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Perspective and Debates

Using argumentation theory to identify the challenges of shared decision-making when the doctor and the patient have a difference of opinion

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Significance for public health

In healthcare, shared decision-making (SDM) is currently receiving much support at a policy and public level. The patient-centred approach emphasises the value of patient autonomy and self-determination concerning medical treatments, which best finds expression in SDM. Despite this emphasis, the preconditions for the application of shared decision-making are not clear, and there are few instruments available to empower doctors and patients in mastering this communication process. From a public health perspective, there is the risk of promoting a form of interaction without equipping doctors and patients with the means to engage in it appropriately. In order to better understand where investment should be made to enhance the quality of SDM in the context of the medical consultation, this paper uses argumentation theory to analyse the case of SDM when the doctor and the patient have a difference of opinion over a treatment. It describes the skills and attitudes that doctors and patients should have in order to settle the difference of opinion, and challenges the feasibility of their empowerment.

Abstract

This paper aims to identify the challenges in the implementation of shared decision-making (SDM) when the doctor and the patient have a difference of opinion. It analyses the preconditions of the resolution of this difference of opinion by using an analytical and normative framework known in the field of argumentation theory as the ideal model of critical discussion. This analysis highlights the communication skills and attitudes that both doctors and patients must apply in a dispute resolution-oriented communication. Questions arise over the methods of empowerment of doctors and patients in these skills and attitudes as the preconditions of SDM. Overall, the paper highlights aspects in which research is needed to design appropriate programmes of training, education and support in order to equip doctors and patients with the means to successfully engage in shared decision-making.

Introduction

Shared decision-making (SDM) is increasingly advocated as the gold-standard of the partnership between clinicians and patients.[1-3] SDM is *a process in which clinicians and patients work together to clarify treatment, management or self-management support goals, sharing information about options and preferred outcomes with the aim of reaching mutual agreement on the best course of action*.[4] SDM is promoted at a public health level in recognition of the value of patient autonomy and self-determination regarding their medical care.[5,6]

The applicability of the standard of SDM has been challenged by some empirical literature[7-9] that points out three main obstacles. First, SDM seems to be possible in a situation of equipoise, when the treatment options are equivalent.[10] Second, as stated by Joosten *et al*.,[11] SDM has been proved to be effective in reaching agreement over treatment in cases of chronic conditions or when the intervention consists of more than one session. It is not appropriate in cases in which a single decision is taken in a context of acute illness. Third, not all patients want to play an active role in decision-making. Some patients prefer to leave the decision to their doctors, especially in cases of medical uncertainty.[9,12-17] There are, however, patients who want to contribute to the decision-making process[1,17-19] and it is, therefore, important to carefully consider its application in contexts that are challenging and in circumstancees which might compromise a successful outcome. This paper focuses on the challenges associated with the application of SDM in a specific challenging context: when the doctor and the patient have a difference of opinion over the course of action to be taken.

Currently, the spread of health information is supporting the development of the point of view of the patient[20,21] which could contrast with those of the doctors.[22] Patients often build their own understanding of their health status, their health condition and its treatment, and they bring this understanding with them to the consulting room.[23-25] Also, especially in the field of chronic pain, patients are often exposed to a large amount of information that they have collected from consultations with different health professionals or alternative therapists.[2] It is extremely important to resolve any difference of opinion the patient may have with the doctor concerning the treatment. Leaving aside the fact that agreement could be desirable in itself, in most cases the implementation of the treatment decision is carried out by the patient (*e.g.* taking medication at home).[27] Therefore, if the patient does not agree with the doctor's suggestions regarding treatment, their post-consultation behaviour and compliance could be affected.[28,29] In contrast to the claims of Charles *et al.* in 1997,[30] much progress has been reported in the literature concerning SDM on its definition and specification.[3,10,27,31] On the contrary, what does not seem to have received sufficient attention is the burden of communication skills that the resolution of a difference of opinion imposes on doctors *and* on patients. In order to reach agreement on what constitutes the most desirable course of action when the patient has doubts about the doctor's point of view or when the patient has a different point of view, the two actors must try to resolve the dispute.[22,32]

In the literature, there is a more or less explicit assumption that the doctor, being in charge of the consultation, is ultimately responsible for assuring and guiding the patient towards this agreement.[7] Also, it seems that the main task of the patient who wants to take part in the consultation is linked to his or her ability to ask the right questions.[33-36] Although the doctor is legally and morally responsible for reaching a decision (and, indeed, asking the right question is an important skill for

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patients to have), the resolution of a difference of opinion implies much more.

The objective of this paper is to identify the challenges linked to the resolution of a difference of opinion between the doctor and the patient by relying on a body of knowledge known as argumentation theory.[37] More specifically, we shall make our analysis by relying on the model of critical discussion developed by van Eemeren *et al.*[32,38] In the first part of the paper, we introduce this model and present the reasons why we decided to adopt it for an analysis in this context. In the second and third parts of the paper, we investigate the skills and the communication preconditions that the resolution of a difference of opinion involves. In the fourth and last part of the paper, we translate this burden of skills and preconditions into challenges that must be faced when designing interventions aimed at the training of doctors and the empowerment of patients. At this stage, we do not have the answers to these challenges. Yet, by highlighting them, we hope to inspire further research on a currently unexplored topic that is, to a large extent, a prerequisite for the success of SDM when the doctor and the patient have a difference of opinion.

Critical discussion as a model of communication

The main claim behind this paper is that the ideal model of critical discussion developed by van Eemeren and Grootendorst[32] is an optimal standard to understand what skills the resolution of a difference of opinion during SDM imposes on doctors and patients. There are at least two main reasons for applying this model in the context of the medical consultation. First, to our knowledge, the model of critical discussion is the best operational model of how argumentation should be structured if it were dispute resolution-oriented. As such, it is equipped with a set of analytical and normative tools to evaluate this resolution from the point of view of the steps and skills needed. Second, this model has been developed by reflecting on *ethical* analytic considerations.[39] As van Eemeren specifies, the model is a priori because it provides a description of what argumentative discourse would be like if it were ideally tailored to the task of resolving a difference of opinion.[39] Yet it has been developed by considering the experience of argumentation and the way it is conducted in real exchanges. Thus, this model presents rules of actual discourses based on normative principles that, although speakers are often not aware of them, are intuitively important and useful if there is a need to solve a difference of opinion. For instance, one of these rules states that discussants do not prevent each other from advancing standpoints.[32] If a speaker is prevented from expressing a standpoint, there is no possibility that the eventual difference of opinion will be settled and, therefore, no solution will be found. Another principle is that speakers should be disinterested in the outcome of the discussion.[39] They should interact in the perspective of accepting the strongest point of view based on the best evidence available. Whenever a speaker has an interest in supporting his points of view regardless of where the best evidence comes from, the exchange is biased. In this case, there is the risk that the difference of opinion remains unsolved or is only solved through manipulation. When there is an argumentative exchange between two parties (here the doctor and the patient) who hold a difference of opinion (*e.g.* they disagree over a certain treatment), this difference can be *single*, when the doctor has a point of view and the patient calls it into doubt or *mixed*, when the doctor and the patient have different standpoints over the course of treatment to be adopted.[32] According to the model of critical discussion, in order for this difference of opinion to be settled, the two actors must be able to: i) identify disagreement; ii) agree between them as to the means by which the disagreement will be settled; iii) explore the eventual merits of the competing positions; iv) resolve the disagreement (or, in some cases, with a mutual recognition that no agreement can be reached).

Thus, van Eemeren and Grootendorst identify four stages of a critical discussion toward the resolution of a difference of opinion.[38]

In the *confrontation stage*, the interlocutors establish that they have a difference of opinion, and they must share an understanding of what this difference involves, *i.e.* in our case what the doctor's standpoint is and what the patient's standpoint is. In the *opening stage*, they decide to resolve this difference of opinion and they look for sufficient common ground to initiate the discussion. In the a*rgumentation stage*, the protagonist (either the doctor or the patient) defends his or her standpoint by putting forward arguments to counter the antagonist's objections or doubts. The argumentation stage can vary from being extremely simple to extremely complex depending on the depth of the disagreement and the effectiveness of the arguments of the two parties. In the *concluding stage*, the two parties determine to what extent their initial difference of opinion has been resolved and in whose favour. Resolution requires that both parties come to an agreement. Thus, either one of the two parties withdraws his standpoint and agrees on the standpoint of the other party or, in the case of a negotiation, both parties agree on a third standpoint.

A complex set of skills

In the literature on SDM, there are indications of what doctors must be able to do; they must be able to provide patients with reliable evidence-based information on the benefits and harms of intervention, including uncertainties and risks.[4] If we consider, however, the frame of critical discussion described above, the challenge for doctors is bigger, and translates into the same challenge for patients.

First of all, in order to support their points of view, doctors must be able to provide reasons on why, they think, a certain course of action or treatment is beneficial for the patient. In other words, doctors must be skilful in argumentation that, by definition, is the process of providing reasons in support of a standpoint with the aim of convincing a critic of its acceptability.[32] Thus, there is a difference between when a doctor says *You should do X* and when he presents an argument in the form *You should do X because of Y.* Providing a reason is the starting point for engaging the interlocutor (here the patient) in reflecting over the acceptability of a certain standpoint.[22,40]

Doctors also have to be skilful in supporting their points of view with reasons that are considered to be personally relevant by the patients. We talk about personal relevance when the interlocutor accepts that a certain content adequately supports a particular standpoint.[41] Indeed, if the doctor uses premises that the patient believes do not adequately support his standpoint, the argumentation might be considered to be irrelevant by the patient regardless of whether or not it is valid.[42] For example, many people are aware of the risk of smoking but still continue to smoke because they do not perceive the damage as potentially affecting them.

Patients who want their standpoint to be addressed in SDM must be skilful in the same tasks. They must be able to explain their standpoint and justify it to enhance the acceptance of the doctor. Above these skills, both doctors and patients must have another competence: the competence of critically evaluating the point of view of the interlocutor and, overall, of mastering, integrating and balancing competing arguments. Indeed, for a patient (or for a doctor) who holds a point of view that is different from that of the doctor (or of the patient), in order to reach agreement in an optimal way, either he withdraws it or he convinces the doctor (or the patient) that his position is better and worthi-

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er to pursue than the one proposed by the other party. In both cases, the parties must engage in a critical examination of the interlocutor's point of view, confront it with their own, and reach a decision about which point of view is better. For instance, the patient should be able to evaluate the doctor's treatment suggestion and decide upon it in accordance with his own preferences and beliefs.

The preconditions for critical discussion

In addition to the above skills, the persons who wish to resolve a disagreement by means of discussion must fulfill three main preconditions of argumentation.[43] First of all, both parties must have the opportunity to cast doubts on a certain point of view and, if so, the other party must respond to them. If the patient has a different point of view, during SDM he must have the possibility of presenting it and receiving feedback from the doctor.[22] If the point of view of the patient is not adequately addressed, he might leave the consultation still thinking that his standpoint is the best.

Another precondition of a successful argumentation is that interlocutors should be disinterested in the outcome of a discussion and be willing to give up their standpoints if that of the other party can be better defended. If they are not disinterested, the risk is that they support a point of view at all costs and beyond it being reasonable, even if confronted with firm evidence. Fulfillment of this precondition in the consulting room is problematic. The doctor's mission is to improve the health of patients and cure them. If they have evidence that a certain treatment works in a certain way and that it would offer appropriate treatment for a certain patient, they have every reason to attempt to convince that patient of its benefits. Disinterested in this context mainly means doctors and patients should not be driven in their argumentation by factors including economic reasons (*e.g.* the prescription of a specific medicine), or by ideologies and convictions (*e.g.* religious views) that do not accept a compromise. But there is evidence that, often, these factors do play a role in the way doctors and patients respectively engage in argumentation.[44-46]

Last but not least, there must be a sharing of knowledge and, ideally, a certain symmetry in the status of the participants, because in the very moment one party does not understand the standpoint of the other party and the supporting evidence, then the evaluation might be biased. Patients might underestimate the point of view of the doctor that is either taken for granted or expressed in terminology that is too technical. In the same way, doctors might underestimate the point of view of the patient and the reason for his or her doubts if these have not been clearly articulated and expressed.[15]

From theory to practice: the challenges

We know from the literature that there are patients who do not want SDM, but prefer to delegate the decision to the health professionals. On the contrary, there are patients who want to engage in this type of interaction. However, in light of the preconditions mentioned above, five main challenges remain. i) These patients must find a doctor who is himself willing to engage in SDM. Recent studies address the issue of the type of participation that a patient would like to have.[15,17,47] But this topic is also an issue for doctors because often openness to dialogue is a natural characteristic of the individual. This implies that doctors and patients who want to engage in SDM should have an internal motivation and predisposition towards engaging in critical discussion over eventual differences of opinion. Both the doctors and the patient must be willing to exchange their views and, especially as far as doctors are concerned, they must be willing to spend time in addressing the point of view of the patient even if they think they are wrong. This willingness cannot be taken for granted. Most training in communication for doctors focuses on enhancing their ability to interact and on how to enhance this attribute in patients.[48] Yet, to our knowledge, there is currently no training programme that prepares doctors to discuss and argue with patients. There are a few articles that claim the importance of argumentation in doctor-patient consultation,[49] but these claims have not yet been made operational and tested in concrete training programmes. ii) As already pointed out by Wirtz and colleagues,[50] doctors are not always willing to give up their standpoint. As mentioned earlier, they might limit the range of treatment alternatives due to policy issues (*e.g.* the inclusion of a medicine in the national reimbursement mechanism).[51] More generally, they find it difficult to let patients set the treatment agenda. Indeed, to allow them this choice, patients should be able to build their points of view according to the unbiased evaluation of all aspects surrounding the choice of a medical treatment, in primis medical evidence in the context of their own situation and preferences. They should understand exactly what the doctors suggest, and have enough understanding to correctly decide that the option they have in mind is a better one for them. Building this understanding is a well known critical issue and one only partially addressed in the literature on health literacy.[52] iii) While medical experts are legally bound to disclose certain information to patients and consumers (*e.g.* about the nature, the benefits and the risks of certain treatments), in supporting their advice argumentatively they might be driven by a rhetorical goal of persuasion that makes, for personal, institutional or marketing reasons, obtaining the patient's agreement and compliance with their advice the ultimate objective. For instance, doctors' reasons for prescribing specific drugs are sometimes determined by cost pressures.[53] Whenever the goal of persuasion prevails, there is the risk that an individual's right to autonomous decision-making is compromised, unless he or she has the critical skills to detect the source of the manipulation. Several studies on the impact of the advertising of prescription medicine show that consumers' preferences for certain treatments are often driven by unreasonable argumentation that is ultimately persuasive.[44] iv) Patients themselves must be prepared to participate in critical discussion. Being willing to participate in the consultation while not being in the habit of taking part in critical discussion damages the outcome. The patient must be ready to withdraw his or her standpoint if it is proven to be wrong. The main challenge here is that this openness to dialogical exchange presupposes a level of rationality that cannot be taken for granted. We know that, especially in the field of health, decisions by patients can be driven by emotional factors rather than rational argumentation.[54,55] On the other hand, without the commitment of the patient to self-examination and critical thinking, questions arise on the usefulness of SDM when the patient does not give us a standpoint that is evidently wrong.[56] There is still little evidence of the value of instruments to help patients in the decision-making process.[57] Critical skills should be part of the competences that make up patient health literacy. Indeed, the literature speaks of critical health literacy that involves aspects such as information appraisal and evaluation.[52,58] Yet, there are not many programmes on how to enhance it and with what outcomes.[59] v) On a more pragmatic level, there are temporal constraints concerning the feasibility of critical discussion in the medical consultation. Provided that the empowerment of those patients who want to be active in SDM should be performed outside the consulting room, the question as to the amount of time that doctors and patients have at their disposal to solve the difference of opinion remains. As pointed out in a resounding article, time and economical constraints can discourage doctors from investigating and adapting to patients' preferences for participation in the decision-making about treatment.[60]

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Conclusions

In the context of SDM, the objective of this paper was to identify the challenges linked to the resolution of a difference of opinion between the doctor and the patient. The resolution of this difference presupposes skills in argumentation and critical thinking on the part of both of them. Furthermore, it presupposes the fulfillment of attitudinal predisposition (*e.g.* to engage in argumentation and to embark in self-examination) from both these actors. We believe that, so far, these aspects have not been taken into sufficient consideration in the literature or in current programmes for the training of health professionals and for patient education and empowerment. There is a need to focus on the development and testing of instruments to facilitate doctors' and patients' engagement in argumentation. It is of no surprise that the patient-centred communication skills at the basis of the current training of health professionals (*e.g.* empathy and openness to dialogue) are often perceived as a soft approach and of limited value in engagement with patients.[61] We suggest that these programmes could be developed on the basis of argumentation theory as has been the case in other fields. Thus, for example, in the legal field, argumentation theory is an important starting point for a normative theoretical model to use to describe relevant features of legal argumentation.[62] Also, argumentation theory is presented in education as an important tool to elicit processes that can support or enhance learning-oriented reasoning.[63] We do not claim that argumentation theory is the best conceptual and normative body of knowledge to identify ways and routes to improve the quality of doctor-patient argumentation. Its application in the medical field is new and there might be a need to refine, if not modify, some of its axioms and assumptions. Certainly, the issue of doctor-patient agreement over a difference of opinion can be addressed using analytical instruments from disciplines other than argumentation theory, for example, from the field of conflict management and resolution.[64] What we do claim, however, is that argumentation theory helped us identify important aspects of the medical consultation that require further investigation. In our future work, we will continue our analysis along the lines of argumentation theory. But in the meantime we invite readers to propose other theories and approaches and we look forward to a fruitful exchange of ideas.

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