Table 2: Quality assessment of dietetic oncology interventions exploring cancer-related fatigue and quality of life

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Baldwin et al. [39] 2011 | Brown et al. [40] 2008 | Darga et al. [41] 2007 | Gnagnarella et al. [42] 2016 | Isenring et al. [43] 2007 & [44] 2004 | Kiss et al. [45] 2016 | Ovesen et al. [46] 1993 | Pakiz et al. [47] 2005 | Paxton et al. [48] 2012 | Persson et al. [49] 2002 | Ravasco et al. [50] 2005a | Ravasco et al. [58] 2005b | Silvers et al. [52] 2015 | Uster et al. [53] 2013 | Zick et al. [54] 2017 | Total score |
| Relevance Questions |
| 1. | Would implementing the studied intervention or procedure (if found successful) result in improved outcomes for the patients/clients/population group?  | N | N | N | N | Y | N | Y | Y | Y | Y | Y | Y | Y | Y | Y | 10/15 |
| 2. | Did the authors study an outcome (dependent variable) or topic that the patients/clients/population group would care about? | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | 15/15 |
| 3. | Is the focus of the intervention or procedure (independent variable) or topic of study a common issue of concern to dietetics practice? | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | 15/15 |
| 4. | Is the intervention or procedure feasible? | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | 15/15 |
| Validity Questions |
| 1.0 | **Was the research question clearly stated?** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.1 | Was the specific intervention(s) or procedure [independent variable(s)] identified? | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | 15/15 |
| 1.2 | Was the outcome(s) [dependent variable(s)] clearly indicated? | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | 15/15 |
| 1.3 | Were the target population and setting specified? | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | 15/15 |
| 2.0 | **Was the selection of study subjects/patients free from bias?** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.1 | Were inclusion/exclusion criteria specified (e.g. risk, point in disease progression, diagnostic or prognosis criteria), and with sufficient detail and without omitting criteria critical to the study? | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | 15/15 |
| 2.2 | Were criteria applied equally to all study groups? | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | 15/15 |
| 2.3 | Were health, demographics, and other characteristics of subjects described? | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | N | N | Y | Y | Y | 13/15 |
| 3.0 | **Were study groups comparable?** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3.1 | Was the method of assigning subjects/patients to groups described and unbiased? [Method of randomization identified if randomized controlled trial (RCT)] | Y | Y | Y | Y | Y | Y | Y | N | Y | Y | Y | Y | Y | N | Y | 13/15 |
| 3.2 | Were distribution of disease status, prognostic factors, and other factors (e.g. demographics) similar across study groups at baseline? | Y | N | Y | Y | Y | Y | Y | Y | Y | Y | N | N | Y | Y | Y | 12/15 |
| 3.3 | Were concurrent controls used? (Concurrent preferred over historical controls) | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | 15/15 |
| 3.6 | If diagnostic test, was there an independent blind comparison with an appropriate reference standard (e.g. “gold standard”)? | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | 15/15 |
| 4.0 | **Was method of handling withdrawals described?** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4.1 | Were follow-up methods described and the same for all groups? | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | 15/15 |
| 4.2 | Was the number, characteristics of withdrawals (i.e. dropouts, lost to follow up, attrition rate), and/or response rate (cross-sectional studies) described for each group? (Follow up goal for a strong study is 80%) | Y | Y | N | Y | Y | Y | Y | N | Y | Y | Y | Y | Y | Y | Y | 13/15 |
| 4.3 | Were all enrolled subjects/patients (in the original sample) accounted for? | Y | N | Y | N | Y | Y | Y | N | U | Y | Y | Y | Y | Y | Y | 11/15 |
| 4.4 | Were reasons for withdrawals similar across groups? | Y | Y | U | U | Y | Y | Y | U | Y | Y | Y | Y | Y | Y | Y | 12/15 |
| 4.5 | If diagnostic test, was decision to perform reference test not dependent on results of test under study? | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | 15/15 |
| 5.0 | **Was blinding used to prevent introduction of bias?** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5.1 | In intervention study, were subjects, clinicians/practitioners, and investigators blinded to treatment group, as appropriate? | N | N | N | Y | N | N | N | N | N | N | N | N | N | Y | N | 2/15 |
| 5.2 | Were data collectors blinded for outcomes assessment? (If outcome is measured using an objective test, such as a lab value; this criterion is assumed to be met.) | N | N | U | Y | N | N | N | N | Y | N | N | N | N | Y | N | 3/15 |
| 6.0 | **Were intervention/therapeutic regimens/exposure factor or procedure and any comparison(s) described in detail? Were intervening factors described?** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6.1 | In RCT or other intervention trial, were protocols described for all regimens studied? | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | 15/15 |
| 6.2 | Was the intensity and duration of the intervention or exposure factor sufficient to produce a meaningful effect? | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | 15/15 |
| 6.3 | Was the amount of exposure and, if relevant, subject/patient compliance measured? | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | 15/15 |
| 6.4 | Were co-interventions (e.g. ancillary treatments, other therapies) described? | Y | Y | Y | Y | Y | Y | Y | N | N | Y | Y | Y | N | N | N | 10/15 |
| 6.5 | Were extra or unplanned treatments described? |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6.6 | Was the information for 6.4, 6.5, and 6.6 assessed the same way for all groups? | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | 15/15 |
| 6.7 | In diagnostic study, were details of test administration and replication sufficient? | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | 15/15 |
| 7.0 | **Were outcomes clearly defined and the measurements valid and reliable?** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7.1 | Were primary and secondary endpoints described and relevant to the question? | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | 15/15 |
| 7.2 | Were nutrition measures appropriate to question and outcomes of concern? | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | 15/15 |
| 7.3 | Was the period of follow-up long enough for important outcome(s) to occur? | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | 15/15 |
| 7.4 | Were the observations and measurements based on standard, valid, and reliable data collection instruments/tests/procedures? | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | 15/15 |
| 7.5 | Was the measurement of effect at an appropriate level of precision? | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | 15/15 |
| 7.6 | Were other factors accounted for (measured) that could affect outcomes? | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | 15/15 |
| 7.7 | Were the measurements conducted consistently across groups? | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | 15/15 |
| 8.0 | **Was the statistical analysis appropriate for the study design and type of outcome indicators?** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8.1 | Were statistical analyses adequately described the results reported appropriately? | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | 15/15 |
| 8.2 | Were correct statistical tests used and assumptions of test not violated? | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | 15/15 |
| 8.3 | Were statistics reported with levels of significance and/or confidence intervals? | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | 15/15 |
| 8.4 | Was “intent to treat” analysis of outcomes done (and as appropriate, was there an analysis of outcomes for those maximally exposed or a dose-response analysis)? | Y | N | N | N | Y | Y | N | N | N | Y | Y | Y | N | Y | Y | 8/15 |
| 8.5 | Were adequate adjustments made for effects of confounding factors that might have affected the outcomes (e.g. multivariate analyses)? | Y | Y | N | N | N | Y | N | Y | N | Y | Y | Y | Y | Y | Y | 10/15 |
| 8.6 | Was clinical significance as well as statistical significance reported? | N | Y | Y | Y | Y | Y | Y | N | Y | N | N | N | Y | Y | Y | 10/15 |
| 9.0 | **Are conclusions supported by results with biases and limitations taken into consideration?** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9.1 | Is there a discussion of findings? | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | 15/15 |
| 9.2 | Are biases and study limitations identified and discussed? | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | N | N | Y | Y | Y | 13/15 |
| 10.0 | **Is bias due to study’s funding or sponsorship unlikely?** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10.1 | Were sources of funding and investigators’ affiliations described? | Y | Y | Y | Y | Y | Y | N | Y | Y | Y | N | N | N | Y | Y | 11/15 |
| 10.2 | Was there no apparent conflict of interest? | Y | Y | Y | Y | N | N | N | Y | Y | N | N | Y | Y | N | Y | 9/15 |
| **Number of papers scoring a point/total papers** | **88%** | **86%** | **84%** | **88%** | **90%** | **93%** | **86%** | **79%** | **88%** | **90%** | **81%** | **84%** | **88%** | **93%** | **93%** |  |
| **Score** | **+** | **+** | Ø | **+** | **+** | **+** | Ø | Ø | **+** | **+** | **+** | **+** | **+** | **+** | **+** |  |

Minus(-) **=** If most (six or more) of the answers to the above validity questions are “No”, the report should be designated with a minus (-) symbol on the Evidence Quality Worksheet; Neutral (Ø) = If the answers to validity criteria questions 2, 3, 6, and 7 do not indicate that the study is exceptionally strong, the report should be designated with a neutral (Ø)symbol on the Evidence Quality Worksheet; Plus (+) = If most of the answers to the above validity questions are “Yes” (including criteria 2, 3, 6, 7 and at least one additional “Yes”), the report should be designated with a plus symbol (+) on the Evidence Quality Worksheet.