Review: psychosocial interventions have a modest impact on improving quality of life in adult cancer patients


Clinical impact ratings GP/FP/Primary care ****** Oncology ******

In adults with cancer, are adjuvant psychosocial interventions more effective than control interventions for improving quality of life?

METHODS

Data sources: Medline, CINAHL, AMED, CANCERLIT, PSYINDEX PLUS, PsycLIT, and SERLINE; reference lists of retrieved articles; and informal inquiries.

Study selection and assessment: English or German language studies were selected if they used psychosocial interventions with >=1 control group (routine medical and caring therapy without any additional psychosocial intervention) and were published between 1970 and July 1999. Overall methodological quality of the studies was estimated as low or high (< or >= average number of fulfilled validity criteria, respectively).

Outcomes: quality of life (QOL) (assessed by various instruments).

MAIN RESULTS

37 studies with 3120 patients (average age 54.1 y) met the selection criteria. 16% of the studies included patient education programmes (medical or procedural information, with or without coping), 12% involved social support (professionally guided support groups of patients providing mutual emotional support and communication of shared experiences), 54% involved coping skills training (cognitive behavioural or behavioural methods to modify cognitions or behaviours by active acquisition of specific coping skills using such techniques as progressive muscle relaxation, systematic desensitisation, biofeedback, behaviour modification, or reinforcement schedules), and 18% consisted of psychotherapeutic interventions (psychodynamic, existential, supportive or eclectic therapeutic psychotherapy and counselling; and crisis interventions). Patients who received the psychosocial intervention showed minimal difference in QOL for women (r [correlation equivalent] = 0.25, 95% CI –0.15 to 0.65) or men and women combined (r = 0.34, CI –0.12 to 0.80) and for the intervention types: social support (r = 0.28, CI –0.27 to 0.83), coping skills training (r = 0.24, CI –0.12 to 0.59), and psychotherapy (r = 0.28, CI –0.38 to 0.93). However, effect sizes increased when only men were treated (r = 0.45, CI 0.26 to 0.72) or when the psychosocial intervention type was characterised by a patient education programme (r = 0.43, CI 0.07 to 0.80). With all potential moderating variables simultaneously controlled by multiple classification analysis, only a longer duration (>12 wks) of psychosocial interventions was a significant predictor of quality of life (Pearson’s r = 0.63, p<0.001).

CONCLUSIONS

In adults with cancer, psychosocial interventions had modest effects on quality of life, with greater improvements observed for duration >=12 weeks.

Commentary

Rehse and Pukrop performed a meticulous study on the effect of “psychosocial interventions” on QOL in patients with cancer. Because they pooled highly heterogeneous studies, their summary statistics must be interpreted with caution. What conclusions can clinicians draw from their analysis? We can be confident that the interventions have some effect. However, because correlation coefficients and standardised mean differences (SMDs) were used, it is not possible to assess the clinical significance of this result. Traditionally, an increase of 10% in QOL is considered clinically worthwhile. Using a scale of 1–100, and assuming a typical standard deviation of 13.5, a 10% improvement in QOL would yield a SMD of 0.75. In the study by Rehse and Pukrop, the SMD is less than this (0.65). The authors failed to define “psychosocial intervention” explicitly, and appeared to consider only psychotherapy in their literature search criteria. Therefore, many other psychosocial interventions could have been considered (eg, structured provision of information).

The lack of detail on included studies and the absence of graphical data presentation make the interpretation of this overview particularly difficult. We are not told enough about whether patients have advanced or early disease, whether the management intention is palliative or curative, or whether patients will be treated with radiotherapy, chemotherapy, or both. Treatment is an important confounder and might explain some of the observed effect of duration of psychotherapy upon benefit. Typically, radiotherapy takes 4–6 weeks and chemotherapy usually lasts 4–6 months. Both have independent and time related effects on QOL: completing treatment is likely to improve QOL independent of any continuing psychotherapy.

Something is happening here. We know (vaguely) what it is, but we cannot tell how important it might be. On the basis of these results, no case exists for routine referral of all patients with cancer to supportive psychotherapy.

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