27 Medical Specialised Communication

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> [T]he chief merit of language is clearness, and we know that nothing detracts so much from this as do unfamiliar terms; accordingly we employ those terms which the bulk of people are accustomed to use, ...
>
> Galen: On the natural Faculties, Book I: 1 (1916)

Abstract: In the chapter on specialised communication, the first step is to introduce the characteristics of technical language and to outline the difficulties that already arise in communication between physicians. However, the focus of the chapter is on physician-patient interaction: on the challenges that doctors face when trying to use technical language in a comprehensible way and on helpful communicative procedures that help to overcome them.

To this end, I will identify three pillars that support successful doctor-patient communication: building on the patient's prior knowledge, explaining technical terms in a comprehensible way and continuously monitoring understanding. Based on a conversation example, I will analyse and discuss possible linguistic and non-verbal forms of these pillars, as well as pitfalls that need to be avoided. At the end of this chap-

ter, I will highlight and deepen in an exercise the importance of building on the patient's knowledge, particularly in teamwork that is common in everyday clinical practice.

27.1 Technical language and specialised communication

Specialised language is a blessing - at least for all those who are experts in a certain field and exchange ideas with like-minded people. "[T]he best possible understanding of certain objects and facts [is] certainly one of the most important goals of specialised communication based on technical language" (Roelcke 1991: 205; orig. in German). Locksmiths, for example, know what the shoulder of a key is; they know that it is the part between the bow and the cuts and they know that shoulders of a key don’t hurt. However, some young customers who are used to transponders and who recently experienced severe pain in their shoulder after a tennis match may be surprised and touch their upper arm when the locksmith mentions the shoulder. The locksmith, on the other hand, for the touch of a moment might think of a key bit when his hairdresser mentions the cut but then he will nod and lean back in the face of the shaggy hair mess on his head and be pleased that practised hands will take care of his hairdo. However, the hairdresser will only be able to do this satisfactorily if he knows whether a Slick Back, a Pompadour or a Faux Hawk should adorn the customer's head. To find this out, he has to describe these types of haircut to the customer in detail, but his colleagues know and can start cutting straight away.

Specialised terminology can ensure quick and precise communication between experts, but in expert-layperson dialogue it usually requires additional explanations. These examples, which will no doubt be familiar to some readers, illustrate phenomena that can pose a challenge in doctor-patient communication, but also in medical dialogue.

27.1.1 General problems of medical technical language

As we have seen above, a technical term does not always come in the guise of a Latinism or Grecism and it can be polysemous. Both also apply to medicine, for example when we think of the German term Bandscheibenvorfall (slipped disc), which conveys a complex medical issue,

and the polysemy inherent in Vorfall (prolapse and incident/occurence). Technical terms such as Bandscheibenvorfall or slipped disc, which are not foreign words, are described by Löning as semi-professional terms (cf. Löning 1994). With an estimated 200,000 medical terms in the anatomical nomenclature and clinical terminology combined, other phenomena are the reason why even among doctors, communication using specialised terminology cannot be taken for granted: the increasing specialisation of knowledge in medicine sometimes pushes doctors to the fringes of the circle of experts. And in a globalised world, many healthcare providers and learners will use terminology that they are unfamiliar with: without a precise definition they risk misunderstandings (Chow et al. 2021).

This is also reflected in the (mis)understanding of abbreviations as one surgeon complained already decades ago:

> However, many other [abbreviations] are already specific to certain medical specialties and are not always understood by representatives of another medical field. [...] Abbreviations that are misunderstood because they are often ambiguous can become a source of dangerous errors. (Schulze 1994: 238; orig. in German)

Several studies among health care professionals focusing on abbreviations show how serious this problem is (e.g. Jayatilake, Oyibo 2023; Holper et al. 2019).

In addition, synonyms, e.g. several terms for one and the same pathology, are particularly common in clinical terminology, which prompted the aforementioned surgeon to call for an "internationally binding nomenclature" for all areas of medicine, not just anatomy. "Then it would no longer happen that there are 15 names for one and the same disease - a heavy burden on linguistic communication" (ibid.; orig. in German). His wish has not yet been fulfilled. How can functioning communication between medical professionals still be established? For communication, "the communicative unambiguity in the use of terms is crucial" (Roelcke 1991: 205; orig. in German), beyond their possible polysemy and synonymy (see also Karenberg 2015: 2; 179ff on understanding medical terminology in context). If, by including the context, no alternative meanings remain open and synonyms are recognisable as such, the lack of unambiguity of technical terms can be counteracted (Roelcke

1991). On the other hand, as shown for abbreviations “context does not necessarily correlate with comprehensibility” (Holper et al. 2019: 1076). Physicians, hence, have to fulfil additional communicative services in medical discourse, and they certainly have good prerequisites in terms of prior training, provided that they are sensitive to problems of meaning in the supposedly precise technical language.
In order to achieve successful specialised communication in the doctor-patient discussion, i.e. in expert-layperson discourse, the interlocutors have to overcome also completely different challenges due to the knowledge gap and the emotional and institutional differences.

27.1.2 The challenge of technical language in doctor-patient interaction

A special feature of the conversation between doctor and patient is that, on the doctor's side, everyday professional routine prevails, while on the patient's side, depending on the illness, there is an exceptional situation and personal concern with corresponding emotional reactions (cf. e.g. Brünner 2009: 182; Schulze 1994), which additionally influences the contact. Patients expect advice and help from a visit to the doctor, and the expert role seems to be clearly attributed to doctors: they have professional, scientifically sound medical knowledge, which they can express in words using the appropriate specialised terminology. Sick people generally have non-professional everyday knowledge of illness and health as well as individual "exclusive illness-related knowledge" (Brünner, Gülich 2002: 20) and are thus, to a certain extent, experts on their own suffering. Furthermore, in our information society, the proportion of semi-professional, mostly media-acquired knowledge is increasing: "It comprises selective elements of expert knowledge, but without possessing its complexity and internal networking" (Brünner, Gülich 2002: 21; orig. in German). Almost always, there may be a knowledge gap between doctor and patient, but the extent and nature of this gap varies from person to person. This has an impact on communication:

> A general *expert task* in DPC [doctor-patient communication] is to process and tailor the medical knowledge that has to be imparted to laypersons and their specific knowledge in order to make it connectable and integrable. This requires learning the layperson's

> knowledge and adapting to it accordingly in dialogue. (Brünner 2009: 173; orig. in German, emphasis in orig.)

Three aspects of successful specialised medical communication in contact with patients become apparent here: Physicians should customise the complex knowledge for the specific patient and put it into words that they can understand. In order to achieve this, they should get to know the patient's knowledge and take it into account.

The latter in particular does not seem to be a matter of course for physicians who want to communicate in a patient-centered way. Referring to an article on the limited comprehension success of patients after anesthesia information, the anesthesiologist Smith, who sees himself as "very conscious of avoiding technical terms when talking to patients", writes as follows:

> The [...] striking lesson is that words that I would have considered to be commonplace ordinary speech such as 'reflux' and 'sedation' were so frequently misunderstood. While I always explain terms such as 'epidural' or 'spinal', I would not previously have supposed that words such as 'numbness' or 'general anesthesia' also needed explanation. (Smith 2010: 775)

While certain technical terms seem difficult to understand from his point of view, he loses sight of the actual comprehension skills of many patients. Promising, patient-orientated specialised communication therefore rests on two pillars: firstly, the comprehensible communication of specialised terminology and its subject matter and secondly, as a prerequisite for this, its adaptation to the actual dialogue partner. If these two pillars are supported by a third pillar, namely the regular checking of whether the patient can still follow and has so far understood, a solid basis is created on which the speaker and listener can interactively ensure functioning communication (cf. e.g. Brünner 2009, Köhle et al. 1998/2010). But how can these three pillars be brought to life verbally and non-verbally in communicative practice? We will explain this below using examples.

27.2 Clear specialised communication with patients

In order to illustrate concrete procedures for successful specialised communication in doctor-patient interaction, the following chapters not

only present suggestions for wording from the literature, but also authentic dialogue examples in which the focus is on explaining a technical term or communicating medical facts using appropriate specialised terminology.

Showing an excerpt from a conversation, which is presented in its course, we will firstly reproduce the three pillars of comprehensible technical communication described above. The excerpt originates from the Cologne teaching project PJ-STArT block (Faculty of Medicine, University of Cologne 2012; cf. § 14.3.11), during which medical students at the end of their last clinical semester, i.e. on the threshold to the practical year, spend a week on a simulation ward and meet different patients, each with different clinical pictures. Part of this simulation week was the teaching module Translating technical language into everyday language. Here, simulated patients pretended not to understand technical terms in the MRI findings of their lumbar spine and asked for an explanation. The students then practised how to make the technical language understandable to the simulated patient. With this module, the Institute for the History of Medicine and Medical Ethics, that teaches medical terminology in the first pre-clinical semester, wanted to find out how students communicate technical language in contact with patients at the end of their 5-year medical studies. The conversations were videotaped during the research phase from winter semester 2009/10 to winter semester 2010/11. We selected the following dialogue excerpts taking into account the results of analyses of simulation and simulated patient performance (cf. Kliche 2015).

A second conversation used in § 27.3 comes from the data corpus Interpreting in Hospitals that was compiled between July 1999 and June 2005 in the research project Interpreting in Hospitals, part of the Collaborative Research Centre Multilingualism, funded by the German Research Foundation (Deutsche Forschungsgemeinschaft, DFG) and hosted by the University of Hamburg. It also includes monolingual conversations (Bührig, Meyer 2009, Bührig et al. 2012). Both excerpts are originally in German language.

27.2.1 The basis: At what point is the patient?

In the literature, there are good suggestions for wording on how the patient's level of knowledge can be ascertained prior to the dialogue phase

in which the doctor wants to convey information. Some of these suggestions will be presented below (see Box 27.1).

Box 27.1 Asking for patient's prior knowledge

Example 1: Before communicating diagnosis
You have been ill for some time now. What have you learnt so far, what have you been thinking about?
(Köhle et al. 1998/2010; orig. in German)

Example 2: Before explaining a disease
Before we go on, could you tell me what you already know about high blood pressure?
(Kripalani, Weiss 2006: 889)

Example 3: Before explaining a disease - patient mentions prior knowledge
D: I don't know how much you already know about diabetes already?
P: Well, I know a little about it - my best friend at college had it.
D: It would be helpful for me to understand a little of what you already know so that I can try to fill in any gaps for you.
(Silverman et al. 2013: 170)

As example 3 from Box 27.1 illustrates, patients often do not give specific details of their knowledge, but rather comment on the extent ("a little") or the reason ("my best friend at college had it"). In this case, the doctor follows up to find out what level of knowledge he can actually start with. In fact, such initial dialogues often provide no more than a first guideline, because "only in the course of the conversation can be assessed or negotiated what knowledge the layperson already has and what needs to be conveyed to him/her, what kind of individual linguistic tailoring [...] is necessary and what degree of professionalism is possible" (Brünner 2009: 177; orig. in German).

The following example E 27.1 is the opening part of the aforementioned conversation videotaped in the teaching project PJ-STArT block that we will use in this chapter to analyse the different communication pillars. The simulation patient (P) has previously described the phrase "circumferential protrusions with indentation of the thecal sac" from her

MRI findings as incomprehensible to her. The medical student, simulating a junior doctor (D), reacts as follows:

E 27.1		"Protrusions with indentation of the thecal sac?" - Part I
01	D	Well, do you have a rough idea [+] of the . anatomy? [2] [so how]
02	P	[I know] that my spine is at the back - and that it goes from my head to almost my bum,
03	D	OK, I'd better draw something for you.
04	P	[uh-huh].
05	D	I think that's the easiest way,

With her opening question in line 01, D aims to determine the patient's perception of anatomical conditions, which form the basis for understanding the description of certain changes to her spine that are clothed in corresponding technical terms. P's concrete but not very well-founded answer in 02 gives D an indication that the patient's anatomical knowledge may not be sufficient to be able to follow an explanation. D therefore announces in 03 that she will draw the necessary anatomical structures, i.e. describe them in more detail first. This description is the beginning of her explanation.

27.2.2 Explaining technical terms in a comprehensible way

In addition to structuring a conversation, the use of specialised terminology plays a key role in doctor-patient encounters, in which physicians communicate medical facts, i.e. give a lot of information. Structure includes chunking information, the "hierarchical-sequential organisation from the more general to the more specific", highlighting important points (Brünner 2009: 174; orig. in German) or providing patients with information about the purpose and course of the conversation (Lalouschek 2004: 145). The insertion of descriptions should also be mentioned here.

Concerning the use of technical terms, it is not advisable to avoid them completely - it can be helpful for patients to be familiar with some of them, e.g. for further research on the internet. And even a complete renunciation of technical language can still remain incomprehensible if the context or intention of the statement is not recognisable (Brünner

2009: 174f). Rather, it is about making a conscious decision in favour of or against a certain choice of words, carefully introducing technical terms and, above all, making the underlying complex issues comprehensible.

The corresponding suitable communication procedures have been widely discussed (e.g. in Brünner 2009, 2011, Brünner, Gülich 2002, Kripalani, Weiss 2006, Lalouschek 2004, Silverman et al. 2013). Many of these methods, such as structuring or using concise, clear formulations, are well known and generally comprehensible. The use of metaphors and comparisons also plays an important role, but will not be the focus here either (see § 11). Instead, we will use the excerpts from the conversation "Protrusions with indentation of the thecal sac?" to discuss procedures that are also helpful for successful specialised communication, but which readers may less be aware of.

After having opened the conversation and announed a drawing, the student continues as follows (E 27.2):

E 27.2		"Protrusions with indentation of the thecal sac?" - Part II
05	D	[d-] so ... if you [holds notepad in the direction of P's gaze] imagine it like this, it's basically a vertebral body [-d] if you [+] look at it from above, [right?]
06	P	[uh-huh]
07	D	=well [-] [d-] from the side it looks something like this: and then runs down like this [right?]
08	P	[yeah-]
09	D	as you said from head to [toe]
10	P	[uh-huh]
11	D	and if you look at a vertebral body from above, [d-] then it is . rather . round to oval- . and has a kind of arch towards the back, .
12	P	yeah-
13	D	like this, right? and there are three processes on this arch - two on the side, one at the back - [d-] this posterior one [points to her own back] that is [+] also [what you, in prin]
14	P	[what one]
15	D	ciple can feel [right? particularly well here in the neck].
16	P	[nodding] [yeah-]

In line 05, D begins to draw (represented in the transcript by [d-]) so that P can see the anatomical conditions necessary for the explanation

and "*anchor*" them in her "imaginative space" (Rehbein 1984: 78; orig. in German, emphasis in orig.). D describes a vertebral body (line 05) as part of the spinal column (07 and 09) and then, from line 11 onwards, becomes more precise when she adds further attributes to it. She accompanies some of her drawing steps verbally with simple terms ("a vertebral body" in line 05, "a kind of arch" in line 11, "three processes" in line 13). Elsewhere, however, in line 07, the drawing is the main carrier of meaning: the deictic references "it" and "this" cannot be understood without it (§ 7.2). In order to give P the opportunity to get her bearings, D provides assistance by indicating the respective viewing direction ("from above" in lines 05 and 11 and "from the side" in line 07) on the drawing.

D thus realises a number of procedures that need to be considered when using drawings and other visual means (Box 27.2):

Box 27.2 The use of visual means
Verbal explanations can be supported by *visual means* (pictures, drawings, models, practical demonstrations). However, the following applies to technical images in particular: "You can only see what you know." In order to be meaningful and helpful for laypeople, the specific knowledge deficit that the image is intended to remedy must be limited and determined by linguistic action.

Brünner 2009: 176; orig. in German, emphasis in orig.

In addition to her drawing and verbal procedures, D establishes a direct connection to P's prior anatomical knowledge when she refers to P's statement about it (line 09) and to the generally valid experiential reality of the palpability of the vertebral body processes (lines 13 and 15). She continues with her description of the anatomical structures (E 27.3):

E 27.3 "Protrusions with indentation of the thecal sac?" - Part III		
17	D	okay, [-] [d-] inside this arch there is [+] the [-d] spinal cord, . [-] and uh [d-] between . individual vertebral bodies there is a disc, [-d] [+] right?
18	P	[yeah-]
19	D	[=so that] the whole thing is cushioned and not bone on bone. . [-] [d-] the intervertebral disc has a kind of fibrous part on the outside and a kind of core on the inside, [-d] [+]

20	P	[nodding] uh-huh,
21	D	Do you understand that so far?
22	P	[nodding] yes- I understand that [so far,]

In her continuation of the description, D verbally and graphically creates the spinal cord and an intervertebral disc (line 17). She adds its function and further anatomical details, namely its two-part structure ("a kind of fibrous part" and " a kind of core", line 19).

D then considers the description, insofar as she needs it to explain the phrase clothed in technical terms, to be complete. The further course of the conversation shows that her explanations are nearly sufficient and only need to be supplemented with individual details. At the same time, they are sufficiently concise so as not to cause confusion with superfluous details. Before she moves on to explaining, she makes sure that P has been able to follow so far (line 21), i.e. that she can assume that the anatomical structures described are common, shared knowledge between her and the patient (§ 27.2.3). This is followed by the actual explanation (E 27.4):

E 27.4		"Protrusions with indentation of the thecal sac?" - Part IV
23	D	[okay,] [-] and uh what basically happens with a slipped disc is that this core pushes through the fibrous part, [1] either, for example, in the direction of the spinal cord or [extends drawing] the roots emerge from here- then in that direction,
24	P	yeah,
25	D	[d-] =and .[reads in report] a protrusion that simply means this core bulges out [-d] [+] so no [-] real herniation yet-
26	P	yeah,
27	D	and [reads in report] um in this case indentation of the thecal sac [d-] =that means that in principle [1] the sheath surrounding the spinal cord [-d] is slightly dented [+] by this b this bulging,

In line 23, D begins with the explanation of the semi-professional term "slipped disc" that she probably considers P to be more familiar with. Although it does not appear in the report quote, it is closely related to protrusion in terms of content. D does not make this connection explicit for P, though. If P is unable to establish it with the help of her prior knowledge, this explanation may be surprising. However, D uses the anatomical conditions she described earlier, extended by one detail ("the

roots", line 23), to explain the underlying facts. She therefore does not presuppose this even when using a common semi-professional term (see Box 27.3).

Box 27.3 Semi-professional language

The identity in the linguistic dimension of patients and doctors, more precisely in linguistic expression, must not obscure the fact that this identity does not exist for the meaning, i.e. for the mental dimension. [...] [For doctors] reality [...] remains a scientifically systematised abstraction of diverse real symptoms of illness, the knowledge related to it remains a scientific one with corresponding categorisations [...], only the usual verbalisation towards colleagues in technical terms (generally often of Latin-Greek provenance) [...] is abandoned in favour of a more patient-oriented form of expression [...] with semi-professional categorisations.

Löning 1994: 105; orig. in German

The explanation of “slipped disc” serves D as a basis for quoting the first technical term of the phrase marked as incomprehensible (“protrusion”) and classifying it in her explanation as its gradation ("that simply means this core bulges out", "no real herniation yet", E 27.4 line 25). She also visualises the protrusion of the nucleus on the drawing. She then quotes “indentation of the thecal sac”, again making it clear to P which terms she is now turning to. The technical content (Brünner 2009: 176), namely the bulging disc with encroachment on the dura, is again depicted with the aid of the previously sketched anatomical information extended by another detail ("the sheath surrounding the spinal cord ", line 27).

We can state that the description of the anatomy takes up more time and space than the actual explanatory part, which D can keep quite short. When explaining, she can resort to elements that she has previously introduced on the drawing, usually accompanied by suitable words. This shows how helpful the descriptive insertion is for both dialogue partners: "[It] not only opens up the 'imaginative space' for the listeners, but also for the speakers and thus widens the view of the facts" (Kliche 2012). D no longer has to fulfil this task while explaining, but can concentrate on the explanation.

27.2.3 Checking comprehension

D has directly addressed her interlocutor P with regard to her prior knowledge (E 27.1) already in the opening of the excerpt that we quoted in several parts. In the course of the explanation part, she also takes further, partly interactive measures to support P in understanding and to check her comprehension.

These measures include directions for orientation on the drawing (E 27.2, lines 05, 07 and 11), reference to P's self-formulated prior knowledge (E 27.2, line 09), and reference to vivid ordinary experiential knowledge (E 27.2, lines 13 and 15). In addition, D regularly checks P's comprehension process through appropriate reassurances. In the description part (presented once again in E 27.5.), we will take a closer look at how exactly she does this and what problems lurk in the process. Please find in the comment column reference to the communicative procedures that are important for this interaction, such as eye contact (represented in the transcript by [+]), tag question (i.e. reassurance question, such as the question particle "right?" at the end of a statement) and listener's (backchannel) reaction.

E 27.5		"Protrusions with indentation of the thecal sac?" - Part II	Comment
05	D	[d-] so ... if you [holds notepad in the direction of P's gaze] imagine it like this, it's basically a vertebral body [-d] if you [+] look at it from above, [right?]	Eye contact Tag Question
06	P	[uh-huh]	Backchannel
07	D	=well [-] [d-] from the side it looks something like this: and then runs down like this [right?]	Tag Question
08	P	[yeah-]	Backchannel
09	D	as you said from head to [toe]	
10	P	[uh-huh]	Backchannel
11	D	and if you look at a vertebral body from above, [d-] then it is . rather . round to oval- . and has a kind of arch towards the back, .	
12	P	yeah-	Backchannel
13	D	like this, right? and there are three processes on this arch - two on the side, one at the back - [d-] this posterior one [points to her	Tag Question

		own back] that is [+] also [what you, in prin]	Eye contact
14	P	[what one]	Backchannel
15	D	ciple can feel [right? particularly well here in the neck].	Eye contact
16	P	[nodding] [yeah-]	Backchannel
17	D	okay, [-] [d-] inside this arch there is [+] the [-z] spinal cord, . [-] and uh [d-] between . individual vertebral bodies there is a disc, [-d] [+]	Eye contact
		right?	Tag Question
18	P	[yeah-]	Backchannel
19	D	[=so that] the whole thing is cushioned and not bone on bone. . [-] [d-] the intervertebral disc has a kind of fibrous part on the outside and a kind of core on the inside, [-d] [+]	Eye contact
20	P	[nodding] uh-huh,	Backchannel
21	D	Do you understand that so far?	Checking
22	P	[nodding] yes- I understand that [so far,]	Response

First of all, we see that D repeatedly looks up from her drawing and looks at P. This at least gives her the opportunity to make eye contact with P and to gain clues in P's facial expressions as to whether or not she understands. Additionally, we can observe an interplay of gaze and/or tag question and backchannel signal: D frequently utters "right?" at the end of a statement, which may or may not be preceded by a look at P. By this means, she repeatedly receives affirmative backchannels such as "uh-huh" and "yeah-" (E 27.5, lines 05/06, 07/08, 15/16, lines 17/18) from P, either directly or with a time delay, which encourages her to continue as no comprehension problems are indicated.

However, these affirmative cues should be treated with caution, as they say little about the actual level of comprehension, especially if they occur after tag questions (Box 27.4).

Box 27.4 The crux of reassurance questions (tag questions)

[T]ag questions, i.e. reassurance questions, [play] an ambivalent role in promoting understanding [...], as they often trigger an automatic consent process that is not always accompanied by actual mental agreement. The doctors who constantly use tag questions are probably not aware of this.

Reisigl 2011: 116; orig. in German

We do not know whether D is aware of the problem mentioned in Box 27.4. But her question at the end of the description part ("Do you understand that so far?", line 21, E 27.5) which checks P's understanding indicates that the simple backchannel signals from P are not sufficient for her to be sure that P has really understood the description of the anatomy. Only when P explicitly affirms understanding (line 22) does D conclude the description and turn to the next step, the explanation.

D's approach is similar to what Silverman et al. call chunking and checking (Box 27.5).

Box 27.5 Chunking and Checking

[C]hunking and checking - that is, giving information in small pieces, pausing and checking for understanding before proceeding, and being guided by the patient's reactions to see what information is required next. Only then is it likely that patients will both recall and understand. As they assimilate each section of information, they will become ready for the next one.

Silverman et al. 2013: 174

Depending on the content or situation of the conversation, it may also be necessary to check the patient's understanding process more closely, i.e. to find out what exactly the patient has understood. However, requesting a corresponding summary from the patient must be handled sensitively in the interaction; unlike in school, a doctor-patient relationship does not provide for an examination (cf. Brünner 2009: 175). The literature offers formulation options for these so-called teach-back (Kripalani, Weiss 2006) or tell-back procedures (Silverman et al. 2013) (see Boxes 27.6 and 27.7):

Box 27.6 Teach back procedure I

D: I always ask my patients to repeat things back to make sure I have explained them clearly. I'd like you to tell me how you're going to take the new medicine that we talked about today.

D: When you get home, your [husband/wife] will ask you what the doctor said. What will you tell them?

Kripalani, Weiss 2013: 889

Box 27.7 Teach back procedure II
D: I know I've given you a lot of information today and I'm concerned that I might not have made it very clear - it would help me if you repeated back to me what we have agreed on so far, so I can make sure we are on the same track.

Silverman et al. 2013: 175

27.3 Exercise: Opening a conversation when working in a team

In hospital teamwork, first steps in the treatment process are often carried out by a colleague before another health care provider takes over the subsequent steps. The connection to the previous treatment must be a perfect fit, instead, such takeovers bear the risk of loss of information. The key to successful communication in such situations, again, is to build on the patient's actual knowledge, adapt explanations accordingly and interactively ensure understanding. The following scenario is taken from the data corpus Interpreting in hospital (§ 27.2): A junior doctor wants to inform a 75-year-old patient, hospitalised for chronic bronchitis, about a bone marrow puncture. Prior to this encounter, the ward physician, Dr Zielke, has already informed the patient of the reason for the planned examination and has introduced the bone marrow puncture method. We do not know anything about the content of this first conversation, nor do we know what the junior doctor (D) knows about it. She opens the conversation as follows (E 27.6):

E 27.6		"Dr Zielke has already spoken to you." (from 00:08)
01	D	Okay, Mr Rath! [1.5] Ms … Zielke I think has … already spoken to you-
02	P	yes,
03	D	that she found in your blood .. uh certain . abnormalities … that certain antibodies can be seen, (well) that there is an aberr . uh something abnormal in the blood,
04	P	uh-huh
05	D	[1.5] to rule out the possibility that your bone marrow is involved, that means from where the blood is formed, we would have to take a bone marrow sample,

06	P	uh-huh
07	D	I would now like to explain to you . how this works,

Interpreting in hospital, conversation D-AUF-52

With the help of the following exercises (Box 27.8) you can scrutinize this opening phase of the conversation.

Box 27.8 Exercises and solutions

Exercise 1:
Work out how the junior doctor makes the connection to the encounter that has taken place beforehand.

Solutions:
- D mentions the previous encounter, formulated as an assumption ("I think") though.
- D summarises the findings.
- D gives a reason for the planned bone marrow puncture.
- D does not involve P.

Exercise 2:
Comment on the doctor's choice of words.

Solutions:
- D uses almost exclusively English, partly semi-professional terms ("antibodies" line 03; "bone marrow"; "where the blood is formed" line 05)
- D uses simple paraphrases, low in content and meaning: "certain abnormalities"; "something abnormal" (line 03).
- Though low in content and meaning, the terms chosen (“abnormality” and the word fragment “aberr …” (for “aberration”?)) have a threatening connotation.

In the following nine minutes of the conversation, the doctor no longer mentions these "abnormalities" in the blood. She explains the procedure of the bone marrow puncture, names and explains the site of the aspiration (the pelvic bone), provides information about the risks, like infection and excessive bleeding, and explains what needs to be done to prevent them.

The patient seems to be able to follow well. He keeps asking questions, which the doctor usually answers immediately. He is interested in whether the puncture is performed under anesthetics, how long he has to stay in bed, whether paralysis can occur, what happens after an infection, where, by whom and when the puncture is performed. After these more practical questions from the patient, the doctor repeats the two risks already mentioned and then asks about allergies. The patient provides information accordingly and at minute 09:30 asks the doctor to write down the name of the planned examination method. At this point, the following excerpt starts (E 27.7):

E 27.7		"Dr Zielke has already spoken to you." (from 09:30)
11	D	... a . bone marrow [2] bone [writes] [2] marrow [1] uh [1.5] puncture, [2] or aspiration,
12	P	for [1,1] for ... protein?
13	D	... no for this [1.5] um I .
14	P	uh-huh
15	D	I thought I had already . m mentioned it, um . the process of creating new blood cells comes from the bone marrow,
16	P	yes but Ms [Doctor Ziel]
17	D	[and there]
18	P	ke however said something about ... because somehow there was a ... table overview there, and somehow the proteins weren't ... as developed- as they should be,

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In line 12, it turns out that the patient who has been an active interlocutor for more than nine minutes, has not understood a fundamental piece of information from the outset. Obviously, Dr Zielke had previously spoken of abnormal “proteins”, while the colleague mentions "antibodies" or, more generally, "something abnormal in the blood" as the reason for the planned bone marrow puncture. It is not clear to the patient that the two doctors are referring to the same phenomenon. To his question "for [1,1] for ... protein?" (line 12) intended to seeks clarifica-

tion and in which he incorporates what he has previously understood, the doctor answers in the negative and starts a new explanation. The patient's words "yes, but" (line 16) and "however" (line 18) manifest an attempt at contradiction and correction. His renewed reference to proteins also shows that he is not convinced in view of his previous information and still wants to continue to work on this supposed discrepancy in content.

This fundamental gap in understanding could have been filled right at the beginning by opening the conversation in a way that involves the patient and makes room for his level of knowledge. The following exercise (Box 27.9) addresses this problem.

Box 27.9 Exercises and solutions

Exercise 3:
Find better formulations for a successful opening of the conversation.

Possible solutions

- "Dr Zielke has already informed you about the planned bone marrow puncture. To give me an idea of what you already know and what is still unclear to you, may I ask you to tell me what you already learnt from her in your previous conversation?"
- "Dr Zielke has already informed you that we would like to perform a bone marrow biopsy on you. What did she explain to you? Tell me about it, then I'll know better where to start." - After the patient's report, follow up with questions like: "What is still unclear to you from the conversation with Dr Zielke?" "Where do you need additional information?"

27.4 Further information

As we have seen, specialised communication in doctor-patient dialogue, but also between doctors, has its pitfalls. However, these can be overcome with the appropriate sensitivity by using certain communicative procedures some of which have been presented here and above all by

interactively involving the respective dialogue partner. After all, it is not about the hopeless endeavour to find THE perfect explanation, THE perfect presentation of knowledge. Rather, in addition to adequate communicative procedures, the interactive negotiation of understanding between doctor and patient plays a central role.

Where appropriate, I referred to further reading. The use of visualisation techniques has not been addressed here with regard to § 11 of this textbook. It is also discussed impressively, e.g. in Brünner, Gülich 2002. In Brünner 2011, you will find detailed descriptions and analyses of various strategies for conveying medical knowledge, illustrated by numerous examples of conversations. These examples, though, are taken from health programmes on TV, which of course changes the target group and the interaction. For different procedures that ensure understanding, see Klüber et al. 2012, who show their consequences for patient reactions using the example of anaesthesia information.

Another aspect has not been our focus yet but does already play an important role: health information that is easily accessible on the internet. It has now become a kind of standard companion for almost every patient. Certified web information tools help patients to understand their health issues, and help doctors and patients to understand each other better, provided that doctors accept information technologies, engage with them and recommend good quality information portals to their patients (Bechmann 2018). They can then actively include this information in their own explanation process. How they can best do this and what they need to bear in mind in order to maximise the benefits of digital health information tools for specialised communication is an exciting research question.

References

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

Bechmann S (2018): „‚Aber Dr. Google sagt…' – Gefährdet das Internet die Arzt-Patient-Beziehung?". ZMK – Zahnheilkunde, Management, Kultur 34 [9], 616-22.

Brünner G (2009): Die Verständigung zwischen Arzt und Patient als Experten-Laien-Kommunikation. In: Klusen N, Fließgarten A, Nebling T (Hg.): Infor-

miert und selbstbestimmt. Der mündige Bürger als mündiger Patient. Baden-Baden: Nomos, 170-88.

Brünner G (2011): Gesundheit durchs Fernsehen. Linguistische Untersuchungen zur Vermittlung medizinischen Wissens und Aufklärung in Gesundheitssendungen. Duisburg: Universitätsverlag Rhein-Ruhr.

Brünner G, Gülich E (2002): Verfahren der Veranschaulichung in der Experten-Laien-Kommunikation. In: Brünner G, Gülich E (Hg.): Krankheit verstehen. Interdisziplinäre Beiträge zur Sprache in Krankheitsdarstellungen. Bielefeld: Aisthesis Verlag, 17-93.

Bührig K, Kliche O, Meyer B, Pawlack B (2012): The corpus „Interpreting in hospitals“ – possible applications for research and communication trainings. In: Schmidt T, Wörner K (eds.): Multilingual Corpora and Multilingual Corpus Analysis. Hamburg Studies in Multilingualism (14). Amsterdam: John Benjamins, 305-15.

Bührig K, Meyer B (2009): “Dolmetschen Im Krankenhaus (DiK).” Archived in Hamburger Zentrum für Sprachkorpora. Version 1.1 (abgerufen am 11.08.2015).

Chow ZL, Indave BI, Lokuhetty MDS, Ochiai A, Cree IA (2021): Misleading terminology in pathology: lack of definitions hampers communication. Virchows Archiv 479, 425–30.

Galen (1916): On the natural Faculties, Book I, English Translation by Arthur John Brock. Cambridge, Massachusetts: Harvard University Press.

Holper S, Barmanray R, Colman B, Yates CJ, Liew D, Smallwood D (2019): Ambiguous medical abbreviation study: challenges and opportunities. Internal Medicine Journal 50, 1073–78.

Jayatilake DC, Oyibo SO (2023): Interpretation and Misinterpretation of Medical Abbreviations Found in Patient Medical Records: A Cross-Sectional Survey. Cureus 15 (9), e44735.

Karenberg A (2015): Fachsprache Medizin im Schnellkurs. Für Studium und Berufspraxis. 4. Aufl. Stuttgart, etc.: Schattauer.

Kliche O (2012): „Sie müssen sich das ja vorstellen …“ (und ich mir auch!) – Erklären und Beschreiben im ärztlichen kommunikativen Handeln. Qualitative Analyse zweier Simulationsgespräche aus dem Kölner Lehrmodul PJ-STArT-Block. Fachsprache - International Journal of Specialized Communication 35 (3-4), 125-45.

Kliche O (2015): Simulationspatienten in der medizinischen Ausbildung. Gesprächsanalytische Untersuchung der Schauspielerleistung am Beispiel von Verstehensäußerungen. Mannheim: Verlag für Gesprächsforschung.

Klüber M, Motsch J, Spranz-Fogasy T (2012): „wenn sie sonst jetzt zum eingriff keine fragen mehr haben dann unterschreiben (.) sie noch mal hier“. Ver-

ständnissicherung in anästhesiologischen Aufklärungsgesprächen – Arztangebote und Patientenfragen. Deutsche Sprache - Zeitschrift für Theorie, Praxis, Dokumentation 40 (1), 240-68.

Köhle K, Koerfer A, Kretschmer B, Obliers R, Reimer T, Thomas W (1998/2010): Manual zur ärztlichen Gesprächsführung und Mitteilung schwerwiegender Diagnosen. 5. Aufl. Köln: Institut und Poliklinik für Psychosomatik und Psychotherapie der Universität zu Köln (first edition 1998).

Kripalani S, Weiss BD (2006). Teaching About Health Literacy and Clear Communication. Journal of General Internal Medicine 21: 888-90.

Lalouschek J (2004): Kommunikatives Selbst-Coaching im beruflichen Alltag. Ein sprachwissenschaftliches Trainingskonzept am Beispiel der klinischen Gesprächsführung. In: Becker-Mrotzek, M, Brünner G (Hg.): Analyse und Vermittlung von Gesprächskompetenz. Radolfzell: Verlag für Gesprächsforschung, 137-58.

Löning P (1994): Versprachlichung von Wissensstrukturen bei Patienten. In: Redder A, Wiese I (Hg.): Medizinische Kommunikation. Diskurspraxis, Diskursethik, Diskusanalyse. Opladen: Westdeutscher Verlag, 97-114.

Rehbein J (1984): Beschreiben, Berichten und Erzählen. In: Ehlich, K. (Hg.): Erzählen in der Schule. Tübingen: Narr, 67-124.

Reisigl M (2011): Schwierige Verständigung. Interkulturelle Gespräche auf der Kopfschmerzambulanz. In: Holzer P, Kienpointner M, Pröll J, Ratheiser U (Hg.): An den Grenzen der Sprache. Kommunikation von Un-Sagbarem im Kulturkontakt. Innsbruck: University Press, 101-27.

Roelcke T (1991). Das Eineindeutigkeitspostulat der lexikalischen Fachsprachensemantik. Zeitschrift für Germanistische Linguistik 19 (1), 194-208.

Schulze P (1994): Empirische Überlegungen eines ambulanten Chirurgen zur medizinischen Kommunikation. In: Redder A, Wiese I (Hg.): Medizinische Kommunikation. Diskurspraxis, Diskursethik, Diskusanalyse. Opladen: Westdeutscher Verlag, 235-8.

Silverman J, Kurtz S, Draper J (2013): Skills for Communicating with Patients. 3. Aufl. London: Radcliffe.

Smith N (2010): Technical terms in pre-anaesthetic consultations. Anaesthesia and Intensive Care 38 (4), 775.

Citation note

Kliche O (2025): Medical Specialised Communication. In: Koerfer A, Albus C (eds.): Medical Communication Competence. Göttingen (Germany): Verlag für Gesprächsforschung.