The Association between Depressive Symptoms and Age in Cancer Patients: A Multicenter Cross-Sectional Study.


ABSTRACT: Context. There is controversy around the association between depressive symptoms and age in adult cancer patients. Objectives. The aim of this study was to evaluate the following hypotheses: 1) cancer patients’ depressive symptoms decrease with age, and 2) in individuals aged 65 years or older, depressive symptoms increase because of the effect of somatic symptoms. Methods. We retrospectively analyzed a database of 356 cancer patients who were consecutively recruited in a previous multicentre cross-sectional study. Depressive symptoms were assessed by the Patient Health Questionnaire-9 (PHQ-9), and correlations with age and other factors were assessed by hierarchical multivariate regression analysis. Age was entered as the dependent variable in the first step, patient characteristics and cancer-related variables were entered in the second step, and somatic symptoms were entered in the last step. We analyzed this model for both the total sample and the subpopulation aged 65 years or older. Results: In the total sample, the PHQ-9 score was significantly associated with lower age, fatigue, and shortness of breath (adjusted R² 14.2%). In the subpopulation aged 65 years or older, no factor was associated with the PHQ-9 score (adjusted R² 7.3%).

Conclusion: The finding that depressive symptoms in cancer patients decreased with age was concordant with our first hypothesis, but the second hypothesis was not supported. Younger cancer patients were vulnerable to depressive symptoms and should be monitored carefully. Further studies using more representative samples are needed to examine in detail the association between depressive symptoms and age in older cancer patients.

STRENGTHS

- Relatively large, multicentre study comprising large database
- PDQ-9 a well validated tool and validated in Japanese

WEAKNESSES

- Secondary analysis, due to exclusions, number lower than initially thought so seems to be inadequately powered
- COGNITION not tested!!! Which the authors to acknowledge
- Depressive symptoms very vague, DSM-IV quoted, but included dysthymia and ‘major and minor depression’. Unclear if included adjustment disorders as these are not listed on PHQ-9 scale interpretation sheet or mentioned in article.
- Selection bias. Patient population from Tertiary cancer centres of cancer pts undergoing ‘aggressive anti-cancer treatments’ at the time they were recruited. These pts had good performance status too.
- Low symptom burden (the four symptoms they used for subscale (which does not appear to be validated in either English or Japanese) on average were between 1-2/10. Other symptoms on
MDASI not included, nor were other psychosocial factors such as having young children, for example. Comorbidities not accounted for.

- PHQ-9 scores were all low on average. Mean scores 3-4 (5-9 minimal symptoms on PHQ-9). Of note, Western studies avg was 6-7).
- Pts who had been seen by a psychiatrist in past 2 mos (38 of the 661, which seems quite high actually) excluded, but these may have been the most likely to have symptom burden of depressive symptoms
- Lower age associated with more depressive symptoms according to PHQ-9, but only accounted for 4.9% of the variance.

**APPLICABILITY TO PALLIATIVE CARE:**

- Importance to look for mood symptoms in patients of any age and in any cultural context.
- Cognitive assessment is also important. Distinguishing between cognitive impairment and depressive symptoms is essential.
- Acknowledging the concept of “Total suffering” and psychosocial factors that may put pts at increased risk of depressive symptomatology and therefore more likely to benefit from Interprofessional Team support, for example. May influence care setting.
- Distinguishing Adjustment disorder with depressed mood from Major Depressive Episode is also important as treatment may be very different.