIATIVES

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Objectives

To examine early/late diagnosis patterns for three common cancers.

Methods

Population-based data from the Eastern Cancer Registration and Information Centre (ECRIC, population ~5.7 million). Multi-level logistic regression models were used to predict odds of advanced stage at diagnosis based on patients' age, deprivation quintile (IMD 2004), tumour type and sex.

Results

During 2006-9, there were 17,836, 13,286 and 14,930 patients with breast (female), lung and colorectal cancer; stage information was complete for 92% (16,560), 79% (10,435) and 86% (12,834) of all patients, respectively. Among staged patients, 41%, 15% and 17% were diagnosed at stage I, and 86%, 21% and 50% at stages I-II, respectively for breast, lung and colorectal cancer patients. Patients aged 70-74, 75-79, 80-84 and ≥85 were compared with those aged 65-69 (reference): For breast cancer, odds ratios of stage III-IV diagnosis were 1.53, 2.04, 2.47, 2.61, $p < 0.001$ – attenuated to 1.20, 1.46, 1.68 and 1.77 after adjustment for whether the tumour was detected through screening or symptomatically. For colorectal cancer, patterns for stage III-IV diagnosis with increasing age were not significant ($p = 0.549$) but odds ratios for stage II-IV diagnosis were 1.22, 1.29, 1.46, 1.56, $p < 0.001$. For lung cancer, there was no apparent association between late stage diagnosis and increasing age; we will be investigating this further. Variation in stage at diagnosis between different deprivation groups was relatively small for all three cancers, and mainly related to stage II disease for breast cancer and stage I disease for colorectal cancer. Sensitivity analysis using multiple (statistical) and normative imputation of stage produced highly similar findings.

Conclusions

There is substantial potential for improvements in early diagnosis among older patients with breast and colorectal cancer. The findings could help inform breast and colorectal cancer early diagnosis initiatives addressed at older people.