13 Medical Communication Training
Didactics of Dialogical Medicine

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> In the last 20 years, medical education and the broad profession that it serves have taken on communication education and training as an important component of the curriculum.
>
> Kurtz, Cooke 2011: 583

> Over the past 20 years publications on effects of communication skills training (CST) in underground and postgraduate settings have increased exponentially.
>
> Bachmann et al. 2022: 2320

> Communication skills training (CST) remains poorly represented and prioritised in medical schools despite its importance.
>
> Venktaramana et al. 2022: 997

Abstract: If one takes into account the preceding statements from the years 2011 and 2022, one can look back on a long history of reforms in which communication education was integrated into medical curricula – with all remaining deficits in practice. During this period, the reform at the Medical Faculty of Cologne University has taken a specific development, which will be presented below in two steps (§ 13, 14). Based on the preceding *didactic* and *theoretical* chapters (§ 1-12), in this chapter we provide an overview of our *Cologne Medical Communication Training* (C-MCT) and present the most important *didactic-methodical* concepts that are used throughout all modules of an integrative *Spiral Curriculum Communication* (SCC) (§ 13.1-3).

The *spiral curriculum* begins with the first-semester tutorial and extends through lectures and internships to preparation for the internship year. In all stages of training, the focus is on the *Teaching-Learning Spiral* (TLS) of *theories*, *reflections*, *trainings* and finally *examinations* on communication competence, which is to be developed and expanded step by step (§ 13.3).

Our teaching concept for training medical communication is to be concretised exemplarily by a Cologne *learning module* "Dialogical Medicine" (DiaMed), which is presented in a tabular overview (§ 13.3.3), referring to the individual relevant chapters of this handbook.

The *communication* competence is continuously taught with *clinical* competences for diagnosis and therapy in specific clinical pictures, to

which the students can continuously gain practical experience in the clinical internships in communicative interaction with patients. The courses take place in *small group work*, which are not only essentially *competence-based* (§ 1.3, 3, 13.2, 14), but are at the same time *research-based, manual-based, problem-based, multimedia-based* and *practice-based* („learning by doing“) (§ 13.4-5). The practical relevance is established in *interdisciplinary* cooperation with other subjects through conversation exercises directly with *real*, but also *simulated* patients (SP), who are at the same time used in specific *examinations* (OSCE) with selected role and disease patterns (§ 13.5-6).

While we will give an overview of our *Spiral Curriculum Communication* (SCC) and the didactic concepts of our *Cologne Medical Communication Training* (C-MCT) in the following, the individual courses from the first semester tutorial to the practical year will then be presented in detail in the entire *Cologne Curriculum Communication* (CCC) (§ 14). Specific problems and methods of evaluation are dealt with later (§ 40-43), including the *observer paradox* already briefly addressed here (§ 13.6).

13.1 Spiral curriculum communication (SCC)

Following international research on doctor-patient communication (§ 2), a variety of reform approaches have been developed in medical education for more than three decades.[1] Characteristic of these reform ap-

[1] From the variety of publications on *reforms of medical education* and the specific *development of communication curricula*, only a very limited selection can be made here, with which we can only refer to the following (overview) works on various conceptual, curricular and didactic-methodical aspects as examples for further interest for such a large period of time and so many study locations: Norman, Schmidt 1992, Barrows 1994, Harden, Davis 1998, Moust, Bouhuijs, Schmidt 1999, Davis, Harden 1999, Koerfer et al. 1996, 1999, 2000, 2004, 2008, Köhle et al. 1999, 2003, Jünger, Köllner 2003, Deveugele et al. 2005, Lane, Rollnick 2007, Brown 2008, Fragstein et al 2008, Bachmann et al. 2009, Silverman 2009, Hargie et al. 2010, Roch et al. 2010, Harden 2011, Kurtz, Cooke 2011, Frischenschlager, Hladschik-Kerner (eds.) 2013, Kiessling, Langewitz 2013, Bachmann et al. 2013, Mortsiefer et al. 2014, Deveugele et al. 2015, Sator, Jünger 2015, Härtl et al. 2015, Thistlethwaite 2016, Frain, Abdalla 2018, Koerfer, Albus (eds.) 2018, Jünger 2018, Kiessling et al. 2019, 2021,

proaches are not only practice-oriented small group work and new learning concepts such as *problem-oriented* learning (POL) (§ 13.4.2), but also that education and training in doctor-patient communication has formed its own focal points, in which specific teaching, practice and examination methods (with role plays, simulated patients, OSCE, etc.) (§ 13.5) have been developed and evaluated.

13.1.1 Integrative teaching and learning

On this basis, an integrative *Spiral Curriculum Communication* (SCC) has been established in Cologne since the mid-1990s, which will be presented here (§ 13) for our department and then (§ 14) in detail as the *Cologne Curriculum Communication* (CCC) for the entire medical faculty.

At our Department of Psychosomatics and Psychotherapy at the Cologne University Clinic, we have been working in cooperation with other disciplines and the Dean of Studies Office for more than two decades on the development of an *integrative*, *competence based, interdisciplinary* and *longitudinal* curriculum on communication (§ 14), in which the teaching, practice and examination of medical interviewing is oriented both to the requirements of *biopsychosocial medicine* (§ 4) and to *new learning and examination methods* (§ 13.2-6).

In close coordination with the other subjects, we pursue an integrative curriculum throughout medical studies and in and in continuing medical education in basic psychosomatic care, which is essentially *competency-based*, *problem-oriented*, *manual-based*, *practice-oriented* and *multimedia-based at* all levels of training (Koerfer et al. 1994, 1996, 1999, 2008, Köhle et al. 1997, 1999, 2003, Obliers et al. 2002, Koerfer, Albus 2018) (cf. § 2, 3, 14, 15, 41). The *interdisciplinary* practical relevance is continuously established in direct contact with *real* or *simulated* patients (SP) with clinical pictures from different *subjects* or clinics (internal medicine, surgery, orthopaedics, dermatology, etc.) or indirectly through videographed and transcribed conversation cases from real consultation hours and ward rounds, which have been prepared in multimedia form (§ 13.4.5).

Zerbini et al. 2024. For current reviews on specific topics (problem-based education, communication training, curricula), please refer to: Trullas et al. 2022, Bachmann et al. 2022, Venktaramana et al. 2022.

With specific focus formations, the courses contain differentiated learning offers on theories of the doctor-patient relationship and communication, critical reflections and practical exercises, which in turn are regularly followed by evaluations. For this purpose of evaluation, we have been conducting specific examinations (OSCE) with simulated patients at our Department for Psychosomatics and Psychotherapy since 1999 (§ 41), in which we use the *Cologne Evaluation of Medical Communication* (C-EMC) (Koerfer et al. 1999, 2008). According to the principle that only what has been taught before should be tested, the evaluation is based on our *Cologne Manual on Medical Communication* (C-MMC) (2022), which has been slightly revised in several editions since 1998 and is used in training and continuing education in Cologne, but also in other university hospitals and other institutions.[2] The structure and function of the C-MMC is described below (§ 13.4) and explained with empirical anchor examples in the Practical Part (IV) of the handbook (§ 17-23), problems and methods of *evaluation* are discussed briefly here and in more detail later (Part IV, § 40-43).

13.1.2 Preclinical and clinical trainings

The Cologne study reform covers all preclinical and clinical semesters. (§ 14). Our teaching offer as a whole (Table 13.1) ranges from the first-semester tutorial to lectures in both the preclinical and clinical training phases, in which courses are central to communicative interaction with real and simulated patients (SP), to the PY (practical year) starting block, which is designed to prepare students for the practical year under the guidance of the Dean of Studies (§ 14). In addition, we offer continuing education events aimed at practising doctors within the framework of the Continuing Education (§ 16, 43).

2 Cf. Appendix of this chapter, cf. Koerfer et al. 1999, 2004, 2005, 2008, Köhle 2011, Petersen et al. 2005, Henningsen 2006, Schweickhardt, Fritzsche 2007, Nowak, Spranz-Fogasy 2008, Lengerke et al. 2011, Mortsiefer et al. 2014, Nowak 2015; Koerfer, Albus (eds.) 2018, Schröder 2019, Abholz, Jobst, Sonntag 2020, Scarvaglieri 2020, Albus 2022.

Semester	Type of teaching	Contents - Learning goals	Didactics - Methodics	Exam
1 preclinic	Tutorial	Biopsychosocial Medicine and D-P Communication	Theory, Reflection, DPV, RS, SP, POL	Text exam
1-4 preclinic	Lecture	Interdisciplinary fields of competence: diabetes, back pain, myocardial infarction, death and grief, etc.	Lecture, Multimedia, DPV, Manual	Text, MC exam
1 clinic	Course Video conference Multimedia (MTP)	Biopsychosocial anamnesis, medical interviews	Theory, Reflection, Training; POL, RP, SP, RS, DPV, VC	OSCE, C-EMC
1 clinic	Elective seminar	Interviewing, taking medical history, BBN, SDM, palliative care	Theory, Reflection, POL, D-P-V, Video Conference, Multimedia MTP	
4 clinic	Lecture	Psychosomatics and psychotherapy	Lecture; Multimedia MTP, DPV, Interactive	MC exam
4 clinic	Block course	Psychodiagnostic interviewing for specific clinical pictures; self-awareness	Theory, reflection, training, POL, RP, SP, DPV, MMC, Junior Balint work,	MC-, Text-Written Examination
4 clinic	Elective seminar	Theory and practice of Psychodyamic Psychotherapy, BBN, SDM	Theory, Reflection, POL, VC	
4 clinic	Elective seminar	Oncology, BBN, SDM	Theory, Reflection, POL, MMC	
Continuing education	Course	Psychosomatic Primary care	Balint work, POL, case reports, DPV, RP, RS, SP	MC-, Text-Written Examination, C-EMC

Table 13.1: Curriculum of the Department of Psychosomatics and Psychotherapy (University of Cologne) (see legend below)

Legend (Table 13.1)

POL	Problem-oriented learning	MMC	Manual Medical Communication (C-MMC)
RP	Real patients	BBN	Breaking Bad News
RS	Role play	SDM	Shared Decision Making
SP	Simulation patients	OSCE	Objective Structured Clinical Examination
MC	Multiple Choice	MTP	Multimedia Training Programme
DPV	Doctor-Patient-Videos	EMC	Evaluation of Medical Communication
MM	Multimedia	VC	Video-Conference (D-P plus students)

Within this framework, we also offer specific further training for tutors and lecturers ("teach the teachers"), who in turn work on learning concepts for teaching communicative competences in their specific medical areas of activity. In preclinical and clinical training, the courses at our clinic are closely linked thematically with neighbouring disciplines in which the teaching of *psychosocial* competences is central.

13.1.3 Clinical reasoning and communication

In an *interdisciplinary lecture*, certain topics and problems in communicative interaction with patients in certain clinical *pictures are* already dealt with in the pre-clinical phase (diabetes, back pain, etc.). The main issue here is the integration of *clinical reasoning* and *clinical communication* (Barrows 1994, Cary, Kurtz 2013, Stanley, Sehon 2019), with which these dual medical competences are to be developed in a *Spiral Curriculum Communication* (SCC) with corresponding interdependent *learning goals* (§ 2, 3, 13.2-3).

While the foundations for understanding medical communication in the context of *biopsychosocial* medicine are already laid in small group work in the first semester tutorial, the practical course in the 1st clinical semester is the central building block for the theory and practice of medical communication, which is taught again in small groups with real patients from different disciplines or clinics (internal medicine, surgery, dermatology, etc.) and is deepened again in the elective courses.

The communication *competences* acquired so far by the students are then differentiated and tested as *psychotherapeutic competences* in the lecture on *psychosomatics and* psychotherapy as well as in the block course and elective seminar in the 4th clinical semester. This *advanced* clinical training phase is primarily determined by commu-

nication with specifically ill patients (anxiety disorder, anorexia, diabetes, etc.) (§ 14), to which medical action with *communicative fitting competence* (§ 2, 3) must adapt accordingly.

Self-reflexive forms of *Junior Balint Work* are also introduced, in which students are to be prepared for their later professional practice, in which the communicative handling of difficult patients is to be anticipated (§ 34), which can lead to a particular strain on the doctor-patient relationship. Problems of medical "psycho-hygiene" are also discussed here, which require careful handling of one's own resources.

The fact that the *doctor-patient relationship* and the guidance of medical communication must be individually designed depending on the type and severity of the illness as well as the age, gender, education and socio-cultural background and personality of the patients (§ 3.2, 10.7, 28, 37) must be taught more intensively during the clinical training phase. This is done either in direct communicative dealings with patients or on the basis of selected case studies from the consultation and ward rounds, on which, for example, problems of denial of serious illnesses (e.g. after myocardial infarction) or communicative dealings with patients' *subjective theories* are dealt with (Birkner 2006, Birkner, Vlassenko 2015, Albus, Köhle 2017, Albus 2022) (§ 21, 29). These problems of an individual approach to patients and their subjective forms of explanation and processing are deepened beyond the compulsory courses, especially in the elective seminars (§ 14), which are concerned with the specific teaching of communicative and clinical competences (§ 3.2).

This includes, for example, *supportive* and *resource-activating* conversation techniques in *motivational talks*, but also the competent handling of patients' forms of defence (denial, projection), which must first be recognised in the conversation by doctors with an understanding and interpretation competence before they can react appropriately, for example, with a *tangential* conversation (§ 3.2, 17.3).

13.2 Medical communication didactics

In both research and teaching on doctor-patient communication, it should be borne in mind that the choice of certain forms of communication, such as *active listening* (speech encouragement, repetition,

paraphrase, etc.), which can serve to promote patient narratives (§ 9, 19), depends essentially on the choice of *relationship model,* in which power and control over the conversation and ultimately over the interlocutor can be exercised quite differently by the doctor (§ 10).

As has been justified again and again, the promotion of communicative competence should not be confused with rhetoric training, but should be achieved within the framework of teaching biopsychosocial and dialogical medicine (§ 4, 7-10). This requires a specifically *medical didactics of communication*, in which the learning goals for medical communication are linked with higher-ranking learning goals of biopsychosocial patient care in a *taxonomy of learning goals* (§ 13.2) and suitable *didactic-methodical* concepts are then used in a *spiral curriculum to* achieve the goals. In the following, the basic features of a medical communication didactics will be presented in overview and then specific learning and examination concepts will be presented in detail, the application of which in individual courses will be described separately (§ 14) within the framework of the entire *Cologne Curriculum Communication* (CCC).

13.2.1 Taxonomy of competence-based learning goals

Although communication training aims to change doctors' conversational behaviour, the corresponding learning goals at this behavioural level are to be taught with higher-ranking learning goals. Accordingly, a distinction must be made in communication training in the sense of taxonomy of hierarchically structured learning goals, at the end of which there can only be those concrete *conversational maxims* to which the doctor's *conversational behaviour* can be oriented as a *manifest* form (see below Fig. 13.1). A corresponding *learning goal taxonomy* can be depicted in an exemplary representation with the help of *purpose-means relations* (see below Box 13.4), which take into account the specific dependencies of the learning goals at the level of observable conversational behaviour ("paraphrases", "repetitions" etc.) on higher-level learning goals in each case. Our decidedly *competence-based* learning approach has been justified and described in detail elsewhere in a *competence model* of medical communication (§ 1.3, 3), so that an exemplary summary will suffice here.

Medical and communicative competences

The *development of communication competences* in teaching and their later further specialisation does not take place "in the air", but is linked to clinical education and experiential practice in clinical reasoning. Following the results of a workshop (conducted at EACH 2012), Cary, Kurtz (2013) explicitly highlighted the need to integrate clinical reasoning and communication (Box. 13.1).

Box 13.1 Clinical reasoning and communication
Integrating clinical reasoning and clinical communication into the broader medical curriculum helps to drive skill development and learning of content material deeper and provides an efficient means of educating a well-rounded clinician.

Cary, Kurtz 2013: 362

The interaction and interplay between medical knowledge and action competences and specific communicative competences has been explained in detail in advance in the *formulation of learning goals* (§ 3). There it was differentiated that doctors must have a *double medical competence*, in which the communication competence is not merely a "rhetorical" competence, which would have to be acquired additionally, but it is to be taught already in teaching with clinical competences in a problem- and practice-based way (§ 3, 13.4-5). Therefore, the interdependence will only be recapitulated here by way of example: Only the doctor who has the necessary *medical-communicative dual competences*,

- can *perform* a specific emergency care, operation, examination or prescription (§ 3.2-3) (§ 26), after he has sufficiently informed the patient and obtained his *informed consent* (§ 10, 22, 26).
- is *able*, on the basis of his knowledge of clinical pictures, to identify the gaps that the patient leaves in his narratives and complaints, and can gradually close these gaps by *asking* specific questions in order to complete the anamnesis (§ 21).
- can *recognise* the pressure to talk from the nervous patient and *hold* back at first with *interrogative questioning* techniques, and through *active listening* and empathic feedback elicit the patient's *narratives* and *emotions* with fitting precision (§ 19-20, 25).

- can *recognise* the distress that patients often have with "sensitive" topics (sexuality, violence, alcohol abuse, etc.) in good time due to his medical *knowledge* of clinical pictures and sensitively *ask* further questions
- can *recognise defensive behaviour* in problem cases (e.g. sexuality, alcohol abuse, etc.) already during the interview and, if necessary, *switch* from a more *confrontational* to a more *tangential* interview style (§ 3, 17, 32).

These *professionelle double competences* are to be realised with a *fitting competence* (§ 3) in specific problem situations, which are to be permanently controlled from a *self-reflexive* observation perspective of a so-called "meta-doctor" (v. Uexküll) (§ 2, 3.6). Here, degrees of professional competence are to be differentiated, which constitute relevant differences, for example, between *novice* status and *mastery*, as discussed in the introduction (§ 1.3, 3.6) for *didactics* and finally for the *evaluation* of medical communication (§ 13.6, 40).

Theory-based didactics and evaluation

The interaction and interplay between *hierarchical* learning goals has already been described in detail (§ 3, 8-10). Here, the focus should again be on the fact that learning goals cannot be formulated in a more or less ad hoc manner, but must be developed within the framework of *theory-based* didactics and evaluation.

Competence-based learning goals in medical education must be derived from both *medical* models and *communication* models, which make a relevant difference to the didactics and evaluation of medical communication. Thus, it makes a difference whether medical acting is shaped by a *biomedical* or by a *biopsychosocial* model of medicine (Engel 1977, von Uexküll, Wesiack 1991) (§ 1, 4). Likewise, *communication theories* must be consulted in order to be able to derive specific *medical* conversation maxims from *general conversation maxims* (Grice 1975) (§ 7.3.3) or to be able to differentiate specific forms of *intransparency* or even *manipulation* in medical information and decision-making (§ 10) with the distinction between the *lifeworld* and the *system/medicine* as well as between *communicative* and *strategic* acting (Habermas 1981, Mishler 1984, Scambler 2001) (§ 7.3.4, 10.2).

In a theory-based didactics and evaluation of medical communication, the interdependencies between *medical* and *communication* models must also be taken into account: The biopsychosocial model is not only a medical model of *epistemology* and *treatment*, but also a model of *relationships* and *communication* at the same time (Koerfer et al. 1994, 1996, 2008, 2010, Koerfer, Albus 2018). The paradigm shift has been exemplified by a pioneer of biopsychosocial medicine, von Uexküll, in a semiotic model (§ 7.2) using a case study, which we have prepared in a didactic concept for a teaching unit (§ 4).

It was only with the paradigm shift from biomedicine to biopsychosocial medicine (§ 4) that a change in the medical model of relationships and communication took place, for example in the alternatives of *paternalism* and *cooperation/participation* or specifically of *interrogation* and *narration*. The paradigm shift in medicine led from "silent medicine" to "talking medicine", which was finally specified as "narrative medicine" (§ 9).

Since these interdependent developments have already been presented in detail in didactic and theoretical foundation chapters (§ 3-4, 6-10), we can limit ourselves here to selected statements as examples in which the theory-guided differences can be formulated negatively or positively:

- A doctor who is still completely attached to the traditional, *paternalistic model* of the doctor-patient relationship will *not* be able or willing to understand why a purely *interrogative* interview style in taking anamnesis (§ 9) or a purely strict *instruction* or an intimidating rebuke or even threat in decision-making (§ 10) can be of little use.
- Similarly, a doctor who prefers a *service model* of the doctor-patient relationship will *not* find his appeasing trivialisations or gentle lies or enticing promises or his consent-seeking suggestive questions per se inappropriate just because they obviously violate the *transparency* principle of medical action (§ 7.5, 10.5).
- However, only those doctors who pursue a *narrative* approach within the framework of *biopsychosocial medicine* and *cooperation model* initially put aside their typical medical information *questions* about details of the complaint and allow their patients to have their say first (§ 21).

- And only the doctor who encourages the patient to continue talking by *actively listening* opens up opportunities for patient narratives within the framework of *biopsychosocial* medicine, in which, on the basis of the *cooperation model*, a corresponding *biopsychosocial* progression of *topics* is promoted in the direction of complete anamnesis (§ 9, 10, 17-20).

This provisional selection is at least about exemplary statements on the *relationship* between forms of *discourse* (interrogation, narration) and forms of *action* (questioning, repeating, paraphrasing, etc.), which in turn are to be placed in relation to *medical relationship* and *care models*. Relational statements of this kind represent a first selection for a systematics of didactics and evaluation oriented towards *normative* premises of a *theory* of *good* medical communication (Koerfer et al 1994, 2008, Koerfer, Albus 2018). On the long road to the *gold standard* (§ 1.4, 2.5, 9.3, 10.4, 40) there are research cliffs to overcome, which go as far as problems of analysis of *questions* (§ 21) or even already *interruptions*, which are not to be concealed as specific problems of good conversation, but are precisely to be made an issue in *research-based* learning (§ 13.4.3). Such theory-based learning issues are ultimately also anchored in a taxonomy of hierarchical learning objectives, as summarised below.

Macro, meso and micro learning goals

The interaction and interplay of hierarchically organised learning goals of different orders had already been described in didactic and theoretical foundation chapters (§ 1-12). Here, the focus should once again be on the fact that *learning goals* should not be formulated more or less ad hoc, but within the framework of *theory-based* didactics and evaluation (§ 2, 3, 17, 40). A here merely *3-level taxonomy* of *macro*, *meso* and *micro* learning goals can be captured in a *hierarchical structure* as it can be reproduced in a reduced and selected representation (Fig. 13.1).

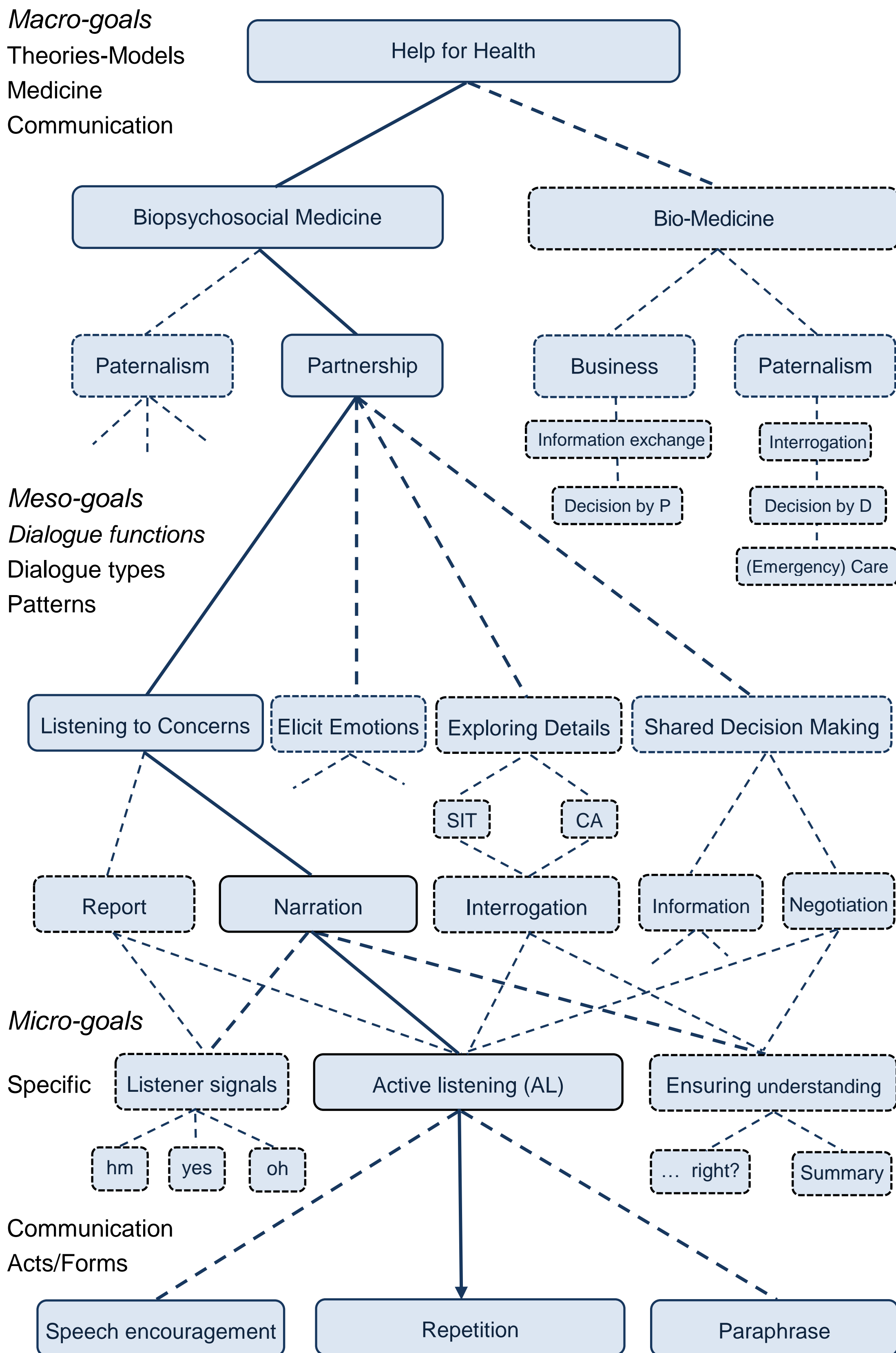

Fig. 13.1: Learning goal taxonomy for medical communication training (Focus: AL)
(Flow chart modified on Koerfer et al. 2008, Koerfer, Albus 2018) (cf. § 2, 3)

The exemplarily marked *main path* runs on three levels of order from the branching node of *biopsychosocial medicine* via the preferred *relationship model* of *cooperation* or *partnership* and via the central *dialogue function* ("listen to concern") and then the associated basal *dialogue type* of *narration* to the specific communication forms of *active listening*, which *manifests* itself linguistically in conversational practice on a *behavioural* level and can therefore be well identified and finally well rated or coded (§ 40).

With all the need of a didactic reduction, to which we will return shortly, should be taken into account for teaching: The structure of the schematic flow chart (Fig. 13.1) contains only selected *placeholders* for *relationship models*, *dialogue types* and *communication actions* and *forms* (interrogation, narration, repetition, listener signals, etc.), which are to be derived from medical and communication theories and models, as summarised above with reference to our didactic and theoretical chapters.[3]

The *challenges* and *chances* of achieving *hierarchical* learning goals (as in Fig. 13.1) will be discussed below for teaching practice in which the learning goals are to be realised with research-, problem-, manual, practice- and multimedia-based learning concepts in differentiated learning processes (§ 3.4-5). Before this, an overview of some application perspectives of such a *learning goal taxonomy* for medical communication training should be shown.

The interaction, dependency, combination and differentiation of the learning goals should be explained as far as possible using examples which are referred to below (13.4-6) and which will be analysed later using transcripts from real D-P communication in the practical part of the handbook (Part IV), which is based on our *Cologne Manual on Medical Communication* (C-MMC) (see Appendix). The learning goal taxonomy can also be presented in a verbally differentiated way, which is illustrated by an excerpt from the manual.

3 Depending on the learning focus, the placeholders in Fig. 13.1, which are still "empty" for reasons of space, are filled with content, so that, for example, in the case of the conversation function "Eliciting Emotions", the typology for empathic feedback that we developed in Chapter 20.4-6 would be adopted here and used with anchor examples for further teaching purposes.

The interdependencies of learning goals and of learning processes from different directions (bottom up, top down) are concretised in the specific learning module on "Dialogical Medicine" (DiaMed), which is presented in a short overview (§ 13.3.3) and then in exemplary versions (§ 13.4-5). There, reference is also made to the empirical case studies from real D-P Communication, which we have transcribed and analysed in detail and annotated for teaching purposes, where they can be used as anchor examples for our manual (C-MMC).

13.2.2 Integration and combination of learning goals

The *learning goal taxonomy* (Fig. 13.1) should be used in teaching in such a way that teachers and learners in cooperation can achieve integration on certain complex topics by creating research- and problem-based combinations of learning goals in both *vertical* and *horizontal* directions.

As already stated above, the mere *rhetorical* practice of skills (e.g. skills training on listening signals) is not helpful if one wants to develop the *double competence* (clinical reasoning and communication) in advanced training and later professional practice in which specific problems arise ("difficult" patients or patients with specific clinical pictures) (Part V). The communication competence of doctors always includes their *fitting competence* (§ 3, 17), with which they must sensitively adjust to changing contexts.

1. Transparency of learning goals and evaluation

Teaching and evaluation should be transparent to learners in all respects. In teaching, for example, we follow the principle that only what has been *taught* before may be *tested*. Accordingly, there is congruence between our *Cologne Manual on Medical Communication* (C-MMC) and our evaluation instrument in the OSCE procedure (C-EMC) (in the practical format of one page) (§ 13.8). Similarly, the learning goals are to be disclosed to the learners again and again in between, for example with a PowerPoint presentation, which can look like the schematic representation (flow chart Fig. 13.1) and can also be provided as a paper (on one page). Learners should also have the learning goals "in mind" and be able to match general learning goals of the group with their individual learning goals by being able to evaluate their own conversation practice

(real or simulated) through self or peer or expert evaluation as appropriate (§ 3.5-6).

2. Learning processes: top down and bottom up

One of the *challenges* in achieving *hierarchical learning goals* is that learning processes have to be taught in *two directions*: from the *theories* and *models* of medical care and communication to the *smallest communication units* such as listener signals (*top down*) and vice versa (*bottom up*). As a rule, a *mixture* of learning opportunities in both directions works best and is best taught in a *teaching-learning spiral* (§ 13.3). This can take its starting point from teaching videos/texts on theory/models or real D-P conversations, which allow conclusions to be drawn about underlying communication and relationship models from the level of observable conversation behaviour (§ 13.4).

3. Comparative Learning: Communication and relationship

In a critical comparison of real conversations, it can be learned, for example, that on the *level of behaviour* in the use of the smallest forms of communication such as the *listener signals* (hm, yes, okay), both their infrequent and inflationary use can lead to *relationship disturbances* just as much as a dominantly *interrogative* interview style.

Using an empirical example (§ 19), it can be made clear that an extreme variant (communication type: "inquisition") leads to the end of the conversation after only 2 minutes and subsequently to a *break* in the *relationship*: The doctor obviously did not find the right relationship model for the expectations of the patient with this type of extremely *interrogative* communication, who demonstrably (audibly and visibly) did not get a chance to speak about her concerns.

4. Didactic reduction and horizontal and vertical expansions

Since, as is well known, one cannot learn everything at once, a *didactic reduction* is unavoidable, as was also made in Fig. 13.1, which we have also used in teaching in this or a similar way, with variants depending on the current *learning purpose* with different learning settings and learning media (13.4). In order not to become over-complex, a reduction must be made for such representations in several respects, which must be gradually reversed under research- and problem-based aspects.

The reductions (in Fig. 13.1) are here due to the learning focus on *Active Listening*. The free arms (in *Eliciting Emotions*) do not lead no-

where, but refer to the corresponding positions in our Cologne Manual (C-MMC). With a different learning focus (see point 5), there are other branches with different centres of gravity.

The reductions can be removed immediately as needed and the learning goal taxonomy can be flexibly expanded and differentiated through complex representations, depending on specific teaching goals and the *learning level* of the learners, whose knowledge and communication competences as "novices" or advanced "tutors" may still differ considerably from "masters" of medical communicating (§ 1, 40). The change in the hierarchy of learning goals means a *change in focus* where, for example, a communication problem such as that of typification of so-called "interruptions" in research-based learning can be "scrutinised" (§ 13.4.3).

The *learning goal taxonomy* (Fig. 13.1) can be extended in both directions: *horizontally* and *vertically*. Analogous to our *Cologne Manual on Medical Communication* (C-MMC) (13.4), the two other basic functions of the conversation can be added *horizontally* at the level of the four basic functions (Fig. 13.1): *Building a Relationship* and *Drawing Conclusions*, which open and end the conversation respectively.

Vertically, various sub-functions of the conversation and the associated communication actions and forms are added (asking questions, empathic feedback, informing, etc.). An overview is provided in our Cologne Manual (C-EMC) that has been condensed onto one page so that it is easily available to all teachers and learners in a transparent way (§ 13.8). Expansions are also possible at the level of *theories* and *relationship models* that go beyond the traditional three-way division (*paternalism, partnership, business*) (§ 10) (see below).

5. Learning focus and focus changes

The *art* of guiding a D-P conversation is first and foremost the art of *good listening* (§ 3, 19). It is obvious that *Active Listening* (AL), for example, does not have to be practised in a specific phase of the conversation (e.g. *history taking*) (see below), but across the conversation, which we have marked here with exemplary connecting lines (faintly dotted). When *negotiating* medical procedures (§ 10, 22), the patient must have just as good a medical listener as in a *narrative* (§ 9, 19).

If one wants to shift the learning focus to other central conversation functions, the learning goals would have to be further differentiated there (corresponding to our Cologne Manual C-MMC). For reasons of

space, the important conversation function *Eliciting Emotions* (§ 20) had to be left out here, as well as the function *Exploring Details* (§ 21). Here (in Fig. 13.1) only two sub-functions der exploration were considered as placeholder, which concern the "Subjective illness theories" (SIT) of the patient and the "Completion of the anamnesis" (CA) (Fig. 13.1) (§ 21).

The learning focus can also be directed vertically to *higher-level learning goals* (to theories or relationship models) (see point 6) or be *problem-based*, as with a magnifying glass, to challenges in *taking a medical history* (see point 7). Finally, all learning goals can also be presented in a *verbally* differentiated way (see point 8), which will be illustrated by an exemplary excerpt from our manual (C-MMC).

6. Biopsychosocial medicine and relationship models

In a *biopsychosocial* medicine, too, specific (so-called open and closed) *questions* must be asked to complete the anamnesis, which has been left out here as a differentiation of the dialogue type *Interrogation* and has been explained elsewhere (§ 21). A further *differentiated* presentation would at least take into account the alternatives of the *relationship models* (Paternalism, Cooperation, Business) (§ 10, 22), which are constitutive for the *choice* of *dialogue types* and *action patterns* (question-answer sequences) (Q-A) and in the end of specific *communication acts/forms* (e.g. in Fig. 13.1: speech encouragement, repetition, paraphrase) (§ 19).

Beyond the condensed flow chart (Fig. 13.1), we presume here, for the purpose of simplicity, the *cooperation* or *partnership* model of the doctor-patient relationship, which is to be preferred anyway in the framework of a *biopsychosocial* medicine.

Alternative models of care and corresponding models of relationships (*Paternalism, Business, Deliberation, Information, Interpretation, Prevention* etc.) as well as the matching *repressive* or *libertarian* models of action and their patterns of communication have been discussed in detail elsewhere (§ 3, 10) and substantiated with empirical examples in the practical part (IV).

It must be emphasised at this point for the differentiation in teaching that recourse to functions and forms of the *paternalistic relationship model* is also possible in principle within the framework of *biopsychosocial* medicine (Fig. 13.1), if the doctor considers this necessary for corresponding disease patterns and patient types. In addition, empirical analyses of D-P conversations show that the *relationship models* are of-

ten realised in a *mixed* form, which is precisely what can be made an issue in problem-based teaching and learning.

At the same time, however, it must be taught in teaching that all functions and forms of communication and treatment should be excluded on the basis of the *business model* (§ 10) within the framework of biopsychosocial medicine.

7. Complex learning goal: Biopsychosocial medicine and history taking

For teaching, we have presented a *learning unit* on the theory and practice of *biopsychosocial medicine* as developed in Germany by one of its pioneers, Thure v. Uexküll, based on a *semiotic communication model* (§ 4). There, a case study was also didactically prepared, which is oriented towards this medical *and* communication model.

At the same time, the example shows the necessary medical *double competence* (*clinical reasoning* and *communication*) (Box 13.1), which the doctor initially lacks in order to then competently turn to his patient again with a *biopsychosocial* perspective that changes in the course of the conversation. We have structured the learning unit in such a way that learners are given opportunities for simulation exercises based on specific learning goals on *biopsychosocial* medicine (already in preclinical semesters) (Table 13.1, 13.2), which are part of our *Teaching-Learning Spiral* (§ 13.2-5) and the *Cologne Curriculum Communication* (§ 14).

With a *complex learning goal* such as *biopsychosocial anamnesis*, it must also be conveyed in teaching that completion necessarily comes up against limits. As has already been pointed out in the long tradition of research, the spectrum of biopsychosocial "data" to be collected through communicative detailed exploration is extremely rich.[4]

The spectrum ranges from the immediate seven *complaint dimensions* differentiated by Morgan, Engel (1969/1977), via the "subject theories of illness" of patients and their "subjective ideas" (about illness and recovery), to completion in further dimensions (systems "from head to toe", general well-being, past medical history, family, social, sexuality history, mental status, etc.) (§ 21).

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4 Over a long period of time, in addition to the pioneering work of Hampton et al. (1975), exemplary reference should be made to the following work: Morgan, Engel 1969/1977, Skelton, Hobbs 1999, Bolden 2000, Boyd, Heritage 2006, Stivers, Heritage 2001/2013, Cole, Bird, 2014, Silverman 2018; cf. Chapter 21 of this Handbook:

Such a *wide spectrum* can be managed neither in one nor in a few consultations, which is why there are often warnings against the claim of a "complete" interview, which according to Lipkin et al. (1995) is a myth (Box 13.2).

Box 13.2 Myth of the complete interview
Many authorities feel that their particular interest is essential and must be explored with every patient. This fantasy of completeness contributes to the myth that there is ever a "complete" interview. There is not - only a more or less effective or thorough one. Each practitioner in each given case must decide how much time is available and how most sensibly to allocate it.

Lipkin et al. 1995: 77

Although an interview cannot be complete, it should be carried out thoroughly, and above all it must be continuously updated from interview to interview, because in the meantime new developments in the patient's illness and life may have occurred (new symptoms, divorce, dismissal, accident, etc.). Although the doctor is already in the middle of providing information in preparation for *shared decision-making*, new issues may "casually" arise that make it necessary to *return* to the *history taking*.

A doctor must be able to *adjust flexibly* to such *incoherences* of topic progressions in dynamic conversational courses and *change the focus* as needed, i.e. on the level of dialogue functions and types (Fig. 13.1). If necessary, the doctor has to invite the patient again for *reports*, *symptom descriptions* or *narratives* in order to take up his therapy suggestions again later, which may have to be modified on the basis of the patient's new information. The best medicine will not help if it is not based on a *good* medical history, which should therefore be a priority in medical communication.

Using the example of the complex learning goal of *taking a medical history*, it should be taught and learned that the *art of medical communication* comes into play in the doctor's *dual competence*: A doctor must continuously perform various conversational functions with *horizontal* connections using certain dialogue types and patterns (Fig. 13.1), and *vertically* match the *biopsychosocial* theme progression (in the background of the conversation) with his or her medical *knowledge* and *reasoning*, in order to then ask a suitable detailed question (e.g. about the

complaints or previous illnesses) at the *fitting point* in the conversation in order to close gaps in the medical history. If gaps cannot be filled immediately, they must remain in the doctors' mind (or be documented) and be addressed at the next opportunity to dialogue with the patient.

The problem of completing the history can cause stress and feelings of failure, especially for novices. The challenge can easily become an overchallenge. This is where another kind of competence comes into play, namely to counteract excessive demands through exaggerated perfection in the profession at an early stage. To this end, *junior balint groups* should also be offered for learners, for example, in which past and future practice can be *self-critically reflected* upon (§ 1, 14).

8. Verbal learning goal representations

In the formal presentation of a learning goal taxonomy (Fig. 13.1), the focus was exemplarily directed to the central *active listening* and thus a further differentiation, e.g. of the important *empathic communication*, was left out (§ 20). Other ways of presenting a competency-based learning goal taxonomy for *medical* communication education, which can be used for general and specific teaching purposes, can be found in other didactic chapters of the handbook (e.g. § 1, 3, 17) and in the practical part on specific conversation functions and steps (§ 18-23) which follow the *Cologne Manual on Medical Communication* (C-MMC).

Beyond *schematic* representations, *verbal* representations can also be used to combine the *structural* with the *functional* perspective in didactics and evaluation as well as in empirical conversation analysis (§ 2, 17-25). The entire *taxonomy of learning goals* can be formulated according to the tradition of *philosophical action theory* and *action analysis* (Koerfer 2013) in so-called "by" relations, which progress from larger units to smaller units (*top down*).

Conversely, descriptions can also be chosen from smaller to larger units by means of "through that" relations (*bottom up*). In this way, the interactions of (types of) learning goals can be described in both directions. An explicit variant with "by" *relations,* which follows an order from *top to bottom*, could be formulated in the following exemplary form (Box 13.3), in which only some main alternatives in medical communication are to be considered.

Box 13.3	By-relationships between macro, meso and micro learning goals

Carry for the betterment of patient health by providing care according to the *biopsychosocial* model, by (...) practising a *narrative* interview style, by letting the patient narrate, by (...) *actively listening* to him, by (not interrupting him if possible and) *repeating* or *paraphrasing* his words verbatim when the opportunity arises.

Or to put it in a nutshell: the communicative *functions* of paraphrasing or repeating words are to be used in the service of *narrative-based, biopsychosocial* medicine. The *art of medical communication* consists in the communicative *fitting* (...) of verbal interventions by the doctor, which must not be arbitrary, but *context-sensitive*, in order to initiate, promote or process a narrative at this current point in the conversation, etc.

Koerfer et al. 2008: 47

Conveying the functional alternating perspective between learning goals is a main task of good teaching on conversation, which must always be done in a *fitting* and *context-sensitive way* (§ 3.2, 17). Thus, certain forms of communication have no end in themselves, but fulfil their function only within the framework of *higher-order goals*. The mere accumulation of listener feedback (*hm, yes*) or pauses in conversation (waiting too long) can lead to communication problems or even disturbances and failures just as much as persistent eye contact (§ 18), which can be interpreted as *staring*.

For further concretisation and illustration of verbal representations of the *learning goal taxonomy* (with *by-relations*) (*top down*), the example from our basic didactics chapter (§ 3) should be used again here (Box 13.4), in which a summary selection is given for the conversational function "Listening to Concerns", which is oriented on our Cologne Manual (C-MMC) (§ 13.4).[5]

These are examples that are located on the order level of the meso- and micro-learning goals (Fig. 13.1) and are to be taught with the higher learning goals on the relationship model (partnership or cooperation) within the framework of biopsychosocial medicine.

5 Building on both the linguistic-philosophical theory of conversational maxims of Grice (1975) and the biopsychosocial approach of Morgan, Engel (1969/1977), the hierarchical learning goals can also be formulated as conversational maxims, examples of which are given throughout this handbook (esp. § 3, 7, 17).

Box 13.4 Learning goal taxonomy for "Listening to concerns" (excerpt)

The doctor practices a *biopsychosocial* approach to care

- by taking a *biographical-narrative anamnesis*
  - by *listening to the* patient's concerns
    - by starting the conversation openly
      - by asking about the motive for consultation
        "What leads you to me?"
      - or by asking about the patient's well-being
        "How are you doing (today)?"
      - or by offering herself as a helper
        "What can I do for you?"
    - and by *promoting the patient narrative*,
      - by giving listening signals (*nodding, hm, yes, etc.*)
      - by avoiding interruptions
      - by tolerating speaking pauses
      - by allowing a free development of themes
      - etc.

Excerpt from *Cologne Manual on Medical Communication* (C-MMC)
(cf. § 2, § 3 and Appendix of this chapter)

A targeted *change* in doctors' *conversational behaviour* only makes sense if it is also in line with the higher-ranking goals of a biopsychosocial medicine. Its functional communication models and dialogue types as well as patterns and forms were described in advance in a *dialogical* medicine (§ 7.5), which is essentially characterised by a *narrative* (§ 9) and *participative* approach (§ 10) to patient care. It is precisely these contexts that are to be made the subject of *reflection* in *problem-based learning* (§ 13.4), both in theory and practice, using selected examples, before training and *behavioural change* can move into the right (§ 13.5).

13.2.3 Theoretical knowledge and practical learning

As has already been emphasised, the *theory-based learning goals* for medical communication training should not only be “in the head” of the teachers, but should also be disclosed to the *learners* themselves in the sense of the general requirement for *transparency* in teaching. Only

through disclosure and self-assurance of the learning goals can a learning attitude be created that is not only prepared to passively tolerate so-called *patient-centred* communication as a mere *rhetorical* concession to patients, but understands it as a medical concern of *biopsychosocial patient care*, which is also to be actively perceived in the medical interest in *effective communication.*

In didactics, theories on the *structures* and *functions* of D-P conversations should first be presented in ideal-typical models, which should be critically reflected on in communication practice and, if necessary, corrected or even revised. In this context, the application of "textbook or manual knowledge" in practice often proves problematic, especially since certain questions remain controversial even in research (§ 13.4)

Learning progress can certainly be achieved through “textbook knowledge”, but it is subject to certain restrictions if it is not constantly corrected by reflecting on one's own and others' conversational practice. This also applies to the *reflective* use of *manuals* based on learning goals, for example, which can only reflect communicative reality to a limited extent.

The schematic representation of theory-based *learning goals* (as in Fig. 13.1) can only take into account selected derivations and placeholders for dialogue types and communicative actions and forms, but cannot represent the *dynamics* of real conversations. The formal arrangement of dialogue types, as it must necessarily be represented *linearly* in our Cologne *Manual on Medical Communiction* (C-MMC) (§ 13.4), does not correspond at all to an *ideal-typical* form of *dialogue progression*, which is rarely realised in conversation practice anyway (§ 3, 17). In this sense, *non-linear, dynamic conversation processes* (§ 17-25) should be made the subject of the teaching.

Such a schematic representation (as in manuals, for example) can be flexibly both reduced and expanded for specific *learning goals* and used in *learning practice* specifically as needed, if it is linked to other teaching media and differentiated and exemplified with practical examples, as with our *Multimedia Learning Programme* (C-MLP) (§ 13.4). In our teaching, it is possible to call up specific D-P videos or transcript examples from selected D-P conversations for certain learning goals for which *problems of conversation* arise that are not only to be *reflected* upon but also to be solved in a *practical learning process*, both in simulated and real *training conversations* with simulated patients (SP) or real patients (RP). However, before we can go into specific concepts of practical learning, it is necessary to put theoretical and practical learning in

an adequate *relation*, in which they are not to be taught separately and linearly, but in interdependent and circular teaching-learning loops (§ 13.3). Before we further present the concept of a Teaching-Learning Spiral to be specifically cut to medical communication, we have to deal with basic distinctions in medical didactics and evaluation with Miller's pyramid model, which is to be modified as a pillar model.

Miller's pyramid model as a pillar model

The best *book knowledge* does not necessarily lead to successful application. The distinction between *knowing that* and *knowing how* has a long tradition in philosophy (e.g. Ryle 1949/1969) and is also familiar in medical education with Miller's (1990) pyramid model.[6] In a modified form, we have also used the pyramid model for further differentiations in the evaluation of medical communication training (§ 40). Here, only the essential modifications and specifications will be marked by a comparative illustration (Fig. 13.2) and some justifications for the change to a pillar model will be given.

Pyramid model

On the pyramid model, knowledge is represented as the basis of learning, which is layered in 2 levels (*knowledge* and *competence*) before action-related learning and assessment processes (*performance* and *action*) build on it. As the image of the pyramid already suggests, the

6 Miller introduces the essential conceptual distinctions without further references, whereby he is less concerned with stages of learning processes, but primarily with *assessments* of *clinical skills*, *competence*, and *performance*. The only reference to a source Miller gives for the concept of *competence* is a very banal reference (*Webster*), without quoting the definition there verbatim. For the historical classification of the terms, reference can only be made here to the traditional distinction between "knowing that" and "knowing how", which goes back, for example, to the philosopher Ryle (1949/1969: 26ff), whereby the translator explicitly states the problem of the distinction between *competence* and *performance,* which became known through the linguist Chomsky (1965/1969), who was primarily concerned with *language competence.* Regarding the pragmatic concept of *communicative competence*, which as a rule already encompasses *knowledge* and *ability,* we refer back to the literature already cited in detail above (§ 3, 7).

knowledge base of the first two levels is correspondingly broad, while the further learning processes in the representation taper off via the level of performance to the top of action.

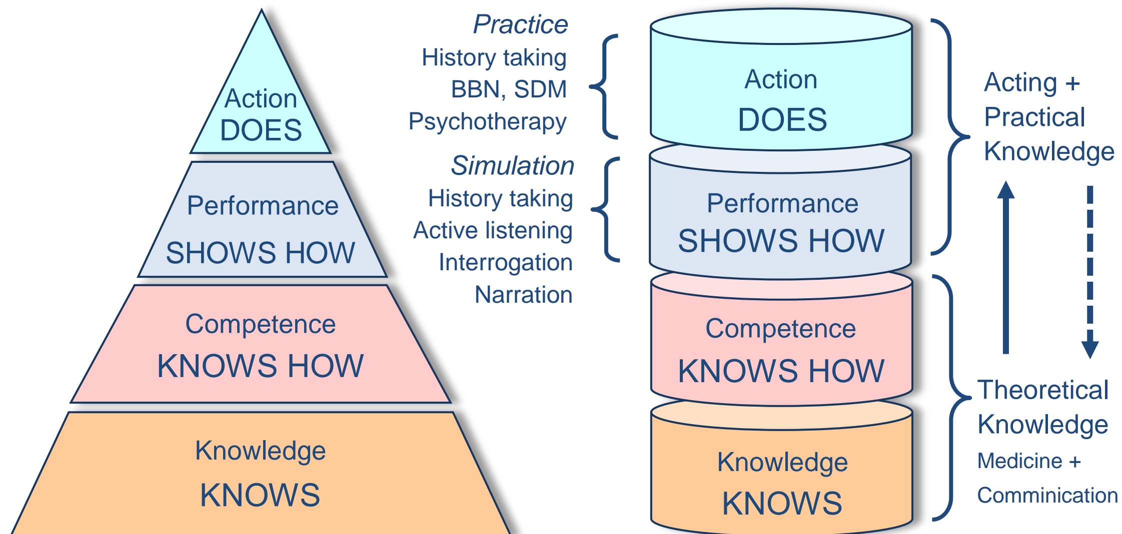

Fig. 13.2 Learning pyramid on Miller 1990
and modified pillar model on Koerfer, Albus 2018

The image of the pyramid alone implies *asymmetries* of *relevance*, on which the last two stages of first demonstrated action (*shows how*) and lastly professional action (*does*) are *marginalised* at the top of the pyramid. Finally, the weakness of the model is reinforced by the fact that on the basis of the logic and relationship of the conceptual distinctions (*knowledge, competence,* performance*, action*) only *unidirectional* learning processes (*bottom up*) are apparently permitted, which do not allow any feedback between action and knowledge, for example.

This means that no learning processes can be taken into account in which an *increase* in knowledge in the sense of *practical action knowledge* that is acquired *during* action arises. Obviously, a static knowledge model is assumed, in which knowledge already exists *before* action, in order to subsequently *apply* it during action. Apparently, *new experiences* of action that could possibly *correct* or *modify* the *theoretical knowledge* retroactively are marginalised or excluded. Thus, this model can hardly depict learning progression that results from the *interaction* of theory knowledge and practical action knowledge.

Pillar model

In a pillar model, on the other hand, the *asymmetries* and *restrictions* can be *removed* accordingly without having to give up the core elements of the pyramid model. The core elements remain and are weighted *equally* as blocks with regard to their *relevance* and specific *feedback loops* are taken into account in which *bidirectional* learning processes are initiated.

Thus, an *interaction* between theory knowledge and practical action knowledge can be assumed, which is acquired as *experiential* knowledge *during* and *through* action and can be expanded. Without complicating the presentation, the differently marked arrows are intended to take into account feedback processes (*top down*) in which, for example, previously learned *theoretical knowledge* about medicine or communication is possibly *corrected* or *modified* by new practical knowledge in simulated practice or real practice.

This *new practical knowledge* can contribute both in simulated practice with simulated patients or real patients, so that, for example, in the application of manual knowledge (theories) *creative problem solving* of *maxims conflicts* in conversational practice can occur, which are to be further tested in *teaching-learning spirals* (§ 13.3).

In summary, the pyramid model presents itself as a *static* learning model with *linear*, *unidirectional* learning processes (*bottom up*), which build on each other in layered learning stages, in which only theoretical knowledge must be demonstrated (*showing how*) in simulated practice (quasi affirmative and one-to-one) or implemented in real practice (*does*). In contrast, the pillar model represents a *dynamic* learning model with *fluid transitions* between theoretical knowledge and practical action knowledge in *bidirectional*, *dynamic* learning processes (*bottom up - top down*), whereby *corrections* or *modifications* can occur in both theory and practice during simulated and professional action.

Despite all the differences, however, the common features of both models are the *teaching content*, which Miller explicitly includes in addition to *technical skills*, among other things, the "communication of medical-history facts" (1990: S65), as well as the learning concepts of *simulation* with SP (in the OSCE), which was still being developed at that time and is standard today (§ 13-5-6).

Because of the continuing relevance of the pyramid model, we retain Miller's (1990) terminology, modifying it as necessary to suit the con-

text.[7] The primary 4-level distinctions in the pyramid (*knows, knows how, does*) can be used for further discussions on the emergence and development of theory- and practice-based learning processes and their evaluation, without having to necessarily share the problematic attributions of the secondary terms (*knowledge, competence, performance, action*) to the 4-level pyramid. However, the static, linear structure of the 4 levels must be modified in a dynamic model, in which not least the transitions between simulated and real (professional) action (*shows how - does*) are to be regarded as fluid, if one wants to maintain this distinction under certain conditions, for example in the comparison of different *learning levels* (e.g. novice versus expert) (§ 40).

First of all, it is a problem, already raised by Miller, of the *closeness to reality* of simulated learning and evaluation settings in which students are supposed to "demonstrate" their acquired performance (*show how)*, as it were, for example in the OSCE. The problem of closeness to reality arises in a modified form when students interact with real patients in teaching, which is already possible in the 4th clinical semester at the *Cologne University Hospital* and will be differentiated in the following.

> But the most effective substitute for reality is probably the simulated clinical encounter using standardized patients (SP).
>
> Miller 1990: 65

Simulation and reality: shows how – does

It is Miller's lasting merit that at the beginning of the education reforms in medicine he set impulses with his basic distinctions in the pyramid

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7 Beyond the literature noted above (Ryle 1949/1969, Chomsky 1965), we would like to point out that there is a long tradition of research in both philosophy of language and linguistics on the distinction between *competence* and *performance* (§ 3, 7) and that, especially in the *analysis of institutional communication*, types of *professional acting* and *acting knowledge* are distinguished, which can be examined generally as *practical acting knowledge* or as specific *institutional* acting knowledge (of teachers, judges, doctors, etc.): e.g. Ehlich, Rehbein (1977), Ehlich, Rehbein (1986), Koerfer (2013), Scarvaglieri 2020, Ehlich 2020, 2022. For more recent work in *medicine* see next note.

model, which are still effective today.[8] In his programmatic article (entitled: *The Assessment of Clinical Skills/Competence/Performance*), he focused on new opportunities for training and especially for evaluation. Although the article is relatively short, he had particularly addressed the *paradigm shift* to learning and assessment (OSCE) qua *simulation*. Although the scepticism from that time towards "simulated practice" has been overcome, the problems outlined by Miller are still current insofar as it is still a matter of clarifying how "realistic" or "practice-suitable" the respective simulations are.

Ultimately, the question is whether the simulations are "demonstrating" acting (*showing how*) or acting in practice (*does*), if this distinction makes any sense at all and if we do not have to assume fluid transitions anyway. On the one hand, it must be emphasised once again that in every practice, further learning takes place *during acting* (*doing*) and that further knowledge is also acquired in later professional practice. On the other hand, questions arise on the so-called "closeness to reality" of *simulation* situations in relation to *real* situations. Without using the modern concept of *virtual reality*, the differences that arise from the *social and interactional roles* of the *actors* must be taken into account for our learning situations.

- **Role-playing**. As already explicitly mentioned by Miller (1990: S64), role-playing is one possibility of simulation. Role plays can be played freely or script-based (clinical pictures, patient types) in the classroom, which we introduced early on at our clinic (Koerfer et al. 1996).
- **Simulated doctor**. Already in teaching, in an early phase of training (1st clinical semester), students in the *simulated doctor's role* (SD) can have conversations with *real patients* (RP) who are treated in various wards (internal medicine, surgery, dermatology, etc.) at the Cologne University Hospital (§ 13.5, 14).
- **Simulated Patient**. In the *examinations (OSCE)*, for good reasons, only simulated patients (SP) can be used who are also trained script-based (clinical pictures. patient types) for this role (§ 13.5-6, 41).

8 For more recent work in *medicine*, in which the pyramid model is often still used affirmatively, we would like to refer by way of example to: Park 2015, Cruess et al. 2016, Venktaramana et al. 2022.

- **Real doctor and SP**. Finally, a *real doctor* can interact with *simulation patients* (SP) in training (cf. Continuing communication training, § 15-16), which can be unfamiliar and cause irritation.

For the student learning focused on here, it makes a difference whether a student meets a *real* patient (RP) or a *simulation* patient (SP) (§ 3.5-6, 14, 41). All actors learn here in an *artificial observation situation*, which can be affected by an *audience* in the group or by *video recordings* in such a way that *communication disorders* occur. These phenomena, which can endanger the *authenticity* even of D-P conversations, have been described in social research as the *observer paradox*. Since we will deal with this problem separately (§ 13.6), our own teaching experiences in such situations should be briefly presented at this point.

From many years of teaching practice we can report that *real* patients - despite knowing the simulation role of the students - often opened up to them very trustingly: The students were apparently sufficiently competent to adjust to their interlocutors through *active listening* and *empathic communication* as well as *detailed exploration* in such a way that the patients were able to tell their history of illness and suffering vividly and describe their concrete symptoms precisely, so that at the end one could take stock of an almost *perfect anamnesis*.

In these cases, one can assume that the simulation situation was "forgotten" and that the conversations were characterised by a great *closeness to reality*. All participants had experienced the conversations as very authentic and the patients often explicitly thanked the student and us (in the group) when we said goodbye and affirmed that they had benefited greatly from the "doctor"-patient communication.

The question of where exactly such a conversation should be typified in the already fluid boundaries between *showing how* and *doing* seemed idle. In these cases, the impressive communication was perceived by all participants as very close to reality, or at least *authentic* – as far as any strictly dyadic communication can be judged as authentic under the observer paradox (§ 13.6).

Competence progression: Resolving maxim conflicts

In addition to such "great moments" of teaching, however, it should not be concealed that many a conversation was also *less successful*. This applies to conversations with *simulation patients* (SP) as well as with *re-*

al patients (RP) (§ 13.5). The differences between *poor* and *good* communication manifest themselves in the different ad hoc solutions to conflicts of maxims in ongoing conversational practice.

As emphasised before (§ 13.2.1), *learning goals* have to be in the minds of the learners and *internalised* in the conversational *routine* in order to be able to critically direct their attention to their own practice and that of others when learning: The learning goals must first prove themselves to be *practice-based* and *problem-based* (§ 13.4). In this context, *research-based micro-learning goals* must also be critically scrutinised.

A prototypical, yet "controversial" example is once again the so-called *interruptions* of the patent speech, which can have very different functions (§ 13.4.3) and must therefore be used in a differentiated manner. A mere *conversation maxim* ("avoid interruptions"), as we also state in *the Manual of Medical Communication* (C-MMC), often does not help in practice if its different functions cannot be demonstrated in empirical case studies, which should be followed by practical exercises under observation and evaluation (*shows how*) (§ 13.5-13.6).

The aim is to learn that "interruptions" of the patient's speech are *not* to be avoided *in principle*, but only those that permanently disturb or even prevent the patient's flow of speech and narrative (§ 9, 19).

The differentiated use of *interruptions* or *listener signals* or *active listening* (§ 13.2.1, Fig. 13.1) must become a *routine* through *practice*, which does not necessarily have to be subjected to *permanent* reflection in "mastery" (§ 1, 2, 40). This is where the difference between *theoretical knowledge* and *practical or experiential knowledge* comes into play (Fig. 13.2, cf. § 3.3.6). The *novice* and the *master* may hardly differ in *theoretical (book) knowledge*, but they do in *practical knowledge*. This difference leads to the fact that they can deal with the *conversation maxims*, as they are also formulated in our *manual* (C-MMC),[9] with different degrees of success in real and simulated conversation practice.

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9 In the preceding chapters we have already referred cited to the relevant literature on general conversational maxims (Grice 1975) (§ 7) and on specifically medical conversational maxims (Morgan, Engel (1969/1977) (§ 1, 3, 17) (cf. Appendix of this Chapter). We have developed the teaching concept of specific *medical conversational maxims* at our clinic in many variants, which were finally also included in our *Manual on Medical Communication* (C-MMC), cf. § 3, 13.4.1, 17-23 and e.g. Koerfer et al. 1994, 1996, 1999, 2004, 2008, Koerfer, Albus 2015, 2018, Albus 2022.

In this very practice, *conflicts of maxims* may arise, which have to be resolved contextually, including theoretical knowledge *and* practical knowledge, which can ultimately only be acquired through learning by doing (§ 13.5). Instead of using a manual flexibly as a tool for orientation in conversation practice, it is often strictly "executed" as a *scheme*, due to their *lack of experience* especially by *novices*, in a linear way and step by step, so that the dialogical dynamics of conversations are often lost. Here, the teacher may have to explain the meaning and purpose of a manual in class and, if necessary, intervene in practice or evaluate it later.

As has been pointed out elsewhere, learning goals for medical communication are not to be understood as ("dialogue-grammatical") rules of communication, but as *conversational maxims* that are more or less followed or violated in practice (§ 1-3, 13.4, 40) (cf. Appendix of this Chapter). The maxims are distinguished as *positive* and *negative* maxims and formulated as imperatives only on the basis of their form:[10]

- *Do* x!
- *Avoid* Y!

In practice, conflicts of maxims can easily arise, which then have to be solved on a problem-based basis, i.e. decided on a case-by-case, context-specific basis. Despite an *introduction* of the Cologne *Manual on Medical Communication* (C-MMC) for use (cf. § 17.5), the risk of schematic application remains, especially with novices.[11] The conversational maxims are sometimes strictly interpreted and inappropriately set in re-

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10 For the *forms, functions* and *contents* of the conversation maxims, see the literature cited in the preceding footnote. The conversational maxims correspond with our Cologne manual (C-MMC). These and other general and specific maxims are discussed in the following subchapters and in the empirical analyses in the practical part (IV) of the handbook (cf. Appendix of this chapter).

11 For the further possibilities and limitations of a manual, we refer to Luborsky (1984/88) (Principles of Psychoanalytic Psychotherapy), who made a practicable guide to the handling of his manual, which can be generalised (cf. § 13.4.1). Although on a much more modest level, we can only endorse his appeal: "Alternating reading and practice helps intensive acquisition." We have adopted and commented on his recommendations and guidance (in six steps) (§ 17.5), before moving on to the empirical anchor examples for the *Cologne Manual* in the practical part (§ 18-23).

lation to each other when it comes, for example, to resolving conflicts between apparently *competing maxims*: In both simulated and real conversation practice, novices often have the problem of not being able to decide in good time between the following maxims of conversation:[12]

- *Tolerate speaking pauses*
- *Avoid interruptions*

- *Ensure understanding*
- *Give listening signals*
- *Give empathic feedback*

Choosing the appropriate conflict solutions depending on concrete conversation situations can be taken as teaching challenges and used productively in *manual-based* and *problem-based learning* in a differentiated way (§ 13.4). In the usual *debriefings* (§ 3.5), learners often comment on their own conversation practice that they did not dare to *interrupt*, even though they had *already lost the thread* of the patient narrative. Apparently, they had missed the *fitting moment* for their comprehension question. In the *relevance balance* between listening and ensuring understanding, they had not been able to find any good compromise solutions. The video recording then identified possible points in the conversation where such interruptions could or should be placed.

In these cases, the learners had obviously assumed a wrong understanding or a merely formal category of "interruption" and had also obviously misunderstood the conversational functions of *active listening* in relation to *ensuring understanding*, or at least had not been able to implement them adequately. In these and similar cases, *supportive* conversation maxims could be added (with comments) and discussed in class:

- **Maxim 1**: *Patients should be granted speaking privilege*
  Comment 1: Patients can use this speaking privilege quite freely for narratives, descriptions of their medical history or for questions, objections to a proposed prescription, etc.

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[12] The first two formal-dialogical maxims (on *turn taking*) could be applied dominantly, which we will come back to in a moment. Other maxim-conflicts will be dealt with below.

- **Maxim 2**: *(However) questions of understanding may take priority* Comment 2: In order not to lose the thread, these questions should be asked at the right time to clarify misunderstandings, which increase the risk of unnecessary repair costs at later stages of the conversation.

Similarly, it may be necessary to explain the maxim "Tolerate speaking pauses", as patients may interpret too long a silence as threatening or helplessness on the part of the doctor ("My doctor doesn't know what to do either"). *Silence* is not always best if the patient can expect to receive *empathetic feedbac*k from the doctor after his dramatically told story (§ 19, 20).

If no good *solutions to maxim conflicts* of this kind can be worked out together in debriefings of training or in subsequent seminar discussions (§ 13.5.3), the teacher should, if necessary supported by multimedia teaching aids (§ 13.4.5), return to theory-based learning. If necessary, in further teaching-learning loops, general *theories* on *dialogical communi*cation (§ 7) or specifically on the category of *interruption* (13.4.3) must again be consulted in order to be able to solve problems in maxim conflicts in a *theory-based* way. At a *higher level* in *Teaching-Learning Spirals* (§ 13.3), *new theoretical knowledge* can then lead to *corrections* in further conversational practice, etc.

Based on the *new practical experiences* in dealing with these conversational maxims in simulated or real conversations, new *reflection* phases can be initiated in order to arrive at *creative* solutions to the problem, i.e. an appropriate "dosage", which requires the development of communicative *fitting competence* (§ 1, 3, 6, 10, 17-23, 25). As was shown in a project with a *pre-post design* for continuing education of doctors, an *improvement in communicative competence* can be achieved even after a long period of professional practice, in which an *established* conversational behaviour (*does*) could be significantly changed in the expected direction, e.g. change from *interrogative* to *narrative* interviewing styles. In this way, the patients get a larger share of speech (§ 40, cf. 13.4.5), which they can use for longer narratives and descriptions of their medical histories, etc.

The doctors could obviously learn in the training to appropriately resolve the permanent conflict between competing maxims of the following type, as they are also included in the manual:

- *Encourage patient narratives*
- *Ask the necessary type of questions for detailed exploration of the anamnesis*

After the training, the doctors were obviously able to hold back their typical doctor's questions about the anamnesis until later, if possible, and to let the patients tell their medical history freely and describe their complaints on their own initiative. This has the effect already described by Balint (1964/1988) and Morgan, Engel (1969/1977), that the doctors are provided with the necessary information through the initiatives of their patients, which later only needs to be deepened and differentiated through thematic resumption and supplementary questions by the doctor.

Although the structure and function of narratives leads to a different linear and relevance order, a narrative medicine (§ 9) proves to be more effective and efficient compared to traditional, interrogative medicine. As the combination of qualitative and quantitative analyses confirm (§ 40 cf. 13.4.5), conversations with a narrative communication pattern become only marginally longer, which is hardly significant in relation to the advantage of a dialogical, specifically narrative medicine that allows active participation of the patient.

Results and empirical examples from this project can at the same time be integrated as research findings into *theory-based teaching* (§ 13. 4-6). With such *theory-based learning* processes, in a repeated run through *Teaching-Learning Spirals* (TLS) (§ 13.3), the above differentiated learning goals of the *learning goal taxonomy* (Fig. 13.1) can be justified with the necessary transparency and evidence, according to which the meaning and purpose of *communication training* can only be pursued *within the framework* of biopsychosocial and participatory medicine if one wants to avoid merely mechanical training of rhetorical skills in the use of forms of communication (listening signals, word repetitions, paraphrasing, question-answer patterns, etc.).

Overall, *theoretical knowledge* and *practical acting* plus *new knowledge* acquired *while* acting (Fig. 13.2) must be imparted iteratively in teaching in order to prevent or at least minimise the risks of a merely schematic application of, for example, a manual on medical communication. The schematic, perhaps even inflationary use of *listening signals* (hm, yes, okay, etc.) or mechanical *repetition of words* or *excessive silences* in mere skills training can quickly lead to an "overdose", which considerably disturbs communication or even jeopardises the doctor-

patient relationship altogether, for which enough empirical examples of poor conversation practice can be cited.

As we will show with many *anchor examples* of theory-based and problem-based learning and evaluation, a *critical comparison* must take into account that even in the real situation between real doctors and real patients *more or less successful cases* occur, which are to be differentiated according to *poor* and *good* conversational practices, which can be used for further theoretical and practical teaching purposes in the sense of *model learning* (§ 13.4.4).

Beyond the first examples in this chapter (§ 13.4.3, 13.5.2), we refer to the abundance of empirical examples, which are analysed in the manual-based part along the six basal conversational functions differentiated there (§ 13.4.1) and commented on for teaching purposes. For teaching as a whole, the *didactic-methodical* concepts will be presented in an overview (§ 13.2.4), followed by the presentation of the *Teaching-Learning Spiral* (§ 13.3) which will later be differentiated for the longitudinal, interdisciplinary *Cologne Curriculum Communication* (§ 14) with reference to all subjects involved.

13.2.4 Didactic-methodical concepts: overview

Before we go into further detail in the practical part on the intended changes in doctors' conversational *behaviour* within the framework of the higher-ranking goal of *biopsychosocial* patient care, our *didactic-methodological* concepts should be presented, which are first summarised here in a tabular overview of *medical communication didactics* (Table 13.2).[13]

As is already clear from the overview, we also use the general concepts of medical didactics in our courses, as they have become established in medical education and training. What has proven itself for *medical didactics as* a whole will be concretised and specified below for a specifically *medical didactics of communication.*

For example, the proven *problem-oriented* learning should also be used for medical communication didactics by *contrasting* unsuccessful with successful cases of conversation ("best practice") (§ 13.4), without this difference having been explicitly marked beforehand in the lessons.

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[13] The entire *Cologne Curriculum Communication* (CCC) is presented below in detail (§ 14) over all semesters as a *longitudinal spiral curriculum.*

Didactics and methodics	Features - Examples
Theory-based	Biopsychosocial medicine, relationship theory, communication theory, models of decision making, etc. (§ 4, 9, 10, 13.4.3)
Competency-based	Competences and attitudes in instrumental action (surgery, medication) and communicative action (cf. § 1, 2, 3, 14)
Manual-based	Manual for Medical Communication (and BBN) (C-MMC) (cf. § 17-23)
Problem-oriented	Transparency vs. manipulation, interrogation vs. narration, confrontational vs. tangential interviewing (cf. § 2, 3, 7, 9)
Research-oriented	Controversial issues of "good" medical communication: interruptions; open vs. suggestive questions, confrontational vs. tangential interview stiles etc. (cf. § 13.4.3)
Case- and practice-related	Practical relevance in the clinic (ward rounds) and GP practice or specialist practice (cf. § 18-25)
Transcript-based	"Transcription" of recorded D-P-communication, specific "best practice" examples (cf. § 17-23)
Multimedia-based	D-P-Video conversations (with specific clinical pictures), information texts, transcriptions, graphics, video conferences with real patients, etc. (cf. § 18-25)
Training-oriented	Practice talks with real and simulated patients, trial acting, multimedia training programme (C-MTP) (cf. § 13.4.5)
Group and self-learning oriented	Lecture ("frontal teaching"), practical course ("group teaching"), tutorial, "homework" (reading, exercises)(cf. § 14)
Self-reflexive and self-evaluative	Role play, simulation, multimedia training programme (C-MTP), evaluation (§ 4, 13.4)
Exam-oriented	Simulation patients, evaluation: OSCE, feedback, Cologne Evaluation of Medical Communication (C-EMC) (cf. § 13.5-6)

Table 13.2: Concepts of medical communication didactics

Only in this way can the active and independent problem-solving of the students also be promoted in medical interviewing, which should by no means follow a certain *pattern* (Scheme X). In this respect, our *Manual on Medical Communication* (C-MMC) (§ 13.4) should be used as a *structuring aid* both in the classroom and in self-learning, which should be used flexibly and case-specifically in the sense of problem-oriented learning.

The methodological approach of empirical conversation research already described in the introduction (§ 1, 2) is to be linked with our didactic approach in such a way that in the case- and practice-related teaching and in the self-learning we use real doctor-patient conversations as a basis, which the learners either conduct themselves with real patients in live situations, which are modelled on a workplace situation, or which have already been recorded directly at the doctor's workplace in the ward round or GP practice.

These recorded conversations were processed in a multimedia way so that they can be used as learning occasions for conversation reflections or own intervention exercises (in a multimedia programme), which we will come back to in a moment (§ 13.4.5).

How the didactic-methodical concepts work together in an integrative curriculum will be described below in a progressive *Teaching-Learning Spiral* (TLS) (§ 13.3) in which the learners can expand their communicative competences at ever higher learning levels and finally prove them in the evaluation. Subsequently, the essential learning concepts of medical communication didactics will be presented in detail.

13.3 Teaching-learning spiral (TLS)

Our teaching programme as a whole is structured as an integrative *Spiral Curriculum Communication* (SCC) in which students' clinical and communicative competences are systematically related to each other in *circular learning processes* and gradually built up and expanded.[14]

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[14] Cf. § 14, and the following exemplary references covering a longer period of development: Murrhardter Kreis 1995, Kurtz, Silverman, Draper 1998, Harden, Stamper 1999, Koerfer et al. 2000, 2008, Fragstein et al. 2008, Silverman 2009, Koerfer, Albus 2018, Bachmann et al. 2022, Venktaramana et al. 2022.

13.3.1 Learning loops: Theory–reflection–training–evaluation

In recurring thematic loops, old and new knowledge and action competences are tested and examined on various learning occasions at ever higher learning levels (Box 13.5), leading from preclinical to clinical training and into the practical year, and finally being continued in advanced training.

Box 13.5 Features of a spiral curriculum

1. *Topics are revisited*: Students revisit topics, themes or subjects on a number of occasions (...) They may revisit themes, such as clinical skills, or medical ethics. They may return to generalizable and transferable skills such as management or communication.
2. *There are increasing levels of difficulty*: The topics visited are addressed in successive levels of difficulty (...)
3. *New learning is related to previous learning*: New information or skills introduced are related back and linked directly to learning in previous phases of the spiral (...).
4. *The competence of students increases*: The learner' s competence increases with each visit, until the final overall objectives are achieved. This progressive gain in competence can be tested through the assessment procedures.

Harden, Stamper 1999: 141

The *spiral curriculum* at our clinic already begins in the first semester (§ 14.2), in which basic communication competences (such as *active listening*) are taught on the model of *biopsychosocial* medicine (§ 4, 13.2), which are then gradually expanded. The courses are interlinked in terms of content and each follows the concept of *problem-oriented* learning (POL) (§ 13.4.2), which moves at each learning level in a multi-phase teaching-learning spiral of *theory*, *reflection*, *training* and *evaluation*.

Depending on individual and institutional learning conditions (group size, prior knowledge, learning level, learning time, learning pace, etc.), the entry into this teaching-learning spiral can be chosen to be more theory-based or more practice-based. As marked in the illustration (Fig. 13.3), the starting points of the learning loops can be set differently:

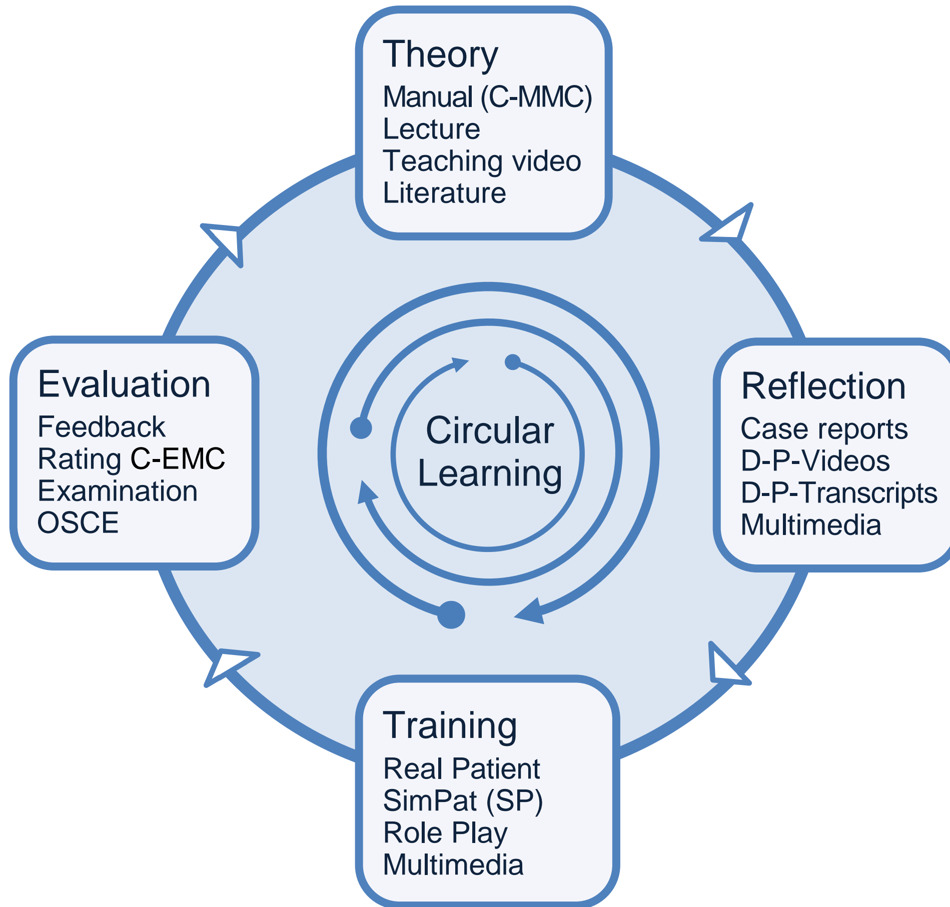

Fig. 13.3: Teaching-Learning Spiral (TLS)
(modified on Koerfer et al. 2004, 2008, Koerfer, Albus 2018)

- Depending on the course of the learning process, in which different problems can occur, the learning loops do not have to be stepped through continuously (theory, reflection, training, evaluation).
- If problems arise during training, it is possible to go directly to a theory-based learning phase, for example to discuss possible solutions to conflicts of maxims, as described above (§ 13.2.3) and taken up again as an example (§ 13.4.3).
- Likewise, transitions from training to comparative reflection can be chosen, in which problems can be illustrated with multimedia processed D-P communication (§ 13.4.4-5).

At any time, the *Cologne Manual of Medical Communication* (C-MMC) can be consulted (§ 13.4.1), which every learner always has at hand, who can consult it or critically question it and thus initiate a theory-

based learning phase, etc., in which the manual is supplemented, modified or even revised.

As a rule, at our clinic, after a short *theoretical* introduction based on selected research literature, our *Cologne Manual* (C-MMC) (§ 13.4.1) is taken as the starting point for further learning processes. The first *reflection* phases are often initiated by case reports or video conversations from our *Multimedia Training Programme* (MTP) (§ 3.4.5), which offers both *positive* ("best practice") examples and *negative* ("poor practice") examples that can be used for c*omparative* learning (§ 13.4.4).

The learning progress achieved in the *reflective learning* phase can then be deepened in specific *training* phases in conversations with real patients (RP) or simulated patients (SP) (§ 13.5) as well as in self-reflective *role play* (RS) (Koerfer et al. 1996, 2008, Koerfer, Albus 2018). The practice conversations are then each subjected to an *evaluation* (§ 13.6), which, if necessary, is given from an experiential *feedback* of the patients (SP, RS) as well as the critical observation perspective of the participants and lecturers, the rating of which is in turn based on the *Cologne Manual* (C-MMC) or the *Cologne Evaluation of Medical Communication* (C-EMC) (§ 13.4.1, 17-23), which is available to all participants for checking.

13.3.2 Circular learning from basic to advanced levels

Depending on the current learning level, further pieces of theory or new practice cases with subsequent *reflection*, *training* and *evaluation* phases are then drawn into the teaching-learning spiral, which is run through in extended learning loops at a *higher learning level* in each case, whereby certain topics (biographical narrative anamnesis elicitation, BBN, SDM, non-adherence, forms of defence, etc.) are taken up again, modified or supplemented and deepened (Table 13.2).

In repeated successful passes through the teaching-learning spiral, learners can expand their active *knowledge* through theories, change their *attitudes* through reflections and acquire *communication competences* through conversation *exercises*, which they can competently apply to *real* patients (RP) and *simulated* patients (SP) with sufficient *fitting accuracy* (§ 2, 3, 17). The acquired competences are in turn *evaluated in* specific examination procedures (OSCE) (§ 13.6, 40-43), combining objective and subjective assessments.

In the *ideal* case of *higher-level learning*, in which (in the sense of George Bateson 1985) one can also perceive one's own *changes* in knowledge, attitude and behaviour, individual participants will self-reflectively notice their individual learning progress in their own conversational practice and bring these self-perceptions to the learning group accordingly (Koerfer et al. 2004, 2008, Koerfer, Albus 2018) by formulating, for example, the following types of self- and behavioural change:

- I can listen better now
- I have become more mindful
- I am less impatient
- I am less prejudiced
- I take a more structured approach

Such self-knowledge on the part of the learners, which can of course also be subject to self-deception in the sense of overestimating oneself, must in turn be checked in further evaluation procedures (video analysis, rating, C-EMC), which refer not only to "remembered" but also to real ("demonstrated") conversational behaviour (*shows, does*) (§ 13.2.3) (cf. § 40-43). Many a *self-assessment* ("I let the patients talk") had to be *corrected* in the *external* observation when, for example, a high number of *interruptions* became manifest in the video recording. Depending on the result of the objective evaluation, corrective, modifying or reinforcing learning processes are then set in motion, etc., whose intermediate statuses can then be further evaluated.

13.3.3 Learning module "Dialogical Medicine" (DiaMed)

Many years of experience have resulted in a specific *Cologne Medical Communication Training* (C-MCT), in which the *manual-based learning* presented below (§ 13.4.1) is only the introduction to the theory phase of the *Teaching-Learning Spiral* (TLS) (§ 13.3.1), followed by the other circular learning loops (reflection, training, evaluation and theory again, etc.). As described above, the learning spiral does not necessarily have to be followed in a linear progression, but can be realised by *flexibly switching* from reflection or training phases to the theory phase depending on specific problem-based learning occasions.

Accordingly, the learning units presented below can be used in class either in toto or in sub-units, depending on requirements. We are only

providing a brief, exemplary overview of the entire "Dialogic Medicine" (DiaMed) learning module here, which will be presented in detail later (§ 13.4).

Before we differentiate the process through further learning loops up to evaluation (§ 13.6), we would like to briefly introduce the topic-specific learning units (LU) that we have gradually developed in our teaching in order to be able to integrate and consolidate them throughout the entire communication curriculum as part of a comprehensive Cologne Learning module "Dialogic Medicine" (C-LM-DiaMed). An overview differentiates between 12 selected learning modules on a specific dialogical medicine (DiaMed) (Box 13.6) and lists the relevant chapters from the handbook (right-hand column) in which the corresponding topics are dealt with.

Initially, only the structures and functions of the *learning units* will be illustrated here, which will be differentiated with varying depth of presentation and within the framework of our DiaMed learning module (§ 13.4). In this learning module, a distinction is made between larger and smaller learning units, which are realised with different *scope* and *depth* depending on the *teaching purpose* and *learning level.*

Accordingly, different choices will be made from the learning units and their sub-units in the first semester tutorial than in the 4th clinical semester (§ 14), in which the *unity of clinical reasoning and communication* (postulated in § 13.1.3) can already be largely ensured on the basis of *developed* competences.

For example, parts of learning unit 1 ("Biopsychosocial medicine and relationship models") (Box 13.6) can already be used in pre-clinical studies, but the use of learning unit 7 ("Decision Making: SDM") or 8 ("Psychotherapeutic competences") or 12 ("Special competences") is reserved for later semesters.

The selection from the DiaMed learning module is made according to the *degree of difficulty*, because *empathic* communication takes on a *new quality*, for example in dealing with difficult patients (§ 34) or with physically chronically ill patients (§ 29) or dying patients (§ 38), etc. The acquisition of communicative competences as *active listening* (§ 19-22) must be promoted throughout all differentiation, which can already be trained in our *Cologne Curriculum Communication* (CCC) (§ 14) in the preclinical phase in role play or through the use of Simulated Patients (SP) (§ 13.5, 41).

Box 13.6		Learning Module "Dialogical Medicine" (DiaMed)	
LU		Title	Chapters
1	MR	Biopsychosocial medicine and relationship models	4, 7, 8, 10, 19-2
		a. The mind-body problem	4, 8, 10,
		b. Paradigm shift to biopsychosocial medicine	4, 8, 10, 13
		c. Relationship and communication models	4, 7, 8, 10,
		d. Case study	4
2	EM	Everyday talk and medical communication	1-3, 7, 9, 17-25
		a. Life world and medicine	1-3, 7, 9, 17-25
		b. Asymmetry: Institutional Communication	5, 7, 9, 17-25
		c. Dialogical communication and medicine	7, 9, 10, 17-25
3	AL	Active listening and verbal Intervention	3, 8, 9.4, 19.3
		a. Speaker-listener roles	2.2, 3, 7, 19-22
		b. Conversational maxims and maxim conflicts	2.2, 3, 7, 19-22
		c. Interrupting speech	3, 9.4, 19.3
4	NM	Narrative medicine	9, 13, 19-22, 25
		a. The psychoanalytic conversation	2, 9, 13
		b. Narration and association	9, 13, 19-22, 25
		c. Cooperative narration	9, 19-22, 25
		d. Evaluation of life narratives	9, 19-22, 25
5	EC	Empathic communication	3, 9, 20, 21, 24, 25
		a. Theory	3, 9, 20
		b. Teaching	3, 9, 20
		c. Deficits and Practice	8, 19, 20, 21, 24, 25
7	DM	Medical decision-making	8.4, 10, 22, 24-29
		a. Theory (SDM)	8.4, 10
		b. Practice	22, 24-29
		c. Prescription talk	26
8	PC	Psychotherapeutic competences	14, 15, 16, 29-39
		a. General practice and psychooncolgy	14, 16, 42
		b. Psychocardiology and Diabetes education	14, 29
9	FM	Forms und functions of metaphors	11, 19-22, 25
10	NV	Nonverbal interaction and communication	12, 18, 25
		a. Theory and Coding	12
		b. NV and Relationship Building	18, 25
11	IP	Interprofessional Competence	2, 6
12	CS	Competences in specific fields	5, 14, 24-39, 42-43

The theoretical foundations (*communication models, relationship models*) and didactic concepts (*competence development, learning goals*) for the entire DiaMed learning module are set out in detail in Part I and Part II of the handbook, to which specific reference can be made in lessons in the individual learning units (literature, problems, questions, text extracts, illustrations, etc.).

The various learning units of the DiaMed learning module can be used in different learning loops of the *Teaching-Learning Spiral* (TLS) (§ 13.3.1) and *interlinked* with each other if certain *problem-based questions* arise in the course of the lesson, for example during *comparative learning* in the *reflection* phase (*poor* vs. *good* communication) (§ 13.4.4) or later directly during practical conversation *training* (“learning by doing”) (§ 13.5). Typical learning processes with *problem-based* questions are exemplified below (§ 13.4.2). First, *manual-based* learning (13.4.1) should be carried out, which can serve as a condensed basis for theory-led learning processes.

13.4 Cologne Medical Communication Training (C-MCT)

The teaching of medical communication follows specific didactic-methodical concepts, which will be presented here in general terms and later elaborated in the overview of the entire *Cologne Curriculum Communication* (CCC) (§ 14) and in the Practical Part (§ 17-23). Our *Cologne Medical Communication Training* (C-MTC) is presented below in a series of teaching concepts (§ 13.4-13.6), which are anchored in the *Teaching-Learning Spiral* (TLS) (§ 13.3). Although different learning phases can be distinguished there (*theory, reflection, training and evaluation*), the boundaries are fluid in practice.

For example, problems can arise in the training phase that do not lead directly to the evaluation phase, but to a theory phase in which a controversial category such as "interrupting the patient's speech" must be clarified before the practical conversation training can continue.

We begin with the presentation of our Cologne Manual of Medical Communication (C-MMC), which is an essential component of Cologne teaching in all learning phases, especially as we have developed an evaluation instrument (rating) analogous to the manual, which can then be used in the examination (§ 13.6, 41).

Overall, the *transparency* principle applies that not only the teachers have the learning goals in mind, but also the learners, so that they can recognise and monitor their *own learning progress* (in the sense of George Bateson 1985). It also applies to the examination (OSCE) (§ 40) that only what has been taught transparently beforehand is tested.

13.4.1 Manual-based learning

The didactic-methodical basis for teaching at our clinic is the Cologne *Manual of Medical Communication* (C-MMC) (Overview: Fig. 13.4), which we developed for training, continuing education purposes and whose first edition (1998) has since been revised several times (Koerfer et al. 1999, 2004, 2008, Köhle, Obliers, Koerfer 2010, Koerfer, Albus 2018).

The *manual* is designed in the form of a *Leporello* and is intended to be used as a "study companion in pocket format", which can be applied in a differentiated way from first semester tutorials to continuing medical education in basic psychosomatic care (cf. § 15,16, 42, 43).

It is evident that such a *pocket-sized* manual cannot reflect what needs to be taught in teaching with a complex *learning goal taxonomy* (§ 13.2) and an extensive catalogue of learning goals (§ 2, 3). In teaching practice, therefore, if possible, the entire multimedia teaching material should always be available (§ 13.4.5), which can be called up on the basis of current learning occasions and problems and which contains the corresponding empirical anchor examples (§ 17-25).

Furthermore, the *Cologne Manual of Medical Communication* (C-MMC) serves as a structuring template for the *Multimedia Training Programme* (MTP) (Koerfer et al. 1999, 2008, Koerfer, Albus 2018), which is available for individual applications and in group teaching (§ 13.4.5, 13.5.2).

Linear structure and application instruction

The manual is divided into a general part on medical interviewing (front pages) and a special part on the communication of serious diagnoses (BBN) (back pages), which can only be discussed here in passing (Köhle et al. 2010). Both sections are further subdivided into 6 steps/functions (Fig. 13.4), which are also realised in this sequence (1-6) in an *ideal-typical* course of conversations.

All 6 or 12 main functions of the manual are subdivided into further sub-functions which are to be understood as *conversational maxims* (§

13.2; cf. § 3.4, 7.3, 9.3, 17.2; nonverbal: cf. § 12, 18) and which have been operationalised as far as possible down to the *behavioural* level of medical communication and provided with exemplary anchor examples for individual conversation steps and functions.

	FUNCTIONS	6 2022
Cologne Manual & Evaluation of Medical Communication	1 Building a relationship	□□ 04
	2 Listening to concerns	□□ 10
	3 Eliciting emotions	□□ 08
	4 Exploring Details	□□ 12
	5 Negotiating procedures	□□ 12
	6 Drawing conclusions	□□ 04
1 1998	EVALUATION	□□ 50

Fig. 13.4: Cologne Manual of Medical Communication (C-MMC)
and Cologne Evaluation of Medical Communication (C-EMC)
(selection: first page) (for further details see § 1-3, 17-23) (see Appendix of this Chapter)

As explained above, all the basic conversational functions of our manual and the sub-functions can be transformed into specific learning goals and conversational maxims, which we have exemplified in extracts from the hierarchy of learning goals (§ 2.3, 13.2).

Handling the manual. For further opportunities and limitations of a manual we refer to Luborsky (1984/88) (*Principles of Psychoanalytic Psychotherapy*), who made a practicable guide to the handling of his manual that can be generalised in all 6 learning stages and transferred

to our learning setting (Box 13.7). Even if at a much more modest level, we can only agree with his appeal: "Alternating between reading and practice helps to intensively acquire the manual and its essential contents." At this point, we adopt Luborsky's recommendations and instructions (in Box 13.7) and comment on them later (§ 17.5), before moving on to the *empirical anchor examples* of the Cologne Manual (C-MMC) in the practical section (§ 18-23).

Box 13.7 Handling the Manual
The recommendations for learning and using the manual are based on the proven principles of learning by doing (...) The clinician seeking to acquire this psychotherapy manual, whether for practice or research, should consider the following stages of learning: 1. Read the manual. 2. Treat some patients and try to apply the manual. 3. Read the manual again. 4. Treat more patients and try to apply the manual. 5. Check with a therapist colleague or with a supervisor to what extent you are really following the manual. 6. And so on until a satisfactory level of knowledge and treatment skills is achieved. Alternating between reading and practice helps to intensively acquire the manual and its essential contents.

Luborsky 1988: 21

Just as, according to Luborsky (1988) (Box 13.7, stage 5), *supervision* is indispensable as the fifth stage in the application of a manual in psychotherapy, good academic teaching and later ongoing continuing education are also necessary in communication training for medical care practice. Although a manual (like this handbook) can be used for self-learning, it cannot replace the *experienced teacher*, who can not only teach *creative* application, but also *recognise* and *correct* inappropriate applications in good time before *incorrect* conversational behaviour can become *established*.

Supervision and Teaching. The *functions* (for supervision) of a teacher or leader of a learning group were previously differentiated, which consist

of promoting the self-reflective meta-competences of the learners on several levels of (self-) observation of the conversation practice (§ 3.3). In the initial phase, it is important that the teacher communicates the challenges of using the manual, i.e. explains the opportunities and limitations.

The teacher's own teaching competences are challenged by the fact that he/she can immediately *recognise the mistakes* and *deficits* in the exercise conversations and, if necessary, promote reflection on the better alternatives not only theoretically but also practically using empirical examples. The teacher must have the anchor examples for the manual at hand in order to be able to stimulate the *comparative learning* processes (*poor* versus *good* communication) of the learners. Success in *comparative model learning* (§ 13.4.4) can then manifest itself again in the improvement of the learner's own conversation practice.

We will take up these *anchor examples* again in the practical part (§ 17-23) and supplement them with empirical examples from *real* conversations (*does*). It should be noted at this point that real conversation practice rarely follows such an *ideal-typical*, *linear* course through the 6 steps/functions, but is realised in numerous variants that are determined by the current purposes of the consultation with specific focal points (taking anamnesis, exploring details, decision-making) (§ 17-22).

After all, a manual should not only *guide* conversation practice, but must also *prove itself* in it. Here we can draw on over two decades of *experience*, in which only a few modifications have proved necessary (e.g. Koerfer et al. 1999, 2004, 2008, Koerfer, Albus 2018). It is much more important to apply the manual appropriately in the practice medical communication, where the *dynamics* of real conversations must be taken into account, which can hardly be captured by the necessarily *linear* structure of a manual.

Manual as an orientation and reorientation aid. As we will see in the practical part of the handbook (IV, § 17-23), a manual on medical communication should not be misunderstood as a *scheme X* for doctor-patient communication that is to be strictly "executed", but should be used as a structuring and orientation *aid*, especially for beginners, who are to be given "reference points" for the first practical steps.

However, as has been shown in continuing medical education (Koerfer et al. 2004), such a manual can also serve as a *corrective aid* for "seasoned" practitioners for whom certain routine techniques of inter-

rogative interviewing have become all too entrenched in everyday practice (§ 13.3.2). Thus, a *Manual on Medical Communication* can serve both as *orientation* and *reorientation.*

Dynamic conversation and maxims

The *dynamics* of real D-P conversations, which are reflected in a complex *dialogue* structure, cannot be adequately represented with a linear format such as a *conversation manual.* This difference cannot be made a topic often enough in teaching, especially to novices who have a tendency towards a *strict sequence* of the 6 steps/functions. Even the image of the steps represents a linear sequence, with which even "1 step back" can be perceived as a *deviation* and *disruption* in comparison with an *ideal* sequence structure.

Therefore, in practical problem cases, we should not be talking about 6 conversational *steps*, but rather 6 conversational *functions*, which - with the exception of the greeting and farewell phases, of course - are perceived in a *dynamic* that may appear - metaphorically speaking - as "criss-cross" on the *manifest surface* of the conversation.

However, more detailed analyses of the conversation reveal the underlying conversational structures that the two interlocutors have built up following an *inner logic* of their conversation, which will be reconstructed in the empirical part relating to the manual (§ 18-13).[15]

Hexagram for dynamic representations. In order to take the dynamics of conversations into account, we have cancelled the linear form of presentation of the manual in the circular illustration of a *hexagram* (Fig. 13.5). In the hexagram, the *main directions* (outer circle 1-6), but also *backward* movements (inner circle) and *cross-connections* between the 6 conversational functions can be considered, which manifest themselves both in (*ideal-*) *typical* and *individual* conversational processes, in which

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15 Of course, there is also the extreme of "chaotic" conversations, which obviously lack a structuring performance by the doctor, which can no longer be attributed to a *dynamic flow of conversation*, but requires a critical analysis of the conversation, which in turn must be based on theories and models of good medical communication in the evaluation (Koerfer et al. 1994, 2010, Koerfer, Albus 2015, 2018, and § 1-3, 17, 40).

the interlocutors fulfil general conversational functions according to their asymmetrical (social and interactive) roles, as it were with "personal" styles, interests, preferences, etc.

When differentiating between ideal-typical and individual conversation processes, it is important to consider this: For all their professionalisation, *doctor-patient* conversations are also fundamentally no different from *everyday talks*. Similarities and differences between everyday talk and medical communication, which are also important for teaching, are systematically dealt with in the learning module "Dialogical Medicine" (DiaMed) (§ 13.3).

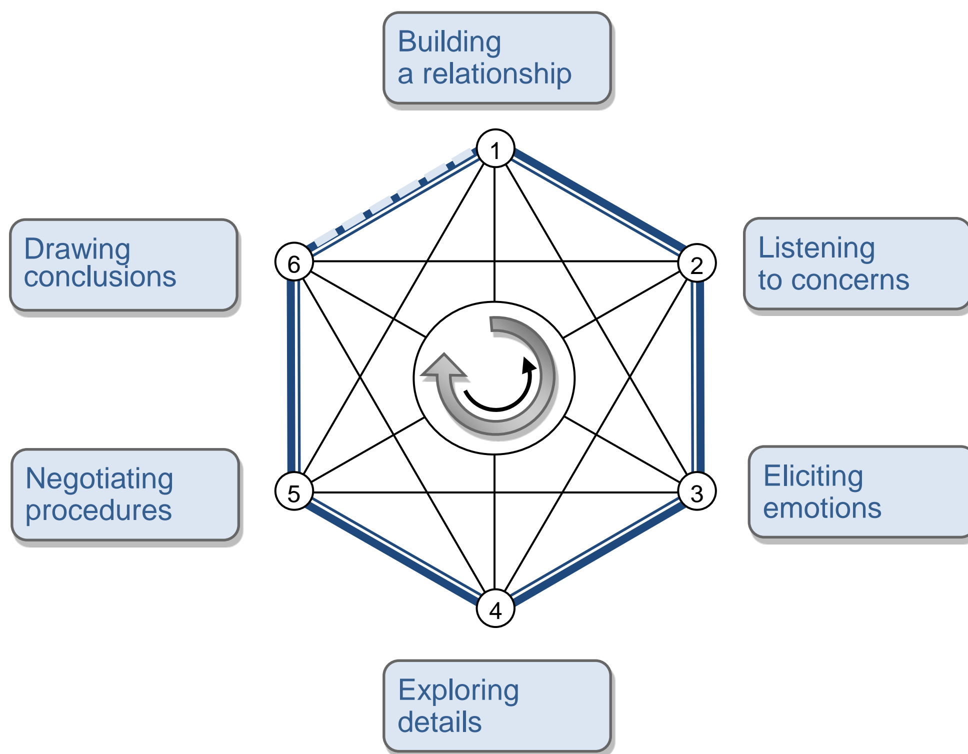

Fig. 13.5: Hexagram of medical communication
(mod. on Koerfer, Albus 2018: 765)

This hexagram representation captures the main structures in the development of a conversation, which are rarely or never realised in the assumed ideal-typical sequence (outer ring 1-6). The dotted line/edge marks the transition from step/function (6) of one conversation to step/function (1) of a subsequent conversation.

The hexagram can be used for specific teaching purposes under these conditions clarified in class: Conversations between doctor and

patient also always follow an *overall structure*, which is subject to the general, ineluctable rules of communication in the sense of a "dialogue grammar", so to speak. Through the dialogue-based exchange (of topics, arguments, narratives, suggestions, etc.), communication will always take on an *individual* form as the dialogue partners generate individual structures that manifest themselves in their own "handwriting".[16]

Specific Hexagrams. In the hexagram (Fig. 13.5), *individual* communication structures and dynamics of real conversations can be localised that deviate considerably from an ideal type of conversation. For example, a patient can confront the doctor with their *emotions* (function/position 3) right at the beginning or demand a certain *treatment* (position 5) right at the start of the conversation, for which many examples (§ 19-25) are given in the practical section (IV) of the handbook, such as when a patient begins the conversation with the request for a "gastroscopy" (§ 19.8).

In order to take account of the *dynamics* of conversations, we have cancelled the *linear* form of presentation in the manual in the *circular* illustration of a *hexagram* (Fig. 13.5), which can be used in class to subsequently mark and explain the diverse, dominant structures of conversations (traditional blackboard picture, PowerPoint, multimedia) (§ 13.4.5). The course of the conversation in an empirical example, which will be analysed in detail with its dramatic narrative (§ 19), can be represented as in the *specific* hexagram (Fig. 13.6).

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16 If metaphorical expressions are (or should be) used in the lesson for clarity, this should perhaps be added: The provisional labels ("dialogue grammar", "handwriting", etc.) are not intended to deny that general structures of communication experience a specific form in *institutional* contexts, which are due to the specific institutional functions and forms (cf. Ehlich, Rehbein 1977, Koerfer 2013, Scarvaglieri 2020, Ehlich 2020, 2022) (cf. § 2). These are specifications insofar as we do not "take a medical history" in everyday conversations, but we do tell our medical histories and seek, accept or reject the advice of competent dialogue partners when making decisions, etc. Similarities and differences between everyday talk and medical communication, which are also important for teaching, are systematically dealt with later (§ 13.4.3).

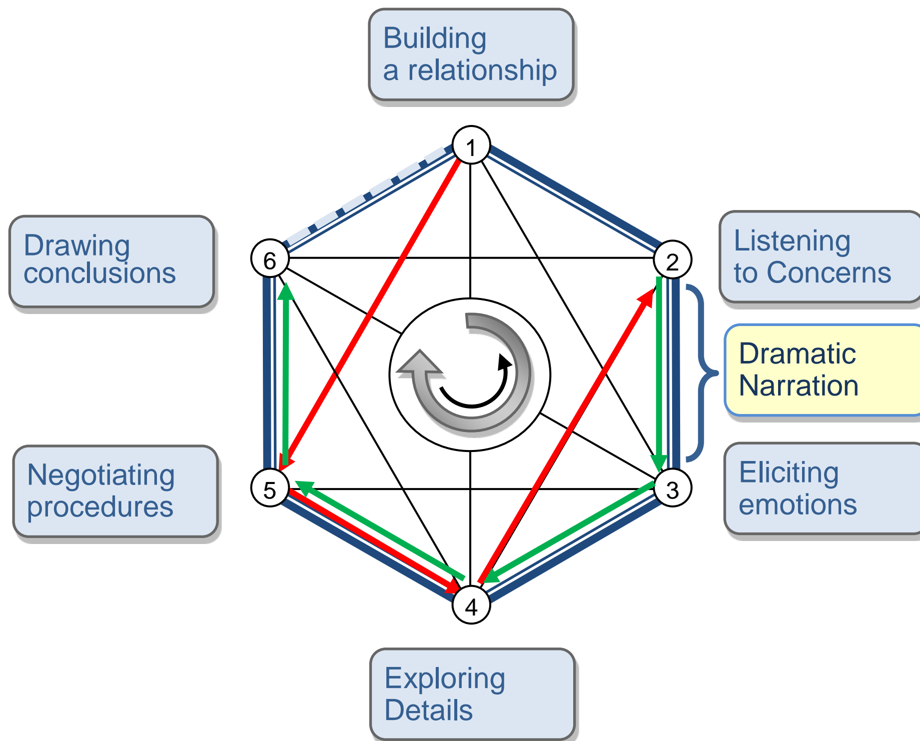

Fig. 13.6: Hexagram of medical communication:
Individual conversation structure (main steps) 1-5-4-2 (red) 2-3-4-5-6 (green)
(Cf. detailed conversation analysis in § 19)

In addition, for certain teaching purposes, we have made further illustrations for certain subtypes of follow-up conversations in which focal points (e.g. on the functions *Exploring details* or *Negotiating procedures*) are taken into account (§ 17, 21, 22).[17]

Manual maxims and meta maxims. When presenting and using a manual, every opportunity should be taken to illustrate basic functions of

17 The complex dialogue structures should initially be worked out by the students in class as independently as possible in the sense of *problem-based* learning (§ 13.4.2), which should be promoted through comparative learning using empirical D-P examples (§ 13.4.4). If learning time is short, this sustainable learning can and must be accelerated through theory-based learning impulses. Hexagrams that have already been "filled in", in which the manifest basic structure of individual conversations is already depicted, can also serve this purpose. Here too, it would be better if learners could enter their findings into hexagrams independently and thus differentiate between the various conversations. We will come back to the problem (of sustainability versus speed in learning) through a dictum of Immanuel Kant (§ 13.4.2 and 13.4.4).

medical communication by means of *context-specific examples*: This includes, for example, that the establishment of a *relationship* cannot, of course, be completed with the first steps, and likewise that *active listening* is a continuous process of communication through all conversational functions, even if the decision-making process already appears to be completed.

If specific conversational maxims conflict (e.g. *allowing talking* versus *interrupting*), higher-ranking *meta maxims* (or super maxims) must be applied, which must be formulated independently of the concrete manual, because (in the long run) they are to be derived from and justified by a *theory of good D-P communication* (Koerfer 1994, 2008, and Handbook § 1-3). We have provisionally compiled some of the super maxims here (Box 13.8), which will later be differentiated and expanded for the "Dialogic Medicine" (DiaMED learning module.

Box 13.8 Manual Maxims and Supportive Super Maxims (Examples)

Manual Maxims

1 Avoid interruptions
2 Allow a free choice of topic
3 Ensure understanding, etc.

Super Maxims

A In D-P communication, the doctor should grant the patient speaking privileges
B The patient should be able to use this speaking privilege to freely choose topics according to their interests.
C In the event of conflicts about the right to speak, the doctor should allow the patient to have the floor in case of doubt.
D Questions to ensure understanding have priority
E Interruptions are permissible if the understanding of the patient descriptions, reports, narratives, etc. is in danger of being lost, etc.

Depending on their status and function, these *super maxims* can be labelled differently from the manual (e.g. with letters or Roman numerals), collected in class according to problem-based learning occasions (§ 13.4.2) and added to the manual as a *supportive mind set* with higher-ranking maxims.

In group lessons, such *supportive super maxims* should be worked out independently in group work where possible. If there is a lack of learning time, the learning process can be accelerated by the teacher's preliminary work. Super maxims also deal with communication competences that are required in a more *psychotherapeutic* setting (Box.13.6: UE 8+12) (§ 29-34, 36-38), for example when dealing with *aggressive*, *depressed* or *anxious* patients and their sometimes *serious illnesses* or when communicating with the *dying*.

13.4.2 Problem-based learning

The improvement of medical communication cannot be achieved by the mere reception of handbook knowledge, but only through active forms of learning in practice contexts. In these *real* practice (*does*) or simulated practice contexts (*shows*), a self-reflective understanding of the problem must be developed, in which the *knowledge* ("knowing that") and *competences* ("knowing how") of the learners must alternately complement and prove themselves.[18]

This requires complex learning processes that can be both *knowledge-based* and *action-oriented* ("learning by doing"). This imparting requires a reform of traditional, purely knowledge-based teaching, which can hardly prove to be purposeful even in the case of communication education. The mere acquisition of handbook knowledge is not sufficient as long as it is not tested in practical application.

Self-directed problem-solving

It is no coincidence that the approach of *problem-oriented learning* (POL) has become established in the long reform discussion on efficient training in medicine and has found international dissemination as *problem-based learning* (Norman, Schmidt 1992, Barrows 1994, Koerfer et al.

[18] We refer again to the problematic distinctions in Miller's pyramid model, which we had modified into a pillar model (cf. § 13.2.). Subject to the reservations discussed there, we stick to his terminology as far as possible because it has become established in medicine (cf. Park 2015, Cruess et al. 2016, Venktaramana et al. 2022, who base their extensive review on Miller's (1990) learning pyramid). The following is based on the description of problem-based learning in Koerfer et al. 2008, Koerfer, Albus 2018.

1994, 1999, 2008, Moust, Bouhuijs, Schmidt 1999, Antepohl, Herzig 1999, Davis, Harden 1999, Baile, Blatner 2014, Trullas et al. 2022). In the meantime, problem-based learning has also been widely applied at local universities and has been tested in a differentiated way at our Department of *Psychosomatics and Psychotherapy* since the mid-1990s (Köhle et al. 1997, 1999, 2003, Obliers et al. 2002, Koerfer et al. 2008, Koerfer, Albus 2018). In many respects, the concept of problem-based learning requires an overcoming of traditional teaching, which was organised according to individual subjects and offered canonised teaching material primarily in the form of the lecture: In *lecturer-centred* teaching, which was delivered "ex cathedra", as it were, students were led to a *passive* learning attitude, which was essentially characterised by the reception of *encyclopaedic* bodies of knowledge as well as *standardised*, subject-specific task solutions, to which hardly any alternatives were offered for discussion.

In contrast to this traditional teaching, *problem-oriented* learning aims to achieve a *curricular* integration of *interdisciplinary* learning content and learning goals that promote *active*, *independent* learning on *exemplary problems,* which, with a corresponding *transfer of learning,* should prepare later *problem-solving behaviour in* medical practice (Wissenschaftsrat 1992, Barrows 1994, Murrhardter Kreis 1995, Harden, Davis 1998, Moust et al. 1999, Antepohl, Herzig 1999, Koerfer et al. 2008, Baile, Blatner 2014, Koerfer, Albus 2018, Trullas et al. 2022). Such problem-solving behaviour presupposes the self-critical willingness and ability to engage in "lifelong learning" (§ 6), in which uncertainties in the interaction of knowledge and action are a challenge for new attempts at problem-solving.

The fact that problem-based learning always emphasises the *autonomy of learning* is due to the *sustainability* of this type of learning (Box 13.9), which was recognised long before empirical learning psychology:

Box 13.9 Self-learning by doing
The powers of the mind are best cultivated by doing everything oneself that one wants to do (...) The greatest aid to understanding is production. One learns most thoroughly and retains best that which one learns, as it were, from oneself.

Kant 1803/1964: 736

Independent learning through action does not mean losing oneself in solipsism, but being able to learn in dialogue with teachers as well. For the art of teaching, a specific form of ‘teaching as dialogue’ is generally preferable, as described from *Antiquity* through the *Era of Enlightenment* to the present day with the *Socratic method* of conversation (Wunderlich 1969, Hanke 1991, Richter 1991) (§ 9.5). According to this teaching method, the teacher does not have to prove himself through the traditional teacher's lecture ("ex cathedra"), but above all in the *art of midwifery* in the acquisition of knowledge by the students. The problems of teaching can already begin with the presentation of the problem itself, in which the solution to the problem must not already be presented, if the independent attempts to solve the problem are not to be obstructed from the outset.

Observation and problem awareness

However, learning processes do not occur by themselves, but require a learning occasion in which a *problem arises* that needs to be *solved*. For problem-based teaching, which should lead to problem awareness through the critical comparison of exemplary practical cases, the difference and unity of *object* and *problem* must first be taken into account. All possible problems are not inherent to the objects per se, but problems only arise during (trial) action as mentally or practically experienced *resistance to action* (Ehlich, Rehbein 1986, Koerfer et al. 2008, Koerfer 2013). A problem does not fall from the sky at some point and could then be dealt with, but it is dealt with because it arises in a certain practice under certain conditions and then needs to be looked at more closely and solved in a motivated way because of its relevance.

The mere observation of an object does not necessarily lead to problem awareness. Rather, it must be taken into account with Karl Popper (1972/94) that there can be no (meaningful) observation without a problem (Box 13.10).

Box 13.10 Without a problem, there is no observation
The older philosophy of science taught - and still teaches - that the starting point of science is our sense perception or sensory observation. This sounds quite reasonable and convincing, but it is fundamentally wrong. This can easily be shown by the thesis: *without a problem, there is no observation*. If I ask you: "Please, observe!", you should ask me, according to the usage of the language, "Yes, but what? What should I observe?“. In other words, you are asking me to give you a problem that can be solved by your observation; and if I do not give you a problem, but only an object, that is somewhat better, but by no means satisfactory.

Popper (1972/1994): 19f

As Popper exemplifies with the distinction between *object* and *problem*, neither the mere instruction ("Please, observe!") nor the specific attention to a certain object ("Please, observe your watch!") leads directly to a problem. One must therefore create teaching or learning situations with specific learning occasions in which the learners themselves can recognise what is or could become a particular problem in the given case of observation (of a conversation).

Problem-based questions

In each learning loop (of the TLS) (§ 13.3), specific problem-based questions can either arise spontaneously in the classroom or can also be used in a differentiated way by lecturers as teaching questions in the function of learning impulses. We have compiled an *overview* of the *typical questions* (Box 13.11 and Box 13.11), which can also be assigned to specific learning units (of the DiaMed learning module) in combination.

Box 13.11 Problem-based questions (A)	DiaMed: UE 1+4
1. What *consequences* can be drawn from the *paradigm shift* from *biomedicine* to *biopsychosocial* medicine for an adequate *relationship and communication model*?	1 MR
2. What are the similarities and differences between *everyday talk* and *medical communication*?	1 MR
3. What are the similarities and differences between *everyday narratives* and *patient narratives*?	1 MR+4 NM

From the DiaMed learning module (learning goals) (§ 13.3.3)

Box 13.12 Problem-based questions (B)	DiaMed: UE 4-6+10
1. What is the difference between a *traditional anamnesis* (of biomedicine) and a *dialogue-based* anamnesis, which is to be specified as a *narrative-based* anamnesis?	4 NM+3 AL
2. What is the difference between *interrogation* and *narration*?	4 NM+3 AL+ 5 EC+6 ED
3. Why doesn't a doctor complete the necessary anamnesis *more effectively and efficiently by asking* typical medical questions?	4 NM+3 AL
4. Why should a doctor *utilise* the patient's everyday narrative competence during a consultation or ward round and *encourage* them to *tell their story*?	4 NM+3 AL+ 5 EC
5. To what extent should a doctor give the patient room for manoeuvre for their narrative *associations*?	4 NM+3 AL
6. What *forms of communication* should a doctor use to *encourage* patients to tell their stories?	4 NM+3 AL+ 5 EC
7. Why should the doctor pay particular attention to the patient's *gaze behaviour* in patient narratives? (keyword: turn taking)	3 AL+10 NV

From DiaMed learning module (§ 13.3.3)

Depending on the learning occasion and learning level, these teaching questions can be answered in greater depth and differentiated in the various learning loops of the *Teaching-Learning Spiral* (TLS) (§ 13.3):

(1) through the reception and discussion of further medical or communication *theories* and *models* (§ 2, 7, 13.4.3)
(2) through comparative *reflection* on the basis of *real D-P conversations* (§ 13.4.4)
(3) through *debriefing* of *own conversation exercises* with real patients (RP) and simulated patients (§ 13.5).

Typical learning processes in which these questions are pursued individually or in combination are described below. For more in-depth information and differentiation in the theory and practice of empirical examples, please refer to the relevant chapters of the handbook and to the description of the entire DiaMed module (§ 13.3.3).

Circular learning and perspective changing

Problems of medical communicating cannot usually be perceived spontaneously, but only gradually, as learners go through various learning phases of the described *Teaching-Learning Spiral* (TLS) (§ 13.3). Depending on prior knowledge or theoretical impulses, the further teaching offer at the beginning and in between can always consist of "open-ended" presentations of video graphed and transcribed doctor-patient conversations from the clinic and practice, without "delivering" the evaluation at the same time (13.4.4).

According to the learning level of the learning group, the *everyday knowledge* or, in the advanced stage, the already acquired *professional knowledge* of the learners should be linked to without evaluative specifications (Koerfer et al. 1996, 1999, 2008, Koerfer, Albus 2018). In teaching, we often experience that the problem of an exclusively questioning approach is often misjudged, especially with "novices" (§ 19).

Only through a *change of perspective* (e.g. patient role), which can also be guided by *Socratic questions* (see above) from the teacher or by looking at the manual (C-MMC), and in the controversial discussion between the students, do they themselves work out that it could be a problem conversation, because the patient hardly gets a word in edgewise.

One student comes to the conclusion that it is a kind of extreme *interrogative interview* ("This is like an inquisition"), in which the patient answers one medical question after the other and otherwise more or less "falls silent", so that the interview ends after only two minutes. What was initially assessed by some learners as an "effective" conversation ("concise and to the point") is finally assessed by others as "unproductive" because at the end of the conversation, which is still to be analysed in detail (§ 19), the doctor has learned nothing or little about the patient as a person, her illnesses as well as concerns and expectations.

What is still a challenge for "novices" because the problem of reducing an exclusively questioning conversation *technique* must first be recognised, already proves to be an underchallenge for advanced semesters because they soon recognise the conversation as a *problem type* ("inquisition") (Platt, Gordon 2004: 17) (cf. § 21) whose dominance must be overcome due to their already acquired *professional knowledge* about a narrative-based, biopsychosocial medicine (§ 4, 9, 13.2, 19).

13.4.3 Research-based learning

It is no coincidence that the reforms at the medical faculties since the beginning of the 1990s have coincided with the *paradigm shift* from *biomedicine* to *biopsychosocial* medicine (§ 2, 4). There were a variety of developments here, in which the University of Cologne also participated, including the development of a *communication curriculum* (§ 14) in which the new findings on research and teaching were continuously implemented and promoted with its own initiatives. In the last three decades of the reform process, we have expanded and differentiated both our *teaching* programme (§ 13.4, 13.5) and the *examination* programme (§ 13.6) in several steps until we have reached the current status of a *longitudinal*, *interdisciplinary* curriculum (§ 14).

Theoretical foundations and didactic concepts

The theoretical foundations (*biopsychosocial medicine*, *communication models, relationship models*) and didactic concepts (*competence development, learning goals*) are set out in detail in Parts I and II of the handbook, to which specific reference can be made in lessons in the individual learning units (literature, problems, questions, text extracts, illustrations, etc.).

Texts from the classics and current literature. Here, we choose the exemplary introduction to TLS in a theory-based learning phase. In order to promote students' *knowledge* and *insights* into reform processes in which the *paradigm shift* from *biomedicine* to *biopsychosocial* medicine also brought about a *change in relationship* and *communication models* (Fig. 13.7), theory- and reflection-based learning loops ranging from the classics to current research must be run through in the teaching-learning spiral (§ 13.3). To this end, we have compiled a *compendium of texts* and excerpts, which are available in traditional form (hand-outs etc.) as required or can also be accessed in part in our *Multimedia Training Programme* for medical communication (C-MTP) (§ 13.4.5).

The (excerpts from) texts range from the beginnings of *psychoanalysis* (Freud) to (semiotic, linguistic, philosophical, psychological) *communication theories* and *dialogue models* (e.g. Bühler, Buber, Austin,

Searle, Grice, Gadamer, Habermas) (§ 2, 7-9) to current trends in *dialogue-based*, specifically *narrative* and *participatory* medicine (e.g. Pellegrino, Thomasma, Brody, Mishler, Greenhalgh, Hurwitz, Charon) (§ 2, 7, 9, 10) (Fig. 13.7). These connections are to be reconstructed in learning unit 2 (of the *DiaMed* module) (§ 13.3.3), for example, in which similarities and differences between *everyday talk, institutional* and specific *medical communication* are to be worked out (§ 2, 5, 9).

Historical-systematic overviews. In order to promote students' understanding of learning goals and focal points, most course units provide *systematic historical overviews*. One example is the overview of the reform development in medicine just mentioned, in which the *paradigm shift* from *biomedicine* to *biopsychosocial* medicine was accompanied by a change in *relationship* and *communication models* (Fig. 13.7).

In class, students should only be sensitised to the development of different theories and models in medicine with a *historical-systematic* overview (cf. § 2, 4, 9, 10). It should be conveyed that these are developmental trends with *overlaps* and *fluid transitions*, and that in practice there can be a variety of *mixed* forms.

A paradigm shift certainly does not occur completely, but *paternalistic* models are mixed with *co-operation* and *partnership* models within the framework of *biopsychosocial* medicine (§ 4, 10). Motives and good reasons for a conditional model change (to paternalism) are to be worked out in class, which is to be decided on a case-specific basis (clinical pictures, patient types, etc.). Selected examples from the practice of consultations and ward rounds are used for reflection and discussion (§ 21, 22, 24-25).

<table>
<tr><th>Phase</th><th colspan="3">Stages in the development of medicine (theories, models)</th><th>Time</th><th>Exemplary literature (theories, models, didactics)</th></tr>
<tr><td>1</td><td>Doctor-centered Model</td><td>Disease-centered Autonomy & Decision D → P</td><td>Bio-Medicine</td><td rowspan="6">↓</td><td>Traditional medicine (practised before and also after v. Weizsäcker 1940, 1946, Balint 1964, Engel 1977, 1981, 1988 and others).</td></tr>
<tr><td>2</td><td>Patient-centered (Business) Model</td><td>Illness-centered D ↔ P P → D</td><td>Biopsycho-social Medicine</td><td>Balint 1964, Byrne, Long 1976, Engel 1977, 1981, 1988, White 1988, Levenstein et al. 1989, von Uexküll, Wesiack 1991, Mead, Bower 2000</td></tr>
<tr><td>3</td><td>Relation-ship-centered Model</td><td rowspan="4">Disease & illness Asymmetrical roles & equal autonomy & SDM (D ↔ P)</td><td rowspan="4">Bio-psycho-social Medicine</td><td>Tresolini et al. 1994, Mead, Bower 2000, Beach et al. 2006, Rider, Keefer 2006, Suchman 2006, Kenny et al. 2010, Miller et al. 2010, Zhou et al. 2023</td></tr>
<tr><td>4</td><td>Inter-actional Care Model</td><td>Beach, Dixon 2001, Robinson 2003, Beach, Mandelbaum 2005, Beach 2013</td></tr>
<tr><td>5</td><td>Partnership & Dialogue-based Model</td><td>Pellegrino, Thomasma 1981, Uexküll 1987, 1995, Herzka 1990, Kampits 1996, Engel 1997, Anderson 1999, Roter 2000, Olesen 2004, Koerfer et al. 1994, 2008, Collins, Street 2009, Walseth, Schei 2011, Richard, Lussier 2007, 2014, Chin-Yee et al. 2019</td></tr>
<tr><td>6</td><td>Partnership & Narrative-based Model</td><td>Brody 1994, Greenhalgh, Hurwitz 1998/2005, Koerfer et al. 2000, 2009, 2010, Charon 2001, 2006, Mishler 2005, Goyal 2013, Köhle, Koerfer 2017, Milota et al. 2019, Weiss, Swede 2019, Galvagni 2022, Kirmayer et al. 2023, Koval 2024, Palla et al. 2025, Fioretti 2025,</td></tr>
</table>

Fig. 13.7: Stages in the development of medicine
Modified on Koerfer, Albus (eds.) (2018: 329) (cf. § 3, 10, 22),
cf. learning unit 1: Biopsychosocial medicine and relationship models (13.3)
cf. Byrne, Long 1974, Weiner 1986, White et al. 1988, Mead, Bower 2000, Langenbach, Koerfer 2006, Beach 2013, Milota et al. 2019, Feldthusen et al. 2022, Grover et al. 2022

The learning unit 1 (of the *DiaMed* module), in which basic knowledge of various medical and communication models is already taught in the preclinical phase according to the *Cologne Curriculum Communication*, is later deepened in the clinical study phases through models of (*psycho*-) *therapeutic relationships* (§ 2, 8, 14)

As soon as the learning group has completed its overview of the historical development and questions arise about the current stage of development of *Narrative Medicine* (Fig. 13.7), for example, the lesson can – as exemplified in the following – move on to corresponding other sub-learning units in which the acquired knowledge is deepened again.[19]

Specific learning goals: Active listening and narration

As explained above using the *taxonomy* of learning goals, various *macro, meso and micro learning goals* must be differentiated at different levels in lessons, the interactive mediation of which is a challenging ongoing task (§ 13.2). This challenge is illustrated by specific learning goals that are to be conveyed in *bidirectional* learning processes (top down – bottom up). This involves changing communication models (e.g. *interrogation* versus *narration*) and the appropriate forms of communication at the *behavioural* level of *active listening* and *questioning* by doctors, particularly when *taking medical histories*.

Suspension/modification of everyday conversation maxims. A key goal of the learning module DiaMed (§ 13.3) is to identify the *similarities* and *differences* between *everyday conversations* and *professional medical*

[19] We have already pointed out that the boundaries between the development phases and models of medicine are fluid (cf. Fig. 13.7). The distinction between *dialogic* and *narrative* medicine is certainly not a clear-cut one, but rather it captures emphases that need to be placed in relation to each other. For teaching purposes, we prefer the relation that the narrative model is a specialisation of the dialogical model. In conjunction with the hierarchical taxonomy of learning goals (§ 2.13.2.1), it should be conveyed in the classroom that patient narratives should be given a significant amount of space during consultations and ward rounds, but that within biopsychosocial medicine, all conversational functions, from anamnesis and interrogative differentiation of complaint dimensions to information on diagnosis and finally decision-making, must be performed in dialogue.

communication, which is primarily explored in the learning unit 2 (EM). However, interactions with other learning units must be established on an ongoing basis during lessons, as exemplified here with the learning unit *Active Listening* (LU: 2 AL) and unit *Narrative Medicine* (LU: 3 NM).

Another example of a *historical-systematic* presentation is the *comparison of communication models*, for which a tabular overview (Table 13.3) summarises comparative features of *conversation maxims* according to Freud (1913) and Grice (1975).

Comparison of conversation types	
Psychotherapy	Everyday communication
Freud (1913)	Grice (1975)
Whereas otherwise you rightly try to hold the thread of the connection in your presentation,	Be relevant; Be orderly
and reject all disturbing ideas and secondary thoughts,	Be orderly
in order to avoid, as they say, going from the hundredth to the thousandth, you should proceed differently here (...)	Avoid overinformativeness
You will be tempted to say to yourself: this or that does not belong here, or it is quite unimportant (...)	Be relevant
Never give in to this criticism (...) So say everything that crosses your mind.	Make your contribution to the conversation as required by the accepted purpose (...).

Table 13.3: Comparison of the (anti-)conversational maxims of Freud (1913) and Grice (1975); from learning unit 2: Everyday talk and medical communication, cf. DiaMed: unit 3+4¸ cf. Lakoff 1980, 1983, Koerfer, Neumann 1982 and § 2, 9, 19.

According to the concept of *problem-oriented learning* (§ 13.4.2), the *comparative* features should be *worked out* by the students in *group work* as *self-directed* as possible on the basis of selected text excerpts (by Freud 1913 and Grice 1975). If learning time is short, such a tabular overview (Table 13.3 as a result) can help to speed up the learning

pace. The comparison between Freud's and Grice's maxims of conversation is part of the larger learning unit 2 (EM), which deals with the identification of similarities and differences between *everyday talk* and *medical communication* (Box 13.6 in § 13.3).

This *comparative* perspective can be specified in the classroom by asking about the forms and functions of narratives in everyday life and narratives in the consultation or ward round. At this stage of the learning process, the *problem-based* questions (guiding teaching) (from Box 13.11+12 in § 13.4.2) that make the difference between *interrogation* and *narration* in conversations can be included and differentiated.

Association rule in narrative medicine. According to *one* of the *specific learning goals* of the sub-unit, students should gain knowledge and insights into the mode of action of the *association rule* in *Narrative Medicine* (§ 2.2, 9.3, 20.9, 40.2). The aim is also to apply – albeit in a moderate form – what Freud explicitly instructs his patients to do, namely to *suspend* the *maxims* of conversation that apply in everyday life in psychoanalysis. The patients are supposed to follow the *rule of association* in deviation from everyday habits, which they find extremely difficult, especially at the beginning of therapy (Koerfer, Neumann 1982).

However, even in psychoanalysis, deviations from everyday communication should not be increased to extreme forms (Kächele et al. 2006) (§ 9). Rather, the *natural flow of associations* in everyday conversation should also be utilised for communication between doctor and patient. The importance of associations for the doctor-patient relationship has already been emphasised by the pioneers of medical communication research (Box 13.13).

Box 13.13 Flowing with the patient’s associations

By flowing with the patient’s associations, communicating understanding (e.g. „I can understand how that might have upset you“), and even adopting some of this patient‘s metaphorical style, the practitioner communicates understanding and concern without taking extra time. Making contact with the patient through indirect mirroring of his or her cognitive and affective styles is a quick and effective means to draw patient and doctor closer and to enhance trust.

Lipkin et al. 1995: 75

In their plea for an association maxim in doctor-patient communication as well, Lipkin et al. (1995) summarise some aspects that can also be taught as specific learning goals in the classroom (adaptation to the language of patients, their individual metaphorical, cognitive and affective styles, etc.). However, one of the main aims of this teaching unit remains to utilise the important resources and potentials of everyday conversation.

Recourse to everyday communication does not have to be directed against the doctor's interest in a systematic medical history, but can help to promote it. Lipkin et al. (1995: 70ff.) also provide maxims for establishing relevance, according to which the patient's narrative thread should be taken up first so that it can be followed up with further questions (Box 13.14):

Box 13.14 The narrative thread and the flow of information

The most efficient approach is to allow the patient to tell the story in his or her own words (...) A narrative thread bestows an organic and meaningful structure on this phase of the interview (...) The device of the narrative tread also makes it possible briefly to move away from the narrative to gain further specific information about the patient's life context, family, work, and so on (...). When enough has been heard, simply by asking „... and what happened next?“ gently gets back to the narrative thread (...) Such minor interruptions do not cut the narrative thread but simply strengthen the utility of the briskly flowing information.

Lipkin et al. 1995: 71f

In the face of possible objections (to the structure and economy of conversations, etc.), the supposed *conflict of maxims* between *narration* and *interrogation* should be addressed in class in such a way that there is no dichotomous relationship here, but rather a complementary relationship, according to which it is merely a matter of prioritising narratives in certain phases of medical communication (§ 8, 17), which can be "seamlessly" followed by medical questions of a certain type (§ 21).

It should be conveyed in class that the *art of medical communication* involves using *active listening* and *empathic feedback* to encourage the patient to adopt a *narrative* style of conversation in which the patient's history of illness and suffering can also be presented *associatively* - even if this does not initially seem to fit into a rigid question-and-

answer scheme for taking a medical history (§ 2.2, 9.3, 19, 20.9, 21, 40.2).

Learning to listen. The apparent *paradox* can be resolved in the *practice* of conversation if the doctor allows the patient to *talk* and the patient then provides concrete information in the form of *stories* about their *illness* and *history* of *suffering*, which would otherwise have to be laboriously asked for or would not even come up in conversation. The deficiency of a purely *interrogative* anamnesis has already been pointed out by Balint, whose dictum (Box 13.15) can provide a further learning impulse in group work.

Box 13.15 Questioning versus listening

In our experience, if the doctor asks questions in the style of the usual anamnesis, he receives answers to his questions – but nothing else. If he wants to arrive at a "deeper" diagnosis, he must first learn to listen.

Balint 1964/88: 171

The experience reported by Balint, which he assumes to be a generalizable ("our") experience in this education context, cannot necessarily be shared by novices from one day to the next. This requires both further *theoretical* knowledge and *practical* experience.

However, it can be put to the test in class by focussing on the question of *interrogation* versus *narration* and what makes the difference in specific D-P conversations that are assessed as *poor* or *good* (§ 13.4.4). In the later training phase (13.5), students can then try out for themselves which type of "doctor communication" leads to which successes/failures. Among other things, it will become clear that questions cannot simply be replaced by *silence* in order to promote the patient's narrative.

Silencing versus speaking. The alternative of *silence* and *speaking*, which does not always correspond to the difference between *gold* and *silver*, requires *specific learning goals* to be pursued in the classroom down to the level of the *smallest* communication phenomena, which can, however, have a *major impact*. Just as too long eye contact can be experienced as a threatening stare, too long silence can also be interpreted as threatening (§ 12, 18). Silence can become counterproductive

if patients draw certain conclusions from it, which may relate to their own failure or the helplessness of the doctor:

- Did I say or do something wrong?
- Am I expecting too much from the doctor?
- My doctor doesn't know what to do either, etc.

As soon as the quite useful function of silence as concern and thoughtfulness has been exhausted, a return to active forms of dialogue participation is unavoidable, which is to be worked out in class using the example of *Active Listening* (in the *Cologne Manual* (C-MMC) (§ 13.4.1) and practical part IV of the handbook).[20]

Types, forms and functions of narratives. One result of the group work must be that other, more active forms and functions of communication should be used by the doctor to promote patient narratives, as opposed to the option of simply remaining silent and waiting for a long time. The patient's everyday narrative competence must be stimulated and activated so that the full story of illness and suffering can "come to light" in the D-P conversation. In detail, the focus of narrative medicine in the classroom should be on the following *micro-learning goals* (Box 13.16 and 13.17).

Box 13.16 Types, forms and functions of patient narratives (A)

Promoting patient narratives of different types appropriately (initiating and keeping them going):

1. Patients realise different *types of narratives* (stories of illness and suffering, progressive and regressive stories, stories of guilt and failure, accident stories, etc.)
2. Patient narratives need to be *initiated* through narrative invitations by the doctor.
3. Narratives that have just started must be *kept alive* as an *ongoing* narrative process.

20 The fact that silence is difficult to tolerate even in psychoanalytic therapies, despite the well-known abstinence rule for patients, is shown by the conversation analyses of Koerfer, Neumann (1982) on the first 12 sessions of therapies. Extensive and differentiated conversation-analytic studies on silence in psychotherapy can be found in Knol et al. 2020 and Dimitrijević, Buchholz (eds.) (2020), Buchholz et al. 2022.

4. Patients should be given the opportunity to fully develop their narratives in all *structures* and *functions* (orientation, complication, evaluation, resolution, coda; information, emotion, evaluation, etc.).

Cf. learning unit 3 from the DiaMed module (§ 13.3) (cf. § 3, 9, 19)

Box 13.17 Types, forms and functions of patient narratives (B)

Following the patient narratives, ask questions, give empathic feedback and use the narratives for joint dialogue work ("new construction of stories"):

5. The doctor should respond to the patient's narrative with questions or (first) empathic feedback.
6. The doctor and patient should then work together on the narrative.
7. Ideally, they achieve a *new construction* of the patient's story (joint construction of narratives, co-operative storytelling)
8. Constructing new stories can lead to better self-understanding and changes in the patient's behaviour, which can ideally contribute to an improvement in the patient's state of health.[21]

Cf. learning unit 3 from the DiaMed module (§ 13.3) (cf. § 3, 9, 19)

These *types*, *forms and functions of narratives* have been described in detail on the basis of current (linguistic, psychological, medical, etc.) narrative research and analysed using examples (§ 9, 19-20, 24-15). In order not to remain at the *level of everyday understanding* of narratives, it is also necessary to impart elementary *knowledge* from narrative research in *medical teaching*. To this end, we have had good experiences with texts from research, some of which are easy to understand (§ 9), as well as with a presentation (Fig. 13.8) and commentary (cf. Box 13.18) on the basic structural elements and functions of narratives by the pioneers Labov, Waletzky (1967/1973) of empirical narrative research (§ 9).

[21] Cf. on joint construction of narratives Brody 1994, on cooperative narration Koerfer et al. 2005, Koerfer, Köhle 2007, Koerfer et al. 2010, Köhle, Koerfer 2017), for empirical example analyses here in the handbook § 19, 20, 24, 25.

Fig. 13.8 Normal form of narration

The normal form of storytelling can be represented by the following diagram:

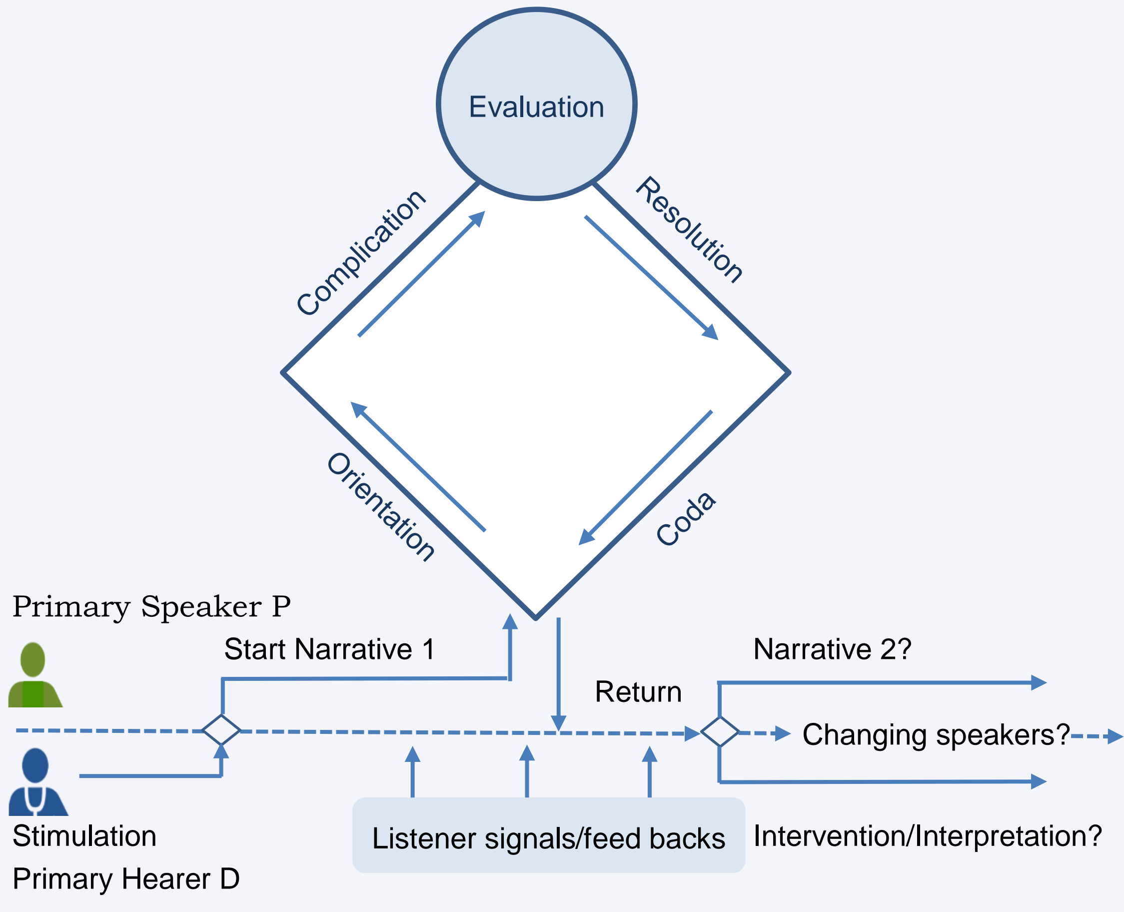

Fig.13.8: Modified on Labov, Waletzky 1967/73: 124
and on Koerfer, Albus 2018: 425

Box 13.18 Explanations of the narrative model (Fig. 13.8)

The development function of the narrative starts at the base of the square, followed by the orientation part at the top left, then the complication part towards the top. Often, though not always, the evaluation stops the plot at this apex, which is expressed by the circle. The resolution takes place downwards to the right, and the coda appears as the line that returns to the situation (the point in time) in which the narrative was originally stimulated.

Labov, Waletzky 1967/73: 124

This narrative model by Labov, Waletzky is an *ideal-typical model* that can be realised in practice in many different ways in many different contexts. After all, it was derived from empirical cases of oral communication. Deviations from the "normal form" are not always indications of defects and deficits in storytelling, but can be context-specific and functional.

In the extensive medical and psychotherapeutic narrative research, many narrative models and theories have been developed with and without reference to the pioneering work of Labov and Waletzky, who modified their model themselves (e.g. Quasthoff 1980, 1999, Flader, Giesecke 1980, Prince 1982, 1988, 1999, Rehbein 1980, 1984, Eisenmann 1995, Mishler 1995, Labov 2001, 2007, Delbene 2011, Boothe (2011), Quasthoff, Ohlhus 2017, Hoffmann 2018, Weiss, Swede 2019, Deppermann et al. 2020, Galvagni 2022).

Dialogical narrative model. Following this text and discourse linguistic research, we have developed a *dialogical narrative model* (DNM) for doctor-patient communication that is *tailored* to our *teaching* purposes as well as to our empirical narrative *analyses*, which can be used as anchor examples for our Cologne manual (C-MMC) in the practical section of the handbook (IV: § 17-23).

In our dialogical narrative model, we take essential elements from the model of Labov, Waletzky (1967/73), which is limited to the narrative as a *monological* large form, and arrange these elements in *dialogical* sequences in which both interlocutors perceive their interactional roles before, during and after the narrative in their own individual dialogical way. The relevant distribution of *dialogue roles* remains the same for narration in the consultation or ward round, according to which the patient is the *primary speaker* and the doctor the *primary listener*, at least for this phase of the communication.

Even according to this dialogical narrative model, a "normal form" of the narrative can initially be assumed, against which variants of realisation can be recorded in the first place (Fig. 13.8) (Labov, Waletzky 1967/73, Labov 1997, 2001). Just like everyday narratives, patient narratives are not always realised in "pure culture" according to sequence and completeness. Deviancies or fragmentary forms of realisation may have to do with a number of psychological, cognitive or interactive aspects of narrative (§ 9).

	Primary speaker	Primary listener	
	Patient	**Doctor**	
	Actional	Mental	Actional
1	Communication 1	New focusing 1 Speech transition	Narrative stimulus "How did that happen?"
2	Framing Thematisation	Logical Understanding	Issues: "Where was that?" "Who else was there?" "When was that?"
3	Orientation Place, time, people		
4	Personal Perspectivation	Psychological Understanding	Settings: "This was what you wanted (hoped for, feared)?"
5	Complication, Scandalon	Scenic-empathic Understanding	Listener feedback: "hm", "yes", "ah", "oops", "terrible", "great", "gosh", "Oh my goodness", "jeez", etc.
6	Problem solution, -Clarification		
7	Evaluation: Morals, maxims		
8	Coda Speech transition	Willingness to taking the floor and making a statement	Empathic Response, Interpretation: "This must have been a shock for you"
9	Feedback "hm", "yes", "right", "exactly"	Securing understanding	Reconfirmation: "even", "that's how it is"
10A	Communication 2A	Focusing 2A	Narrative stimulus 2
10B	Communication 2B	Focusing 2B	Interpretative Intervention

Table 13.4: Dialogic narrative model (DNM) of doctor-patient communication
Modified on Koerfer, Albus (2018: § 9)

The marked differences between 10A and 10B manifest the *alternatives* for the continuation of the dialogue by the doctor (Table 13.4). Following the narrative, the doctor can choose either *empathic feedback* or a *clarifying question* or a *stronger interpretative intervention* in order to initiate the *joint processing* of the narrative, which we have analysed in the practical section of the handbook (IV) on the basis of many anchor examples that can be used for teaching purposes.

The *dialogue narrative model* is designed in such a way that a distinction can be made between optional and obligatory structural and functional elements and, in principle, mental and interactional processes of narration can be recorded in both conversation partners. For reasons of space, only the mental doctor's side was differentiated in order to initially focus on his participation perspective (Table 13.4). The mental participation manifests itself in his audible and visible activities before, during and after the patient's narrative and can be inferred accordingly – but only in retrospect, once the manifest action has been completed.

Intervention exercises. This methodological principle can now be used in lessons for practice purposes. Since a "real" conversation, according to Martin Buber (1954/1986: 296), cannot be "predisposed", it is hardly predictable, neither for the dialogue partners themselves nor for third observers. However, conclusions can be continuously drawn from this third quasi-participant observation by means of an as-if perspective, as is known from conversation psychotherapy (according to Rogers 1962/1990) (§ 20.3) or philosophy of dialogue (Gadamer 1993) (§ 9.5). In class, this as-if attitude can be adopted towards real D-P conversations by asking students the self-reflective question:

- What would I do (ask, answer, suggest, etc.) instead of the doctor if I were to continue the conversation at this point.
- What would I refrain from doing instead of the doctor (asking questions, confronting, contradicting, etc.) if ….

We systematically applied this procedure of *role-taking* by *pausing* the video of a D-P conversation at certain critical points in the conversation in a *multimedia programme* (§ 13.4.5) and inviting the user to intervene verbally in the imagined role of a doctor (“it's your turn, doctor!”). The procedure has been described in more detail elsewhere (Koerfer et al. 1999, 2008) and is explained below (13.5). For active listening exercises,

the method can be used particularly at sensitive points in the conversation where a narrative is initiated or prevented, kept going or interrupted, recorded and processed or "deleted", as it were, with a radical change of topic. Video documentation is certainly ideal, but traditional forms (paper and pencil) are often sufficient, where the course participants can fill in the blanks in the D-P conversation transcript (Box 13.19).

Box 13.19 Comparative simulation exercises (context type narration)

The starting point of this learning and evaluation method (Koerfer et al. 1999, 2008) is a conversation sequence from a real doctor-patient conversation, which can be used from the learner's perspective for the following intervention and evaluation steps, after the last patient utterances in image and sound and/or text (= step 1) have first been received:

1. Verbatim statements of the patient (specifically (1) before, (2) during and (3) after a narration), doctor/role-player for the time being without knowledge of the real continuation of the conversation:
   (1) [Preceding utterance] ...
   (2) [Narrative] ...
   (3) [end of narration - speech pause] ..."
2. "It's your turn, doctor" (simulated speech takeover)
   (How would I intervene if I were the doctor?).
   My intervention:
   "..."
3. Playback of the real medical intervention:
   "..."
4. Comparative evaluation of my intervention in comparison with that of the real doctor.

Cf. empirical example in § 13.5.2

The procedure of the intervention exercises can be extended by using the course participants' interventions for comparison in further steps or by adding expert ratings (§ 13.5). In principle, all the empirical examples that we have transcribed and compiled in a three-digit number as anchor examples for our manual can be used both in class and for self-learning by interrupting the reading of the transcripts at certain critical points to consider how one would continue the conversation oneself instead of the doctor.

The users' interventions vary considerably between extreme intervention types. For example, there are cases in which students lose themselves in detailed questions (clarification of references) or completely change the subject after a dramatic, emotional narrative. On the other hand, there are impressive empathic responses to stories of grief and suffering, which obviously "go to the heart" even in the imagined role of a doctor.

The question of whether extreme reactions are still rooted in novice status and become routine in the course of professionalisation in one direction or another has been addressed elsewhere (§ 1, 40). In any case, our studies on emotionality and empathy in medical communication have shown that dealing with particularly emotional narratives remains a particular challenge even for experienced doctors (Koerfer et al. 2004).

Conclusion. Both theory-based and practice-based reflections and training can represent the first steps in the right direction on the path to a "change of attitude" (§ 1, 3) described by Balint (1964/1988). The historical-systematic presentation based on classics from different disciplines and times (Freud, Grice, Balint, Labov, Waletzky) creates a basis of knowledge that is to be detailed in further lessons with texts and examples from more recent research on narrative medicine (e.g. Greenhalgh, Hurwitz 1998, Charon 2001, 2006, Koerfer et al. 2010, Köhle, Koerfer 2017, Milota et al. 2019, Galvagni 2022).

Ideally, the acquired theoretical knowledge is tested in subsequent reflection phases and training phases (of the TLS) in self-reflection and in one's own actions and becomes routine as practical action knowledge (§ 1, 13.2, 40).

The fact that even established routines of strictly interrogative medicine can still be corrected has been shown in evaluation research on continuing education (§ 40). The foundations for better alternatives should already be laid during basic training in order to promote the appropriate routines for medical communication in good time.

Quantitative and qualitative conversation analysis

Likewise, teaching should take into account what is emerging as a development in research that seeks to mediate *quantitative* and *qualitative* studies. Increasingly, traditional topics of qualitative research approaches are coming into the focus of analysis and evaluation, which

refer comparatively to everyday or institutional communication, but also to *medical communication* in particular:[22]

- Nonverbal interaction (*facial expression, gestures*)
- Dialogical communication (*turn taking, (a)symmetry*)
- Narration (*co-construction* through *active listening* by the doctor)
- Emotion and empathy („atmosphere“ in conversation)
- Cooperativeness (negotiation, concordance, partnership)
- Fitting and context-sensitivity
- Coherence ("topic flow", biopsychosocial theme progression)
- Rhetoric (logical inference, metaphors)

As we will see in the practical section (§ 17-23) and evaluation section (§ 40-43), *quantitative* and *qualitative* approaches should by no means be played off against each other, which should be disclosed for research and teaching alike.

The fact that a conversation turned out "less" well can be "proven" both from a *quantitative* perspective by *counting words* (by speakers, speech contributions, conversation phases, etc.) (§ 13.4.5, 17) and from a *qualitative* perspective by a *narrative analysis of* individual speech contributions, which we will return to in detail in the practice and evaluation section (IV, VI). To anticipate one result: Patient narratives can be recognised, among other things, by the fact that patients can "talk in one piece", which can be "counted" in a continuous series of words without a doctor's interruption, if one uses an appropriate concept of "interruption" (see above) for the analysis. The patients can thus develop their *patient narratives* (§ 9, 19), in which the doctors are very effectively involved as *co-constructors* with minimal *(non)verbal interventions.*

On *the* other hand, a singular communicative "event" (*laughter, moaning, question, narration,* etc.) can lead to a new quality of conversation by triggering whole chains of reactions, so that a change from a strictly *biomedical* to a *biopsychosocial* progression of *topics* takes place. The "trigger" can be a metaphor of a patient (1) or an appropriate medical intervention (2) after the dramatic patient narrative (§ 19-20):

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22 Cf. basic chapters (7-12) and the empirical analysis chapters (17-25). Here we would like to mention by way of example: Bensing et al. 2003, Koerfer et al. 2004, Knight, Sweeney 2007, Langewitz 2007, Ness, Kiesling 2007, Koerfer et al. 2010, Koerfer, Albus 2015, 2018, Habermas 2019, Zhang et al. 2023.

(1) P: "that threw me off track"
(2) D: "so that you actually always feel you are selling
yourself short"

Attention in teaching should be drawn to such individual utterances with a great consequential effect (as *key interventions*) (§ 17, 19, 20), which lead to a quality change in the conversation, as well as to the problem that the mere "inflationary" use of listening signals (*hm, yes, okay*) does not necessarily make a conversation better, on the basis of maxim (A), but which conflicts with maxim (B):

(A) Much helps much!
(B) Too much of a good thing!

Here, the *dosage problem* common in medicine is to be dealt with in teaching, which here concerns the specific dosage (quantity ratios) in medical communication, for which a specific *fitting competence* (§ 2, 3, 17) has to be developed.

Overall, *quantitative* and *qualitative* approaches can complement each other well, as long as it is clear what can be "counted" and what cannot (Duncan 1974, Ehlich 1982, Flader, Koerfer 1983, Inui, Carter 1989, Korsch et al. 1995, Koerfer et al. 1994, 1996, 2000, 2004, Köhle et al. 1995, 2001, Roter, Hall 2006, Heritage, Maynard 2006, Skelton 2011, Britten 2011, Salmon 2013, Inui, Carter 2013, Koerfer, Albus 2018 (§ 40). Here, quantitative analyses can benefit from a sharpening of observation categories and coding procedures if they borrow correspondingly from qualitative analyses in terms of theory and methodology (Heritage, Maynard (eds.) 2006). This also applies to the traditional distinction between so-called "*open-ended*" and "*closed-ended*" questions, which can already prove insufficient for differentiating *suggestive questions* or *opening questions* or *explanatory questions* (Koerfer et al. 1994, 1996, Robinson 2006, Koerfer, Albus 2018) (§ 21.2). As long as the claimed *gold standard* has not yet been found for all the detailed questions of a "good" conversation, teaching should be open to *exploratory learning on the* questions that remain "contentious".

13.4.4 Comparative model learning: "poor" vs. "good" practice

A specific method for the development of problem understanding is the contrast typological comparison, which is to be transferred to teaching

as an established research principle (v. Uexküll 1987). To this end, learning occasions must be created that stimulate a critical comparison of extremely *negative* examples ("poor practice") with extremely *positive* examples ("best practice"), without this difference having to be specifically marked in the lesson beforehand (Koerfer et al. 1996, 1999, 2008). As was shown in a project with a *pre-post design* for continuing education of doctors, an *improvement in communicative competence* can be achieved even after a long period of professional practice (§ 40).

From this project, many video-recorded conversations are used in class for comparative learning without first justifying or commenting on the selection. The difference between positive and negative examples of conversation is not conveyed *deductively* by the teacher, but is worked out by the learners themselves in the sense of *active* learning. To put it in a nutshell: Those who advocate a change from *doctor-centred* to *patient-centred* conversation practice in teaching should analogously change from a *lecturer-centred* to a *learner-centred* training practice, as is more likely to be achieved with the *Socratic* conversation method already mentioned (§ 13.4.2).

Learner-centred model learning

In a *learner-centred* approach, the learners' every day or pre-theoretical knowledge is first activated more or less unprompted as "*tacit* knowledge" about communication (as in *tacit knowledge* about language, Chomsky 1965/69) when extremely negative examples are contrasted with extremely positive examples and handed over to the learners' spontaneous judgement initially without further evaluative comments.

In this way, a *prejudicial problem presentation* can be *avoided*, which would obstruct independent learning processes because the result would already be anticipated. In contrast, with an *inductive* learning approach, independent problem identification can be largely maintained without further instruction, without, however, having to do without implicit guidance for problem-oriented learning.[23]

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[23] The problem awareness described above with Karl Popper (1972/1994) (§ 13.4.2) arises implicitly through the learning context in which it is a question of proving the "best" (way of) conducting conversations, which in a comparative approach always requires a rational justification/evaluation in order to be able to "separate the wheat from the chaff". The (self-) ex-

The instruction, which is effective in learning practice, is based solely on the previously didactically justified contrastive selection of extreme examples of conversation, which enable comparative learning on the *negative* or *positive* model, for example, in order to be able to work out the difference between *interrogative* and *narrative* interview styles in class.

This differentiation of conversation types is rarely successful in the classroom at the first attempt, but requires repeated runs through the Teaching-Learning Spiral (TLS) (§ 13.3). Initially, in the first learning loops with reflection phases, the focus is on uncontrolled collections of spontaneous judgements of the following type:

- The doctor asked one question after another
- The doctor got straight to the point
- He doesn't let her finish at all, interrupts her all the time.
- It's like an inquisition
- At the end, the patient seemed quite unsettled

As already described in advance, even in extremely negative cases such as an "inquisition" (§ 19), positive assessments ("succinct and to the point") can often arise spontaneously, leading to group learning processes through controversial discussions in which spontaneous judgements are subjected to revision, usually resulting in a group consensus. In such group discussions, the role of the teacher can initially be limited to a moderating function in which, with a *learner-centred* perspective, only controversial opinions on the assessment of doctor-patient communication need to be invited:

- Is everyone of this opinion?
- What do the others think?
- Which doctor made the patient feel better/comfortable?
- Which doctor would you like to go to/unlike to go to yourself?
- How do you justify your choice?

Such and similar questions can be asked in class and discussed in the group. But they can also be asked in systematic *lay ratings*, as we had

plorative question is: "Why do I find this way of conducting a conversation "good" and that "poor"? or discursively: "Why do you/we find ...?". Only when such questions are answered conclusively can the evaluative premises of medical interviewing be revealed (Koerfer et al. 1994).

used them as additional instruments in the evaluation of the pre-post project (§ 40.2).

Many students follow a medical conversation model early on, as is sometimes still followed at the beginning of continuing education by doctors who have been practising for a long time. After viewing a (video-recorded) doctor-patient conversation, the following typical statements were made by the doctors in the discussion, which also dealt with questions of dealing with *emotions*, from which their prevailing conversation model can be inferred (Box 13.20)

Box 13.20 Typical statements of doctors in continuing education

After looking at a real D-P conversation, examples from the reflexive discussion on dealing with patient emotions:

1. First collect the facts, then address the emotional issues.
2. Rather stay on the factual level, you have safe ground there.
3. It's better to stay on the factual level, you're on safer ground there.
4. You are afraid to follow up with the patient. She wouldn't stand for it and I certainly wouldn't.
5. Otherwise you are walking on black ice with the patient
6. You have to filter out the emotional issues.
7. It is better to have both feet on the ground, everything else often frightens you yourself.

Koerfer et al. 2004: 244

These spontaneous, self-explorative statements of the group members on the medical interview practice of a colleague illustrate first of all the spectrum of typical attitudes and justifications in an initial stage of training. These statements can be differentiated by content analysis according to *relevance* and *relations* of types, such as risk minimisation by excluding emotions from the consultation or by a certain order of their management, etc. (Koerfer et al. 2004: 244f).

The opinions of the doctors (in continuing education) are often still congruent with those of the students. Here as there, the learners apparently follow a conversational *model of traditional anamnesis* and *decision-making*: With overall low chances of patient *participation*, *narratives* or *emotions* or *negotiation* are apparently not provided for. To cognitively develop alternatives to this prevailing conversation model and to implement them in practice (*showing* and *doing*), it takes learning time with

alternating theory, reflection, training and evaluation loops before a new conversation model can manifest itself in conversation practice.

While changes in our continuing education courses (with pre-post design) could be demonstrated in the evaluation of conversational behaviour (§ 40), systematic studies with a corresponding design in training with students using subjective and objective *evaluation instruments* are still pending (§ 13.6, 40.2, 41). However, despite all the different starting positions and discrepancies in the comparative model learning of the group participants for the development from the 1st clinical to the 4th clinical semester, the *tendency of a change* in the conversational model can be assumed, which is also manifested in the comparative spontaneous judgements of the students.

Apparently, in the repeated run through the teaching-learning spiral in model learning, alternative conversation models are preferred and finally imitated, which are characterised by a stronger *participation* of the patients (*narration, emotion, negotiation*) (see above Box 13.14). Subject to a methodical strict evaluation (as in continuing education) (§ 40), it can be stated in the training for the *achievement of learning goals* that the students

- recognise alternative models of conversation
- identify their essential features and
- are able to imitate the positive "role models" in the practice conversations.

The question remains, however, whether the lengthy learning processes can be *accelerated*, for example, through stronger instructional *control* by the teacher. To this end, speed gain and long-term success must be put into relation and the extent to which fast learning is also *sustainable* enough must be examined (§ 40.3).

Sustainable learning

This brings us back to the question posed at the beginning, to what extent the teacher in a more *teacher-centred* perspective should intervene earlier in the classroom in an active and *directive* role or whether he should rather take on a *moderating* function. There is no question that the teacher ultimately does not have to hold back with his or her "expert" opinion, especially since this is often demanded by the learners as the official "teaching opinion" anyway.

Even if he holds back for a long time, experience teaches that after a certain start-up time or saturation of the discussion, the students challenge the teacher to take a critical stance, for example with the following typical questions and prompts:

- What do you actually think (as an expert) of this conversation?
- Why do you think the patient did not come back?
- Tell us what you would do differently.
- Should a doctor really listen to such a garrulous patient to the point of exhaustion?

However, those who place this *doctrinal opinion* right at the beginning of the lesson risk a passive attitude of reception, which threatens to "nip a critical discussion in the bud". If learning time permits, "best practice" examples should not simply be presented as such, but should be worked out in critical comparison with less successful (also "worst practice") examples, to which we will contribute with empirical communication cases (§ 13.5.2, 19-22).

When balancing *deductive* and *inductive* learning concepts, the advantages and disadvantages must be taken into account, which must not least be put in relation to real curricula, which for their part do not always "optimally" fit the "best" teaching-learning practice. On the one hand, it is obvious that an *inductive* learning method is usually more *time-consuming* than a *deductive* learning method, solely because of the necessary self-correction processes in group learning, in which the desired learning result can simply be "lectured" by the teacher, especially if it is supported by media ("power point presentations"). On the other hand, Kant's dictum (§ 13.4.2) once again reminds us that self-learning processes lead to greater *sustainability*.

Teachers and learners can benefit equally from this *sustainability* if they can fall back on *(self-)acquired knowledge* and *action competences* in advanced *Teaching-Learning Spirals* (TLS) (§ 13.3) that are not soon "lost" again but can be used as a basis for further learning at a higher learning level (§ 40.3).

13.4.5 Multimedia Training Programme (MTP)

With the comparative learning method described above, in which extremely negative examples are critically compared with extremely positive examples in order to be able to determine the best examples (*best practice*) as exemplary models or *ideal model conversations,* we have

gained many years of teaching experience (Koerfer et al. 1996, 2008, Koerfer, Albus 2018). Based on this experience, we have developed a *Multimedia Training Programme* (MTP) which will be presented below (cf. (Koerfer et al. 1999, 2008, Koerfer, Albus 2018) (Table 13.5). All in all, the *Multimedia Training Programme* allows for differentiated use both in self-learning and in group lessons.

Concepts and contents

Depending on the individual or group-specific learning level and learning needs, the multimedia learning programme is designed in such a way that users can call up further background information or practical exercises at any programme point where further questions arise for them. This active participation of the user takes place on the basis of specific learning offers that can be used with different degrees of freedom.

In terms of content, the *Cologne Multimedia Training Programme* (C-MTP) is structured like a handbook according to chapters, but it can also be used with the help of search terms, so that an *individual* usage profile according to topics, conversation techniques, clinical pictures, etc. is possible. As can be seen from the exemplary overview (Table 13.5), information can be obtained on major topics (biopsychosocial medicine, epistemology) as well as communication patterns (greeting, questioning, clarifying) or individual phenomena (eye greeting, eye contact, listener feedback, etc.).

Videos and transcripts. The core of the C-MTP is a rich collection of videos from *real D-P-Communication* that can be used in teaching and self-learning under many aspects (conversation techniques, clinical pictures, etc.). As in Box 13.6 (§ 3.3.3), we provide ongoing references to the chapters of the handbook for all learning units (LU), which contain further *theoretical foundations*, *empirical analyses* of conversations and *didactic comments and suggestions*. This also includes references to our D-P videos, which are available in this handbook as conversation *transcripts* (§ 17-25).

These can be used at any time for practical exercises (traditionally with pencil and paper) in the classroom and for self-learning, as further explained below using examples (§ 13.5.2). Where technically possible in the classrooms, the full C-MTP is used, which can provide the necessary information (theories and models, texts, quotations, transcripts, graphics, etc.) and D-P video examples.

Theme-Techniques-Phenomena	Examples
Biopsychosocial medicine and episte-mology ("constructivism")	Educational film "How safe is reality?" (duration: 13 min)
Talks on specific disease patterns	Depression, anorexia, diabetes, somato-form disorders, etc.
Talks about problems (further treatment)	Adherence, Coping, Defence, etc.
Fields of competence and phases of the medical interview	Medical history, decision making (SDM), communication of serious diagnoses (BBN), dealing with the dying, etc.
Verbal intervention techniques	Opening questions, active listening, naming emotions, detail questions
Dialogue role structure	Turn taking, listener feedback, speech proportions of doctor/patient, etc.
Nonverbal communication	Eye greeting, eye contact, gestures, fa-cial expressions, posture, etc.
Communicative action patterns	Greeting, questions, clarification, deci-sion making, etc.
Theme developments	Biopsychosocial theme progression, emotions, "sensitive" issues, etc.

Table 13.5: Exemplary overview of the Multimedia Training Programme (C-MTP)

Comparative learning. The selection of negative or positive model conversations made for this teaching programme (from a total pool of over 300 videographed conversations from predominantly GP practice) is the result of a selection process through comparative conversation analyses and conversation ratings following a research and intervention project with a pre/post design (§ 40).

With this design, the project initially served to evaluate doctor-patient communication with doctors who had participated in continuing training in Balint groups for at least one year because of the *pre-post design* (Köhle et al. 1995, 2001, Koerfer et al. 2004, 2008). From this research pool of interviews came a large part of the selection of inter-

views that were further processed for the multimedia learning programme after comparative, quantitative and qualitative analyses.

The multimedia training programme is based on our *Cologne Manual* (C-MMC) (Koerfer et al. 2008, Koerfer, Albus 2018) (§ 13.4.1, 17-23) (cf. 13.8) and is designed so that further information on interviewing can be accessed at any time. Many of the conversations have been prepared in a user-friendly way according to aspects of empirical conversation analysis for corresponding multimedia use (slow motion, transcript, graphics, manual, literature, etc.).

The multimedia training programme can also be used for different teaching purposes and learning groups at different learning levels: For example, *novices* at the beginning of the study should be "invited" with the multimedia training programme in the sense of the comparative learning concept to make extreme comparisons of particularly "poor" and "good" conversations (without or with just this prior information).

Thus, *information* from *quantitative analyses* (e.g. on the speech proportions of the interlocutors) can also be used to form a judgement on the quality of doctor-patient conversations, in order to assess the patient's chances for the placement of narratives. The comparison of 4 conversations makes it clear that the narrative chances are unequally distributed, which is reflected in a corresponding narrative analysis (§ 17, 19-20).

In this way, quantitative analyses (e.g. on the speech proportions of the interlocutors) (Fig. 13.9) can also be used to draw conclusions about the *quality* of doctor-patient conversations in order to assess the patient's *chances of placing narratives*. The comparison of four conversations makes it clear that the narrative chances are unequally distributed, which is reflected in a corresponding narrative analysis (§ 17, 19-20).

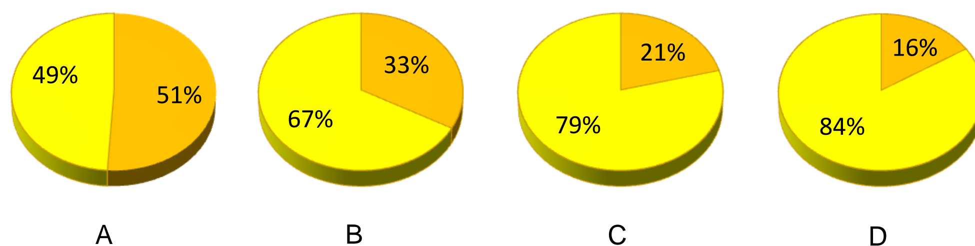

Fig. 13.9: Speech proportions of doctor and patient in 4 conversations (A-D).

These and other conversations can then be used in group work or self-learning to work out how the two partners in the conversation use their respective parts of speech, for example by the patient *telling the story* and the doctor *actively listening* and giving empathetic feedback, or by both partners asking *questions* and giving *answers* to each other.

For *advanced* learning groups, in which the participants already have developed professional knowledge and communication competences for medical interviewing, the "topic focus" is to be adjusted more specifically to differences between interrogative and narrative interview styles (§ 18-19) or to problem conversations (for example with "delicate" topics: sexuality, addiction) or difficult patients (§ 34), for which empirical cases can be found in the practical part (IV).

Overall, the multimedia training programme contains a lot of *D-P-Conversations* an *background information* that can be used directly for teaching in the lecture or in group lessons, but also for self-learning (§ 13.5).

Comparative simulation exercises

As already mentioned in the introduction (§ 1.4), additional alternative interventions can be simulated and evaluated in group lessons or self-learning (at specially selected and marked D-P-Communication points) on the basis of the motto "It's your turn, doctor" under self-reflective questions. The more or less *good* intervention alternatives can be differentiated in a critical comparison procedure, which will be reproduced here again in 7 steps (Box. 13.21).

In the *self*-evaluation (learners) and *external evaluation* (other learners, experts), one's own verbal interventions are to be compared both with the real interventions of the real doctor in real conversations and with other fictitious alternatives (from simulated conversations). In the critical comparison, the more or less „good" interventions can be rated differentially (scale 1-5) ("school grades") (Koerfer et al. 1999, 2004, 2008, Koerfer, Albus 2018). We have repeatedly had good experiences with this comparative reflection procedure, in teaching and continuing education as well as in multimedia projects, precisely because the "competition" for the "best" intervention helps to challenge one's own resources.

Box 13.21 Comparative simulation exercises

1. Last verbatim statements of the patient:
   "..."
2. "It's your turn, doctor" (simulated speech takeover) (how would I intervene if I were the doctor?).
3. My intervention:
   "..."
4. Playback of the real medical intervention:
   "..."
5. Comparative evaluation of my intervention in comparison with that of the real doctor.
6. Comparative evaluation of my intervention and that of the real doctor with the interventions of other participants (from my course or past courses).
7. External evaluation by experts.

Empirical examples see below § 3.5.2

For specific teaching goals in smaller learning units, we have developed a reduced version of the *Cologne Multimedia Training Programme* (C-MTP), which is exemplified below (§ 13.5.2) with an empirical example taken from real doctor-patient communication.

13.5 Learning by doing

The learning concepts described so far are integral components of our spiral curriculum (§ 13.1-3), which, however, can be used with varying intensity in the individual courses (overview Table 13.1) (cf. § 14). This is not least a question of the type of course in which certain learning goals are to be achieved in a given learning time. For example, video presentations of exemplary doctor-patient conversations in a lecture can at best be used for a targeted *illustration* of a specific topic (communicative handling of "defence"), while the same or further conversations in an elective course (on "Psychodynamic Psychotherapy") can serve as learning occasions for controversial discussions.

The clarification of "controversial" topics may require a flexible return in the *Teaching-Learning Spiral* (TLS) (Fig. 13.3) to detailed theory or reflection phases also on further practical cases before new practice phases can be specifically introduced in which new theoretical knowledge, practical insights or changed attitudes can be tested in action in practical learning situations.

13.5.1 Types of practice-based learning situations

There are various types of more or less practice-oriented learning situations available for trial action in medical consultation, which differ in degree from the everyday reality of medical action. As a rule, the lower the risk of any kind of "failure" of the action, the easier it is for the learners to try it out. According to this, the learning situation of free role play, in which *peer* participants meet in a familiar learning situation, already differs considerably from the simulation situation with specially trained simulated patients (SP), who usually do not belong to the learning group and appear as strangers.

While in both cases the role players still appear personally protected behind their role because they are not personally addressed, trial action with *real patients* (RP) is seen as particularly risky because here, for example, personal "mistakes" in the conversation can have equally personal consequences ("hurting feelings"), which are usually seen as less "bad" in all other "played" learning situations.

The further variant of trial action in a multimedia learning situation is also usually seen as particularly "harmless", especially if the "interaction" with "virtual" patients is carried out anonymously, i.e. without personal attribution and feedback from a personal counterpart, so that a lack of *authenticity* (see below) is of no further significance here. The advantage of this type of multimedia learning, which will be presented separately in a moment (§ 13.5.2), is that learning can be particularly playful and experimental (Koerfer et al. 1999), without having to share the responsibility for the consequences of the trial action with real patients.

In all these learning situations, "distortions" can of course occur during trial action, which are also possible otherwise when action is taken under the observation of third persons (§ 13.6.1). If one leaves out the external observer role and only looks at the *dyadic* learning situation from the internal perspective of the actors, then the following basic

types of trial action can be ranked according to the criterion of increasing *practical relevance:*

1. Practical exercises in multimedia simulations ("virtual")
2. Practical exercises in "classic" role play ("peers")
3. Practical exercises with simulated patients (with/without examination, OSCE)
4. Practical exercises with real patients

In this context, the *authenticity* of the interaction usually increases with the closeness to reality insofar as it is increasingly subjected to a reality and acceptability check by a real communication partner towards whom the general rule of reasonableness must be observed (Koerfer 2013). Whereas in the "computer game" one only has to reckon with critical feedback in the "worst" case, behind which anonymous programme designers stand (§ 13.5.2), in the interaction with real patients, medical role-players have to reckon with the development of a "real" conversation, in which "unreasonable things" can also "have an effect" and, if necessary, be explicitly rejected by real patients, e.g.:

- How dare you ask me such a question?
- You can't be serious!
- What do you think you are doing?
- Your suggestion is impertinent!

Here, not only "feigned" but "real" indignations and the like of a personal interlocutor are to be expected, whom one must not "offend". That is why the learners (despite merely "playing" the role of a doctor) are rightly afraid of hurting the "real" feelings of their patients. Although or precisely because this can of course also happen to a "real" doctor, the "played" doctor's role vis-à-vis real patients is so "close" to the reality of medical conversation practice.[24]

In our clinic, all four types of trial practice are used, but with different objectives and focus. At the centre of our clinical training is the conversation with *real* patients who, in many years of interdisciplinary

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24 This is why the learners' conversational behaviour that can be observed in this case is also located quite high up in the transition to the top of the *learning pyramid* (by Miller 1990), where an action is not only "demonstrated" (*shoes how; performance),* but is already carried out (*does; action),* which we will return to briefly here under the examination aspect (§ 13.6) and in the evaluation part VII (§ 40.3); cf. Venktaramana et al. 2022, who base their extensive review on Miller's (1990) learning pyramid.

cooperation with various clinics (internal medicine, surgery, dermatology, orthopaedics, etc.), thankfully make themselves available for our teaching purposes.

Actor-patients or simulated patients (SP) are mainly used in preclinical training, but also in clinical training and in the practical year (in cooperation with the Dean of Studies), especially when no real patients are currently available (SP as a "second-best" solution). In addition, we use simulated patients (SP) in our OSCE examinations, which we have been training with a "permanent staff" since 1999. The OSCE procedure for the examination with SP will be briefly reported here in conclusion (§ 13.6) and in detail in the evaluation section (§ 41). The "classic" role play (among *peers*) is used in different variants in individual courses as needed. The difference between the *free* and a *scripted role play,* which is quite close to the interaction with SP, has been discussed elsewhere (Koerfer et al. 1996).

In the following, we will first present (§ 13.5.2) a specific *multimedia* learning programme for conversation simulation, which can also be used in a "slimmed-down" version as PowerPoint presentations, and then describe (§ 13.5.3) the communicative interaction with *real* patients, which is central for us and which can already be regarded as "serious" trial practice in a learning situation, which largely corresponds to the frequently made demand for *practice-oriented* training.

13.5.2 Learning in multimedia conversation simulations

Another component of the Cologne *Multimedia Training Programme* (C-MTP) presented above (§ 13.4.5), which has undergone various developments since the end of the 1990s, is a simulated learning situation in which learners are stimulated to engage in comparative reflection and verbal intervention exercises (Koerfer et al. 1999, 2008). This type of learning can be organised both as *self-learning* on the individual computer and in *group learning*.

Simulated interventions

In both cases, a particularly successful, real doctor-patient conversation (in the sense of "best practice") is played to the learners, without, however, communicating this information beforehand. The learners should

follow the presented conversation, which is usually an initial conversation, as impartially as possible without prior information. The general instruction to the learning users is only that they should intervene on behalf of the real doctor at certain pre-programmed points in the conversation (E 13.2: contribution 05), where the video presentation stops for a certain period of time.

E 13.2		Last patient statement:
01	P	(...) and I have pain ... and so far I have been taking [name of drug] for the last 20 years ...
02	D	hm [nods] .
03	P	then taken, if it was then . then after half an hour not gone . still uh [drug name] .
04	D	yes .
05	P	for the pain ... and I think ... I think I'll have a look and see if it's something my previous doctor didn't find.

In this period, the simulated intervention of the learner must follow the last patient statement, so that in each case for the learner as simulated doctor it is currently: "It's your turn!" (E 13.3). Afterwards, the learner's own interventions can be systematically and critically compared with the interventions of the other learners or with the real intervention of the real doctor guiding the conversation (E 13.3-5). The respective advantages and disadvantages of the intervention alternatives can be assessed and also formally evaluated in class or in an examination (differentiated according to "school grades").

E 13.3		"It's your turn!"	Evaluation
L1	D	[My intervention is:] -- --	❶❷❸❹❺

E 13.4		Simulated Conversation: Alternative Interventions	Evaluation
L2	D	how long have you had this pain?	❶❷❸☺❺
L3	D	can you describe the pain in more detail?	❶❷☺❹❺
L4	D	what are you thinking about?	☺❷❸❹❺
L5	D	what other medicines are you taking?	❶❷❸❹☺
L6	D	where and how is the pain? Is it sharp, pull-ing or pressing?	❶❷❸☺❺
L7	D	what did your previous doctor find?	❶☺❸❹❺

E 13.5		Real continuation of the conversation: Intervention of the real treating doctor	Evaluation
06	D	what do you think might have been over-looked? .	☺❷❸❹❺

The simulated interventions of the learners (L1-L7) already cover a wide spectrum of possible verbal interventions in this small sequence. The spectrum ranges from the temporal information question about the duration of the complaint (L2), which could almost be answered itself if the learner listens well, because the patient has already been taking medication for 20 years according to his own statement, to the question about further medication (L5), which does not "run away" and could also be asked and answered later, to the question about the patient's *subjective* theory (L4), which comes closest to the real intervention of the attending physician (06) with its fitting follow-up function to the last patient statement. In group lessons, the discussion about such intervention simulations often leads to a real "competition" between the learners for the optimal intervention ("best choice"), whose reflective justifications can in turn initiate new learning processes at higher learning levels.

Self- and external evaluations

The evaluation of the "own" intervention (L1) as well as the "foreign" interventions (L2-L7) can always be done independently by the learners in the initial situation, but can also be settled afterwards with the "expert"

opinions of teachers or the "expertise" of the programme designers. A possible "dispute" about the "correct" evaluation of the interventions usually ends in consensus in group discussions. In each case, the verbal interventions of the real doctor, whose conduct of the conversation was rated as particularly "good" overall by both the experts and the learners, received a great deal of approval. The "good" reasons for this positive overall assessment of this model conversation ("best practice") will become apparent when we later subject the progress of the conversation to a detailed empirical analysis (§ 17-23).

In the repeated use of the training programme, the participants can, if necessary, notice their own learning progress (in the sense of George Bateson 1985), if they should notice in retrospective comparison that they now use completely different types of verbal interventions than their predecessors in other semesters or than they themselves used in earlier learning stages or come to different assessments (than before). For this purpose, it would be useful to create individual and collective learning histories and learning profiles in the evaluation with an appropriately complementary programme (and while preserving anonymity) in order to be able to correct or reinforce developments of learning processes with intervention exercises in good time.

The described multimedia training programme for simulated conversation could also be made more effective if, for example, the spontaneous oral interventions of the learners (E 13.3: L1) could be recorded directly via a speech recognition programme and the written data (transcripts) obtained in this way could be made available for further processing both to the programme designers and "experts" and to the fellow learners for immediate critical comparison.

In everyday teaching and learning practice, multimedia deficits can be compensated for with traditional means without major effort, for example, by handing out additional worksheets to the learners to accompany the video presentations of D-P-Conversations (plus transcripts), which are embedded in *PowerPoint presentations* in sequences. These worksheets can be filled in by the learners with their own intervention suggestions (E 13.3: L1), as can be seen in the preceding examples (E 13.2-5), which fit into a DIN A4 format, and can be worked on as evaluation sheets. In addition, these evaluation sheets can also serve as working materials for further classroom discussions in this or a subsequent learning group, which can at the same time serve as working materials for further lesson discussions in this or a subsequent learning group in the future.

With the combination of video presentations of *real* conversations and traditional media such as worksheets ("paper and pencil"), relatively *realistic* intervention exercises with subsequent conversation reflections in group discourse are possible, whose reality content makes this form of learning seem at least the "second best" solution if no simulated or real patients are available. Certainly, the training with *real* patients, which will be described below (§ 13.5.3), is the "royal road" of medical communication training, but there are other, multimedia ways, which in their own way can also contribute to achieving the goal.

For example, there is a variant on a multimedia self-learning programme for simulated D-P-Conversation (C-MTP), which in our clinic is to be worked on by students in the 1st clinical semester as a "homework assignment" in addition to the internship (§ 14.1, 41.4), in which they receive individual feedback on simulated interventions.

In addition, we have developed a didactic concept of *video conferences* (§ 14.1, 14.3) in both the 1st and 4th clinical semesters, in which students are given the opportunity to follow an actual conversation between patient and doctor directly (*live*) in the ongoing medical consultation and subsequently discuss open topics (anamnesis, coping, diagnosis, therapy, etc.) directly with the patients and/or the doctor - at the interface with direct person-to-person contact in learning situations with „real“ patients (type 4 in § 13.5.1), as will be described below.

13.5.3 Learning with real patients

The "royal road" of communication training is taken by all students as early as the 1st clinical semester in small group work, in which each of the six to eight group members usually gets two opportunities to talk to real patients. Here, the small group work is mainly about practising anamnesis conversations with "unselected" patients who are undergoing treatment on various wards at our university hospital in Cologne.

This gives the students contact with real patients with "cardiological", "surgical", "orthopaedic", "dermatological" etc. diseases. The real patients are asked for their willingness to participate in close cooperation with the respective clinic management and the treating doctors and are prepared for the conversation situation as a learning situation by our specially trained tutors, in which they are to contribute "nothing more than themselves" (as a sick person).

Then in the 4th clinical semester, also in small group work (with six to eight members), the exercises in conversation guidance are focused on specific problems of medical communication (psychosomatic comorbidity, coping, defence, "difficult" patients) (§ 29-34). Because of this specialisation of conversation guidance, specifically trained *simulation patients* (SP) are then also used, who have been trained for their respective roles in special training courses by experts corresponding to our training of SP for the OSCE examination (§ 41). For trial practice with real and simulated patients, the common *learning setting* is to be described first, which is then to be differentiated.

The learning setting

The two variants of the learning procedure, which we have been practising with both *real* patients (RP) and *simulated* patients (SP) at our clinic for almost two decades, are based on a common *learning setting,* the basic structure of which will be illustrated here first with Baile (2011) (Fig. 13.10). Although Baile has tailored the learning setting specifically to conversation training with SP in oncology, it can be generalised for other learning situations on medical conversation.

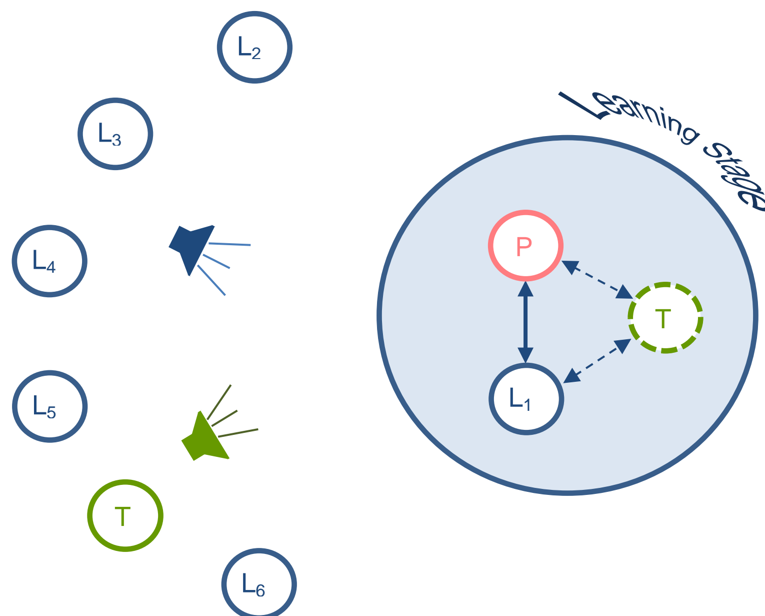

Fig. 13.10: The general learning setting with patients, modified based on Baile (2011) (L = learner, P = patient, T = teacher; or D = docent)

In the typical learning constellation, the two main actors L_1 and P act in their respective doctor and patient roles more or less separated from the rest of the learning group, as it were on a "stage" (*learning stage*), on which the dyadic doctor-patient conversation takes place under the observation of an attentive "audience", which follows the "performance" on stage in critical observation.

Although the external influence during the conversation between L_1 and P should be kept as low as possible (see below), "stage directions" are certainly given in advance by the teacher (T) (marked here with a dashed line), who then withdraws into the rest of the learning group before the doctor-patient conversation begins, until a critical "review" from the entire "audience" can be expected afterwards. The learning setting will be described in more detail here for the *trial practice* with *real* patients (RP) and then more briefly with *simulated* patients (SP), as it is essentially analogous.

Phases of group learning

The lesson is divided into three phases: (1) the theoretical and practical *preparation of* the practice conversation by our teacher (T), (2) the subsequent *performance of* the conversation on the "stage" between a learner (L_1) and a patient (P) and (3) the *debriefing*, in which L_1 is supposed to *self-reflect on the conversation* she has just "completed" and receives *feedback* from the other $L_{2\text{-}6}$ from the group and from D, after which the objectives for the next sessions are determined individually for L_1 and the whole group. These three phases will be described below according to content, structure and function with different variants.

(1) Preparation: "Directing" instructions for all participants

In the learning situation with real P that we initially practised in the first clinical semester, D usually only performs a *preparatory function* for L_1 and P, instructing them in their respective conversational roles. After a *theoretical* introduction, in which our *manual* on interviewing is presented with further literature, the learners are practically prepared for their "doctor role". They do not receive any further information about their future patients and their illnesses, but are supposed to conduct

an initial interview as if they were taking their first medical history on the ward.

The real P's should remain as much as possible in their natural role as ill persons, but must be introduced to the learning situation in such a way that it is clear to them when they participate that their counterpart L_1 is not a "real" doctor, but is supposed to "practise" the doctor's role conversationally "under supervision". The P's are made aware of their "right of refusal" if something "gets too close" to them, especially in front of the group as the "audience" ("You can interrupt or stop the conversation at any time if something gets too uncomfortable for you or you feel too much pressure"). However, the P's only made extremely rare use of this right of refusal, which can also be taken as evidence of the *acceptance* and *authenticity of* the conversations.

Finally, our tutors or our Ds assured the Ps once again that "as everywhere" in the clinic, medical confidentiality applies here as well during the trial practice with medical students.

The other L_{2-6} in the group (as the "audience") are either given general observation tasks according to our *Cologne Manual of Medical Communication* (C-MMC) (§ 13.4.1, 17-23) or according to our *Cologne Evaluation of Medical Communication* (C-EMC) (cf. Appendix § 13.8) or they are given specific observation tasks, for example on *non-verbal* communication (§ 12), in which, for example, attention is to be paid to gestures and facial expressions or body posture. Because it is often difficult to pay attention to everything at the same time, a division of labour may be useful, in which one group member L_{2-4} focuses in their observation on "interruptions" of patient narratives, for example (§ 13.4.3), and other group members L_{5-6} concentrate on specific phenomena of non-verbal interaction ("posture") (§ 12).

(2) Conducting the interview: standard procedures and variants

During the individual conversation, the teacher (T) withdraws into the group and only intervenes in the interaction on stage in an "emergency", for example if a conversation between L_1 and P threatens to "stagnate" or "derail". Thus, in the case of a persistent "lull in conversation", D could "intervene" with the following intervention to get the conversation going again: "We haven't found out anything about the patient's family/professional situation yet". On the other hand, occasionally a limiting intervention by D is needed in the rare cases where real patients, if they

do not already make active use of their "right of refusal" (see above), nevertheless need to be protected from an overly invasive conduct of the conversation ("encroachments") by L_1 ("To clarify this further would go too far here in the group now"). This option should apply to particularly "sensitive" topics (sexuality, domestic violence, drug addiction, etc.), although patients are often prepared to deal with these issues openly on their own initiative - even in front of the group.

Otherwise, the conversation can and should take its "free course" before it is brought to a "round" conclusion by L himself after a certain saturation of the conversation or is "formally" ended by T from the outside after the expiry of a conversation time agreed upon in the group.

Before feedback is given from the group in the debriefing (see below), our teacher (T) can optionally have different role-play variants perceived for the learning situation on stage: If this has been agreed beforehand with the group and the respective P, another L_2 can also take on the role of the doctor and continue the conversation that already seemed "saturated". It is often astonishing for the group to find out what further information can still be explored about P when almost "everything seems to have been said".

So it is impressive for all involved how a second doctor-player L_2 can pull the same patient into a productive *second conversation* through further questioning after the predecessor seems to have already pulled out all the stops. Then suddenly topics, attitudes (fears, wishes) and emotions (anger, sadness) can come to the surface, which P had obviously not been "addressed" sufficiently by L_1 before.

However, this variant of "understudying the doctor's role" requires a developed trust in the learning group so that the "competition" between the first and second occupation of the doctor's role is not experienced as personal "rivalry" but as an extension of experience in conducting the conversation with the same P, with whom different conversation results can be achieved in each case. In special situations in which the conversation is visibly stagnating and no other L wants to "step in", the doctor's role can also be taken over by T, which in successful cases may also be perceived as a "model conversation" (*best practice*).

Also optional, after the practice phase, which initially ends with the conclusion of the interview, "questions from the group" can be asked of P, depending on the time remaining and the interest of the learners as well as the willingness of patients. Even in this supplementary procedure to the taking of anamnesis, new insights into P often come as a surprise, which once again proves "in front of everyone's eyes and ears"

that a taking of anamnesis can rarely be considered "complete" - a deficit that one also has to realistically adjust to in later professional practice.

(3) Debriefing: self-reflection and feedback

After P has said goodbye, the group returns to its old group constellation in order to critically *(self-)reflect* on the "conversation case" that has just been experienced in a *debriefing*. In this *reflection phase,* L_1 should have the first word with the "doctor role" leading the conversation, which can be stimulated and structured by the following questions, for example:

- "How did I experience the conversation, my patient and especially myself in the conversation?"
- "Did P actively participate or did I have to "wrestle" everything from P?
- "What feelings did I myself develop when P came to talk about the emotional issue of (...)?"
- "Where were the key conversation points to be made to steer the conversation in one direction or another?"
- "Where and when was I sure/uncertain about how to proceed with the conversation?"
- "Should I have structured less/more?"
- "What did I do well/not so well?"
- "To what extent did P "benefit" from the conversation, even though it was only an exercise?"
- "What would I do differently next time?" etc.

Following this kind of *self-reflection*, which we dealt with under the aspect of developing a doctor's *meta-competence* (§ 2.3, 3.2), the other group members give their *feedback* on the conversation, which is still "freshly" assessed from an experiential perspective. In their specific learner role as observers, the group members often reciprocally follow similar aspects as L_1 himself had already addressed in the doctor role, and confirm or deny or modify his self-assessments. In addition, they report their specific observations, for example on non-verbal communication, which they may have been specifically asked to do by D with an observation assignment (see above):

- "Your gaze behaviour was open and facing, except for the stage where you were taking notes".
- "When you give listener signals, it is often "okay", which you give relatively mechanically and sometimes inappropriately, because what P is saying is not "okay".
- "What you did well/less well was (...)"
- "What I would have done differently in your place on this subject (...) is (...)"
- "What you should basically do differently next time is (...)"

Even if the opinions are critical, they should be welcome in such a small learning group (with six to eight members) as collegial suggestions for improving one's own conduct of the conversation. Dealing with criticism should be meant and understood in a spirit of solidarity, if only because all learners will take turns in the same doctor's role, in which, according to the "definition" of the learning situation, "trial and error" is the order of the day and thus "mistakes" are not only allowed, but can be used as *learning opportunities* by all learners to "do better".

Finally, the group usually expects an "expert" opinion from T, but this should not be done prematurely, so that the discussion about the possible controversies in the evaluation of the conversation just experienced can be conducted as openly as possible in the sense of *problem-oriented* learning, which should lead to *independent* problem solving (§ 13.4.2). Possibly, an "expert" assessment by T will precisely not conclude a discussion, but lead to new controversies. If necessary, the discussion will then be enriched by "theory pieces" and practical cases (manual, literature, best practice examples).

An overall assessment should on the one hand lead to concrete recommendations for L_1 in the "doctor's role" ("Keep it up, but more eye contact and listener signals, but avoid the mechanical accumulation of "okay", etc.) and for the group as a whole set a to-do list, which may require a restructuring of the next sessions, in which outstanding or accumulated problems of the doctor's conduct of the conversation (such as types of *listener feedback*) can be specifically made a topic.

Should a greater *need for theory* and *reflection arise,* sessions can also be used in a different way than planned, which in any case occasionally has to happen for pragmatic reasons if patients (for whatever reason, e.g. the current deterioration of their condition) should cancel at short notice and the corresponding "gap" has to be "filled" elsewhere.

Otherwise, the return to theoretical or reflective phases can also be used for interim assessments (for example, in the middle of the semester) in order to prepare new conversation techniques for the further *practice conversations* or to sharpen the observation categories for these conversations accordingly (according to the *manual* and *evaluation sheet*) using *best-practice examples* (§ 13.4.4).

13.5.4 Learning with simulated patients (SP)

Because the learning situation with *simulated patients* (SP) is similar to that with real patients (RP), only the reasons for a change from RP to SP will be given here. One banal reason is the (lack of) *availability* of the "desired" types of patients with corresponding clinical pictures and role patterns, the other reason is the *reasonableness* of a "risky" trial practice with RP.[25]

Whereas in the first clinical semester patients must and can be "taken" for the *anamnesis interview* as they come to us from the (internal, surgical, dermatological, etc.) wards, in the fourth clinical semester other demands must be made on a specifically psychodiagnostic interview with patients. In the fourth clinical semester, other demands must be made on a specific *psychodiagnostic interview* with patients for whom, in addition to taking the anamnesis, the focus should be on specific diagnostic and therapeutic problems (depressive co-morbidity in diabetes, coping, defence, oncological, terminally ill, aggressive-devaluing patients, etc.) (§ 29, 34, 38). These problems can neither be taken for granted in real patients nor can their discussion in learning groups be required of real patients without further consideration.

For this reason, simulated patients are used in the 4th clinical semester, who have been trained accordingly in advance (§ 13.6, 41), so that they can also meet extraordinary requirements. In this way, they can also react to unacceptable situations ("assaults") in a role-conforming manner, especially since they are not personally affected in the case of an "insult" by the role-playing doctor.

25 The learning setting for the trial practice with SP and RP was described above. The advantages and disadvantages of using simulated patients are discussed in the evaluation (§ 13.6) and OSCE (§ 41). Further literature can be found there. For immediate feedback from simulated patients (SP) to undergraduate medical students, cf. George, Wells, Cushing 2022.

As in the learning situation with real patients, three phases can be distinguished in training with simulated patients. The learners can be prepared theoretically and practically for certain clinical pictures (*depressiveness*) and problems (*defence*), for example by teaching the differences between a *confrontational* and a *tangential* approach using examples (§ 3.2, 17.3, 32). Likewise, the degree of difficulty can be agreed with the SP in *advance,* for example, to "play" a psychological comorbidity (depression) of the patient with diabetes or a defensive behaviour up to the "degree of difficulty" where a patient largely falls silent or tries to break off the conversation.

During the practice conversation with SP, D can intervene more strongly (than with RP), for example by stopping the conversation, discussing alternatives of conducting the conversation in the group or trying to restart the conversation. A very productive variant here is also the understudy of the doctor role by a learner, if L_2 leaves the room beforehand during the first practice conversation, in order to then conduct his conversation without knowledge of the first conversation, i.e. just as "blindly". Here, too, the co-learning observers can compare and experience how different conversations can turn out with a comparable "input" (identical SP(s) in the same role). Likewise, with SPs, fluid changes in the doctor's role are possible, not only in the middle of the conversation, but also towards the end, when "almost everything seems to have been said" and yet a "new" doctor knows how to expand and deepen the conversation considerably.

In *debriefing,* (self-)reflection can be structured similarly to RP (see above), but in addition, practice conversations with SPs have the advantage that they in turn provide *feedback* according to certain standards that have been trained beforehand (§ 13.6, 41). This feedback is also intended to help learners acquire a *self-reflective meta-competence* (§ 3.2, 6.4) that they can apply to their future conversation practice with increasing routine. Another test case along this path is the OSCE method examination, which also uses simulated patients (SP) (§ 41).

13.6 Evaluation of communicative competence

As already stated in the introduction (§ 1), medical interviewing is not only neglected in medical education and training as a whole, but it is also examined too rarely and too far away from practice, so that the effi-

ciency for teaching and the progress for the learners can hardly be assessed. The examination method (OSCE) (*Objective Structured Clinical Examination*) with standardised simulated patients (SP) can be seen as a significant contribution to quality assurance in teaching. The use of standardised or simulated patients (SP) has already been tested internationally in a long tradition with a wide variety of applications in research, teaching and examination (OSCE).[26]

In addition to feedback procedures (by SP and teachers) and questionnaires for (self-) assessment of the learners, we use the *Cologne Evaluation of Medical Communication* (C-EMC) that has been revised several times (cf. Appendix § 13.8). The evaluation procedures are carried out during or directly after the examination.[27]

At our clinic, we introduced the final examination with simulation patients for the first time in the winter semester 1999/2000 (Koerfer et al. 2000, 2008) and have systematically expanded it since then. In the meantime, we have a large number of simulation patients who are increasingly used in teaching with a diverse range of roles (§ 13.5.3). Since we will report in detail on the use of simulation patients in examinations according to the OSCE method (§ 41), only a brief overview of the examination procedure and its acceptance by the stakeholders involved will be given here.

By way of introduction, we will look into the methodological problem that candidates are known to be under specific, critical observation in examinations of their communicative competence, which could lead to

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26 The advantages and disadvantages of using simulated patients are discussed in the chapter on the OSCE method (§ 41). Over the long period of three decades, examples are given: Hoppe 1995, Kurtz, Silverman, Draper 1998, Nikendei et al. 2003, Ortwein, Fröhmel, Burger 2006, Simmenroth-Nayda et al. 2007, Fröhmel, Burger, Ortwein 2007, Lane, Rollnick 2007, Eckel et al. 2014, Kliche 2015, Hauser, Matthes 2017, George, Wells, Cushing 2022, who base their qualitative research on grounded theory and identify 5 overarching themes: 1. Feedback processes, 2. Challenges in providing feedback, 3. Cumulative experiences, 4. Web of interpersonal relationships and dynamics and 5. Portraying the character and patient representations.

27 In their review on curriculum development, Bachmann et al. (2022: 2324) explicitly advocate a „good mixture“ of *formative* and *summative* formats (2022: 2324). A systematic review of evaluation research on adult education (distinctions: assessment vs. evaluation; formative vs. summative) is provided by Bin Mubayrik 2020.

the equally well-known "distortions" that seem to call the examination result into question.

13.6.1 The observer paradox as a problem of evaluation

In all the types of learning situations described above (§ 13.5), "distortions" can occur during trial action, which are also possible otherwise when action is taken under the observation of third parties, be it one's own group members or the teachers or even the examiners, etc. In these quasi-public situations, the general rules of triadic communication apply (Koerfer 2013), according to which it must be expected that in the dyad, action is taken simultaneously under the perception and judgement perspective of (potential) observers. However, this applies to all communication if the actors are aware that they are acting under observation. The fact that action is taken differently with observation (than without) has been described in *social science* and specifically *linguistic* research as the *observer paradox* (Labov 1971, Koerfer 1985, 2013). According to this, the intended object of investigation can not only be "missed" but "falsified": When data are collected under observation, the "subjects" do not "present" the ("natural") behaviour that one would "actually" like to study as unobserved behaviour.

The methodological problem that the examination candidates, especially in examinations of their communicative competence, are known to be under specifically critical, not least *censorious* observation, which could lead to the equally feared "distortions", will also be pursued later under the aspect of evaluation, which not only concerns communication between students and SPs. Communication between real doctors and real patients is also subject to the problem of observation if, for example, video recordings of doctor-patient conversations are to be made for the purpose of evaluating Balint group work, which are examined under the special "observation microscope" of empirical conversation research (§ 2), from which we still seek to "profit" extensively here in the practical part of the Handbook.

As an essential result of the methodological considerations on the observer paradox, which can also have a variety of effects in examination situations, it should be anticipated here that in examinations of communicative competences, "Sunday speeches" are to be expected, behind whose level the "candidates" may fall back again in unobserved everyday conversation, but in these extra-ordinary ("Sunday") examina-

tion situations, it is precisely the *maximum* competences that are to be tested in their *principle* availability. [28]

According to Miller's (1990) *pyramid model*, to which we will also return (cf. above § 13.2.3, and § 40.3), it can be expected that candidates will "prove" their learning progress in medical interviewing not only as an increase in knowledge (*knows how*), but also demonstratively (*shows how*) in communicative action with SP to the extent that they *can* prove this. The fact that the situation of action is to be designed in a relatively *practical way* when rehearsing with SPs in general and specifically in examinations, so that realistic chances of action are opened up for the actors, was already discussed in advance (§ 13.5.1) and will be further elaborated under the aspect of evaluation (§ 40-43).

13.6.2 Standard procedure of the examination (OSCE)

The examinations according to the OSCE procedure with SP are organised by us at the end of the courses in the 1st clinical semester. The examinations are always chaired by one of our teachers (T) who was not at the same time a teacher for the examination candidates, so that in this respect ("sympathy" bias, etc.) a corresponding neutrality can be expected in the evaluation.

The examiners pay attention to the "formalities", which include, for example, adherence to the interview time (approx. 10 min.) and take over the written evaluation using an evaluation sheet (C-EMC; see Appendix § 13.8). The examination candidates often take the situation so seriously that they bring their "doctor's gowns" in order to be able to "slip" better into their doctor's role before they invite "their" P (into T's office) in, as in later professional life, introduce themselves by name (etc. as in the manual), offer a seat in a separate table and open the conversation (in the "distant" presence of the teacher) in a quasi-dyadic situation.

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[28] Especially in exams, candidates will want to "do their best", whatever they *think* is their best. If they follow an inappropriate model of (purely *interrogative*) conversation, this will also come out in the examination. The fact that candidates who are particularly *anxious* about examinations can "perform below their capabilities" is certainly a problem of examinations in general.

If everything goes "normally", the students (S) also end the conversation independently or are reminded by the teacher in time that they have to "gradually" come to the end. Afterwards, the SP has the first word, which the teacher gives (after thanking both actors) with a more or less standardised question (e.g. "As a patient, how did you experience the conversation with your doctor?"). The SP then uses the opportunity to speak for a first feedback before S comments on it from the perspective of the (played) doctor's role (approvingly or critically) and finally the teacher also joins in with observations, comments and a structured overall evaluation (according to C-EMC) (§ 13.8), so that a short discussion usually ensues between all participants who "talk through" the conversation (and possible alternatives) once again.

13.6.3 Structured evaluation

In addition to the many advantages of using simulation patients (SPs), which are seen primarily in their *flexibility*, *role diversity*, *standardisability*, *availability* and *resilience* (§ 41), a particular advantage that can be used in examinations in particular is that the SPs can give *feedback* to "their doctors" after the examination interview, which contains standardised elements as well as spontaneous feedback.

Feedback by simulated patients (SP)

For the examinees themselves, the experiential feedback of the simulation patients is valuable because they can already anticipate the possible "(dis)satisfaction" of the real patients with their (way of) conducting the conversation, analogous to their later professional practice. Feedback can also be enriching in critical cases, for example when "uncertainty" in the formulation or "lack of eye contact" or "too much guidance through questions" are reported back.

From such feedback from the SPs, conclusions can be drawn about the achievement of our learning goals on interviewing, as this becomes clear, among other things, in the direct comparison of real examination interviews that were audio visually recorded.

For example, the same SP in the same sick role gave rather negative feedback in the case of a strongly *interrogative* interview (SP: "that's why I told less than I would have liked to") (E 13.6), while after the other ex-

amination interview (E 13.7) she expressed an overall "very positive" opinion towards the student (S):

E 13.6		OSCE No. 43 - SP feedback: "I told less of myself than I would have liked to".
01	SP	and um . maybe you could hear that there was a bit of insecurity (...) that's why I told less than I would have liked to . that was my impression . and I would agree with the examination [suggested by S] ... yes .

E 13.7		OSCE No. 44 - SP Feedback: "I had to really tell the story"
01	SP	. yes . my impression was (...) that someone was serious and didn't mix things up and just wanted to make sure that he had understood it correctly . the same thing . there were a lot of open questions . so I had to tell the story properly . that was real work .
02	S	. yes .
03	SP	I found that pleasant . and then this story . "Am I right in assuming that you are busy or have a lot on your plate" . that I could say: "yes, that's how it is" . that also gave me the feeling . someone recognises my performance (...) and I found that very positive .
04	S	hm .

In both cases, the SP uses a *vocabulary* of *everyday language* for her feedback that comes quite close to the corresponding terminological-professional category formations (understanding, open questions, narration, empathic recognition), without any specific instruction having been given on this in the SP training. Not only in positive, but also in negative cases, the SP's feedback can certainly be understood and accepted, not only by the students/examinees themselves, but also by our examiners, who only in exceptional cases give deviating, often only modifying feedback.

Professional rating (C-EMC)

As a rule, there is a high degree of *agreement* between the SP's feedback and the evaluation by our lecturers. This applies both to the subsequent dialogue debriefing of the examination discussions with the examinee and to the structured lecturer rating using an evaluation sheet.

The *principle of transparency* applies to all those involved, according to which only what has been taught beforehand should be tested. Therefore, analogous to our *Manual on Medical Communication* (C-MMC), which is the basis for teaching (§ 13.4.1, 17-23), we have developed the *Cologne Evaluation of Medical Communication* (C-EMC) (see Appendix § 13.8) for the final examination to systematically check communication competence.

In the direct comparison of the two examination interviews mentioned above (E 13.6 and E 13.7), which received negative and positive feedback from the SP respectively, the differences in the individual scales as well as in the total score achieved could be seen immediately (13:31 points out of 42 and 50 respectively).[29] The strengths and weaknesses of the two interviews, which were already described in everyday language in the SP feedback, are reflected accordingly in the overall categorical profile of the Cologne evaluation instrument (C-EMC).

On the basis of preliminary analyses of the evaluation procedure, the following tendencies can be identified: While the students consistently achieve good results in the opening and closing techniques of interviewing, which are particularly easy to teach and learn, their communicative competences in the central dimensions of the anamnesis interview vary considerably. The students have particular difficulties in dealing with emotions, as this has already been described as a problem in research (Suchman et al. 1997, Koerfer et al. 1994, 2004, Butow et al. 2002, Hojat et al. 2004, 2009, Neumann et al. 2011, Seitz et. al. 2017, Koerfer, Albus 2018, Parker et al. 2020 (cf. § 20).

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[29] The maximum number of points (50) for the evaluation cannot be achieved in such examinations (in the 1st clinical semester), as only the medical history taking is to be assessed here (max. 42). For the "explanation of previous findings" and for the "coordination of the examination and therapy plan", 4 additional points each can be achieved (42+4+4=50) (see C-EMC in Appendix of this chapter).

Here, the evaluation results point to specific challenges for the further teaching of medical communication, in which the *empathic competences* (§ 3.2, 20) should be particularly strengthened. Likewise, the competences for the exploration of *subjective ideas and expectations* of patients should be promoted more strongly, the relevance of which for further *medical decision-making* (§ 10, 22) is probably still underestimated by the students.

13.6.4 Relevance and acceptance of the examination process

In order to check the *acceptance* of our examination procedure with simulation patients, which essentially corresponds to the *authenticity* of the action from both action roles, we regularly and anonymously ran a questionnaire in several semesters following the examination, with which the students (S) were to formally (2 scales) assess the *relevance* of the examination procedure and their *satisfaction* with it in a first step.

In a second step, the Ss were asked to share their experiences, criticism or suggestions for improvement in a *free text.* A first sample (n=153) consisted of Ss who had no previous experience with SP, so that we could expect a spontaneous, "unbiased" primary judgement for this group after their first contact with SP. During the formal questioning in the first step, the following assessments (differentiated by "school grades") could be made for this sample immediately after the OSCE procedure, so that the impressions were still up-to-date:

- I find my experiences with simulation patients:
  positive ①②③④⑤ negative
- I find the OSCE examination with simulation patients:
  important ①②③④⑤ unimportant

For both scales, the ratings "1" or "2" were given by approx. 90 % of the students. While this previous *formal* evaluation of the sample revealed a particularly high level of *acceptance* and *relevance* for the examination procedure overall, the *content-analytical* evaluation of the associated *free texts* revealed a differentiated picture of the justifications for these very attitudes, some of which will be cited here as examples (E 13.8):

E 13.8		OSCE questionnaire/free texts (selection):
01	S	I found the patient very authentic, so it was not so difficult for me to get into the situation.
02	S	Conversations are a good way to get over the first inhibitions. But the best way to get real "practice" is with "real" patients.
03	S	Personally, the conversation showed me very clearly on which points I could have asked more.
04	S	I also think it's good that you get direct feedback on what you did well and where you can still improve.
05	S	OK, just difficult to take the situation really seriously, knowing that they are not real patients.
06	S	Imitating a realistic situation is very good.
07	S	I think it's good that you can try out how such a conversation is conducted.
08	S	The patient described his complaints (physical and mental) very credibly.
09	S	Simply super! effective
10	S	Personally, the conversation [= debriefing] after my medical history interview showed me very clearly in which points I could have asked more.
11	S	I think it [=OSCE method with SP] is good and it should be done more often.
12	S	It was fun
13	S	Maybe a course [with SP] could be offered on a voluntary basis.

The spectrum of the students' (S) statements which are only listed here as a selection of examples, can be arranged under content-analytical categories (*authenticity*, *learning success*, *trial action, feedback*, etc.). First of all, there are isolated cases (S5) in which the examinees, with general prior knowledge that their interlocutors are not "real" patients, apparently find it difficult to engage in the conversation simulation in a way that *conforms to the role* ("difficult ... because you know that they are not real patients"). However, these are rather rare exceptions, which may also be due to an "examination blockade" that could no longer be overcome during the examination interview. A *relative* weighting is given by S2, according to which positive entry functions with SP are not disputed, but in the long term practice conversations with *real* patients are preferred, which of course is not possible in exams.

While in these few cases the *authenticity* of acting with SP is questioned or relativized, for most students the situations turn out to be

"authentic", "realistic" and "credible" - sometimes explicitly contrary to their own expectations (S1, S6, S8). In addition to this aspect of *authenticity,* many students place the spontaneous *feedback* (S4: "what you did well and where you can still improve") at the centre of their comments or combine the *feedback* with their personal *learning success* (S3, S10), which is also recognised for the entire procedure with a certain enthusiasm (S9: "Simply super! Effective"). Other students, in turn, emphasise the possibility of *trial and error* (S7), which is often credited with the fact that mistakes are not so "bad".

Some students even managed to find a "joyful" side to the examination situation (S12: "It was fun"). In this respect, their positive attitude obviously coincides with those who wished for a regular expansion of the exercise procedure with SP - and even "on a voluntary basis" (S13) - throughout the entire study programme, which in the meantime has also established itself as a tendency.

Obviously, many students were able to abstract well from the examination character of the conversation situation and effectively use their conversation with the simulation patients as another practice opportunity to prepare for their later *communication-intensive* professional practice.

Finally, it should not go unmentioned that whole "generations" of lecturers and simulation patients have been involved in the active implementation of the OSCE procedure at our clinic since the winter semester 1999/00 and have continuously improved it on the basis of their individual and joint experience, for example in the follow-up training of the SP in order to achieve even greater standardisation.

Even initial sceptics soon became active supporters, because together with the students they not only experienced the *effectiveness* of the procedure in *testing communicative competences*, but despite all the seriousness of the examination, they were also able to experience the *playful composure* and *creativity* in the medical trial with the SPs as well as the *humour* and *critical faculties* of the examinees in the debriefings, which cannot be assumed for all (types of) examinations.

2.7 Further information

The objectives and structure of the handbook are presented in more detail in a problem-oriented introduction (§ 1), which is followed by a critical review on the state of the art of interdisciplinary communication re-

search (§ 2) and the promotion of the learning goal 'communication competence' (§ 3) (Part I).

After the theoretical foundations (Part II: § 4-12) and the didactic concepts of student training and continuing professional education for doctors on medical communication (Part III: § 13-16), the empirical practical Part IV follows, which is essentially structured by our *Cologne Manual on Medical Communication* (C-MMC) (§ 17-23).

In Part V, major challenges of communication practice in specific fields of competence are described and analysed in detail (§ 24-39). Subsequently, problems, methods, and results of evaluation research are discussed in Part VI (§ 40-43).

Extensive and further references can be found in the mentioned review (§ 2), which explores the literature on 15 topics (§ 2.2), with a particular focus (13) on *Education and Evaluation*, before discussing the *concept* of *competence* in medicine and the promotion of *communication competence* in particular (§ 2.3).

References can be found at the end of this Chapter after the Appendix.

13.8 Appendix

13.8.1 Cologne Manual & Evaluation of Medical Communication (C-M+EMC)

13.8.2 Cologne Evaluation of Medical Communication – Diabetes and Depression (C-EMC-DD)

13.8.3 Cologne Manual of Interprofessional Communication (C-MIC)

13.8.4 Conversation maxims (according to Morgan & Engel)

See next pages

Cologne Manual & Evaluation of Medical Communication						C-M+EMC
OSCE Checklist for Medical Interviewing						[1]1998
© Department of Psychosomatics and Psychotherapy at the University of Cologne						[6]2022
No.	Course	Interviewer	Date	Patient (SP)	Rater	Sum:
						☐☐ 50

1 Building a relationship	☐ 4
1 Framing • Enable confidentiality • Avoid disturbances	
2 Greeting • Make eye contact • Verbal greetings, shaking hands • Address by name	⓪①
3 Introducing yourself • Introduce yourself by name • Communicate function ("ward doctor")	⓪①
4 Situating • Speak sitting down (chair to bed) • Ensure convenience • Coordinate proximity/distance	⓪①
5 Orientation • Structure conversation • Goals, time frame	⓪①

2 Listening to concerns	☐☐ 10
1 Start the conversation openly • Offer "What can I do for you?" • Occasion *"What brings you to me?"*	⓪①
2 Encouraging storytelling - feedback • Listener signals *hm, yes,* nod, etc. • Avoid interruptions • Allow pauses, free choice of topics	⓪①②③④
3 Active listening - verbal support • Encourage speaking up • Repeating statements verbatim • Paraphrase statements • Openly ask further: *"How did that come about?"*	⓪①②③④
4 Ensure understanding • Ask "Do I understand correctly ...?" • Summarise	⓪①

3 Eliciting emotions	☐ 8
1 Pay attention to emotions • Verbal (e.g. metaphors) • Non-verbal (e.g. gestures, facial expressions, gaze behaviour, etc.)	
2 Empathise with patient's situation	
3 Respond empathically • Offer appropriate help and comfort • Acknowledge burdens, coping	⓪①②③④
4 Promote emotional openness • Addressing *"I perceive that ...?"* • Naming *"You are sad then?"* • Clarify *"What do you feel then?"* • Interpret *"Your fear may come from..."*	⓪①②③④

4 Exploring details	☐☐ 12
1 Inquire about complaint dimensions • Localisation and radiation • Quality, intensity *(scale 0-10)* • Dysfunction/disability • Accompanying symptoms • Time (beginning, course, duration) • Condition "In what situation ...?"	⓪①②③④
2 Exploring subjective ideas • Concepts *"What do you imagine?"* • Explanations *"Do you see causes?"*	⓪①②③④
3 Complete anamnesis • Systems ("From head to toe") • General health, sleep, etc. • Previous illness, pre-treatment • Family risk factors • Family, friends, job, finances, etc. • Addressing gaps (sensitive issues)	⓪①②③④

5 Negotiating procedures	☐☐ 12
1 Plan an evidence-based approach • What is secured? • Do diagnostics have consequences?	
2 Clarify expectations • Ideas, wishes, hopes *"What did you have in mind?"* • Control beliefs *"What could you change yourself?"*	⓪①②③④
3 Explaining previous findings • Communicate diagnosis • Communicate problems	⓪①②③④
4 Examination or therapy plan • Explore decision model (SDM) • Discuss proposals and risks • Consider reactions • Strive for consensus	⓪①②③④

6 Drawing conclusions	☐ 4
1 Summarise the conversation • Reason for consultation, complaints, • Diagnosis, therapy agreement	⓪①
2 Offer clarification of outstanding issues • Information *"Do you still have questions?"* • Satisfaction "Can you handle it? "	⓪①
3 Arrange follow-up appointments • Examination appointments • Set a meeting date	⓪①
4 Say goodbye to the patient	⓪①
5 Complete documentation • Coding & conversation impressions • Topics for follow-up talks	

⓪① [⓪ = not met; ① = met] ⓪①②③④ [⓪ = not met ...④ = fully met]

Fig. 13.11: Cologne Manual & Evaluation of Medical Communication (C-M+EMC)

Cologne Evaluation of Medical Communication - DD						C-EMC-DD
OSCE checklist for physician communication of co-morbidity: diabetes, depression						1 2009
© Department of Psychosomatics and Psychotherapy,University of Cologne						2 2018
No.	Course	Interviewer	Date	Patient (SP)	Rater	Sum:
						☐☐ 73

1 General anamnesis ☐☐ 18

1 Establish a relationship ⓪①
- Greeting and introduction
- Situating and orienting (time, goals)

2 Listen to concerns ⓪①②③④
- Encourage storytelling
- Actively listen and support

3 Allow emotions ⓪①②③④
- Respond empathically
- Promote emotional openness

4 Explore details ⓪①②③④
- Exploring dimensions of complaints
- Complete general medical history

5 Coordinate procedure ⓪①②③④
- Clarifying information and expectations
- Negotiate therapy plan (SDM)

6 Draw a conclusion ⓪①

2 History of diabetes ☐☐ 20

1 Symptoms ⓪①②③④
- Thirst, nausea, etc.
- Hypoglycemia, nocturia, etc.

2 Start and course ⓪①②③④
- Diagnosis made when, by whom?
- Phases (condition, findings)

3 Preliminary examinations ⓪①②③④
- Referrals (specialist)
- Briefings (current occasion)

4 Pretreatments ⓪①②③④
- Therapy plans (nutrition, insulin, etc.)
- Therapy success (adherence, coping)

5 Complete medical history ⓪①②③④
- Risk factors (CHD, cholesterol)
- Concurrent / secondary diseases (CHD, retinopathy, nephropathy, etc.)

3 Anamnesis depression ☐ 4

1 Introduction open ⓪①
"How are you doing mentally?"

2 Suspected diagnosis: 2-question test
- Main symptom 1 ⓪①
  "Have you felt mostly down, sad, or depressed in the last 14 days?"
- Main symptom 2 ⓪①
  "In the past 14 days, have you mostly lost interest in things that usually bring you joy?"

3 Follow-up question after affirmation
- Main symptom 3 ⓪①
  "Did you feel mostly tired and exhausted during this time?"

4 Additional symptoms depression ☐ 7

1 Concentration ⓪①
"How about your ability to concentrate (at work, reading the newspaper)?"

2 Self confidence ⓪①
"How would you rate your self-esteem (self-confidence)?"

3 Guilt ⓪①
"Do you often blame yourself?"

4 Future prospects ⓪①
"How do you see your future - more optimistic or more pessimistic?"

5 Sleep "How (good) is your sleep?" ⓪①

6 Appetite "How is your eating behavior and appetite?" ⓪①

7 Suicidality "Do you sometimes think that you'd rather be dead?" ⓪①

5 Anamnesis Depression (cont.) ☐☐ 12

1 Onset and course ⓪①②③④
- Beginning "When did this start?"
- Phases/episodes
  "What were the worst times?"
  "Were there times of improvement?"

2 Subjective ideas ⓪①②③④
- Concepts
  "What do you imagine depression, etc. to be?"
- Explanations
  "Do you see causes yourself?"

3 Findings and pretreatments ⓪①②③④
- Diagnoses with comorbidity
  "What have you been in treatment for (depression, anxiety, etc.)?"
- Therapies (medication, psychotherapy)

6 Coordinate procedure ☐☐ 12

1 Clarify expectations ⓪①②③④
- Ideas, wishes, fears
  "What do you think might help?"
- Control beliefs
  "What can you change about your lifestyle (diet, exercise, etc.)?"

2 Communicate information ⓪①②③④
- Info Need "Do you have any questions?"
- Diabetes sequelae/prevention
- Comorbidity: "During depressive episodes, you seem to be extremely neglectful of your self-care."

3 Negotiate therapy plan (SDM) ⓪①②③④
- Adherence or change of therapy
- Psychotherapy or consult
- Topics/targets for follow-up appointments (rounds)

⓪① [⓪ = not met; ① = met] ⓪①②③④ [⓪ = not met ...④ = fully met]

Fig. 13.12: Cologne Evaluation of Medical Communication – DD (C-EMC-DD)

Cologne Manual of Interprofessional Communication						C-MIC
OSCE checklist for team communication						TEAM
© Department for Psychosomatics and Psychotherapy at the University of Cologne						2021
No	Course	Team member(s)	Date	Patient (SP)	Rater	Total
						☐☐ 72

1 Communication – Basics ☐☐ 12

1 Informing and instructing ⓪①②③④
- Discuss the current situation (*briefing*)
- Clarify the responsibilities, tasks, and readiness of team members

2 Conducting tailored conversations ⓪①②③④
- Concise, clear, and goal-oriented
- Exchange information reciprocally
- Let team members finish speaking
- Listen actively *hm, yes, really? what*?
- Respond appropriately to questions and criticism (*speaking up*, doubts)

3 Ensuring understanding ⓪①②③④
- Use people's names
- Ask questions ("Do I understand correctly ...?")
- Feedback type 1 (*call back*): *A: The infusion is finished – B: Good*
- Feedback Type 2 (*Closed loop*) *A: Pulse? – B: 62 – A: Okay!*
- Summarize interim/final results

4 Leadership – Management ☐☐ 12

1 Authority and leadership ⓪①②③④
- Take responsibility as a leader
- Demonstrate and assert authority
- Resolve team conflicts objectively (i.e., not *"Who is right?"* but *rather: "What is right?"*)
- Strive for consensus where possible

2 Planning, delegation, and control ⓪①②③④
- Develop and agree on plans by consensus wherever possible (5.3)
- Delegate functions and tasks
- Perform control (checklists)

3 Resource management ⓪①②③④
- Timing according to plan (*just in time*)
- Adapt pace to all team members as far as possible (including *time out*)
- Check workload and correct if necessary (*workload, stress coping, burnout, etc.)*

2 Situation awareness ☐☐ 12

1 Patient: Monitoring – Responding ⓪①②③④
- If responsive: see C-M+EMC [5]2010
- Condition or state
- Findings (data: images, values, etc.)

2 Team: Monitoring – Responding ⓪①②③④
- Verbal TM* (cues, information, alarm)
- Visual TM (gaze, gestures, etc.)
- Paraverbal TM (questioning, hesitant, friendly, mocking, annoyed, etc.)

3 Process: Monitoring – Responding ⓪①②③④
- Standard procedure (team routine)
- Anticipated complications
- Critical events (sudden bleeding, respiratory arrest, technical defects, etc.)

5 Decision-making ☐☐ 12

1 Timely problem identifying ⓪①②③④
- Address critical event
- Name the problem

2 Communicating the problem to team ⓪①②③④
- Assess relevance and risk
- Classify within the ongoing process
- Put consequences (emergency, etc.) into perspective (*think ahead*)

3 Developing decisions within the team ⓪①②③④
- Explore information, views, criticism, and options of team members
- *Shared decision making* whenever possible
- If necessary, decide alone
- Create and execute plan A or B

3 Teamwork – Cooperation ☐☐ 12

1 Supporting team members ⓪①②③④
- Encourage initiative (*support*)
- Strengthen individual and subject-specific skills (*coaching*)

2 Providing feedback ⓪①②③④
- Reward commitment (*feedback*)
- Take concerns and feelings seriously

3 Cooperation and participation ⓪①②③④
- Proactively involve team members
- Promote team building, working atmosphere, open communication
- Improve coordination of activities, intentions, and cognitions within the team (*shared mental model*)

6 Debriefing – Reflection** ☐☐ 12

1 Debriefing of the "incident" ⓪①②③④
- Summarize the process
- Reflect on critical situations

2 Discussing new plans within the team ⓪①②③④
- Explore opinions and suggestions of team members
- Develop alternative plans and keep them available (*think ahead*)

3 Reflecting on unresolved issues ⓪①②③④
- Identify the need for clarification
- Set a date for further discussion of similar incidents
- Prepare a meeting with specifically qualified team members

⓪①②③④ [⓪ =not fulfilled ...④ =fully fulfilled] – *TM=team members – **optional with max. 12 points

Fig. 13.13: Cologne Manual & Evaluation of Team Communication

Conversation maxims

1. The doctor must *encourage* the patient to *speak freely*, because only the patient can *tell* him what he has experienced.
2. The *degree of guidance* needed is different for each patient.
3. The doctor must remain *flexible* when taking the medical history and adapt to the nature of the patient.
4. Neither should he allow himself to be passively swamped by numerous insignificant details, nor should he guide the anamnesis in the manner of a cross-examination.
5. The doctor must always start a topic with *open questions*. He uses *specific questions* only to fill in gaps, to remove ambiguities or to substantiate certain facts.
6. If possible, *avoid questions* that the patient can answer with a simple "yes" or "no".
7. A question must be easy to *understand*. It must *not influence* the patient's answer.
8. (The doctor) takes over the *patient's expressions*, at least until he understands what the patient means by them.
9. (He tries to) *link each question* to what the patient has mentioned.
10. So the doctor *picks up the thread* where the patient left off.
11. At the *end* of the conversation, the doctor *asks*, 'Is there *anything else* you would like *to talk about*?'
12. Once the doctor has taken the patient's medical history, he *informs* the patient about the next *planned step* (usually the next examination).

Box 13.22: from: Morgan, Engel: Chapter 3
(English 1969; German 1977: 31-75) (selection and emphasis ours).

References see text pages

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Citation note

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