



UvA-DARE (Digital Academic Repository)

The reasonableness of argumentation from expert opinion in medical discussions: Institutional safeguards for the quality of shared decision making

Snoeck Henkemans, A.F.; Wagemans, J.H.M.

Publication date

2012

Document Version

Final published version

Published in

Between scientists & citizens: proceedings of a conference at Iowa State University, June 1-2, 2012

[Link to publication](#)

Citation for published version (APA):

Snoeck Henkemans, A. F., & Wagemans, J. H. M. (2012). The reasonableness of argumentation from expert opinion in medical discussions: Institutional safeguards for the quality of shared decision making. In J. Goodwin (Ed.), *Between scientists & citizens: proceedings of a conference at Iowa State University, June 1-2, 2012* (pp. 345-354). Great Plains Society for the Study of Argumentation.

General rights

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: <https://uba.uva.nl/en/contact>, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.

UvA-DARE is a service provided by the library of the University of Amsterdam (<https://dare.uva.nl>)

The Reasonableness of Argumentation from Expert Opinion in Medical Discussions: Institutional Safeguards for the Quality of Shared Decision Making

A. F. SNOECK HENKEMANS

*Department of Speech Communication, Argumentation Theory, and Rhetoric
University of Amsterdam
Spuistraat 134
1012 VB Amsterdam
The Netherlands
a.f.snoeckhenkemans@uva.nl*

J. H. M. WAGEMANS

*Department of Speech Communication, Argumentation Theory, and Rhetoric
University of Amsterdam
Spuistraat 134
1012 VB Amsterdam
The Netherlands
j.h.m.wagemans@uva.nl*

ABSTRACT: The ideal of shared decision making starts from the assumption that physicians and patients are able to take a joint decision as to what is the best treatment. However, since medical consultations are to be viewed as discussions between an expert and a layman, in practice it will often be the case that the patient has to rely on the physician's expertise. In this article we examine the extent to which the Dutch laws, guidelines and professional conventions within the medical domain positively influence the quality of the process of shared decision making, even in cases where the physician makes use of an argument from expert opinion. To this end, we will chart some of the most important institutional safeguards for the quality of medical decisions and analyze how these safeguards relate to the critical questions associated with the argument scheme of argumentation from expert opinion.

KEYWORDS: argument scheme, argumentation from expert opinion, critical questions, shared decision making, medical discussion, institutional safeguards.

1. INTRODUCTION

For the last ten years it has been increasingly regarded desirable that the physician and the patient take a joint decision as to a safe and acceptable treatment for the patient by means of conducting a discussion. This process is also known as 'shared decision making.' In its ideal form, shared decision making is:

[a] decision-making process jointly shared by patients and their health care provider, [which] relies on the best evidence about risks and benefits associated with all available options (including doing nothing) and on the values and preferences of patients, without excluding those of health professionals. (Légaré et al., 2008, p. 1)

The process of shared decision making is one possible way to meet the legal requirement of informed consent. It is legally required for any treatment that the physician obtains permission from the patient, after having given the patient enough information for taking a decision on the matter. The new consultation format of shared decision making does not prevent the patient from having to rely on the expert opinion of the physician. Since in general, a medical consultation is to be characterized as a discussion between an expert and a layman, patients will rarely be able to assess the quality of the information and opinions of the physician directly. In the communicative activity type of a medical consultation, the expertise of the physician still plays a decisive role.

It is therefore important to analyze to what extent the laws, guidelines and professional conventions that relate to these consultations, offer a safeguard for the quality of the expert opinion put forward by the physician. In this article we will provide such an analysis from the perspective of argumentation theory. We reconstruct the appeal to expert opinion as ‘argumentation from expert opinion’ and relate the abovementioned laws, guidelines and professional conventions to the different critical questions that are associated with this type of argumentation.

First, we will indicate how the asymmetrical relationship between physician and patient relates to the ideal of shared decision making (section 2). Then we will give a brief overview of the key critical questions that play a role in the assessment of so-called ‘argumentation from expert opinion’ (section 3). Taking these critical questions as a starting point, we will then list a number of institutional safeguards for the quality of medical decisions (section 4). Finally, we will summarize our findings (section 5).

2. SHARED DECISION MAKING

In the literature it is generally assumed that shared decision making has a positive influence on the quality of medical decisions. Rather than confining themselves to informing the patient about the various treatment options and their pros and cons, physicians actually discuss the options with the patient (Charles, Gafni, & Whelan, 1997). Since during the process physicians are also supposed to tell their patients which treatment they prefer and why, in the process of shared decision making the physician not only provides information, but also argumentation. As a result, the expertise of the physician is more fully utilized. In addition, shared decision making is recommended because it often leads to more satisfaction with the consultation and improved therapy compliance.¹ Patients feel more involved in the decision about their treatment because the physician allows them to participate in the discussion and to put forward their own preferences.

From an argumentation theoretical point of view, the requirement that the physician should discuss the available treatment options with the patient can be seen as an institutional obligation with respect to the burden of proof regarding medical decisions (Goodnight, 2006; Mohammed & Snoeck Henkemans, 2012). The main reason to impose this burden of proof upon the physician is that in medical consultations there usually is an ‘asymmetric’

¹ This is especially the case in decisions about long-term treatments, like chronic diseases. See Joosten et al., 2008, p. 224.

relationship between the discussants.² This means that the discussants do not have the same knowledge of the topic of discussion: the physician is an expert, and the patient is a layman.³

In some cases, this asymmetry makes it impossible for the ideal of shared decision making to be realized completely, because the physician will not be able to comply with the institutional burden of proof in all respects. Depending on the degree of difference in expertise, at some point in the discussion the physician will have to refrain from providing a substantive or ‘direct’ defense of his position and will have to appeal to his expertise.⁴

In an indefinite context, contributions to the discussion can be analyzed as argumentation from expert opinion when there is an *explicit* appeal to expertise. In the more specific context of the medical consultation, we believe also other contributions to the discussion can under certain conditions be reconstructed as this type of argumentation. This is the case when the physician chooses not to further defend a (sub) standpoint—e.g., by merely repeating or confirming his standpoint—while the responses from the patient indicate that the standpoint does need further support. An example of such a situation would be the following fragment adapted from Ariss (2009, p. 914):

D: And I don’t want to see your blood pressure for six months, I don’t wanna know about it.
 P: Ohf. Are yuh sure?
 D: Absolu- Yes absolutely fine.

In an indefinite context, the reply of the physician (D) in turn 3 to the question of the patient (P) in turn 2 would be evaluated as an evasion of the burden of proof. In the specific context of the medical consultation, however, it is more appropriate to reconstruct the physician’s response as an *implicit* argument from expert opinion. For the patient, by having requested the consultation in the first place, has already indicated that he is prepared to rely on the physician’s expertise.

The patient’s lack of expertise may render it impossible for him at some point in the discussion to determine the acceptability of the physician’s standpoint in a direct, substantive manner. This, however, does not mean that the patient is forced to accept the physician’s standpoint regarding the diagnosis, prognosis or treatment without further consideration. Apart from in a direct, substantive way, an expert opinion can also be assessed in an indirect way. According to Goldman (2001, p. 93), a layman may check the extent to which the expert opinion is consistent with that of other experts, what results have been achieved by the expert so far, and whether there is a conflict of interests.

We believe that these indirect assessment possibilities can be transformed into criteria for assessing the reasonableness of argumentation from expert opinion. Within the field of argumentation theory, such criteria generally take the form of a series of critical questions (see for instance Walton, 1997; Walton, Reed, & Macagno, 2008; Wagemans, 2011). In the context of the medical consultation, the general rule is that the more opportunity there is for the patient

² According to Ariss (2009) it is not only the factual difference in knowledge that hinders an equal participation to the decision process, but also the view of both doctors and patients that the doctor has more epistemic authority.

³ By ‘expert’ we mean someone who is a professional expert and by ‘layman’ we mean someone who is not a professional expert. Of course, a layman can be an expert by expertise.

⁴ Goodwin & Honeycutt (2009, pp. 27–28) say that whenever scientists in the context of a public debate choose to not give arguments but appeal to their authority, the laity does not have enough incentive to draw a conclusion that is based on their own analysis of the material.

to determine whether the criteria for the reasonableness of argumentation from expert opinion have been met, the more fully the ideal of shared decision making can be realized—even in cases where the physician explicitly or implicitly appeals to his expertise.

3. CRITICAL QUESTIONS

Argumentation from expert opinion is a type of argumentation in which the protagonist supports the standpoint that a certain opinion is acceptable (A is true of O) with the argument that the opinion at issue has been put forward by an expert (P is true of O).⁵ The standpoint (1), argument (1.1), and acceptability transfer principle (1.1') involved in this type of argumentation can be represented in the following way:

- 1 A is true of O
- 1.1 P is true of O
- 1.1' The fact that P is true of O renders acceptable that A is true of O

O = opinion
 A = being acceptable
 P = being put forward by an expert in the relevant field

Viewed from a pragma-dialectical perspective, the antagonist in response to an argument from expert opinion may call the propositional content of the argument (1.1) as well as the justificatory force of the argument (1.1') into question. The first type of criticism can be represented as a question in the following way:

- 1.1? Has the opinion at issue indeed been put forward by an expert in the relevant field?

This critical question concerning the propositional content of the argument can be further differentiated. A first sub-question is whether the person who has expressed the opinion is indeed an expert in the relevant field. It may be the case that he is not in fact an expert, or in a different field than that to which the opinion belongs. The second issue is whether the person in question has indeed put forward the opinion mentioned in the standpoint.

The second type of criticism that the antagonist may put forward in response to argumentation from expert opinion relates to the justificatory force of the argument at issue (1.1'). This type of criticism can be formulated as follows:

- 1.1'? Does the fact that the opinion has been put forward by an expert in the relevant field indeed render the opinion acceptable?

This critical question can be further differentiated as well. A first sub-question is whether it is indeed the case that the expert has voiced his opinion primarily from his own expertise and not from his personal interest. A second issue is whether the expert is able to defend his opinion in a way different from referring to his expertise. And a third sub-question is whether experts in the same field agree as to the acceptability of the opinion expressed in the standpoint.

⁵ This section is based on Wagemans (2011), who takes 'argumentation from expert opinion' to be a type of 'argumentation from authority' and specifies the associated critical questions by incorporating Walton's (1997) critical questions into a pragma-dialectical framework.

Summarizing, the sub-questions regarding the propositional content of the argument raise doubt with respect to the expertise of the person and the accuracy of the representation of his opinion. The sub-questions regarding the justificatory force of the argument respectively raise doubt about the personal reliability of the expert, the presence of further evidence for the acceptability of the opinion, and the consistency of the opinion with that of other experts in the field. In practice, of course, the antagonist may also express doubt regarding a combination of these issues.

4. INSTITUTIONAL SAFEGUARDS

In the previous section we indicated that the acceptability of argumentation from expert opinion can be established by checking whether the relevant critical questions for this type of argumentation can be answered in the affirmative. If this is the case, accepting the standpoint defended by the physician may in principle be considered as reasonable, which is beneficial to the realization of the ideal of shared decision making.

In this section, we will give a number of examples of institutional safeguards for the reasonableness of argumentation from expert opinion. It is our aim to show that these safeguards may be interpreted as an institutionalized anticipation of the critical questions pertaining to argumentation from expert opinion.

In what follows, we propose to make a distinction between ‘direct’ and ‘indirect’ institutional safeguards. A safeguard is ‘direct’ if it provides the patient with some assurance that the answer to a particular critical question will be affirmative. A safeguard is ‘indirect’ if it offers patients the possibility to investigate themselves whether the answer to a certain critical question is affirmative or not.

4.1 The Physician’s Expertise

The first critical question that can be raised concerning argumentation from expert opinion is: ‘Has the opinion at issue indeed been put forward by an expert in the relevant field?’ Since the type of discussions that are at issue in this paper generally speaking involve a reference to the speaker’s own opinion, and not to that of another expert, the question whether or not the person concerned has really put forward the opinion is not of importance to our analysis.⁶ In what follows we will therefore concentrate on those safeguards that can be related to the first sub-question: ‘Is the person who put forward the opinion indeed an expert in the relevant field?’

According to Goldman (2001, p. 93) a novice can evaluate the expertise of an expert by relying on the judgments of ‘meta-experts.’ In this category of judgments Goldman includes formal forms of recognition, such as certificates and diplomas. Another way in which the novice can evaluate the expertise of an expert is by gathering information about the expert’s track record.

Some institutional rules and guidelines within the Dutch healthcare system offer a number of direct safeguards that are comparable to the judgments of meta-experts. One

⁶ See Pilgram (2012), who makes a distinction between argumentation from authority (when reference is made to someone else’s authority), and argumentation by authority (when reference is made to the speaker’s own authority). In the case of the latter type of argumentation by authority, Pilgram regards the question of whether the authority has been correctly represented only relevant in cases in which the doctor refers to statements made by him or herself at an earlier occasion.

example is the Dutch law for professions in the individual health care (BIG). This law aims to protect patients against incompetent and negligent treatment by health care providers. Healthcare providers are obliged to enroll in an official register and may only carry a protected medical title and practice, if they have been registered. It is checked by a special committee so that only medical specialists in the possession of a “recent competence” are registered. Professionals registered in the medical register are governed by the relevant disciplinary rules.⁷

In order to be able to enroll in the medical register, the physician must satisfy the relevant medical requirements for his or her own specialty. Roughly speaking these requirements encompass that the specialist must have followed an education for a couple of years in an authorized hospital. Medical specialists—as of 2012, other health care professionals as well—are obliged to renew their registration every five years. In order to be able to do so, the specialist must meet the minimum criteria of having regularly cared for patients, of having participated in the relevant inspection programs, and of having followed a minimum number of hours of accredited post-graduate courses and refresher trainings.

A second direct safeguard for the expertise of the medical expert is the Dutch law concerning the medical treatment contract (WGBO). This law became valid in 1995 and aims to strengthen the patient’s position. Article 453 of this law runs as follows (our translation):

Health care providers should provide good medical care and should act in accordance with their responsibilities that follow from the professional standard of health care professionals.

The code of conduct for physicians of the Royal Dutch Society of Medicine (KNMG) provide a further specification of what it means to provide good medical care. For the expertise of the physician rule I.3 and I.5 in particular are relevant:

I.3 The care that is provided should be of good quality. Relevant aspects in this connection are: expertise, efficacy and efficiency, patient centeredness, accuracy and safety. The physician should keep the medical knowledge and skills of his own specialization up to standard. Postgraduate education and refresher courses are a necessity in this respect.

I.5 The physician should take care not to cross the boundaries of the execution of his professional duty. He should refrain from performing actions and making statements that fall outside the scope of his own expertise.

In combination with the law itself, the code of conduct for physicians ensures that the expertise of the physician is a legal imperative.

Apart from these direct safeguards, there are also a number of indirect institutional guarantees that can be seen as relating to the sub-question about expertise. One example is that patients may check in the medical register whether their health care provider is indeed registered. They also have access to a so called ‘black list’ which contains the names of physicians and other health care professionals that have been suspended or have been expelled from their profession by the disciplinary judge.

In recent years more and more initiatives have been taken to give patients instruments with which they can check the quality of health care. Examples are internet sites on which comparisons between various health care providers are published, and sites in which patients’ experiences are made public.

⁷ This section is based on information drawn from various websites concerning the Dutch health care system, a.o. http://orde.artsennet.nl/Opleiding-4/Registratie_en_herregistratie.htm; <http://knmg.artsennet.nl/Nieuws/Nieuwsarchief/Nieuwsbericht-1/Relaties-transparant.htm>.

4.2 *The Physician's Reliability*

The second critical question that can be raised in the case of argumentation from expert opinion is: "Does the fact that the opinion has been put forward by an expert in the relevant field indeed render the opinion acceptable?" The first relevant sub-question is whether or not the judgment of the expert is unbiased.

There are several factors that can endanger the independence and integrity of the physician, such as financial and other types of reward, research interests, pressure from the organization for which the physician works and personal contacts. These factors can influence the treatment given to the patient, but also the type of research that is carried out and the presentation of the results of this research.

An example of a *direct* institutional safeguard related to this sub-question is the oath that most physicians and health care professionals have to take when they receive their medical qualification. This oath can be seen as a standard for the moral self-regulation of the professional group. In the Netherlands, physicians are no longer legally required to take the oath, nor does not taking the oath have consequences for the inscription in the medical register. Nonetheless, the oath is still seen as decisive for physicians' decisions and for the patients' trust in their physicians (CHA, 2009).

Originally, the Physicians' oath was based on the Hippocratic Oath, but since 2003, in the Netherlands, the Hippocratic Oath has been replaced by a more modern version. In a commentary on this new oath, van Everdingen and Horstmanshoff make the following observations:

Apart from a personal declaration about the physician's devotion to the patient, the text of the new physicians' oath also refers to aspects of the relationship with society and contains a number of new elements that are related to present-day discussions about professional ethics. Examples of such elements are the testable attitude of the physician (openness about data concerning the performance and about complaints and errors) and the recognition of one's own limitations (referring to other specialists on time). On the other hand, there are a number of actual problems that are not raised, such as the pressure of free market processes on professional ethics and the execution of scientific research in relation with the pharmaceutical industry (2005, p. 1066, our translation).

There are also a number of legal rules that aim to prevent different forms of conflicts of interest. The Dutch law concerning the medical treatment contract (WGBO), for instance, does pay attention to the actual problems that were just mentioned. This becomes clear if one looks at two articles of this law which aim to prevent conflicts of interest in carrying out scientific research and in maintaining contacts with the business world:

IV.4 When doing scientific research, the physician always puts the patient's interest before his research interest so as to avoid any conflict of interest that may harm the patient. The physician only accepts recompense for the research in so far as this is proportional to the efforts that have been put in.

V.1 The physician maintains an open and honest relationship with the business world and prevents conflicts of interest that may harm the patient. Accepting favors is only acceptable to a limited extent, in accordance with the standards in the Code of conduct of the Foundation Code drugs advertisements.

Apart from such direct safeguards, there are also *indirect* institutional guarantees for the reliability of the physician. One example is the initiative taken by a group of organizations in health care in October 2011 to develop a uniform code in order to prevent both improper

influencing in cases of medical advice and development of protocols that may result from conflicts of interest between physicians and the pharmaceutical industry. Since it is unavoidable that there will be interests at stake, the organizations concerned believe that optimal transparency is the most appropriate means to combat inappropriate influencing: in this way it becomes possible to make the interests visible and checkable.

In 2005 a study group of the Royal Netherlands Academy of Arts and Sciences (KNAW) published a report with recommendations for doing commissioned research. One of the most important recommendations of the study group was to sign a “Declaration of independence”:

With this written declaration, client and researchers promise to stick to a number of rules that will guarantee the independence of the scientific research. A person acting contrary to this declaration breaks his public and explicit promise, which must lead to sanctions after this has been reported to a national body (2005, p. 2, our translation).

This declaration is a direct safeguard for the independence of scientific research. The same report also mentions a measure that could be seen as an example of an indirect guarantee. In a combined editorial, a number of leading international medical journals have laid down that they will require all authors to sign a declaration in which they promise to mention their potentially conflicting interests in their scientific publications.

4.3 Additional Evidence and Consistency

The second and third sub-question with respect to the justificatory force of argumentation from expert opinion are the question whether the expert has further evidence for the opinion and the question of whether the expert’s judgment is consistent with that of other experts. In this section we will give a number of examples of direct and indirect institutional safeguards that can be related to these sub-questions.

An important *direct* guarantee that is related to *both* sub-questions is the rules concerning Evidence Based Medicine (EBM). These rules are aimed at ensuring that the patient has some guarantee that the opinion of the consulted expert is in accordance with the current knowledge of experts in the same field. EBM is “the conscientious, explicit and judicious use of current best evidence in making decisions about the care of individual patients” (Sackett, Rosenberg, Muir Gray, Haynes, & Scott Richardson, 1996, p. 71). In the Dutch law concerning the medical treatment contract (WGBO), the following stipulation concerning EBM can be found:

I.6 The physician is prepared to account for his opinions and to adopt a testable attitude. Guiding principle for this test is the criterion “customary practice among professional colleagues.” The implementation of this criterion should be by an accredited scientific association.

This quote makes clear that the rules governing EBM do not just constitute a direct safeguard for an affirmative answer to the question about further evidence for the physician’s opinion, but also for the question about whether the expert’s opinion is consistent with that of other experts.

As regards the indirect safeguards, the asymmetrical relationship between physician and patient will in many cases make it impossible for the patient himself to check whether the physician’s opinion is based on further evidence. The recent publication of summaries of

guidelines for medical specialists in non-technical language by a cooperative of the Dutch scientific associations for medical specialists may be seen as an attempt at giving the patient the opportunity to check whether his physician's opinions are in accordance with the medical evidence, and consistent with the opinions of other experts in the relevant field.

By far the most important indirect safeguard for the consistency of the expert's opinion with that of other experts are the regulations with respect to the so-called 'second opinion.' In the aforementioned Dutch law concerning the medical treatment contract (WGBO, II.19), it is specified that a physician should comply with the patient's request to be referred to another health professional for a second opinion, unless there are weighty considerations against doing so, which should then be made explicit and motivated. Since patients thus have the right to ask for a second opinion, they have the possibility of checking whether the first expert's opinion is consistent with the second expert's opinion.

5. CONCLUSION

In this paper we have shown that the institutional guidelines and procedures within the medical field can be related in a meaningful way to argumentation theoretical standards for the reasonableness of argumentation from expert opinion. On the basis of this research it may be concluded that the asymmetrical relationship between the physician (the expert) and the patient (the layman) does not necessarily put the ideal of shared decision making at risk. Even in cases where a direct assessment of the physician's opinion is not possible and the patient has to rely solely on the physician's expertise, the reasonableness of the judgment is to a large extent guaranteed. This is done both by direct safeguards, which can be viewed as assessments of argumentation from expert opinion that have been delegated to the institution, and by indirect safeguards, which enable patients to evaluate the reasonableness of this type of argumentation themselves. Of course, physicians will always have to meet the minimum requirements for informed consent, which means that they should allow their patients to give their consent for the treatment on the basis of an understanding of the facts, implications and consequences of the treatment proposed. Whenever the explicit or implicit appeal to expertise obstructs this understanding, without there being an adequate justification for it, the appeal is not only contrary to the ideal of shared decision making, but also contrary to the legal requirement of informed consent.

ACKNOWLEDGEMENTS: We would like to thank Bart Garssen, Nynke Kalkers and an anonymous referee for their critical comments on an earlier version of this contribution.

REFERENCES

- Ariss, S. M. (2009). Asymmetrical knowledge claims in general practice consultations with frequently attending patients: Limitations and opportunities for patient participation. *Social Science & Medicine*, 69, 908–919.
- CHA—Commissie Herziening Artseneed (2009). *Nederlandse artseneed*. [The Dutch physicians' oath]. Badoux: Houten.
- Charles, C., Gafni, A., & Whelan, T. (1997). Shared decision-making in the medical encounter: What does it mean? (or it takes at least two to tango). *Social Science & Medicine*, 44(5), 681–692.
- Goldman, A. I. (2001). Experts: Which ones should you trust? *Philosophy and Phenomenological Research*, 63(1), 85–110.

- Goodnight, T. G. (2006). When reasons matter most: Pragma-dialectics and the problem of informed consent. In P. Houtlosser & M.A. van Rees (Eds.), *Considering pragma-dialectics: A festschrift for Frans H. van Eemeren on the occasion of his 60th birthday* (pp. 75–85). Mahwah, NJ: Lawrence Erlbaum Associates.
- Goodwin, J., & Honeycutt, L. (2009). When science goes public: From technical arguments to appeals to authority. *Studies in Communication Sciences*, 9(2), 19–30.
- Joosten, E. A. G., DeFuentes-Merillas, L., de Weert, G. H., Sensky, T., van der Staak, C. P. F., & de Jong, C. A. J. (2008). Systematic review of the effects of shared decision-making on patient satisfaction, treatment adherence and health status. *Psychotherapy and Psychosomatics*, 77, 219–226.
- KNAW Werkgroep Opdrachtonderzoek (2005). *Wetenschap op bestelling: Over de omgang tussen wetenschappelijk onderzoekers en hun opdrachtgevers* [Science on command: About the contact between researchers and their clients]. Amsterdam: Koninklijke Nederlandse Akademie van Wetenschappen.
- KNMG (2002). *Gedragsregels voor artsen. Richtlijn II.01*. [Code of conduct for physicians]. Utrecht: KNMG.
- Légaré, F., Elwyn, G., Fishbein, M., Frémont, P., Frosch, D., Gagnon, . . . van der Weijden, T. (2008). Translating shared decision-making into health care clinical practices: Proof of concepts. *Implementation Science*, 3(2), 1–6.
- Pilgram, R. (2012). Reasonableness of a physician's argument by authority: A pragma-dialectical analysis of the specific soundness conditions. *The Journal of Argumentation in Context*, 1(1), 33–50.
- Sackett, D. L., Rosenberg, W. M. C., Muir Gray, J. A., Haynes, R. B., & Scott Richardson, W. (1996). Evidence based medicine: What it is and what it isn't. *British Medical Journal*, 312, 71–72.
- Snoeck Henkemans, A. F. & Mohammed, D. (2012). Institutional constraints on strategic maneuvering in shared medical decision-making. *The Journal of Argumentation in Context*, 1(1), 19–32.
- van Everdingen, J. J. E., & Horstmanshoff, H. F. J. (2005). De nieuwe Nederlandse artseneed. [The new Dutch physicians' oath]. *Nederlands Tijdschrift voor Geneeskunde*, 149, 1062–1067.
- Wagemans, J. H. M. (2011). The assessment of argumentation from expert opinion. *Argumentation*, 25, 329–339.
- Walton, D. N. (1997). *Appeal to expert opinion: Arguments from authority*. University Park, PA: Penn State University Press.
- Walton, D. N., Reed, C., & Macagno, F. (2008). *Argumentation schemes*. Cambridge: Cambridge University Press.