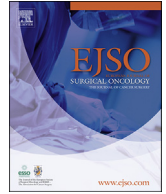




Contents lists available at ScienceDirect

European Journal of Surgical Oncology

journal homepage: www.ejso.com

Surgeon's steering behaviour towards patients to participate in a cluster randomised trial on active surveillance for oesophageal cancer: A qualitative study

Mathijs R. de Veer^{a,*}, Merel Hermus^a, Charlène J. van der Zijden^b, Berend J. van der Wilk^b, Bas P.L. Wijnhoven^b, Anne M. Stiggelbout^c, Jan Willem T. Dekker^d, Peter Paul L.O. Coene^e, Jan J. Busschbach^a, Jan J.B. van Lanschot^b, Sjoerd M. Lagarde^b, Leonieke W. Kranenburg^a

^a Department of Psychiatry, Section Medical Psychology, Erasmus University Medical Centre, Rotterdam, the Netherlands

^b Department of Surgery, Erasmus University Medical Centre, Rotterdam, the Netherlands

^c Medical Decision Making, Department of Biomedical Data Sciences, Leiden University Medical Centre, Leiden, the Netherlands

^d Department of Surgery, Reinier de Graaf Group, Delft, the Netherlands

^e Department of Surgery, Maastad Hospital, Rotterdam, the Netherlands

ARTICLE INFO

Article history:

Received 23 August 2022

Received in revised form

20 April 2023

Accepted 15 May 2023

Available online xxx

Keywords:

Active surveillance

Oesophageal cancer

Persuasion

Steering behaviour

Thematic content analysis

ABSTRACT

Introduction: Few studies have been conducted into how physicians use steering behaviour that may persuade patients to choose for a particular treatment, let alone to participate in a randomised trial. The aim of this study is to assess if and how surgeons use steering behaviour in their information provision to patients in their choice to participate in a stepped-wedge cluster randomised trial investigating an organ sparing treatment in (curable) oesophageal cancer (SANO trial).

Materials and methods: A qualitative study was performed. Thematic content analysis was applied to audiotaped and transcribed consultations of twenty patients with eight different oncological surgeons in three Dutch hospitals. Patients could choose to participate in a clinical trial in which an experimental treatment of 'active surveillance' (AS) was offered. Patients who did not want to participate underwent standard treatment: neoadjuvant chemoradiotherapy followed by oesophagectomy.

Results: Surgeons used various techniques to steer patients towards one of the two options, mostly towards AS. The presentation of pros and cons of treatment options was imbalanced: positive framing of AS was used to steer patients towards the choice for AS, and negative framing of AS to make the choice for surgery more attractive. Further, steering language, *i.e.* suggestive language, was used, and surgeons seemed to use the timing of the introduction of the different treatment options, to put more focus on one of the treatment options.

Conclusion: Awareness of steering behaviour can help to guide physicians in more objectively informing patients on participation in future clinical trials.

© 2023 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY license (<http://creativecommons.org/licenses/by/4.0/>).

1. Introduction

Shared decision making (SDM) is used to involve patients in making choices about their treatment [1]. This is particularly true for situations where no single treatment is superior to others,

which can therefore be called 'preference-sensitive' decisions [2]. SDM requires a thorough discussion between physician and patient of the uncertainties, benefits, and harms of different treatment options. One way to do so is by following the model of Stiggelbout et al. (2015), consisting of four steps [3]. First, patients should be informed that a decision needs to be made and that their opinion is important [4]. Second, the options and their pros and cons are explained. Third, the preferences of the patient are discussed. Finally, it is discussed whether patients want to make their own decision or whether they want to leave it to the physician, and the

* Corresponding author. Erasmus University Medical Centre Department of Psychiatry, P.O. Box 2040, 3000, CA, Rotterdam, the Netherlands.

E-mail address: m.deveer@erasmusmc.nl (M.R. de Veer).

<https://doi.org/10.1016/j.ejso.2023.05.010>

0748-7983/© 2023 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY license (<http://creativecommons.org/licenses/by/4.0/>).

decision is made or postponed.

It is not always easy for physicians to engage with patients in the decision-making process [5]. Sometimes information physicians provide about the disease and its treatment is inconsistent and/or below the legal minimum of what should be disclosed [6]. Typically, benefits are given more attention than harms [7]. Research has shown that most of the treatment decisions made in consultations are still 'doctor-led', and patient involvement is low [8–11]. In such decisions, 'implicit persuasion' is frequently used, meaning that choices of patients are often steered towards the treatment option that the physician thinks is best for the patient [12]. Several studies found physicians to use different forms of steering behaviour to persuade patients to choose for a specific treatment. Examples are the use of 'steering language' (e.g. metaphors, and 'royal'-plurals (*pluralis majestatis*) to increase authority and credibility) [12–14]; biased presentation of clinical experience [12,13]; positive and negative framing [14–20], or imbalanced presentation of pros and cons of treatments and downplaying of side-effects [12–14]. This steering behaviour disrupts an optimal SDM-process.

An invitation to participate in a randomised trial, is also a 'preference-sensitive' decision, in which SDM is relevant, since 'equipoise' is present (i.e. the state of 'substantial uncertainty' about which treatment is best) [21]. Consultations in which participation in clinical trials is discussed with patients can be emotionally and intellectually challenging [22–26]. Several studies concluded that information about the presentation of 'equipoise' was omitted in about half of the consultations where patients were asked to participate in a randomised trial [21,27,28].

Few studies have been conducted into how physicians use steering behaviour that may persuade patients to choose for a particular treatment, let alone to participate in a randomised trial. Steering behaviour can influence the decision-making process whether to participate in a trial. In the current qualitative study we took the opportunity to investigate steering behaviour within the context of the multicentre SANO trial, in which institutions were randomised in a stepped-wedge cluster design [29]. The aim of the current qualitative study was to assess if and how surgeons use steering behaviour when inviting patients with (potentially curable) oesophageal cancer to participate in this stepped-wedge cluster randomised trial. Knowledge of such behaviour may help physicians to become aware of potential pitfalls in discussing future treatment options with their patients.

2. Methods

2.1. Study design and setting

A qualitative research design was used. Thematic content analysis was performed of audiotaped and transcribed consultations between oncological surgeons and patients. The study was carried out in one academic (Erasmus University Medical Centre Rotterdam) and two teaching hospitals (Maastricht Hospital in Rotterdam and Reinier de Graaf Hospital in Delft) in the Netherlands. Data collection took place from June to December 2020. The end of this period was determined by the end of the inclusion period of the randomised trial.

This study took place within the context of the multicentre Surgery As Needed for Oesophageal cancer (SANO) trial. The SANO trial had been initiated to investigate if AS is a safe and effective treatment alternative for standard oesophagectomy for oesophageal cancer patients with a clinically complete response (i.e. no vital tumour cells detected with endoscopic biopsies, endoscopic ultrasound and PET-CT) after neoadjuvant chemoradiotherapy (nCRT) [29]. AS consists of frequent diagnostic investigations to assess recurrence of cancer. If recurrent disease is proven or highly

suspected, oesophagectomy is offered. The SANO trial applies a stepped-wedge cluster randomised non-inferiority study design, which means that randomization took place at an institutional level. All institutions started offering standard treatment (nCRT followed by oesophagectomy), and the moment at which participating institutions switched from the control arm to the interventional arm (nCRT followed by AS) was randomised. At the time of this current study, all three institutions had switched to the interventional arm, and AS was offered to the patients in the context of the study. Patients were aware of the treatment in the interventional arm before they signed informed consent and if they decided not to participate, standard nCRT followed by oesophagectomy was offered. The medical ethics boards of the Erasmus University Medical Centre approved this study (MEC-2018-526).

2.2. Participants

Patients with recently diagnosed oesophageal cancer and the treating oncological surgeons were invited to participate in the study at the patient's first consultation. Operable patients with locally advanced resectable and potentially curable oesophageal carcinoma who were planned to undergo nCRT followed by surgical resection were eligible for inclusion in the SANO trial [29].

2.3. Procedure and measures

During the first consultation with the surgeon, patients were informed about the SANO trial after which they also received written information about the study. Patients did not have to decide immediately, but were given time to think about the choice for the experimental treatment or standard oesophagectomy. These conversations were audiotaped and transcribed *verbatim* by a specialised company.

The surgeons were aware that the consultations were recorded and used to investigate the physicians' information provision about the trial. Surgeons were not briefed on how to inform the patients about the SANO trial. Information about the age and gender of patients and surgeons was collected.

2.4. Analysis

The transcripts of the consultations were imported in NVivo (V1.4). The data were analysed according to the principles of thematic content analysis [30]. The transcripts were read by two researchers (M.V. and M.H., both psychologists). Both researchers developed a structured analysis framework independently consisting of provisional categories and codes. Steering behaviour classified in previous research was used as a starting point for the codes [12–14], and was supplemented with other types of steering behaviour identified from the transcripts. The two independently developed frameworks were compared and discussed, to reach consensus on a final framework. Based on this final framework, one researcher (M.V.) coded the transcripts. For ambiguous text fragments that could not be directly classified under a theme, the code 'other' was used. Text fragments coded as 'other' were discussed and renamed into an existing or new code which best reflected the content of the otherwise uncategorised text fragment. After all transcripts had been coded, two researchers (M.V. and L.K., both psychologist) reviewed the (sub)themes for internal homogeneity and external heterogeneity. Based on this analysis, the final themes were defined to come to a coherent account and accompanying narrative of the data.

3. Results

3.1. Participants

Twenty consultations between eight surgeons and their patients were recorded. All surgeons were white, Dutch males, mean age 47.3 years (SD 9.5); one participant was a fellow in specialised upper GI surgery. Surgeons had an average of ten years surgical experience and were actively involved in the preoperative care and performed surgery themselves. Surgeons differed in their experience in discussing AS an experimental treatment for oesophageal cancer, ranging from six to 29 months. The mean age of the twenty participating oesophageal cancer patients was 63.9 years (SD 17.1), seventeen were male and three female. Sixteen patients eventually chose to participate in the trial. The other four patients chose not to participate, and standard nCRT followed by oesophagectomy was offered.

3.2. Themes: types of steering behaviour

Data-analysis resulted in four main themes: balancing pros and cons, steering language, introduction of treatments, and surgeons' preference. A distinction was made between 'steering behaviour towards AS' (SANO trial) and 'steering behaviour towards standard surgery'. Themes are described in detail below, for AS and surgery separately. Surgeons' quotes from the data are included to illustrate their steering behaviours.

1. Balancing pros and cons

A frequently used type of steering behaviour was the imbalance between pros and cons of AS and standard surgery.

AS: Surgeons made use of positive framing when discussing AS. They argued that AS offers the possibility to prevent patients from life-changing complications, by postponing or possibly preventing oesophagectomy.

"Some people develop an anastomotic leak and lay weeks or even months in ICU. So it's really serious, and maybe that's why the idea of that study is so appealing, that if you don't necessarily need it [surgery], you don't have to undergo it" [Surgeon 6; consultation 9]

Furthermore, AS was framed as a safe treatment option since surgery would always be an option later in the process. Negative framing of surgery was also used, but less often. In such cases it was emphasised that if no viable tumour cells were detected in the removed tissue or if the cancer had unknowingly metastasised, the surgery would have been futile.

Surgery: When surgeons used steering behaviour towards surgery, pros and cons presented were not always in balance. Here too, steering behaviour was aimed at the patient's opinion about AS. An example of negative framing of AS is that surgeons extremely and repeatedly emphasised that it is an experimental treatment.

"But it is a very new study, so I cannot say what the risk is, because hardly anyone has preceded you." [Surgeon 1; consultation 1]

Negative framing of AS was used more often than positive framing of surgery. An example of positive framing of surgery is that in some consultations, possible complications of surgery were downplayed.

2. Steering language

In many cases, steering forms of language were used when discussing AS and standard surgery. For example, 'we'-plurals, known to be persuasive [13,31], were used while discussing both treatments. These plurals radiate authority, security, and certainty.

AS: The choice of certain words sometimes sounds more persuasive than other words. The surgeon's quote below illustrates a steering choice of words.

"Plan A is the SANO trial, ...". [Surgeon 2; consultation 7]

This surgeon chose to call the SANO trial 'plan A'. His choice to use the word 'plan' gives the apparent impression of AS being tried first, and if this plan fails, they move on to 'plan B', in this case standard surgery.

Surgery: In some consultations it seemed as if the patient had already made the decision to have standard surgery. This was evident not from what the patient said, but more from the way the surgeon approached the conversation. The quote below shows this illusion of decisional control where surgery is presented as the only possible treatment, making it seem as if the decision is no longer made by the patient. This illusion of decisional control often was accompanied with priming of the standard treatment and detailed information about surgery.

"Well, I already saw that she [gastroenterologist] had discussed some things with you and you are actually here with me to discuss the surgical plan." [Surgeon 2; consultation 7]

3. Introduction of treatments

The timing and the way in which surgeons mentioned the treatment options seemed to influence the further course of the consultations.

AS: Consultations in which the SANO trial was mentioned early were more AS-oriented during the rest of the conversation. This may steer patient's decisions towards trial participation and thus AS instead of standard surgery. Furthermore, patients who were told that many other patients were already participating in the SANO trial, was identified as steering behaviour toward AS. This statement may lower the threshold to join this large group of participants, as many people have already preceded them.

"... almost all oesophageal cancer centres participate. We now have an immense number [participants] and everyone in the world is looking forward to these results and what will be the outcome, because that would mean that there might be a completely new policy." [Surgeon 7; consultation 13]

Surgery: In many consultations, patients were primed with the standard treatment, in this case surgery. Without first naming all treatment options, the surgeon starts by explaining the surgery, which places AS more in the background of the decision-making process. This timing created a focus on the first mentioned treatment. Furthermore, when discussing surgery, surgeons often gave very detailed information. As a result, the SANO trial was often not discussed until late in these conversations.

"... we can offer you a treatment that offers the prospect of a cure, meaning that the cancer as we see it on the scan now, it is there, but we think we can treat it with chemotherapy and radiation, followed by surgery. That is actually the standard treatment we offer in the

Netherlands. And all over the world by the way." [Surgeon 3; consultation 18]

4. Surgeon's preference

Surgeon's frequently mentioned their own personal preferences, even if patients did not asked for them.

AS: Although giving a personal preference may be attenuated by stressing that ultimately it is the patient's preference that counts, the surgeon's preference might direct patients that face an uncertain and complex decision that is contrary to their interests and preferences. [32].

"Personally, if I had it [cancer] myself, I would participate in the study, but I don't want to influence you because it's your body and you two have to decide it together ... And if I wouldn't support it, I would tell you, but we are involved in this study for a reason. It's not our study, but it really is a study that matters. It's one of the few studies I've experienced in my life that really matters." [Surgeon 7; consultation 13]

Surgery: Surgeons tried to put patients at ease by indicating that they had a good chance that the surgery would be successful and that negative consequences would be limited. These estimates about recovery after surgery were often based on the patient's physical fitness and comorbidities. Furthermore, some surgeons even gave advice to choose for surgery.

"My proposal would therefore be, if I see and hear you like this, seen your condition, let's just go for the best possible starting position, and I think that is the chemoradiation followed by surgery." [Surgeon 5; consultation 3]

3.3. Overarching findings

We found that in the context of this stepped-wedge trial, surgeons used steering behaviour, either positive or negative, mostly with a focus on AS. When steering behaviour was used towards AS, the SANO trial was positively framed in more cases compared to a negative framing of surgery. When surgeons used steering behaviour towards surgery, the SANO trial was negatively framed in more cases compared to a positive framing of surgery. So when framing occurred, it was especially the experimental treatment that was the subject of the framing, being either positive or negative.

The four steps of SDM were seldom applied altogether in one consultation. First, patients were not always told that they could participate in decision-making. Second, patients were often primed with a particular treatment, making other options less prominent. The third and perhaps most important step of the SDM-process, discussing patients' preference, was applied in only half of the consultations. The fourth step of SDM, the discussion whether the patients want to make their own decision or whether they want to leave it to the physician was regularly used during consultations.

4. Discussion

This study showed that surgeons use different forms of steering behaviour that may steer patients towards participation in a stepped-wedge clinical trial. Four categories of steering behaviour were found: 1) an imbalance of the pros and cons of the different treatment options; 2) steering language, *i.e.* suggestive language; 3) the timing and comprehensiveness of the introduction of treatments; and 4) the mentioning of the surgeon's own preference.

Furthermore, we found that of the four steps of SDM, only the last step, discussion whether the patient or the surgeon would make the decision, was regularly applied.

Engelhardt et al. (2016) identified four types of implicit persuasive behaviour: unbalanced presentation of benefits and side-effects, presenting treatment recommendations as authorised decisions, creating the illusion of decisional control and persuading patients using (clinical) experience [12]. This has much resemblance with our categories 1 and 4, and in a lesser extent relates to category 2 and 3. In line with other studies, we found evidence of framing and only little discussion of patient preferences, despite this being a key element of SDM [14,15]. It is likely that steering behaviour impacts the patients' choice. A recently published study from our group suggests that the patients' interpretation of the doctor's advice can influence their treatment preferences. [33] It was found that if a doctor seems - according to the patient - enthusiastic about one of both treatment options, the patient is tended to opt for that specific treatment, independent of whether that treatment is active surveillance or surgery. It should however be noted that the patients that participated in this study had a strong preferences for one of the two treatment options. It is hypothesised that if patients with a strong treatment preference are already receptive for the presumed preferences of their doctor, this may even be more so in a less pronounced patient group.

This study differs from normal clinical decision-making processes because it involves discussion of treatment options within the context of a stepped-wedge trial, which is different from a regular randomised trial, because participants know what treatment they are getting. Nevertheless, in all cases SDM is relevant, especially as the choice for treatment is preference-sensitive and thus needs non-directive counselling [2]. This argument may hold even stronger in the case of a trial - as *equipoise* in fact provides the rationale for performing a trial. Yet, the four steps of SDM were applied in very few cases [3]. Sometimes patients were not even told that they could choose to participate in the trial or not, and thus, given the stepped-wedge cluster randomised design, in fact could choose the treatment themselves. Research shows that fostering choice awareness is connected to better implementation of the SDM steps, such as informing patients and discussing preferences. [4].

However, conveying medical information can never be completely value neutral [34]. For instance, the context in which information is shared influences how it is interpreted. Each person will, based on personality and previous life experience, give a different meaning to facts, making all information person-relative. Value-neutrality is therefore impossible to achieve. So, even when it would be possible to present 'neutral' information, this does not mean that the information is 'neutrally' received. At the same time, it may also be overtly naive to assume that all medical information can or maybe even should be offered without any underlying motives on the part of the sender. Steering behaviour, be it mild or arbitrary, often stems from the best intentions. Applied to the SANO trial this may work both ways: as the non-inferiority of AS is not proven yet, some surgeons may feel a certain need to 'protect' their patients of 'unknowingly' entering an experimental treatment, by overly stressing the experimental character. At the same time, AS may 'spare' a patient invasive surgery and including patients for the AS arm will finally enable comparison between both treatments. The primary endpoint of the SANO trial is overall survival, an issue most surgeons would like an answer to, since an organ-sparing treatment could prevent patients from disadvantages and risks of surgery. This might be a reason for the high inclusion rate in the study.

4.1. Study strengths and limitations

The use of SDM has been extensively studied in clinical situations where a treatment choice is to be made, but so far seldom for trial situations. Indeed this study is the first to investigate if and how surgeons use steering behaviour towards an experimental treatment.

A limitation of this study is that all included consultations took place at institutions in the experimental arm of the stepped-wedge cluster design of the SANO trial. This means that from a research-perspective, AS was the preferred treatment at the time of the consultations. As a result, steering behaviour in this sample could not be compared with patients treated in the control arm (standard oesophagectomy). A point of discussion is whether SDM is applicable to a trial such as this. On one hand, the answer is yes: two treatments are compared of which one is thought to have the potential to be non-inferior. On the other hand, AS is still an experimental treatment, which makes it subordinate to the effectively proven standard treatment (surgery). This raises the question if AS needs to be discussed in a similar manner as the standard treatment, and whether the surgery should not always be introduced first during consultations.

4.2. Clinical implications

The findings of this study can help create awareness among surgeons and healthcare professionals involved in trial recruitment in general. Our results provide information on the way surgeons use steering behaviour. Understanding this behaviour may help to create awareness and prevent physicians from unintentionally steering patients towards a particular treatment. Moreover, as it is thinkable, if not likely, that similar steering behaviour is present in daily practice, our findings can help to create awareness of steering behaviour in daily practice, which may eventually lead to consultations that are more in line with standards of SDM.

A possible next step in promoting informed decision-making is the development of decision aids that can guide patients in making a choice in line with their values and preferences. [35] These aids should involve a balanced presentation of the pros and cons of different treatment options, the use of unbiased language, and equal attention to each option. By providing these decision aids, healthcare professionals can facilitate a collaborative decision-making process that empowers patients to actively participate in their treatment. Furthermore, training healthcare professionals to effectively utilize such aids can further enhance proper trial recruitment. Ultimately, this approach can help mitigate the potential for steering behaviour by professionals, and ensure that patients are making choices that align with their own values and preferences.

5. Conclusion

Various types of steering behaviour were identified in the information provision to patients for participation in a stepped-wedge cluster randomised trial investigating an organ sparing treatment in (curable) oesophageal cancer. These include an imbalanced presentation of pros and cons, steering language and the timing at which treatments were discussed. Awareness of such steering behaviour can help to guide physicians in the future, when they inform patients on participating in randomised trials. When physicians are unaware of the fact that they sometimes and possibly unintentionally direct patients towards a certain treatment, they cannot adapt to this either. Creating awareness of steering behaviour will help improving the information provision and will contribute to the practice of SDM.

CRedit authorship contribution statement

Mathijs R. de Veer: Methodology, Formal analysis, Investigation, Data curation, Writing – original draft, Visualization, Project administration. **Merel Hermus:** Formal analysis, Validation, Writing – review & editing. **Charlène J. van der Zijden:** Writing – review & editing. **Berend J. van der Wilk:** Conceptualization, Methodology, Investigation, Writing – review & editing. **Bas P.L. Wijnhoven:** Conceptualization, Methodology, Investigation, Writing – review & editing. **Anne M. Stiggelbout:** Conceptualization, Writing – review & editing. **Jan Willem T. Dekker:** Investigation, Writing – review & editing. **Peter Paul L.O. Coene:** Investigation, Writing – review & editing. **Jan J. Busschbach:** Conceptualization, Writing – review & editing. **Jan J.B. van Lanschot:** Conceptualization, Writing – review & editing. **Sjoerd M. Lagarde:** Conceptualization, Methodology, Investigation, Writing – review & editing, Supervision. **Leonieke W. Kranenburg:** Conceptualization, Methodology, Formal analysis, Validation, Writing – original draft, Writing – review & editing, Supervision.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Acknowledgements

The authors would like to thank all the participating patients and surgeons, in particular Erwin van der Harst (Maasstad hospital) and Stijn van Esser (Reinier de Graaf hospital), for their involvement in the study.

References

- [1] Stiggelbout AM, Van der Weijden T, De Wit MPT, et al. Shared decision making: really putting patients at the centre of healthcare. *BMJ* 2012;344.
- [2] O'Connor AM, Légaré F, Stacey D. Risk communication in practice: the contribution of decision aids. *BMJ* 2003;327(7417):736–40.
- [3] Stiggelbout AM, Pieterse AH, De Haes JCM. Shared decision making: concepts, evidence, and practice. *Patient Educ Counsel* 2015;98(10):1172–9.
- [4] Kunneman M, Branda ME, Hargraves I, Pieterse AH, Montori VM. Fostering choice awareness for shared decision making: a secondary analysis of video-recorded clinical encounters. *Mayo Clin Proc: Innovations, Quality & Outcomes* 2018;2(1):60–8.
- [5] Kannan S, Seo J, Riggs KR, Geller G, Boss EF, Berger ZD. Surgeons' views on shared decision-making. *Journal of patient-centered research and reviews* 2020;7(1):8.
- [6] Knops AM, Ubbink DT, Legemate DA, de Haes J, Goossens A. Information communicated with patients in decision making about their abdominal aortic aneurysm. *Eur J Vasc Endovasc* 2010;39(6):708–13.
- [7] Kunneman M, Stiggelbout AM, Marijnen CAM, Pieterse AH. Probabilities of benefit and harms of preoperative radiotherapy for rectal cancer: what do radiation oncologists tell and what do patients understand? *Patient Educ Counsel* 2015;98(9):1092–8.
- [8] Ford S, Schofield T, Hope T. Observing decision-making in the general practice consultation: who makes which decisions? *Health Expect* 2006;9(2):130–7.
- [9] Driever EM, Stiggelbout AM, Brand PLP. Do consultants do what they say they do? Observational study of the extent to which clinicians involve their patients in the decision-making process. *BMJ Open* 2022;12(1):e056471.
- [10] Couët N, Desroches S, Robitaille H, et al. Assessments of the extent to which health-care providers involve patients in decision making: a systematic review of studies using the OPTION instrument. *Health Expect* 2015;18(4):542–61.
- [11] Joseph-Williams N, Elwyn G, Edwards A. Knowledge is not power for patients: a systematic review and thematic synthesis of patient-reported barriers and facilitators to shared decision making. *Patient Educ Counsel* 2014;94(3):291–309.
- [12] Engelhardt EG, Pieterse AH, van der Hout A, et al. Use of implicit persuasion in decision making about adjuvant cancer treatment: a potential barrier to shared decision making. *Eur J Cancer* 2016;66:55–66.
- [13] Karnieli-Miller O, Eisikovits Z. Physician as partner or salesman? Shared decision-making in real-time encounters. *Soc Sci Med* 2009;69(1):1–8.
- [14] Ziebland S, Chapple A, Evans J. Barriers to shared decisions in the most serious

- of cancers: a qualitative study of patients with pancreatic cancer treated in the UK. *Health Expect* 2015;18(6):3302–12.
- [15] Gong J, Zhang Y, Feng J, et al. How best to obtain consent to thrombolysis: individualized decision-making. *Neurology* 2016;86(11):1045–52.
- [16] Jasper JD, Goel R, Einarson A, Gallo M, Koren G. Effects of framing on teratogenic risk perception in pregnant women. *Lancet* 2001;358(9289):1237–8.
- [17] Reyna VF, Nelson WL, Han PK, Dieckmann NF. How numeracy influences risk comprehension and medical decision making. *Psychol Bull* 2009;135(6):943.
- [18] Moxey A, O'Connell D, McGettigan P, Henry D. Describing treatment effects to patients. *J Gen Intern Med* 2003;18(11):948–59.
- [19] Haward MF, Murphy RO, Lorenz JM. Message framing and perinatal decisions. *Pediatrics* 2008;122(1):109–18.
- [20] Akl EA, Oxman AD, Herrin J, et al. Framing of health information messages. *Cochrane DB Syst Rev* 2011;12.
- [21] Djulbegovic B. The paradox of equipoise: the principle that drives and limits therapeutic discoveries in clinical research. *Cancer Control* 2009;16(4):342–7.
- [22] Blazeby JM, Strong S, Donovan JL, et al. Feasibility RCT of definitive chemoradiotherapy or chemotherapy and surgery for oesophageal squamous cell cancer. *Br J Cancer* 2014;111(2):234–40.
- [23] Du C-Y, Zhou Y, Song C, et al. Is there a role of surgery in patients with recurrent or metastatic gastrointestinal stromal tumours responding to imatinib: a prospective randomised trial in China. *Eur J Cancer* 2014;50(10):1772–8.
- [24] Earlam R. An MRC prospective randomised trial of radiotherapy versus surgery for operable squamous cell carcinoma of the oesophagus. *Ann Roy Coll Surg* 1991;73(1):8.
- [25] Donovan JL, de Salis I, Toerien M, Paramasivan S, Hamdy FC, Blazeby JM. The intellectual challenges and emotional consequences of equipoise contributed to the fragility of recruitment in six randomized controlled trials. *J Clin Epidemiol* 2014;67(8):912–20.
- [26] Walters SJ, dos Anjos Henriques-Cadby IB, Bortolami O, et al. Recruitment and retention of participants in randomised controlled trials: a review of trials funded and published by the United Kingdom Health Technology Assessment Programme. *BMJ Open* 2017;7(3):e015276.
- [27] Rooshenas L, Elliott D, Wade J, et al. Conveying equipoise during recruitment for clinical trials: qualitative synthesis of clinicians' practices across six randomised controlled trials. *PLoS Med* 2016;13(10):e1002147.
- [28] Sherratt FC, Brown SL, Haylock BJ, et al. Challenges conveying clinical equipoise and exploring patient treatment preferences in an oncology trial comparing active monitoring with radiotherapy (ROAM/EORTC 1308). *Oncol* 2020;25(4):e691.
- [29] Noordman BJ, Wijnhoven BPL, Lagarde SM, et al. Neoadjuvant chemoradiotherapy plus surgery versus active surveillance for oesophageal cancer: a stepped-wedge cluster randomised trial. *BMC Cancer* 2018;18(1):1–12.
- [30] Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psychol* 2006;3(2):77–101.
- [31] Engelhardt EG, Pieterse AH, Stiggelbout AM. Implicit persuasion in medical decision-making: an overview of implicitly steering behaviors and a reflection on explanations for the use of implicitly steering behaviors. *Journal of Argumentation in Context* 2018;7(2):209–27.
- [32] Gurmankin AD, Baron J, Hershey JC, Ubel PA. The role of physicians' recommendations in medical treatment decisions. *Med Decis Making* 2002;22(3):262–71.
- [33] Hermus M, van der Wilk BJ, Chang RTH, et al. Patient preferences for active surveillance vs standard surgery after neoadjuvant chemoradiotherapy in oesophageal cancer treatment: the NOSANO-study. *Int J Cancer* 2023;152(6):1183–90.
- [34] Hilhorst MT, Kranenburg LW, Busschbach JJV. Should health care professionals encourage living kidney donation? *Med Health Care Phil* 2007;10(1):81–90.
- [35] Collée GE, van der Wilk BJ, van Lanschot JJB, et al. Interventions that facilitate shared decision-making in cancers with active surveillance as treatment option: a systematic review of literature. *Curr Oncol Rep* 2020;22:1–13.