Supporting women with breast cancer in making an informed decision about immediate breast reconstruction: the development and evaluation of a patient decision aid

Stege, J.A. ter

Chapter 1b

Decision aid

ter Stege JA, Sherman KA

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SYNONYMS

Decision support tool, patient decision aid, patient decision support technology.

DEFINITION

A decision aid is a tool designed to facilitate the process of shared decision making between patients and physicians. Decision aids have typically been developed for preference sensitive health decisions where the patient's preferences and values are critical for identifying how best to proceed. A decision aid aims to clarify the choice that has to be made, and provide understandable information about treatment options, including the likely benefits and harms of each option. Also, it helps to clarify personal values of the patient, often through the use of value clarification exercises, and supports patients to make well-informed decisions, that align with their personal preferences and values. As an adjunct to clinical consultation, decision aids can be used prior to, during ("encounter tools") and/or after the physician consultation. The format of decision aids ranges from paper-based booklets, videos or DVDs, and web-based applications, to face-to-face/live interventions, such as an extra consultation with a social worker. The International Patient Decision Aids Standards (IPDAS) outlines a set of criteria that guide the development of decision aids, including their developmental process, content and function, and that provide a framework by which decision aids can be judged for quality (1, 2). IPDAS quality criteria include among others whether the decision aid provides realistic and accurate expectations of risk, and whether there is evidence that the decision aid improves patients' knowledge and leads to decisions that reflect the values held by the decision aid user (1, 2).

DESCRIPTION

Over the last two decades there has been an increase in the development and evaluation of decision aids across a range of medical and health contexts (3). Decision aids have been developed to assist patients with medical decisions about prevention (e.g. Hepatitis B vaccination), screening and diagnosis (e.g. prostate cancer screening), and treatment (e.g. medication for diabetes, cancer surgery). An overview of some publicly available decision aids can be found at https://decisionaid.ohri.nl.

In general, compared with standard counseling, decision aids have been found to be effective in reducing patient decisional conflict, improving patient knowledge about the treatment options, helping patients feel clearer about personal values, and improving risk perceptions of patients without increasing anxiety (3). Patients that have used a decision aid report feeling more involved in the medical decision-making process, and more able to participate in effective communications with clinicians (3).

Although studies on the effects of decision aids on the decision-making process from the clinicians' perspective are scarce, their results suggest that using decision aids can be mutually beneficial for patients as well as clinicians. Decision aids are likely to improve clinicians' satisfaction with the medical decision-making process and clinicians who used a decision

aid considered the tool to provide patients with more helpful information than usual care (4, 5). Clinicians report added value from the use of a decision aid, for example, by positively challenging patients' preconceived ideas and by facilitating more structured and coherent consultations (4).

The impact of the use of a decision aid on the actual chosen option differs among contexts (3). It has been suggested that the use of a decision aid might decrease the uptake of an option if there is over-use of that option, and might increase the uptake of an option if there is under-use of that option (6). Other studies found no impact of the use of a decision aid on the actual choice made (3).

Moreover, the impact of decision aids on consultation time is yet unknown. A Cochrane review identified ten studies investigating this topic and concluded that the median effect of decision aids on consultation length was 2.6 minutes longer (3). However, only two studies found a significant increase in consultation length in the decision aid group, while eight studies found no difference between the decision aid group and usual care (3).

As an intervention designed for public use in medical contexts it is surprising how little is known about the cost-effectiveness of decision aids (7), although evidence is emerging that decision aids can be beneficial and cost-effective (8, 9).

More research is required about what elements of a decision aid are particularly effective, in what format a decision aid is most effective, and on the optimal timing of provision of a decision aid (3). This could provide insight into unanswered questions like whether or not adding explicit value clarification exercises or patient narratives illustrating other people's experiences with their decision-making process increases a decision aid's effectiveness in improving informed decision making (10-12).

Albeit the evidence on their efficacy is growing, the implementation of decision aids in clinical practice is only progressing slowly (13). Multiple barriers and facilitators for their implementation have been identified, consisting of factors related to clinicians, patients, organizations and the healthcare system (13, 14). Lack of time is often considered as a barrier for using decision aids by clinicians, as is the concern about disruption to established workflows and a lack of training in using the decision aid (13-15). Furthermore, a lack of ownership of the decision aids and a lack of (financial) incentives have also been repeatedly stated as barriers for implementation (13). Strategies suggested to support the implementation include automating decision aid distribution, making decision aids easily available electronically and having them available on hospitals' electronic medical records, reimbursing their use, and making the use of decision aids a quality of care indicator (16).

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