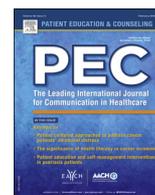




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Residents' perceived barriers to communication skills learning: Comparing two medical working contexts in postgraduate training[☆]Valerie van den Eertwegh^{a,*}, Jan van Dalen^b, Sandra van Dulmen^{c,d,e}, Cees van der Vleuten^{f,g,h,i}, Albert Scherpbier^j^a Maastricht University, Maastricht, The Netherlands^b Skillslab, Maastricht University, Maastricht, The Netherlands^c NIVEL (Netherlands Institute for Health Services Research), Utrecht, The Netherlands^d Radboud University Nijmegen Medical Centre, Nijmegen, The Netherlands^e Buskerud University College, Drammen, Norway^f Department of Educational Development and Research, Maastricht University, Maastricht, The Netherlands^g University of Copenhagen, Copenhagen, Denmark^h King Saudi University, Riyadh, Saudi Arabiaⁱ Radboud University, Nijmegen, The Netherlands^j Faculty of Health, Medicine and Life Sciences, Maastricht University, Maastricht, The Netherlands

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ABSTRACT

Objective: Contextual factors are known to influence the acquisition and application of communication skills in clinical settings. Little is known about residents' perceptions of these factors. This article aims to explore residents' perceptions of contextual factors affecting the acquisition and application of communication skills in the medical workplace.

Method: We conducted an exploratory study comprising seven focus groups with residents in two different specialities: general practice ($n = 23$) and surgery ($n = 18$).

Results: Residents perceive the use of summative assessment checklists that reduce communication skills to behavioural components as impeding the learning of their communication skills. Residents perceive encouragement to deliberately practise in an environment in which the value of communication skills is recognised and support is institutionalised with appropriate feedback from role models as the most important enhancing factors in communication skills learning.

Conclusion: To gradually realise a clinical working environment in which the above results are incorporated, we propose to use transformative learning theory to guide further studies.

Practical implications: Provided it is used continuously, an approach that combines self-directed learning with observation and discussion of resident-patient consultations seems an effective method for transformative learning of communication skills.

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1. Introduction

There seems to be a mismatch between the increasing prominence of communication in health care and doctors' training and skills in this respect. Although medical educators are increasingly taking account of the shift from biomedical to bio psychosocial care and, more recently, from patient-centred to relationship-centred care [1–5], postgraduate communication skills training is still reported to be

deficient in structure and continuity [6,7]. Patients increasingly call for doctors who listen, and complain of doctors' lack of involvement and inadequate provision of information [8–13]. Doctors, however, report knowing about the importance of adequate doctor-patient communication but having difficulty applying those communication skills in their actual workplace [14–17]. Bombeke et al. [18] recently validated earlier findings that students' patient-centeredness declines during medical training, and that their communication skills, acquired at the undergraduate stage of their training, were not applied in the workplace. Consequently, there is a need for improvement of and more attention to transfer of communication skills at postgraduate level.

Transfer of learning in general has among others been addressed by Burke et al. [19], who mapped influencing variables in the trainee, the training design and delivery, and the work

[☆] I confirm all patient/personal identifiers have been removed or disguised so the patient/person(s) described are not identifiable and cannot be identified through the details of the story.

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environment. The main influencing variables found in other studies are a supportive social environment, time constraints, fatigue, and existing beliefs and attitudes [20–25]. Exactly how this complex interaction of factors seems to be influencing the acquisition and application of new skills and knowledge is not fully understood yet. A recent literature review identified gaps in research on the transfer of communication skills to the clinical workplace [26]. It concludes that effective communication skills training is recommended to be based on constructivist principles and that learning is not an isolated activity in a teaching setting, but an ongoing process in interaction with the demands of the workplace. To facilitate transfer, teaching should meet the needs of the learners and should be offered in representative contexts [26]. But little is known about how these contexts influence the learning and transfer of communication skills. More attention should thus be paid to investigate which factors in specific medical working contexts influence the transfer of communication skills [20,24–26]. Given the paucity of literature on this topic, we addressed the following research question: *What factors do medical residents perceive to be obstacles or facilitators with regard to the acquisition and application of communication skills in their clinical context.*

We decided to investigate residents' perceptions, since residents are learning communication skills while applying these skills in practice. Consequently they have first-hand experience of contextual factors at play in the transfer of communication skills from training to practice.

In this study we used the term 'context' to mean the working environment that is actively produced and influenced by interactions between individuals and their environment [27–29].

In order to clarify characteristics of the working environment that may influence the development of communication skills, we chose to compare perceptions of residents from two different working contexts. White et al. [30] showed that surgeon-patient consultations differed systematically from primary care consultations, as have several other studies [31,32]. We therefore chose to investigate and compare perceptions of residents general practice and residents surgery.

2. Methods

2.1. Study design

We chose to interview focus groups as this method is particularly appropriate for this type of exploratory research [33]. In comparison to individual interviews, focus groups enable the researcher to collect a broad range of perceptions as the group interaction stimulates participants to reflect more deeply on their own perceptions. Ideas expressed by participants act as triggers for other participants to explicate latent thoughts, perceptions and experiences [34–39].

2.2. Sampling

To explore the influence of different clinical contexts on residents' communication skills training, we sought the perspectives of general practice (GP) and surgical residents. The main differences between the actual working contexts we studied are described in Table 1. The most striking distinction appears to relate to systematic and continuous attention to communication skills, which is an integral component of GP training but not of surgical residency.

Study participants were recruited from residents in the first and third years of the postgraduate GP programme of Maastricht University Medical Centre (MUMC) and among all surgical residents in training at the time of the study in the departments of surgery and orthopaedic surgery of MUMC and Atrium Hospital Heerlen, The Netherlands. We obtained permission for recruiting residents for the study from the heads of the departments. GP residents were approached during one of their weekly sessions at the Department of Family Practice, and surgical residents were approached by the first author (VvdE) during regular resident meetings in their hospitals. After the setup of the study was explained, residents were invited to volunteer for participation in a focus group to be held between January 2012 and February 2013.

Of 32 GP residents who volunteered, eight were unable to participate for personal reasons, resulting in a total of 23 participants. Four focus groups were composed in accordance with residents' date and time preferences. A total of 24 surgical residents were willing to participate, and the department secretariats selected appropriate time slots for three focus group sessions. Six residents appeared unable to participate for personal reasons or because they were still in theatre at the time of the session, yielding a total of 18 participants. The mean age was 30 years for GP residents and 29 years for surgical residents. The male–female ratio was 20:80 for GP and 40:60 for surgical residents. In compensation for their participation the residents were offered refreshments during the sessions.

2.3. Procedure

The focus group interviews lasted around ninety minutes. The sessions were guided by one moderator and one observer (who monitored process and content of the interview). All were experienced interviewers, who had no functional or professional relationship with any of the participants. In order to help the group get into the topic at the beginning of sessions, the moderator asked the participants to think about their experiences regarding communication skills training at under- and postgraduate level. After a few minutes the moderator opened the discussion by asking: 'What factors influence the way you apply in practice those communication skills that you acquired earlier'. Except for asking

Table 1
Differences in working context between general practice and surgical postgraduate training.

Postgraduate training and working context of the GP residents in our study	Postgraduate training and working context of the surgical residents in our study
Training lasts three years: 1 year in one GP practice, 1 year of three clinical placements in institutions, 1 year in another GP practice.	Residency lasts 5 or 6 years depending on the speciality and residents have placements in regional and academic hospitals.
Every week residents attend a day release programme at the Department of Family Practice.	The programme does not include an off-site day release programme.
Weekly training in communication skills consists in small group discussions of residents' videotaped consultations, facilitated by a GP and a behavioural scientist.	Supervisors observe residents daily during patient encounters, but the focus is on surgical knowledge and skills.
GP trainers have received special training to give residents feedback on communication skills and provide continuous individual support.	Supervisors have not been trained to teach and give feedback on communication skills.
Residents hand in 40 video recordings of patient consultations they have conducted, of which six are used for the end-of-year summative assessment using a behavioural checklist.	Off-site communication skills training is available for surgical residents in the form of a four-hour communication skills session within the annual course on the CanMEDS competencies.

probing questions when needed, the moderator provided no active guidance. As no new information with relevance to the research question emerged during the fourth focus group of GP residents and the third focus group of surgical residents, it was concluded that saturation of data had been attained.

2.4. Analysis

For maximum consistency of data collection across groups, the moderators and observer met in between sessions to discuss the preceding sessions and prepare for the next one. With the participants' consent, all interviews were audio taped and transcribed verbatim. Each session was followed by a member checking procedure. VvdE and JvD independently analysed and coded the transcripts. Using principles of thematic analysis [40] the researchers further analysed the coded data, clustering codings into coherent categories by abstracting salient themes and exploring patterns and relationships. While the dataset was treated as a whole, special attention was paid to the differences between the surgical and the general practice residents as these two contexts were expected to lead to diverging perceptions on the role of communication skills practice. In an iterative process, VvdE and JvD discussed and compared their codings until consensus was reached and emerging themes were established. All authors discussed and agreed on the main themes.

2.5. Ethics

The study was approved by the Ethics Committee of the Dutch Association for Medical Education (NVMO) (file no. 159). At the beginning of each session, it was explained to the participants that the data would be processed anonymously and they were free to withdraw from the study at any stage. Consent was obtained from each participant at the start of the session and signed consent forms were collected at the end.

3. Results

Five main factors appeared to impede or enhance the learning and application of residents' communication skills. The factors appeared applicable to both groups of data (GP as well as surgery) and are described below. Quotes are coded with GP or surgery followed by the number of the focus group the quote comes from. The influence of the two different working contexts is discussed throughout the results section.

Residents reported being deeply motivated to improve their communication with patients. Residents in general practice as well as their colleagues in surgery mentioned working beyond their regular working hours to check on patients whom they thought had not understood the doctor's information or who they remembered being worried earlier during the day.

One of the strongest inhibiting factors on the learning of communication appeared to be the current form of assessment by checklists (MAAS-Global [41] in GP and Mini-CEX in surgery). These checklists did not do justice to the qualities of doctor-patient communication the residents wanted to improve.

Of the 40 videos you have to record, 6 are watched and assessed. And when you are recording, you keep thinking 'oh, this consultation may be selected for the test.' You become a different kind of doctor when you are recording, just to get a good rating on the video test (GP1).

Although GP residents were perfectly aware that not every consultation calls for the use of the full spectrum of behavioural options, when recording a consultation they felt compelled to display a type of artificial communication behaviour that would tick as many checklist boxes as possible.

We always want to make sure that we have covered all items of the Maas-Global assessment checklist. I feel that is what we are expected to do from the way we are assessed. But I think it is a problem of our education system that we are focused on scoring items, instead of focusing on how to establish a positive relationship with the patient (GP1).

Apart from its negative impact on patient consultations, the GP residents criticised the assessment format for being neither effective nor instructive as they received no or only very general feedback. The GP residents thought the checklist did not enhance skill development and felt the assessment was a goal in itself rather than an instrument for skills improvement.

I have found the meetings and conversations with my supervisor, in which I get feedback on a specific learning goal we have set beforehand, to be far more helpful than all those video assessments put together (GP3).

Additionally, the communication skills of the surgical residents were only seldom formally assessed. They were implicitly covered by the obligatory mini-CEXs (clinical examinations), but the primary focus of that assessment was their surgical performance. Just to make sure they met the target of ten mini-CEXs, the residents asked their supervisor to write the little communicational feedback on a mini-CEX form. As there was no link between their personal learning goals and the feedback or comments on the mini-CEX forms and no follow-up over time, residents considered the mini-CEX to be of hardly any benefit to their communication skills. Like the GP residents, the surgical residents appeared to experience an impeding effect of *summative* assessment on their communication learning.

A learning environment in which you monitor things together and practise would be far more useful than just collecting the required number of mini-CEX forms. We think that would be really useful and would work best (S1).

Second, Confrontation with their communication behaviour was reported as a powerful stimulating factor for learning. Surgical and GP residents both said it was necessary for them to be directly confronted with a communication problem before they would consider changing their behaviour.

When you see yourself on video it can be really scary, but you learn a lot from it. For instance typing and looking at the computer screen during a consultation with a patient. If you would never see or discuss that, you would just keep on doing it for ever. Videotapes confront you with what you do and make you aware of it. It is only then that you realise that you can do better (GP4).

Being confronted with real situations was considered by the residents to be far more effective than sessions with simulated patients or role-play. The authenticity of the trigger for learning was a powerful incentive.

Surgical residents said they were only very rarely confronted with their own communication behaviours and consequently remained mostly unaware of weaknesses and how they might redress these. Supervisors paid no attention to communication behaviour and there were no dedicated sessions in the training programme for reflection on their performance. Some residents in surgery organised video recordings themselves, at the cost of running late in their office hours.

Every morning, time is scheduled for one specialist to observe a consultation. During an observed consultation you may receive feedback but it is very unusual for feedback to deal with communication. It depends very much on the specialist in question whether you are confronted with your communication style. Most of them are not really inclined to discuss communication skills (S3).

As a third factor repetition appeared to enhance the learning and application of communication skills. Residents repeatedly argued that communication was part of “who you are and how you develop as a person”, and they thought that continuous attention and repeated practice with respect to communication skills should be an integral part of their training.

In the GP working context, residents received regular concrete feedback on recorded consultations with suggestions for alternative behaviours, which they were encouraged to try out and practise. Residents emphasised that repeated practice of new behaviours was crucial, firstly to experience if the behaviour was really effective, secondly to become accustomed to using the behaviour, and finally to integrate it in their natural communication patterns.

If things go well, you think ‘hey it works’ and then you think, ‘well I should do this more often’ ... and then you find yourself relapsing if you do not continue to pay attention to it regularly (GP1).

Most GP residents said their supervisors were usually willing to give them ten to fifteen minutes extra consultation time in addition to the usual ten minutes to practise new behaviour during

working hours. This prevented their reverting to old behaviour due to stress or time constraints.

You see patients every day, due to the attitude of my supervisor I continuously have the opportunity to learn and train and I only have to think back on what feedback I received from the video discussions and implement it to have another couple of practice moments for that day (GP2).

Surgical residents encountered difficult situations in their daily work as well, but unlike their GP counterparts they did not discuss these situations with supervisors and consequently did not benefit from advice on alternative behaviours they might try. Also their daily workload left no time for experimentation with new approaches. They said they would like to be given regular opportunities to practise difficult situations in a safe group atmosphere.

It would be useful if we had sessions about things many of us find difficult and if together we could have some hands-on practice. If you practise something, it is much easier to remember and recall later (S2).

Fourth, GP residents testified to the effectiveness of systematic and continuous attention to communication.

Most supervisors create a working climate in which you feel supported. Also because the supervisors are trained and know how to guide us and we have our weekly meetings in which we discuss communication matters (GP3).

This was in sharp contrast to surgical residents who frequently reiterated: “*We don’t have time; we are too busy to spend time on communication issues*”. When this notion was explored it appeared that lack of time was rather a symptom of a working context failing to support residents in improving their communication skills. Residents observed that even though the department head acknowledged the importance of communication skills, this support did not materialise into concrete measures to stimulate skill development.

No hard and fast rules are laid down in the training requirements stipulating how we have to pay attention to communication. The department head considers communication to be important so I think there is room for attention to it but there are no stimulating and supporting measures; you have to arrange for everything yourself and you are not given extra time to arrange this (S2).

Surgical residents expressed a clear need for structured and continuous attention and support with regard to communication skills development. They indicated it was not enough for them to attend the isolated, off-site course every year without any follow-up or connection with their working context. Skills learned during such a course evaporated quickly. They suggested ways to improve their communication skills, such as installing a video in one of the consultation rooms to enable them to record their patient encounters without time loss, for discussion with senior residents, supervisors with an interest in communication, or behavioural scientists.

In fact there is very little monitoring. There are plenty of opportunities for learning in practice but to make these effective more active facilitation and support is needed. The department could for instance buy a camera to give us the opportunity to record our own patient consultations (S1).

Finally, good role modelling was seen as a powerful learning tool. Most GP residents had a trusting relationship with their supervisor and received feedback tailored to concrete individual learning goals. This was considered supportive of self-directed and effective learning.

I am fortunate in that my supervisor is very good where matters of communication are concerned. We take time every week to discuss difficult situations and I really learn a lot from that (GP2).

The surgical residents observed that it was not common practice for their clinical supervisors to attend training in how to support residents in the development of communication skills or how to give feedback on these skills. Consequently, surgical residents received little support and their supervisors' feedback was primarily focused on medical content and accurate diagnosis.

Partly as a result of our undergraduate training we are sensitive to communication, we are trained to do it, and I think the same does not apply for most of our superiors. I don't think staff members really get it. Most of them have difficulty verbalising things where communication is concerned, only some of them are very good at finding the right words. The focus is on medical matters only, there is no attention whatsoever given to communication (S2).

Surgical residents also remarked that most supervisors in the hospital did not observe them while communicating with patients, causing many learning opportunities to go unused. However, they highly valued the feedback on communication they received from nurses and peers.

Supervisors may attend ward rounds, but they have no idea what is really going on and what is arranged on the ward. Nurses give you a very different sort of feedback, much more practical and related to communication. Senior staff would not even notice how you communicate (S3).

My peers are more useful to me than experienced doctors, because they give more feedback and point out more problem areas than do senior staff. They probably understand better what is going on with you (S3).

4. Discussion and conclusion

4.1. Discussion

Residents in general practice and their colleagues in surgery both mentioned being motivated for excellent doctor–patient communication. The value of being confronted with their own behaviour was reported as a strong stimulus for learning. Practice and repetition was regarded as a necessary ingredient of adequate training, and such training was judged to be more effective when better embedded in institutionalised attention and support by the workplace's organisation. Moreover, good quality and focus of feedback, tailored to their own learning needs was considered vital for good learning.

The reductionist effect of a behavioural checklist noted by GP residents is consistent with conclusions by Salmon and Young [42] (and others like Epstein et al. [43] and Rees [44]) that communication skills cannot be atomised and are best assessed using a holistic approach. We would support this view provided generic communication skills are taught well in the undergraduate curriculum. The residents' complaints that assessment using a checklist does not promote learning is in accordance with the view expressed by White et al. [30] that there is no single or standard way for a consultation to play out, and with Veldhuijzen et al.'s call for awareness of the uniqueness and specific goals of each consultation [45]. We recommend that those in charge of the programme should take to heart the adage 'assessment drives learning' [46] and recognise that the reductionist effect of the assessment checklist actually counteracts the positive effects of their systematic communication training efforts. As noted by Bombeke et al. [47]: "Without inner motivation and positive attitudes, communication skills training leads to short-term faking behaviour. When residents formulate their own learning goals with help and support from supervisors, learning is likely to be more intrinsic and focused on personal development over time instead of on passing a checklist-type test [48]."

Our findings are in line with the opinions of Lévesque et al. [49] and Khanum [50], who proposed to use the theoretical underpinnings of transformative learning theory to improve medical communication skills learning, and we recommend further research to explore how principles of transformative learning can be applied to optimise the learning of medical communication skills, in line with our plea for a constructivist approach. Transformative learning theory, an adult learning theory developed by Mezirow [51–53] and sometimes referred to as triple loop learning [54] posits that deep learning results from reflection on and changes in the frame of reference and underlying assumptions and beliefs of an individual, and that the learning and development of complex skills, like communication, entails three dimensions: psychological (changes in understanding of the self), convictional (revision of belief systems), and behavioural (changes in action) [53,55]. Because transformative learning focuses on these three

dimensions, as opposed to an exclusive focus on behaviour, we think it might provide an appropriate theoretical framework for an approach that promises lasting improvement of the learning and transfer of communication skills. In this way, learning is not a one-time occurrence but a lifelong development. This appears to echo the view expressed by residents that learning communication skills is an integral component of continuous personal development and a part of “who you are and how you develop as a person” implying the need for change at a deep, personal level. Transformative learning is also consistent with residents’ perceived effects of confrontation as an incentive to take action to change their communication strategies, emphasising that confrontation with a problem that needs to be solved sparks eagerness to learn. Transformative learning is also consistent with residents’ perceived importance of repetition and practice in authentic situations as a prerequisite for lasting modifications of their frame of reference and behaviour. Principles of transformative learning seem to be an excellent fit with the factors we distilled from the perceptions voiced by the residents.

Due to the design of the current study, focus groups in a Dutch healthcare setting, the transferability of the results presented in this study could be limited and deserves further investigation. We purposively selected participants from two different contexts; selection in a different medical context could elaborate our findings. We acknowledge that voluntary participation may have caused selection bias with low representation of residents with little interest in communication. However, when we recruited participants, we noticed that both residents with a positive and those with a more cynical attitude towards communication skills volunteered, which would diminish the likelihood of selection bias.

4.2. Conclusion

As early as the fourth century B.C. Aristotle wrote: “We are what we repeatedly do. Excellence is not an act, but a habit”. This notion supports an important conclusion suggested by the findings: communication skills need continuous attention and practice to become an integral component of a doctor’s clinical skills. More specifically we found that residents perceived training and transfer of doctor–patient communication to be impeded by the use of summative assessment checklists that reduce communication skills to behavioural components. Residents reported training and transfer of doctor–patient communication to be enhanced when they are encouraged to deliberately and frequently practise in an environment in which the value of these skills is recognised and acknowledged and where appropriate feedback from role models is available.

4.3. Practice implications

In order to foster transformative learning of communication skills, more attention should be given to contextual factors [56]. Setting up a system of work-based coaching that enables effective supervision of residents’ communication skill development could foster a more reflective and non-threatening learning environment [16,17]. Observation of consultations (video or live) combined with self-directed learning and constructive feedback seems an effective method in this regard provided it is firmly embedded in the daily working context and used consistently and continuously. A sound structure for communication skill development could result in a safer and more effective learning climate and make the learning and application of communication skills a truly transformational process.

Conflict of interest

The authors have no conflict of interest.

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