Abstract

Background: There are several questionnaires available to assess quality of life in breast cancer, however the choice of the best questionnaire often does not take into account the adequacy of these questionnaires' measurement properties. Objective: To test the measurement properties of two generic quality of life questionnaires and one quality of life questionnaire specific for women with breast cancer. Method: We assessed 106 women after surgery for breast cancer. The assessment included application of the SF-36, WHOQOL-bref, and FACT-B+4 questionnaires as well as the Global Perceived Effect and Pain Numerical Rating scales. The participants were interviewed on three occasions to investigate internal consistency, floor and ceiling effects, construct validity, reproducibility, and responsiveness. Results: Most of the instruments' domains showed adequate internal consistency (Cronbach’s alpha varying from 0.66 to 0.91). Reliability varied from poor to substantial (ICC 2,1 between 0.39 and 0.87) and agreement varied from negative to very good. The SF-36 presented doubtful agreement and showed floor and ceiling effects in three domains. The domains of the generic questionnaires presented moderate to good correlation with the FACT-B+4 (Pearson varying from 0.31 to 0.69). The internal responsiveness varied from small to large (ES varying from −0.26 to 0.98) and external responsiveness was found in only some of the instruments' domains. Conclusions: Most of the measurement properties tested for the WHOQOL-bref and FACT-B+4 were adequate as was their ability to assess quality of life in women with breast cancer. The SF-36 showed inadequacy in agreement and floor and ceiling effects and should not be used in women with breast cancer.

Keywords

breast cancer; questionnaires; quality of life; reliability and validity; physical therapy.