26 The Prescription Talk

Katarina Buchmann, Stefan Herzig, Jan Matthes

> Thought does not always mean said, said does not always mean heard, heard does not always mean understood, understood does not always mean agreed, agreed does not always mean applied, applied does not always mean retained.
>
> attributed to Konrad Lorenz (1903-1989)

Abstract: The prescription talk sets complex requirements for medical communication. The intention of this chapter is to show how the legally justified obligation to provide information and the participation in the decision-making process desired by many patients can be implemented in practice. A conversation guideline is proposed that brings together the communication model of shared decision-making and essential information on drug therapy in a “coat-bag format” in order to support a

therapy decision made jointly on the basis of a mutual risk-benefit assessment (see § 26.7). Excerpts from prescription talks between medical students in the clinical phase of their studies and actors playing patients are intended to illustrate relevant situations and possible procedures but are not necessarily to be understood as “best practice” examples in the narrower sense (E 26.1-26.6).

26.1 Background and significance

Adherence to a drug therapy is generally defined as the extent to which someone takes their medication as prescribed (Osterberg, Blaschke 2005; Vrijens et al. 2012). If this is insufficient, it is referred to as non-adherence. This usually refers to the quantity taken per unit of time (mostly, albeit rather arbitrarily, associated with a cutoff value of 80%), but the time at which the medication is taken, the regularity with which it is taken or the observance of special instructions (e.g. “unchewed” or “with a meal”) also play a role here. The term “compliance”, which was mostly used in the past, is often (mis)understood from the perspective of a paternalistic (or maternalistic) role model of the treating person, i.e. as not complying with the (drug) therapy prescribed by the doctor. The preferred term today, adherence, is aimed at the therapeutic alliance between patients and practitioners and thus explicitly refers to responsibilities on both sides.

The importance of the topic becomes clear when one considers, for example, that one third of all avoidable medication-related hospital admissions are attributed to problems with adherence to medication (Howard et al. 2007; Ayalew et al. 2019). Others have shown that the frequency of hospital admissions depends on the extent of (non-)adherence (Sokol et al. 2005; Encinosa et al. 2010). A meta-analysis of clinical studies found a consistent correlation between adherence and mortality reduction (Simpson et al. 2006). Non-adherence to medication is therefore a major problem in medical care (e.g. World Health Organization 2003). Factors such as lack of information or dissatisfaction with the medical consultation can reduce the willingness to take medication as prescribed. Lack of awareness (of the severity) of a disease and inaccurate medication instructions can also lead to poor treatment adherence (Düsing 2006; Osterberg, Blaschke 2005). On the other hand, appropriate “preparation” for therapy can facilitate the (long-term) appropriate intake of medication. Of note, promoting treatment adherence

goes hand in hand with an improvement in clinical treatment outcomes (e.g. Matthes, Albus 2014). An important foundation stone for good adherence to therapy should be laid at the initiation of drug therapy, i.e. during the prescription conversation.

Drug prescription plays an important role in the daily routine of GP practices: on average, a medicine is prescribed in every second to third doctor-patient contact (Richard, Lussier 2006; Stevenson et al. 2000). In addition to the medical significance of a prescribed therapy, it should be noted that even the dosage might interfere with a patient's everyday life. It is not unusual for a patient to have to deviate from their usual lifestyle due to drug treatment. Furthermore, there is a risk of adverse drug reactions. It therefore seems understandable that many patients want to be involved in the medical process as far as possible. In fact, patients have a clear need for information regarding the background to their illness and the (alternative) treatment options (e.g. Coulter et al. 1999). Furthermore, they want to have a say and be involved in decisions[1] (e.g. Cullati et al. 2011; Guadagnoli, Ward 1998). Shared decision-making is a key method by which this patient involvement can be implemented. Based on a partnership approach to the doctor-patient relationship, this involves interaction between the parties concerned, which aims to use communicative means to reach a joint decision on an appropriate course of action (e.g. drug therapy). The communication of current scientific evidence plays a significant role in this. Ultimately, the decision should be made in the best possible way, taking into account the patient's preferences and clinical requirements. Our guideline is also based on shared decision-making in the process proposed here for the prescribing discussion (§ 26.7), not least because this approach can apparently contribute to improving clinical endpoints (Hauser et al. 2015).

[1] The possibility of selecting a medication of course requires that several suitable drugs are available to treat a disease. These may be equivalent alternatives, but it will often be the case that there are differences, e.g. in terms of efficacy and tolerability (while differences in the range of side effects may be decisive for the choice). However, it will always be the case that the doctor has to make a (preliminary) selection of the options "to be offered" from a professional point of view. In any case, the patient must be informed of the putatively different "value" of the options (perhaps including those not offered). There is no question that there are situations in which there is "no choice". In terms of therapeutic freedom, however, this is ultimately at the discretion of the respective doctor and is always a case-by-case decision.

Patient participation in general has also been taken into account at a health policy and legal level. The professional code for doctors working in Germany stipulates that "patient consent" must be obtained for treatment after the "nature, significance and scope [...] including treatment alternatives and the associated risks" have been explained. In 2013, the enactment of the so-called Patients' Rights Act (see § 630 of the German Civil Code (BGB)) also laid down in law what information is required to prepare the patient for treatment decisions.

Although patients, in accordance with the law, want and demand to be sufficiently informed about their medical situation, studies show that in fact they are often not well informed (z.B. Richard, Lussier 2006; Tarn et al. 2006; Twigg et al. 2016). The discrepancy between the need for information and the actual exchange of information can lead to dissatisfaction on the part of both patients and doctors (e.g. Stevenson et al. 2000). In fact, decisions for a particular treatment are mostly made unilaterally by the doctor (e.g. Karnieli-Miller, Eisikovits 2009; Loh et al. 2007).

One argument often raised against the postulated patient participation and increased exchange of information is the concern about the additional time required, which would not be feasible given the daily routine of clinics and practices. However, a large number of studies suggest that these fears are unjustified (Légaré, Witteman 2013; Kirsch, Matthes 2021).

In the following, we propose a procedure for the prescription conversation (§ 26.7), which was developed on the basis of results from communication research and studies on drug therapy, as well as taking into account General Practitioners' and our own experience. The applicability of the resulting guide was first tested with medical students in a discussion with a simulation patient[2] (Hauser et al. 2017). In the meantime, we have investigated the applicability, acceptance and effects not only in the context of teaching medical students, but also in a pilot study in GP practices (Kirsch, Matthes 2021).

[2] Scenario: Initiation of antihypertensive therapy in a 50-year-old patient with a positive family history, HDL cholesterol deficiency, controlled bronchial asthma and currently asymptomatic hyperuricemia

26.2 Preparing a prescription talk

Misunderstandings are not unusual in doctor-patient communication (Stevenson et al. 2000). To prevent this, it should be clear from the outset what the purpose of the upcoming discussion is: a (treatment) decision is to be made. However, there may initially be a need for clarification as to how this decision is to be made. Does the patient want to be involved in the decision at all or do they prefer to rely entirely on the professional expertise of their doctor? Unfortunately, there is no "gold standard" for the appropriate level of patient involvement and information. On the contrary, this is one of the major challenges in conducting discussions, as described in more detail elsewhere (e.g. Chapter 10, the decision-making dialog). The desired scope of information and the patient's preference for participation can vary depending on the disease, its severity and/or stage and the phase of treatment (Butow et al. 1997). It is therefore all the more advisable to ask about expectations and preferences (repeatedly if necessary) (Box 26.1). This step is crucial for the further course of the conversation. For example, if the patient is content to be "provided" with a medication by the doctor, it is unlikely that extensive information about alternative treatments will be expected, so the conversation can focus on the medication chosen by the doctor (see § 26.6).

Box 26.1	Opening a prescription conversation

At the beginning, the initial situation must be clarified, in particular the patient's expectations of

- the doctor's role in the decision-making process (from pater- or maternalistic to partnership-based to that of a service provider).
- the patient's role in the decision-making process (desire for / willingness to participate in general, kind and extent of participation if applicable, personal confidence, personal responsibility).

The corresponding expectations on the part of the doctor should also be clarified and communicated to the patient.

If the patient has a need for active participation, the procedure according to § 26.3 - 26.6 or § 26.7 is recommended.

E 26.1	Examples of asking about willingness to participate in the decision-making process
Example 1	
01 D	we have three types of medication, the main difference is actually the side effects . yes . so I would like to briefly introduce them to you, discuss them and then we can decide together which is most suitable for you, yes? ..
02 P	ok .
Example 2	
01 D	In your case I would suggest that we start directly with a medication [hm], but that's not something I can just throw at you ... the aim today is for us to jointly develop a decision that you can be comfortable with . and you say, I'm (familiar) with the medication, I'd like that or I don't like any of these medications, I need a little more time to think about it .
02 P	yes, I see .
03 D	is that okay for you... [yes, of course] if we go through a few medications briefly at eye level and I describe the advantages disadvantages, effects and side effects to you and then we'll see

26.3 The prescription talk is bilateral as well

Once the course has been set for the rest of the meeting, the next step is to exchange relevant information. It is important to note that both sides have relevant knowledge that is largely unknown to the other party, but which can be crucial for the decision-making process.

26.3.1 Important contributions from the patient

In discussions about drug therapy, the proportion of talking on the part of the doctor is generally higher than on the part of the patient (Richard, Lussier 2007). Nevertheless, patients consider the discussion of their personal concerns (e.g. fears regarding treatment) in the medical consultation to be at least as important as the discussion of the medical situation itself (Little et al. 2001). However, doctors only rarely address

this (Richard, Lussier 2006; Sleath et al. 1999), which may also be due to the fact that patients often do not clearly express their need for discussion (Barry et al. 2000).

The importance of a patient's knowledge of their own situation is significant for the treatment decision - after all, you know yourself best. Expectations, doubts, values, personal needs, individual circumstances and the compatibility (or incompatibility) of a treatment with one's own life situation are important information that can influence the decision for or against a particular treatment option (see Box 26.2). Taking this knowledge into account can be essential for a successful course of therapy, as barriers arising from personal circumstances that could make medication adherence more difficult can be identified, considered, circumvented or overcome during the discussion.

However, patients are increasingly looking for information on medical aspects and are forming their own picture of their situation (Nink, Schröder 2006). This can be an advantage and a disadvantage, but must be taken into account in any case. If, for example, the information acquired is incorrect or incomplete, this could lead to a distorted perception of the disease and misunderstandings and also have an impact on the course of treatment.

Box 26.2 Examples of essential information on the part of the patient

- Personal needs, expectations regarding the course of the disease and treatment, values
- Knowledge of own lifestyle and personal background (e.g. profession, family situation, etc.)
- Prior knowledge of their own illness, treatment options and risks
- Any treatment measures they have taken themselves (e.g. self-medication)

There is information that patients have but (knowingly or unknowingly) withhold from the doctor. In Germany, for example, about 42% of adults use non-prescription medicines for self-medication (Knopf et al. 2017). However, more than half of patients do not inform their doctor about this. 14% believe that this information is not important for the doctor (Sleath et al. 2001). However, as 4% of the problems associated with self-medication are interactions with other medicines, in addition to inadequate choice of preparation and incorrect use, this is certainly essential information (for a treatment decision) (Eickhoff et al. 2012). It is

obvious that doctors need to actively inquire about this. It is worth noting that patients apparently overestimate doctors' knowledge of their medication and that information may be "withheld" from doctors because of this (Serper et al. 2013).

E 26.2	Important aspects on the part of the patient: Prior knowledge, life situation and expectations

Example 1

01	D	Are you fundamentally aware ... that/what a permanently high blood pressure . what consequences it can have? .
02	P	yes I've already informed myself a bit . only I just can/ I would like to know so from you ... because when I sit in my room and read everything, it's always [yes] different than in a conversation .
03	D	yes, there is a medication that you can usually start with . which can also cause a cough ... I don't know what you do for a living? .
04	P	I work in the office, in a bank .
05	D	In other words, if something like this occured now . You don't necessarily have to give lectures or anything like that? . that something like that would occur and that would be a problem for you? .
06	P	No no .

Example 2

01	D	Could you imagine starting a drug therapy? .
02	P	(well) . sure [yes], so I . am here to know, uh what . what can I do now? [hm so] how can I proceed now .

26.3.2 Important contributions from the doctor

The doctor generally chooses a treatment because they expect a (medical) benefit for the patient. Accordingly, they know (realistic) treatment goals and the probable effectiveness of a drug therapy. Patients, on the other hand, are often not (sufficiently) aware of this information (without which the treatability and need for treatment of a disease can often not be deduced). Therefore, this information should be provided at the

beginning of the presentation of options for drug treatment, before the pharmacological properties of the drugs are discussed.

Detailed information on medicines and how to use them is not only essential for doctors. If a shared decision-making process is to be implemented with patients, they will also need this information (and not only then). The question of "how much information" about a drug therapy is necessary or sufficient for a patient to be able to understand and, if necessary, support a particular decision, is in the end a case-by-case decision. However, several patient and physician surveys have come to similar conclusions about which drug-specific information is (particularly) relevant (e.g. Dickinson, Raynor 2003; Steckelberg et al. 2005) (see Box 26.3).

Box 26.3 Essential information about drug therapy

The following points regarding drug classes (or individual drugs/preparations) that are important for the prescription conversation should definitely be addressed:

- Duration of treatment
- Name of drug classes or drugs (perhaps trade name)
- Advantages and chances
- Risks and side effects (see also Box 26.4)
- Probabilities with which risks and side effects occur (see also § 26.4), case- and practice-related

The benefits and opportunities of a therapy are the points most frequently considered by doctors during the prescribing discussion (Tarn et al. 2006) and patient satisfaction with these aspects is also particularly high during the medication discussion (Mahler et al. 2009). However, the situation is different when it comes to information about the risks and side effects of a medicine, which patients also consider to be particularly important (Barry et al. 2000; Ziegler et al. 2001). The potential risks and side effects of a drug are only discussed in around a third of all prescribing discussions in everyday GP practice (Makoul et al. 1995; Tarn et al. 2006; Richard et al. 2017).

Finding the right amount of information can be a balancing act. Explaining all treatment options to the patient, with their advantages and disadvantages as well as risks and side effects, would not only go beyond the time frame of a prescription talk, but would also overwhelm the patient. The particular challenge for the doctor at this stage is

therefore to make a "smart" (preliminary) selection. In addition to potential incompatibilities with other drugs taken (including self-medication, see § 26.3.1), knowledge of the patient's personal background can be helpful here (see § 26.2 and § 26.3.1). Are the side effects and lifestyle habits in conflict? Can the conditions of use (e.g. injection) be implemented in the daily routine? Are side effects (e.g. tiredness, lack of concentration) acceptable when carrying out an employment (e.g. working on machines, driving a vehicle)? These questions can help to make a well-founded pre-selection regarding a preparation. If necessary, the significance of certain adverse drug reactions for the respective patient can be assessed (Box 26.4).

Box 26.4 Risks and side effects

Not all side effects are equally relevant for the patient. It seems advisable

- to mention potentially *serious* risks and side effects (e.g. life-threatening side effects, side effects with permanent defects). Here, the probability takes a back seat to the possible consequences of the adverse effect.
- to list the most *common* risks and side effects. Even if the side effect is not expected to have serious consequences, the probability that the side effect will also occur in this patient is high.
- to list the side effects that are likely to be of particular significance for this *individual* patient.

Information on chances as well as risks and side effects is usually accompanied by information on frequencies or probabilities. Due to its particular relevance and complexity, a separate section is dedicated to this topic below (§ 26.4).

E 26.3 Important information on drug therapy: reasons for treatment and existing treatment options

Example 1

01	D	But nevertheless, you have this high blood pressure and [hm] it has to be treated, huh? . Um, have you ever heard anything about why high blood pressure can be harmful? .
02	P	I know (a) little bit, but I have . from my father [hm aha], he also died of a heart attack at 50 . I know (a) little bit about that, that something like that could happen in the long term [exactly] . but I can't say everything in detail .
03	D	Yes . fact is that high blood pressure damages the blood vessels from the inside in the long run and can then lead to heart attack or stroke ... and these are the long-term consequences that are feared with high blood pressure ... and that is why it's recommended to undergo therapy to lower blood pressure and reduce the risk of this cardiovascular disease occurring.
04	P	hmm . yes .

Example 2

01	D	So I can tell you what (alternative) options we have .
02	P	yes . please .
03	A	Ultimately, what they all have in common is that they widen the blood vessels and . thereby ensure that your blood pressure goes down [hm] . but of course they all have slightly different mechanisms of action, that is, just when/regarding the adverse effects ... that's where they differ a bit [aha], amlodipine, . that has the advantage [...]

26.4 Communicating opportunities and risks

Informing patients about the opportunities and risks is a sensitive topic that is indispensable in "evidence-based" medicine. Of note, the fear that informing patients about possible adverse effects of a treatment could have a negative impact on medication adherence, occurrence of suspected side effects and clinical outcomes, could not be confirmed (Jose, AlHajri 2018). Patients regard their doctor as the most important source of information on medicines (Nink, Schröder 2006). Although the Internet is becoming increasingly popular as a source of information, the doctor still seems to be more important in the eyes of patients (Hämeen-Anttila et al., 2018; O'Donovan et al. 2019). However, "statistical illiteracy" can often be observed on the part of both patients and doctors (Gigerenzer et al. 2007), i.e. statistical information is often not understood or misunderstood (e.g. Berry et al. 2002; Gigerenzer et al. 2007; Knapp et al. 2004; Steckelberg et al. 2005; Wegwarth 2013; Wegwarth, Gigerenzer 2013).

The particular challenges of risk communication are therefore, on the one hand, understanding and, on the other, the comprehensible presentation of probabilities and frequencies.

26.4.1 Frequency of benefits and risks of drug therapy

In the prescription conversation, risk communication mainly takes place in the area of adverse drug reactions. Important measures in this context are the relative risk, the absolute risk and the "number needed to harm" (NNH). Of course, the chances of a drug therapy can also be quantified (in analogy to the NNH then with the "number needed to treat", NNT). Brief definitions can be found in Box 26.5; for background information and further explanations, please refer to the specialist literature (e.g. Gigerenzer 2014).

Box 26.5 Important indicators in risk communication

Definition	Example
Relative risk, relative risk reduction: the probability of an event occurring in one group compared to another group or the decrease in this probability compared to the other group.	Statins reduce cardiovascular mortality by 27% in the prevention of cardiovascular disease.
Absolute risk, absolute risk reduction: the probability of an event occurring overall or the decrease in the number of events compared to another group.	In the prevention of cardiovascular diseases, statins reduce the number of cardiovascular deaths by 14 per 1,000 patients.
Number needed to treat: the number of people who need to be treated (for a certain time) to prevent an event compared to another group.	A total of 69 patients must be treated with a statin to prevent cardiovascular disease in order to avoid one cardiovascular-related death.
Number needed to harm: the number of people who need to be treated (for a certain period of time) in order for the treatment to cause harm compared to another group.	It takes 7,428 patients treated with a statin in the prevention of cardiovascular disease to cause one case of potentially fatal rhabdomyolysis.

Examples based upon: LaRosa et al. 1999; Thompson et al. 2003

In Germany, the description of the frequency of adverse drug reactions, e.g. in package leaflets and information for healthcare professionals, generally follows a recommendation of the Federal Institute for Drugs and Medical Devices (BfArM) (see Table 26.1) (BfArM 2015). However, even doctors and pharmacists frequently assign incorrect frequencies to these categories (Ziegler et al. 2013).

Frequency category in words (package leaflet, Summary of Product Characteristics)	Corresponding numerical category	
	Representation in natural numbers (absolute risk)	Presentation in percent (relative risk)*
Very rare (“sehr selten“)	May affect up to 1 in 10,000 people treated	≤0.01%
Rare (“selten“)	May affect up to 1 in 1,000 people treated	>0.01% to 0.1%
Uncommon (“gelegentlich“)	May affect up to 1 in 100 people treated	>0.1% to 1%
Common (“häufig“)	May affect up to 1 in 10 people treated	>1% to 10%
Very common (“sehr häufig“)	May affect more than 1 in 10 people treated	>10%

Table 26.1: Frequency of adverse drug reactions according to the Federal Institute for Drugs and Medical Devices in Germany (BfArM). *: recommended until 2015.

The fact that package leaflets often lead to uncertainty and possibly even anxiety among patients (Vinker et al. 2007) may also be due to this less user-friendly presentation of frequencies. The importance of risk communication in the prescribing discussion is therefore all the greater.

26.4.2 Presentation of frequencies and probabilities

The challenge in the prescribing discussion is to describe frequencies and probabilities - of wanted and unwanted drug effects - not only vividly but also in layman's language despite the medical context (for specialist communication, see also Chapter § 27). Terms such as “number needed to treat” or relative and absolute risk should also require explanation. It has been shown that reading the package leaflet can lead to drug-related anxiety in patients, with the risk of reducing their willingness to take the medicine and worsening adherence (Vinker et al. 2007). This may be partly due to the form in which frequencies are reported, as described above. Studies show that patients assigned significantly higher probabilities to the terms (Table 26.1) and thus in some cases considerably overestimated the risk (Fischer, Jungermann 2003; Knapp et al. 2004). For example, the assessment of the category “common” (>1 to

10% according to the BfArM recommendation of 2002) had an estimated probability of 34%, i.e. a good threefold overestimation (Knapp et al. 2004). Another study also showed an overestimation of the frequency, but this mainly concerned adverse drug reactions with a frequency of <1% (Fischer, Jungermann 2003). Interestingly, this effect was context-dependent, i.e. the frequency of mild side effects was more likely to be overestimated than that of serious side effects. It is not easy to answer the question of whether the representation of frequencies with terms or with numbers is more suitable. For example, Fischer and Jungermann (2003) also showed a context dependency in that the numerical description of mild side effects was interpreted as riskier than the verbal description, while the opposite was true for severe side effects. On the other hand, a general preference for numerically described medications over verbally described medications was observed.

In addition, the "nature" of the numbers plays a role. Information in the form of natural numbers appears to be easier for patients to understand. Relative probabilities (Table 26.1) lead to misjudgments more frequently than absolute probabilities (e.g. Edwards et al. 2001; Gigerenzer et al. 2007). This also means that there is a danger of overestimating the risk of a therapy. Relative risks should therefore be communicated, if at all, as additional and not sole information.

Finally, it should be emphasized once again that the above also applies in principle to the presentation of chances, i.e. the probability of desired events ("treatment success") (see examples in Box 26.5). In order to make it possible to weigh up the benefits and risks, their probabilities should also be stated in a comparable manner.

Box 26.6 briefly summarizes the most important recommendations for presenting the probabilities of risks and benefits in the prescription conversation.

Box 26.6 Recommendations for presenting probabilities

- Represent probabilities as *natural* numbers
- Use *absolute* probabilities, relative numbers only as additional information if possible
- In addition to the verbal representation (e.g. "common"), always provide corresponding *numerical* information (1 to 10 out of 100), see Table 26.1
- Give a *comparative* figure (e.g. "3 out of 10") to provide a benchmark

E 26.4 Presenting the frequency of adverse drug reactions

Example 1

01 D of side effects with ramipril are common side effects . that is . a maximum of 10 out of 100 people get it, but that also means at the same time . that 90/with 90 people it's not the case ... that headaches can occur [hm], abdominal pain, nausea and . such an irritable cough .

Example 2

01 D a side effect that is . not frequent/occurs only occasionally, that means between 1 and 10 out of 1,000 people . is called angi-oedema [hm], which is a swelling of the subcutaneous tissue and [oh] also of the . mucous membranes, which is rare . but . not really irrelevant [hm] .

Example 3

01 D you also have to know that these . unwanted side effects are always written in large print in the package inserts [hm], but it is of course the case that they do not occur in everyone . but rather in the minority .
02 P [so] how often . does that occur? .
03 D hm .the classification is/we are now talking about common, it is called . and that is 1 in 100 to 10 in 100 . so a maximum of 10% of the people who take it get this side effect [yes] . so that is now not . um . very likely that you will get it .

26.5 The decision-making process

The agreement on a treatment option as the goal of the shared decision-making process can be regarded as the "grand finale" of the prescription conversation. In view of the complexity, but also the general validity of aspects of decision-making, please refer at this point to Chapter 10 § 6.2 ("Dialogical decision-making as a process of deliberation"). Box 26.7 once again lists elements that are essential (not only) for the prescription talk.

Box 26.7 Decision by weighing up the options

In order to come to a decision together, it is helpful to go through various steps with the patient:

- Asking for a preference regarding a treatment option
- Weigh up the pros and cons of the options together
- Weighing up together how well a treatment option suits the patient's lifestyle and situation, taking into account the duration of treatment

Decision aids can be used to help the patient weigh up the sometimes complex information. These can be very different media, from brochures in print format to audio books ("podcasts") and computer or internet-based offers. Even if these aids are aimed at the actual decision, they can be used at any point in the discussion that seems appropriate (e.g. presentation of risks and opportunities, see § 26.4.2) or in preparation for it. Studies show that decision aids can increase patients' knowledge, promote their participation in the decision and reduce decision-making conflicts (Elwyn et al. 2010; Stacey et al. 2017). They are therefore a suitable means of facilitating a partnership-based (prescription) conversation. Some studies show that decision aids can increase the chances of successful treatment. For example, an internet-based application was able to increase the proportion of patients with an increased cardiovascular risk who opted for proven effective preventive measures (e.g. cholesterol-lowering medication). However, study results on the effect of decision aids on adherence are inconsistent, which may indicate that the use of decision aids alone is not sufficient (Stacey et al. 2017).

It should be noted at this point that a treatment decision can also be "postponed". In most cases, there is no acute need for action, so that this step, which may involve making a commitment for a longer period

of time, can also be “slept on” for a night. This may also be in the doctor's interest, as a mature decision made out of conviction is likely to be followed more readily and consistently than one made “hastily”.

26.6 Concluding the conversation

26.6.1 Instructions for the correct use of the medication

Studies by the AOK Research Institute (Wissenschaftliches Institut der Allgemeinen Ortskrankenkassen, WIdO) showed that the doctor was a primary point of contact for patients with questions about drug therapy (Nink, Schröder 2006) and that still seems to be the case (Hämeen-Anttila et al., 2018; O’Donovan et al. 2019). It is therefore primarily a physician’s task to provide information on the handling and use of medication.

By definition, deviating from the instructions of use is non-adherence. Since non-adherence is associated with disadvantages (up to poorer prognosis), adherence to treatment is a key objective of the prescription conversation. Ultimately, however, patients can only adhere to medication instructions that they know. There is ample evidence that this is often not the case (e.g. Barat et al. 2001). However, this is not necessarily because patients are unable to remember information on drug therapy: Tarn and Flocke (2001) found that, on average, 86% of the drug treatment information conveyed during a prescription talk was remembered, and 64% of patients remembered all the information conveyed. However, doctors addressed only 62% of the drug-related aspects considered important. Information on dosage was missing in nearly a quarter of the discussions, in about 40% on the duration of administration and in almost 70% on the time of administration. In our opinion, the patient must be given written instructions on how to take the medication (see Box 26.8). In addition, however, the relevant instructions for taking the respective drug should be explained during the consultation. It should be noted that dosage modalities can have a significant influence on the treatment decision (e.g. when interfering with habits and daily routines, see 26.3.1). In this respect, information on intake may be discussed at an earlier stage in the consultation if necessary. Of note, it has been shown that active patient engagement and explicit conversa-

tions about medications were associated with improved treatment information recall (Richard et al. 2017).

Box 26.8	Important information on administering and taking drugs

- *What:* Name of the drug
- *When:* e.g., morning, noon, evening
- *How:* e.g. with a sip of water, unchewed, on an empty stomach, etc.
- *How much:* e.g., how many tablets to take at a time
- *How often:* e.g., once daily (o.d., qd)
- *How long:* e.g., until the pack is empty, for a week, for a lifetime

Adapted from: Tarn et al. 2013

E 26.5		Intake instructions in the prescription conversation
01	D	Take one tablet once a day, which is 8 mg .
02	P	yes .
03	D	You can take them independently of meals, you don't have to somehow . half an hour before a meal or so . doesn't matter .
04	P	Aha . ok.
05	D	only with sufficient fluid and . always at the same time of day, yes? . so that you take it regularly

26.6.2 Suggestion for progress evaluation

Following the prescription, it is the doctor's task to accompany the patient during treatment. This includes, but is not limited to, assessing the effectiveness of a treatment ("therapeutic success"). It should be noted that a (supposed) ineffectiveness can also be due to the (intentional or unintentional) disregard of instructions for use (Albus, Matthes 2014). For example, the occurrence of side effects or problems with handling the medication can jeopardize the success of treatment and should therefore be (regularly) addressed in the subsequent doctor-patient discussions. The aspect of non-adherence should not be taboo and should be addressed openly but without reproach. One study showed that in 40% of patients with supposedly drug-resistant hypertension, the mere announcement that they would follow up on their

medication adherence resulted in a reduction in systolic blood pressure, in 32% of the patients even below the target value of 140 mmHg (Burnier et al. 2001).

For the patient, the announcement of further appointments can be important simply because it makes it clear at an early stage that the course of treatment is being monitored and reviewed (Box 26.9). This also makes it clear that the joint path leading to a treatment decision does not end with the prescription and that the patient can continue to rely on their doctor.

Box 26.9 Making agreements

Clearly formulated agreements can help to make the therapy initiation phase a success:

- Make an arrangement for a *follow-up* appointment
- Announce that *progress* will be monitored and *reviewed*
- Make arrangements on how to deal with *medication-related problems*: e.g. do not stop taking medication without authorization, call if necessary, wait for a certain period of time in which side effects could occur, etc.

E 26.6 Announcing a progress assessment

01	D	If we start with the lowest dosage, . then you would come back in a week and then we would do a blood test and see if everything is ok, yes? . Whether the kidneys and liver are OK and whether the blood count is OK [aha]. and then we can also discuss again how you have been coping . and then we would make another follow-up appointment in 3 to 4 weeks.
02	P	yes .
03	D	We will then check your high blood pressure, because unfortunately it doesn't go down from one day to the next, but takes a few weeks to settle in.
04	P	oh? [hm] yes . ok .
05	D	and then after about 4 weeks we can assess whether this lowers your blood pressure and whether this is already sufficient at the low dosage … (if) we have no effect, then we will start to increase it slowly bit by bit .

06	P	oh . ok- .
07	D	But I don't think that's very likely in your case.
08	P	good .

26.7 A guide for conducting a prescription talk

A structured procedure for conducting a prescription conversation is suggested below (Box 26.10). The course of a discussion is dynamic and must adapt to the needs and possibilities of the discussion partners (and possibly other influencing factors). In this respect, the guide describes an "idealized" course of such a conversation. The general feasibility was initially demonstrated in simulated conversations that medical students (3rd to 5th year of study) conducted with an actor patient (Hauser et al. 2017). The guide takes into account the essential steps of shared decision making, considerations on essential information about a drug therapy and it addresses actual deficits of human medicine students in doctor-patient communication about a newly prescribed medication (Hauser, Matthes 2017). We called the guide AMPEL, i.e. Aspects of Medication and Patient participation – an Easy guideLine (in German: Arzneiverordnungsgespräche unter Berücksichtigung Medikamentöser Aspekte und der Partizipativen Entscheidungsfindung – ein Leitfaden). In a pilot study in GP practices, we have now been able to show that the AMPEL guide led to a significantly better evaluation of conversations by both patients and doctors (Kirsch, Matthes 2021). Among other things, doctors were more satisfied overall with the guide-based consultations than with a consultation conducted as usual. Interestingly, there was no negative effect on the assessment of the duration of the consultation. Patients were also more satisfied overall, but above all felt more activated and better informed than those with whom a conversation was conducted as usual (see Figure 26.1).

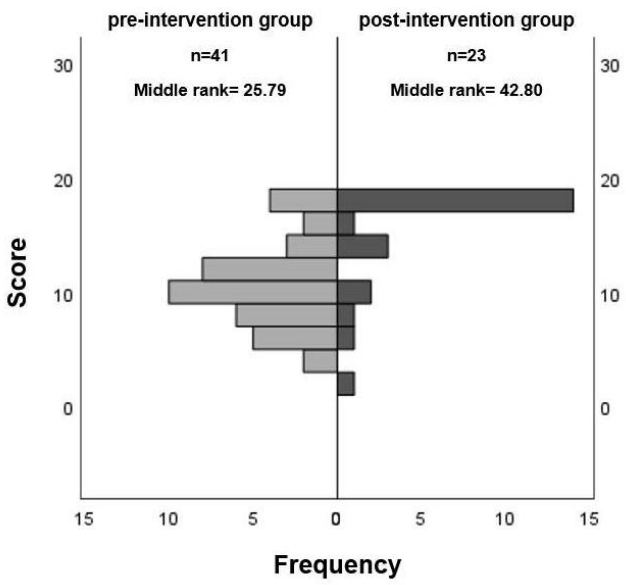

Figure 26.1: Patient satisfaction with information about their medication. Frequency distribution of the overall assessment of the medication information received during the prescription talk, as surveyed with the SIMS-D questionnaire. The physicians conducted the conversations without (pre-intervention group) or with knowledge of the guide (post-intervention group). The difference between the two groups was statistically significant ($p < 0.05$ in a Mann–Whitney U test). (reproduced from Kirsch & Matthes, Naunyn-Schmiedebergs Arch Pharmacol 2021, 394: 1757-67).

Box 26.10 A guide for conducting a prescription talk

1. Convey the aim of the discussion, i.e. making a treatment decision.
1.1 Explore to what extent the patient wants to be involved.
2. Underscore communality, i.e. that a decision should be made or at least supported by both, patient and physician.
3. Explore the patient's background, i.e. their
3.1 knowledge about the disease.
3.2 understanding, attitude and expectations of the patient with regard to therapy.
3.3 personal problems and other individual conditions that could lead to poor adherence.
4. Inform about treatment options, i.e.
4.1 mention or explain the reason for the treatment and the aim of the treatment.
4.2 inform the patient about the duration of the (respective) treatment.
4.3 Name drugs, drug classes and / or trade names.
4.4 Describe the advantages and chances of the various treatment options.
4.5 Describe the risks and side effects of the various treatment options.
4.6 Explain the probabilities and, if applicable, the extent of possible risks and side effects, but also the expected benefits, in a clear

and comprehensible manner.
5. Ask the patient about putative preferences regarding the introduced treatment options.
6. Negotiate the preferable treatment option(s) and by this
6.1 help the patient to weigh up the pros and cons of the options.
6.2 weigh up with the patient how well the treatment options suit their lifestyle or life situation.
7. Aim for a shared decision on a treatment option and if reached
7.1 summarize the result / the decision once again.
8. Bring about an agreement on how to implement the decision and
8.1 inform the patient (once again) about the exact instructions for taking the medicine (e.g. quantity to be taken, dosage interval).
8.2 suggest a review of the treatment/decision and arrange a follow-up appointment.

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Further references on doctor-patient communication can be found in other topic-specific chapters and in the complete bibliography of the handbook.

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