2.2.7 Using value clarification tools

Introduction

Since health information is intended to support patients and citizens in the process of shared decision-making, their personal values and preferences play an important role in the decision-making process (1). To support this group of people in the clarification of their individual values and preferences, value clarification tools are used as part of decision aids (2). This includes various methods and strategies designed to help users to gain clarity about their personal values and preferences regarding medical interventions and to communicate these in order to reach a decision the outcome of which is consistent with their personal values and preferences (2).

Generally, explicit and implicit value clarification tools are differentiated. The user of implicit value clarification tools only thinks about what is important for his/her own decision. The users of explicit value clarification tools are involved in an interactive process in which attributes that are decisive for the therapy or diagnostic option are reflected on and evaluated with regard to their subjective importance on a rating scale (1, 3). Since evidence-based health information should generally be required to present different options in such a way that they enable an implicit clarification of preferences, the focus here is on explicit value clarification tools. In the process, it will be discussed whether value clarification tools improve the decision-making process (1, 2).

The developers use various formats based on different theories (e.g. the *Differentiation and Consolidation Theory*, *Fuzzy Trace Theory*) (4). Typical representations are similar to a scale with positive attributes (benefits) on the one side and negative attributes (risks) on the other side, which are evaluated by the patients in their subjective importance, resulting in a preference for or against a therapy option according to the given preferences (1). Another possibility are rating and ranking exercises in which predetermined attributes are sorted according to the subjective importance. Each attribute is then classified according to how much it influences the actual decision. Finally, the patient receives an evaluation of his/her assigned preferences, which illustrate the tendency to a certain option (5).

Question

1. What effects do value clarification tools in health information have?

Recommendation

	Recommendation **„No recommendation can be made on the use of value clarification tools."** Agreed: 10, Disagreed: 0, Abstentions: 0 **Quality of the evidence:** moderate quality
Comment on the recommendation: The recommendation refers to the comparison of health information or decision aids, which use explicit value clarification tools, with the health information that does not use these instruments. In this comparison no effect was shown in one study concerning the cognitive outcome *knowledge*. Two studies on the outcomes *comprehensibility / readability* also showed no effect. With regard to the affective outcome *acceptance / attractiveness*, a positive effect for the use of value clarification tools was shown in one out of three studies. One out of four studies concerning the additional outcome *decisional conflict* showed an effect (greater reduction of the decisional conflict) in favor of the information without a value clarification tool. In one out of six studies, which collected partial aspects of the *decisional conflict*, an effect for information without an value clarification tool was shown with regard to the aspect *effectivity of the decision*.	

Summary of the findings

Characteristics of the included studies

For this comparison seven studies with a total of 1,247 participants were included (1, 3, 5-9). The studies were carried out in Canada (1, 7, 9), the USA (5, 8), the UK (3) and the Netherlands (6). Predominantly healthy test persons were included as well as in two studies patients of both sexes, who were about to make a health-relevant decision (8, 9).

In the included studies, explicit tools were investigated as an intervention to clarify the preferences in which information or content aspects are evaluated with regard to

their personal value. For this, stars were awarded (3), ranking lists set up (8), weighing pans or scales used (1, 6, 7).

Results for the relevant outcomes

For the outcomes knowledge, comprehensibility / readability and acceptance / attractiveness, no or no consistent effect could be shown. The same applied for the additional outcome decisional conflict.

Research needs

Overall, it was not possible to make a recommendation on the use of value clarification tools, as there is not sufficient evidence of the effect of these tools. However, since these tools are usually used in decision aids, a relevant need for research is identified.

Evidence table

Table 23: Evidence table „Information with a value clarification tool versus information only“

Certainty assessment						Summary of findings				
						No. of participants per group		Effect estimates		
Outcomes [No. of studies]	**Study design**	***Risk of bias***	**Inconsis-tency**	**Indirect-ness**	**Impreci-sion**	**Interven-tion**	**Control**	**Effects**	**Quality of evidence**	**Importance**
Information with a value clarification tool (VCT) versus information only										
Knowledge [n=1] Garvelink (6)	RCT	not serious	not serious	not serious	not serious	N= 202	N= 135	In one study no effect (6).	high	critical
Comprehensibility / readability [n=2] O´Connor (1) Sheridan (5)	RCT	serious (-1)	not serious	not serious	not serious	N= 176	N= 165	In two studies no effects (1, 5).	moderate	important but not critical
Acceptance / attractiveness [n=3] O´Connor (1) Sheridan (5) Feldman-Stewart (7)	RCT	serious (-1)	not serious	not serious	not serious	N= 236	N= 195	In one study effect for value clarification tools (7). In two studies no effects (1, 5).	moderate	limited importance
Decisional conflict (decisional conflict scale) [n=4] Sheridan (5) Garvelink (6) Achaval (8) Feldman-Stewart, 2012 (9)	RCT	not serious	not serious	not serious	not serious	N= 427	N= 345	In one study effect for information only (higher reduction of the decisional conflict) (8). In three studies no effects (5, 6, 9)	high	not defined

Informed subscale [n=4] O´Connor (1) Abhyankar (3) Garvelink (6) Achaval (8)	RCT	serious (-1)	not serious	not serious	not serious	N= 393	N= 314	In four studies no effects (1, 3, 6, 8).	moderate	not defined
Values clarity subscale [n=5] O´Connor (1) Abhyankar (3) Sheridan (5) Garvelink (6) Achaval (8)	RCT	serious (-1)	not serious	not serious	not serious	N= 468	N= 379	In five studies no effects (1, 3, 5, 6, 8).	moderate	not defined
Support subscale [n=3] O´Connor (1) Garvelink (6) Achaval (8)	RCT	serious (-1)	not serious	not serious	not serious	N= 372	N= 305	In three studies no effects (1, 6, 8).	moderate	not defined
Uncertainty subscale [n=4] O´Connor (1) Abhyankar (3) Garvelink (6) Achaval (8)	RCT	serious (-1)	not serious	not serious	not serious	N= 393	N= 314	In four studies no effects (1, 3, 6, 8).	moderate	not defined
Effective decision subscale [n=4] O´Connor (1) Abhyankar (3) Garvelink (6) Achaval (8)	RCT	serious (-1)	not serious	not serious	not serious	N= 393	N= 314	In one study effect for information only (higher reduction of the decisional conflict) (8). In three studies no effects (1, 3, 6).	moderate	not defined

References

1. O'Connor AM, Wells GA, Tugwell P, Laupacis A, Elmslie T, Drake E. The effects of an 'explicit' values clarification exercise in a woman's decision aid regarding postmenopausal hormone therapy. Health expectations [Internet]. 1999; (1):[21-32 pp.]. Available from: http://onlinelibrary.wiley.com/o/cochrane/clcentral/articles/046/CN-00414046/frame.html.

2. Fagerlin A, Pignone M, Abhyankar P, Col N, Feldman-Stewart D, Gavaruzzi T, et al. Clarifying values: an updated review. BMC medical informatics and decision making. 2013;13 Suppl 2:S8. Epub 2013/01/01.

3. Abhyankar P, Bekker HL, Summers BA, Velikova G. Why values elicitation techniques enable people to make informed decisions about cancer trial participation. [References]. Health Expectations: An International Journal of Public Participation in Health Care & Health Policy Vol14(Suppl 1), Mar 2011, pp 20-32. 2011.

4. Pignone M, Fagerlin A, Abhyankar P, Col N, Feldman-Stewart D, Gavaruzzi T, et al. Clarifing an d expressing values. In Volk R & Llewellyn-Thomas H (editors). 2012 Update of the International Patient Decision Aids Standards (IPDAS) Collabporation's Background Document. Chapter D. 2012.

5. Sheridan SL, Griffith JM, Behrend L, Gizlice Z, Jianwen C, Pignone MP. Effect of adding a values clarification exercise to a decision aid on heart disease prevention: a randomized trial. Medical decision making : an international journal of the Society for Medical Decision Making. 2010;30(4):E28-39. Epub 2010/05/21.

6. Garvelink MM, ter Kuile MM, Stiggelbout AM, de Vries M. Values clarification in a decision aid about fertility preservation: does it add to information provision? BMC medical informatics and decision making. 2014;14:68. Epub 2014/08/12.

7. Feldman-Stewart D, Brennenstuhl S, Brundage MD, Roques T. An explicit values clarification task: Development and validation. [References]. Patient Education and Counseling Vol63(3), Nov 2006, pp 350-356. 2006.

8. Achaval S, Fraenkel L, Volk RJ, Cox V, Suarez-Lmazor ME. Impact of educational and patient decision aids on decisional conflict associated with total knee arthroplasty. Arthritis care & research [Internet]. 2012; (2):[229-37 pp.]. Available from: http://onlinelibrary.wiley.com/o/cochrane/clcentral/articles/011/CN-01018011/frame.html.

9. Feldman-Stewart D, Tong C, Siemens R, Alibhai S, Pickles T, Robinson J, et al. The impact of explicit values clarification exercises in a patient decision aid emerges after the

decision is actually made: evidence from a randomized controlled trial. Medical decision making : an international journal of the Society for Medical Decision Making. 2012;32(4):616-26. Epub 2012/01/31.