A Systematic Review of Quantitative Health Preference Methods to Support Value Clarification and Shared Decision Making: A Report of an ISPOR Special Interest Group

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Abstract

Objectives: This study aimed to explore the design and outcomes of preference-based value clarification methods (Pb-VCMs) used in the context of supporting patients' clinical decision making to understand whether guidance is used in Pb-VCM development and which Pb-VCM is most effective. Methods: In April of 2023, PubMed, Scopus, and Web of Science were searched for studies reporting the development and/or evaluation of Pb-VCMs without restrictions on publication date. Two reviewers independently extracted data including context and clinical decisions, study methods, sample, Pb-VCM design and development, type of preference information, and measurement of outcomes, such as feasibility/acceptability and effectiveness. Data were synthesized using descriptive and narrative analyses. Results: Of 3207 abstracts screened, 50 studies were included: 28 descriptive, 9 observational, and 13 experimental. The most common Pb-VCM approaches were adaptive conjoint analysis (n = 16), analytic hierarchy process (n = 9), and simple ranking (n = 6). Most studies (n = 37) did not report using preference- or decision aid-specific guidelines to support development. Personalized preference information was provided to participants in 45 studies. Most studies reported positive findings related to feasibility and participant experience, although complexity was identified as a challenge. The most-frequently assessed outcomes were decisional conflict and value congruence. Evidence on effectiveness was limited and mixed. Conclusions: Although individual studies report positive findings, variation in design and reporting of existing studies hinders drawing of general conclusions regarding whether Pb-VCMs improve decision-making processes and outcomes. Future research should focus on developing guidelines, for which the data extraction form developed for this study could serve as a starting point.

Author keywords

clinical decision support; patient decision aids; patient-centered decision making; shared decision making; value clarification methods

Indexed keywords

MeSH

Clinical Decision-Making; Decision Making, Shared; Decision Support Techniques; Humans; Patient Participation; Patient Preference

EMTREE medical terms

analytic hierarchy process; clinical decision making; clinical decision support system; clinical practice guideline; data extraction; decision making; human; open access publishing; pharmacoeconomics; practice guideline; review; shared decision making; systematic review; Web of Science; clinical decision making; decision support system; patient participation; patient preference; procedures

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