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Feedback-giving behaviour in performance evaluations during clinical clerkships

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Abstract

Context: Narrative feedback documented in performance evaluations by the teacher, i.e. the clinical supervisor, is generally accepted to be essential for workplace learning. Many studies have examined factors of influence on the usage of mini-clinical evaluation exercise (mini-CEX) instruments and provision of feedback, but little is known about how these factors influence teachers' feedback-giving behaviour. In this study, we investigated teachers' use of mini-CEX in performance evaluations to provide narrative feedback in undergraduate clinical training.

Methods: We designed an exploratory qualitative study using an interpretive approach. Focusing on the usage of mini-CEX instruments in clinical training, we conducted semi-structured interviews to explore teachers' perceptions. Between February and June 2013, we conducted interviews with 14 clinicians participated as teachers during undergraduate clinical clerkships. Informed by concepts from the literature, we coded interview transcripts and iteratively reduced and displayed data using template analysis.

Results: We identified three main themes of interrelated factors that influenced teachers' practice with regard to mini-CEX instruments: teacher-related factors; teacher–student interaction-related factors, and teacher–context interaction-related factors. Four issues (direct observation, relationship between teacher and student, verbal versus written feedback, formative versus summative purposes) that are pertinent to workplace-based performance evaluations were presented to clarify how different factors interact with each other and influence teachers' feedback-giving behaviour. Embedding performance observation in clinical practice and establishing trustworthy teacher–student relationships in more longitudinal clinical clerkships were considered important in creating a learning environment that supports and facilitates the feedback exchange.

Conclusion: Teachers' feedback-giving behaviour within the clinical context results from the interaction between personal, interpersonal and contextual factors. Increasing insight into how teachers use mini-CEX instruments in daily practice may offer strategies for creating a professional learning culture in which feedback giving and seeking would be enhanced.

Introduction

In clinical training programmes, performance evaluations through workplace-based assessments like the mini-clinical evaluation exercise (mini-CEX) are aimed at helping students improve their clinical performance (Norcini & Burch 2007). It allows the teacher, i.e. the clinical supervisor, to provide meaningful feedback directly following observation of a performance. For feedback in performance evaluations to be effective, teachers have the demanding task of shifting between assessment for summative purposes and formative assessment (i.e. providing meaningful feedback) (Govaerts et al. 2013). Teachers are supposed to continuously acquire, organise and interpret relevant performance information to arrive at judgements about performance (McGill et al. 2011). Since teachers vary in the behaviour they observe, how they

Practice points

- Teachers' personal educational beliefs influence their usage of mini-CEX instruments in performance evaluations.
- Embedding time for performance observations in clinical practice supports feedback exchange between students and teachers.
- Establishing trustworthy relationships is essential in creating a feedback supportive learning environment.
- Longitudinal clinical clerkships allow trustworthy student–teacher relationships to develop.
- The fact that formative assessments are used in high-stakes assessment procedures influences teachers' feedback-giving behaviour.

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assess and integrate these observations into a judgement and how they provide feedback to the student, large variations in feedback-giving behaviour is common (Van der Vleuten et al. 2000; Mazor et al. 2007). This is problematic because research has also shown that this is related to significant variations in the quality of narrative feedback in formative workplace-based assessments (Pelgrim et al. 2011; Driessen & Scheele 2013; Bok et al. 2013a).

In the present study, we focus on factors influencing teachers' feedback-giving behaviour in performance evaluations. A recent study by Pelgrim et al. (2013) showed that specific personal characteristics of feedback givers, such as task perception and level of neuroticism, influence their feedback-giving behaviour. The authors concluded that being concerned about patient safety during consultations with students resulted in more frequent observations and higher feedback quality. Scholarly evidence from human resource management as well as medical education has acknowledged the importance of high-quality written narrative feedback in performance development (Govaerts et al. 2005; Brutus 2010). However, Govaerts et al. (2013) found evidence that especially written feedback lacked information that could help students to improve their clinical performance. As a possible explanation, the authors stated that giving meaningful and effective written narrative comments places high demands (i.e. this takes more time and requires more cognitive effort) on teachers' feedback skills (Govaerts et al. 2013). In a study across three cultures of professional training (music, teacher training and medicine), Watling et al. (2013) found evidence that a long-standing teacher–student relationship could improve feedback quality in terms of credibility and constructiveness. Recent research reported that the feedback seeker and the relationship between feedback seeker and feedback giver accounts for a substantial portion of the variance in feedback-giving behaviour (Pelgrim et al. 2013; Bok et al. 2013b).

Because performance evaluations are often performed within a complex clinical workplace, in addition to personal characteristics of teacher, student, and their relationship, contextual and organisational factors have also been proved to influence teachers' feedback-giving behaviour (Kogan et al. 2009; Watling & Lingard 2012; Fokkema et al. 2013; Pelgrim et al. 2013). For example, Kogan et al. found evidence that the process of direct observation seemed to be influenced by factors related to the clinical and educational system (e.g. organisation of the clinical unit and institutional educational culture; Kogan et al. 2011). In line with these findings, Watling et al. reported that teachers' engagement in the process of in-training evaluation of residents may be compromised by elements such as time constraints, inconsistency in approach to in-training evaluation, and lack of continuity between educational assignments (Watling & Lingard 2012). Despite recent scientific attention on different factors influencing feedback-giving behaviour, not much is known about how these factors influence teachers' feedback-giving behaviour in performance evaluations.

To illuminate feedback-giving behaviour further, we aimed to understand how different personal, contextual and organisational factors affect teachers' practice with regard to performance evaluations. More specifically, this study investigated factors and their relationships that influence teachers' usage of mini-CEX instruments to provide narrative feedback in undergraduate clinical training. To this end, we conducted an exploratory study using semi-structured interviews with teachers.

Method

Study design

We designed an exploratory qualitative study using an interpretive approach (Guba & Lincoln 2005; Bunnis & Kelly 2010). Our aim was to contribute to the understanding of factors influencing teachers' feedback-giving behaviour related to mini-CEX instruments applied in a clinical learning environment.

Setting

The study was conducted among clinicians (residents and specialists) participating as teachers (i.e. clinical supervisors) in the clinical phase (years 4, 5 and 6) of the six-year undergraduate curriculum at the Faculty of Veterinary Medicine, Utrecht University, The Netherlands (FVMU). In this phase, clinicians work side-by-side with students. Students work in different clinical departments depending on their chosen animal species track (Equine Medicine, Small Animal Medicine or Farm Animal Health). In September 2010, the FVMU implemented a programme of assessment in the clinical phase that focused on the integration of learning and assessment (Bok et al. 2013a). Within this new programme of assessment, students were motivated and supported to arrange for mini-CEXs that provide feedback on their competency development. Narrative feedback documented in the mini-CEX instrument needed to be explicitly related to short observations of specific clinical tasks (e.g. observation of a student's history taking – animal owner – and physical examination of a patient with respiratory-related problems). These low-stakes, workplace-based assessments were documented in a digital portfolio structured around predefined competencies (Bok et al. 2011). To reach a reliable and valid judgement of a student's competency development, low-stakes assessments (from multiple observers and multiple cases) were aggregated over a prolonged period of time (six months to one year).

Participants and procedure

Participants were sampled by maximum variation sampling to ensure variety in the teachers' levels of expertise, animal species track and specialty. This sampling procedure provided us with information-rich cases for in-depth study (Patton 2002). The principal researcher conducted interviews between February and June 2013. In total, 14 supervisors were invited and all agreed to participate. Each interview was conducted by the principal researcher at FVMU, lasted between 30 and 45 minutes and was audio taped and transcribed verbatim. Data collection and analysis were performed iteratively for emerging issues that would be identified in subsequent interviews.

Interview development

Semi-structured face-to-face interviews, based on concepts from the literature, were conducted to gain in-depth information and motivate clinicians to share their views (Patton 2002). It was based on the research questions and on a theoretical framework derived from literature on the provision of feedback and the utility of workplace-based assessments (Figure 1; Kogan et al. 2009, 2011; Pelgrim et al. 2013; Watling et al. 2013; Bok et al. 2013b). The interviewer asked open-ended questions and relevant emerging issues were further explored. Two pilot interviews resulted in some minor adjustments to the wording of the interview guide, but not to its content. The interview guide consisted of the following questions:

(1) How do you apply mini-CEX instruments in daily clinical practice?
(2) Why do you apply mini-CEX instruments in a certain way?
(3) Which factors are of influence on how you apply mini-CEX instruments?

Data analysis

The transcriptions were analysed using template analysis (King 2004). This technique involved an iterative process of qualitative data reduction and display. We created a template that consists of coded themes representing the most important issues in the data and the relationships between them. Based on existing theory (Kogan et al. 2009, 2011; Pelgrim et al. 2013; Watling et al. 2013; Bok et al. 2013b) and initial coding of parts of the dataset, the principal researcher created an "initial template". Subsequent iterative collection and analysis of the data modified this template.

The principal researcher (H. G. J. B.) was responsible for coding the data and constructing themes, resulting in further development of the template. After interviews 4, 10 and 12, the template's evolution, including the identified themes, was discussed with the research group in order to prevent narrowing of ideas. Using open coding, two researchers (P. W. T. and D. A. D. C. J.) analysed the sixth transcript, which was compared with the template generated by H. G. J. B. Discrepancies between analyses were discussed, which resulted in minor template adjustments. After 12 transcripts were coded, theoretical saturation was reached, i.e. no new themes emerged. The principal researcher, D. A. D. C. J., P. v. B., C. P. M. v. d. V. and P. W. T. discussed and agreed on the final analysis of the data. Two additional interviews were conducted; their transcripts were analysed and confirmed the final template.

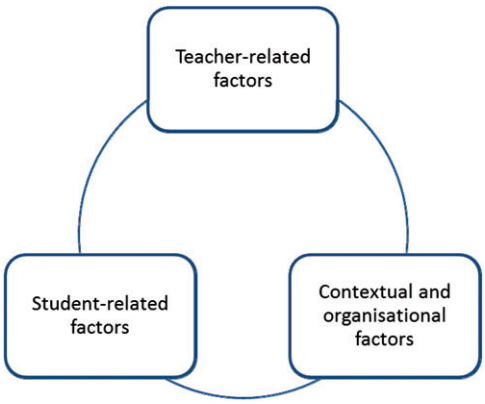

Figure 1. Frame of reference based on current literature for factors influencing teachers' feedback-giving behaviour in performance evaluations.

Confidentiality and ethical considerations

Participants participated voluntarily and were assured of confidentiality. Prior to the interviews, written informed consent was obtained. The ethical review board of the Netherlands Association for Medical Education approved the study (case number 233).

Results

Fourteen clinicians participated. They worked in the three main animal species tracks and had different specialties and levels of expertise. Their characteristics are listed in Table 1.

The analysis revealed three main themes of factors, albeit interrelated, that influenced teachers' practice with regard to mini-CEX instruments: teacher-related factors, teacher–student interaction-related factors, and teacher–context interaction-related factors (Figure 2). We will first define the three main themes that emerged from the data. Four issues that are pertinent to workplace-based performance evaluations will then be presented to exemplify how different factors interact with each other, illustrated by quotes from the interviews.

Teacher-related factors

A substantial amount of variation in teachers' feedback-giving behaviour with regard to mini-CEX instruments could be explained by teacher-related factors. Teachers' personal educational goals and beliefs influenced their affinity towards workplace-based assessment. Considering their natural approach to education related to the ideas underpinning workplace-based assessments (e.g. promoting self-directed and reflective behaviour), mini-CEX instruments were more easily incorporated into teachers' daily work.

Within the programme of assessment, mini-CEX instruments were intended to be formative, which required students to feel safe in asking for feedback directly following a performance observation. Being a credible and supportive teacher with adequate communication skills contributed in creating a safe learning environment.

Teachers' levels of experience in their task domains and in performance evaluations also seemed to influence the provision and quality of feedback. Due to a lack of task-related experience and the need to get their work done within certain time limits, the more inexperienced teachers felt unable to use mini-CEX instruments to provide high-quality feedback.

Teachers' own physical and mental well-being influenced their engagement towards workplace-based assessment and their ability to create an optimal learning environment. When they were physically or mentally exhausted (due to personal or work-related reasons), other professional tasks, like patient care or research activities, were given a relatively higher priority than education.

Table 1. Characteristics of participants.

	N (male)	Age (range)	Experience as supervisor in years (range)
Small animal medicine	6 (2)	39.2 (34–47)	10.5 (2–20)
Farm animal health	3 (2)	43.0 (34–55)	14.0 (5–25)
Equine medicine	5 (2)	41.6 (31–52)	14.2 (5–26)
Total	14 (6)	41.3 (31–55)	12.9 (2–26)

Figure 2. Factors of influence on teachers' practice with regard to mini-CEX instruments.

Teacher–student interaction-related factors

The students and the teacher–student relationship influenced teachers' feedback-giving behaviour. Teachers tend to give more clinical responsibilities to thoroughly prepared, more experienced, and highly motivated students who displayed active learning behaviour.

The nature and duration of the relationship between student and teacher influenced both teachers' feedback-giving behaviour and students' feedback-seeking behaviour. Trying to create a trustworthy relationship between teacher and student was generally agreed to be an important influencing factor in creating opportunities to provide formative feedback. Building professional relationships in which students felt comfortable participating as team members, felt a sense of responsibility for patient care and were confident enough to seek and ask for feedback on their behaviour, would enhance the use of mini-CEX instruments in the intended way. Clear teacher–student agreements prior to the workplace learning (e.g. by explicitly stating that it is all right to make mistakes and ask for feedback) seemed to enhance students' feedback-seeking behaviour.

Teacher–context interaction-related factors

Alongside factors related to the teacher and the student, the educational programme (curriculum) and the clinical organisation were identified as important factors influencing the way teachers applied mini-CEX instruments. As mini-CEXs were intended to be formative, the focus was on collecting meaningful written narrative feedback. However, because mini-CEX instruments had become part of the assessment programme and minimum numbers of completed mini-CEXs were required, students changed their feedback-seeking behaviour towards completing the required number of mini-CEXs. As a consequence, the teacher provided less qualitative information (i.e. narrative feedback).

Teachers' affinity towards workplace-based assessments, as mentioned under the heading "teacher-related factors", was also influenced by their colleagues' opinions. Teachers who felt that their peers recognised the value of workplace-based assessments voiced few negative feelings about the implementation of mini-CEX instruments.

Finally, the clinical environment influenced the use of mini-CEXs. As good quality feedback requires (some) time and cognitive effort, the high workload of the unstructured clinical environment was seen as a barrier to using the mini-CEX instrument. Teachers working in a clinical environment that included time for assessment considered the mini-CEX easier to perform. Furthermore, the increasingly important organisational focus on preventing financial losses meant that not every client (patient owner) was perceived to be suitable for educational purposes.

Teachers' application of mini-CEX instruments in the clinical workplace

The next four issues, (1) direct observation in performance evaluations, (2) duration of performance observations and the relationship between teacher and student, (3) verbal and written narrative feedback in performance evaluations, and (4) performance evaluations for both formative and summative purposes, were selected because these were recurrent issues in workplace-based assessment literature. They illustrate how the factors from the three main themes interact with each

other, resulting in variety of behaviour related to the application of mini-CEX instruments in clinical practice.

(1) Direct observation in performance evaluations.

Direct observation is crucial in providing effective feedback in performance evaluations because it supports the teacher in acquiring relevant information about the student. Furthermore, student observations also give the teacher information about the curriculum. "*Because I observe my students I now have better insight into how our educational programme is working out. Do we achieve our learning goals and what are issues for improvement?*" (P6)

The intended procedure for using the mini-CEX was to briefly observe a student performing a task, directly followed by giving narrative feedback. However, as an example of how interaction between the teacher and context influence the use of mini-CEX, due to the highly demanding tasks of clinical practice, the teacher often had limited time immediately after the observation to discuss the feedback with the student. Therefore, some teachers made notes about a student's performance during the observation and later used them as a memory aid during the feedback discussion and the subsequent completion of the mini-CEX.

Besides having little time to discuss and deliver the feedback using a mini-CEX, teachers also struggled to find space and time for observing students. "*During my daily work I have my ward rounds, I have to fulfil numerous administrative tasks, and, furthermore, I also have a research agenda*." (P1) Incorporating opportunities for performance evaluations into the daily programme was found to be a worthwhile effort in order to achieve more performance observations. In line with this finding, making clear agreements on what students themselves would like to accomplish through performance evaluations (e.g. receiving feedback on a specific topic and how many times feedback should be given) and what a student could expect from their teacher contributed positively to achieving more, and more meaningful, completed mini-CEX instruments. The next quote is an example of how the interaction between teacher and student influence the use of mini-CEX: "*My students know that I always use the first patient of the day for performance evaluations*." (P3)

Interview analysis showed that teachers recognised that students feel anxious about being observed. When a teacher observed a student's patient encounter, a disadvantage of observation was that both the client and the student usually alter their behaviour and focus on the teacher. This influenced the student's task performance and subsequently affected the provided feedback. "*Some students behave differently and are nervous when I observe them. Therefore, when I am sure that patient safety is not at issue, I prefer to give the responsibility to the student and discuss their findings afterwards*." (P6)

(2) Duration of performance observations and the relationship between teacher and student.

Teachers using the mini-CEX instrument as intended (i.e. explicitly related to a specific task and over a short period of time) mentioned that the documented feedback resembled the discussed feedback. The short observation of a patient encounter allowed the teacher to focus on a specific task and provide specific written narrative feedback. In contrast, teachers observing students over a prolonged period of time (a day or even a week) reported that they used the mini-CEX instrument differently. When feedback was given over a longer period of time, teachers were able to provide more feedback on a variety of relevant competencies, including the more generic ones (e.g. collaboration skills, personal development). When they restrained their observation to a certain clinical task, teachers felt that their feedback was mostly limited to the technical competencies. "*I am working together with my students during a week. I observe them on numerous occasions and when appropriate I directly provide specific task-related feedback verbally. At the end of the week I use the mini-CEX form to document their performance during the entire week. Therefore, this feedback is much more generally formulated and not so task-related*." (P11)

Within the clinical workplace, teachers wanted to support and guide students' learning by increasing their independence and gradually giving them more responsibilities. They provided feedback to challenge and motivate their students and to teach them to be self-reflective. This required working together over a longer period of time in a safe learning environment. Furthermore, teachers felt a sense of urgency in building more longitudinal relationships with students in order to see improvements in their performance and to follow-up on the previously provided feedback. This allowed teachers to follow-up with the students and to see whether they developed from, reflected on and reacted to the provided feedback. As a consequence, it allowed them to better judge students' progress over a certain period of time. "*Working together over a longer period of time enables me to build a professional relationship with the student, which allows me to provide better, more reliable and more constructive feedback.... I also noticed that students get more active and confident over time and feel more confident in seeking and asking for feedback*." (P12)

(3) Verbal and written narrative feedback in performance evaluations.

By design, the teacher should be the person who documented the narrative feedback in the mini-CEX. However, discussing the feedback, writing it down and validating it together with the student required time and effort. Due to their high workloads, some teachers asked the students to write down the verbally discussed feedback themselves. "*I ask my students to fill in the feedback I verbally provided. Because the corresponding mini-CEX form is uploaded in my digital portfolio, at an appropriate time, usually in the evening, I can adjust and approve it*." (P1) However, participants also mentioned some negative results from letting students write down feedback about themselves. Sometimes the mini-CEX became more of a self-evaluation report instead of containing meaningful feedback that included clues for improvement. Furthermore, documentation of feedback by the teacher was acknowledged to stimulate teachers to really think more about how to formulate their comments in a meaningful way. "*Especially when I need to formulate and write down comments for improvement, this requires time and effort*." (P7)

Teachers' feedback-giving behaviour was also influenced by the student's actual or perceived reaction towards negative feedback. In most cases, negative feedback was provided verbally and not documented in the mini-CEX. Teachers were reluctant to document negative feedback because they wanted to focus on motivating students, they were afraid of damaging the student or experienced ego damaging themselves when providing negative feedback. Also, they preferred to provide negative feedback privately due to the risk of perceived ego or image damage to the student.

(4) Performance evaluations for both formative and summative purposes.

The design of the assessment programme had a major impact on teachers' feedback-giving behaviour. The information documented in the mini-CEXs was collected in a digital portfolio. When a sufficient amount of data were filed in the portfolio, the information was aggregated into a high-stakes, summative judgement by a portfolio review committee. Notwithstanding the fact that the purpose of the mini-CEX was to collect meaningful narrative written feedback, the focus of both teachers and students shifted towards completing the required number of performance evaluations. Due to this summative aspect, students changed their feedback-seeking strategies. "*A lot of times, I only provide positive feedback instead of meaningful feedback on issues for improvement. Students only ask for a mini-CEX when they are confident about their task performance*." (P8) This is an example of how the interaction between the educational programme (context) and teacher could influence teachers' feedback-giving behaviour.

Because of the portfolio review process, teachers were sometimes reluctant to include negative narrative feedback in the mini-CEX. They felt that their comments were not important enough to be included into a high-stakes assessment procedure. "*. . .Usually I only see a student for a couple of hours. Of course, I could observe that person and provide that person with feedback, but for me it doesn't feel right that this judgement could also have summative implications. Maybe we need some time to get used to each other or maybe the student experiences a bad day*." (P2) The fact that the mini-CEX instrument that was intended to be formative was, in the long run, part of a longitudinal high-stakes assessment protocol, apparently corrupted its original intentions.

Discussion

In this qualitative exploratory study, we focused on how teachers use mini-CEX instruments to gain insight into how different factors impact teachers' feedback-giving behaviour in performance evaluations in clinical practice. Three themes of interrelated factors were distinguished: teacher-related factors, teacher–student interaction-related factors, and teacher–context interaction-related factors.

The usage of mini-CEX instruments in performance evaluations appeared to be influenced by teachers' personal educational goals and beliefs. When these ideas align with the intended ideas underpinning formative workplace-based assessment, they were more frequently used in the intended way. This is in line with literature on the influence of assessors' self-theories on performance evaluations, which state that assessors' beliefs affect their judgements and expectations of students' future behaviour (Hong et al. 1997; Teunissen & Bok 2013). Furthermore, this finding is consistent with a study exploring effects of innovations in postgraduate medical education as perceived by the user, suggesting that teachers' beliefs influence their behaviour in dealing with workplace-based assessments (Fokkema et al. 2013).

Teachers' levels of experience appeared particularly relevant to how they used performance evaluations. More experienced teachers reported few difficulties in providing negative feedback. This may have affected the quality of written narrative feedback in terms of meaningfulness and specificity. This finding relates to previous work done by Govaerts et al. who discussed that providing meaningful feedback and assessing a student's performance required a certain level of expertise in performance assessment and demanded task-related experience (Govaerts et al. 2011, 2012). To anticipate and deal with effects such as a decrease in feedback quality, inexperienced teachers should receive long-term support, additional allocated time for performance evaluations, and on-the-job training and supervision (Govaerts et al. 2013).

Creating longitudinal teacher–student relationships in a safe learning environment facilitated feedback-giving behaviour. Such trustworthy relationships created more possibilities for the teacher to observe the student, and allow the teacher to see improvements in the student's clinical performance and to follow-up on the previously provided feedback. This is in line with a study by Watling et al (2013) which stated that investments in teacher–student relationships could increase feedback quality within medicine's professional culture. More active feedback-seeking behaviour occurs in a professional learning culture where students feel comfortable participating. This active behaviour by students has a stimulating effect on teachers' feedback-giving behaviour, resulting in a more frequent use of mini-CEX instruments. As a supportive and credible teacher enhances students' feedback-seeking behaviour, these factors interact continuously. These effects emphasise the importance of building trustworthy relationships to decrease potential costs associated with both feedback-giving and feedback-seeking behaviour. This finding is in line with other studies reporting about feedback-seeking behaviour in medical education (Teunissen et al. 2009; Bok et al. 2013b; Crommelinck & Anseel 2013). When departments or individual clinicians succeeded in incorporating performance evaluations into their schedules, this had a positive influence on feedback-giving behaviour and indicates that adapting the organisation and subsequent professional learning culture could contribute to accomplishing the intended goals of the mini-CEX. This is in line with research by Mastenbroek et al. (2014) stating that a supportive environment can motivate and engage people.

Workplace-based assessment instruments are usually intended to be formative with the focus on collecting meaningful written narrative feedback. Incorporating mini-CEXs in a longitudinal high-stakes assessment protocol apparently hinders these original intentions. Literature provides evidence that when workplace-based assessment methods, designed to

provide feedback, were perceived to be summative, students' feedback-seeking behaviour decreased (Driessen et al. 2010; Govaerts et al. 2013; Bok et al. 2013a,b). To respond to this problem, recent research stated that decisions about promotion should not be taken on the basis of a single assessment but rather after careful consideration of information collected from a variety of sources and over a prolonged period of time (Van der Vleuten et al. 2012). However, the fact that all individual assessments ultimately contributed to the final summative decisions caused students to perceive all individual assessments as summative rather than formative. The summative judgement was just postponed until the data points from the assessments were aggregated (Bok et al. 2013a). This influenced students' feedback-seeking behaviour as they made a context-dependent assessment of the potential risks and benefits of seeking feedback (Bok et al. 2013b).

Strengths and limitations

To increase insight into factors influencing teachers' feedback-giving behaviour related to mini-CEX instruments, we conducted an exploratory qualitative study based on existing theory. Template analysis enabled the researchers to build on previous findings and theories derived from other research domains, without being restricted by them.

A potential limitation is the single-institute research design that focuses on specific elements of the curriculum (i.e. the usage of mini-CEX instruments as part of the assessment programme). However, the veterinary clinical learning environment very much resembles that of medical education where students have patient encounters under the supervision of a clinical supervisor. In veterinary medicine one often has a triadic relationship – client, animal, clinician – which is frequently viewed as similar to paediatrics in human medicine.

Data acquired from the interviews are inherently limited because they only provide teachers' perspectives about the factors that influence their feedback-giving behaviour in performance evaluations. These perceptions may not wholly mirror their actual behaviour and factors of influence. However, this possibility is inherent to the interpretive approach of the study and each new interview might potentially suggest a new conceptual perspective.

Future research

Future research should increase insight into how teachers' goals and beliefs influence their feedback-giving behaviour in performance evaluations. Further studies, for example ethnographic, could also investigate the effects of facilitating a more longstanding relationship between teacher and student on both teachers' feedback-giving behaviour and students' feedback-seeking behaviour in the clinical workplace, especially in large-scale undergraduate medical education. In addition, design-based research strategies could reveal valuable insights into how the medical professional learning culture can be enhanced to stimulate learning by creating opportunities for high-quality feedback. Furthermore, our findings call for more research into the relationship between formative and summative assessment purposes of performance evaluations.

Implications for practice

There were some common factors that could promote teachers' feedback-giving behaviour in performance evaluations in clinical practice. Some departments succeed to incorporate time for observations and feedback in their schedules by allocating time for performance observations in the daily clinical programme. Embedding observations in clinical practice creates opportunities for teachers to provide narrative meaningful and task-related feedback directly following performance observations. Simultaneously, this makes it easier for students to ask their teachers for a performance evaluation. However, the increasingly important organisational focus on preventing financial losses interferes with the evaluation process due to a focus on more efficient workflows and protocols that leaves less time for observations and feedback related to performance evaluations.

To enhance the provision of effective feedback, both teachers and students should invest in establishing a professional relationship and strive to create a safe learning environment that supports and facilitates the feedback exchange. Investing in more longitudinal clinical clerkships allows trusting teacher–student relationships to develop, which is important for documenting competency development. This could also have potential positive effects on helping clinicians identify themselves as teachers with tasks in guiding and supporting students. By incorporating students as members of the clinical team with subsequent responsibilities, students will demonstrate more active feedback-seeking behaviour and teachers' feedback-giving behaviour will be influenced positively (Bok & Teunissen 2013). Furthermore, as teachers' feedback-giving behaviour within the clinical setting is influenced by interrelated factors (teacher, teacher–student interaction, and teacher–context interaction), we propose incorporating those factors that enhance teachers' feedback-giving behaviour into faculty development programmes.

To stimulate the usage of formative mini-CEX instruments, we propose to adjust workplace-based assessment protocols and include instruments that are truly low-stakes and not integrated into a final summative judgement. This allows both teachers and students to give and seek feedback in a safe learning climate without perceiving costs or consequential negative effects from provided or sought feedback. For example, mini-CEX instruments can be used for strictly formatively assessments of short observations of patient encounters allowing the teacher to focus on the task and provide meaningful and constructive feedback, supplemented by workplace-based assessments evaluating performance over a prolonged period of time. This allows the teacher to carefully consider the student's clinical development, reflections and feedback follow-up on all aspects of clinical competence in a more high-stakes evaluation. More experience and research are needed to create more insight into this important issue in undergraduate and postgraduate medical training.

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