Feedback as a means to improve clinical competencies:
Consultants’ perceptions of the quality of feedback given to registrars

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Effective supervision in postgraduate medical education involves the process of feedback. Giving feedback may be challenging for consultants who have no formal training in this process, which may be further compounded in heterogeneous diverse settings. Consultants need to develop the art of giving feedback through appropriate training so that they are more comfortable and proficient with

Methods. Thirty-seven consultants consented to completing a questionnaire on what, when, where, how often, and how feedback was provided, as well as on the type and effect of feedback to registrars. Descriptive statistics were used to analyse the data. Differences between groups were calculated using Pearson’s χ² test for independent variables, with a p-value of <0.05 regarded as being statistically significant.

Results. Only 40% of consultants reported that they provided feedback often or always and 62.2% reported that standards were not predetermined and communicated to registrars. When feedback was provided, it was based on concrete observations of performance (78.4%), it incorporated a plan for improvement (72.9%) and it supplied information on techniques performed incorrectly (72.9%). Only 40.5% of consultants provided feedback on procedures performed correctly. Moreover, only half of the consultants believed they were proficient at giving feedback.

Conclusion. Consultants need to develop the art of giving feedback through appropriate training so that they are more comfortable and proficient with

All consultants from the disciplines of Surgery, Internal Medicine, Obstetrics and Gynaecology, Paediatrics, Psychiatry and Family Medicine were invited to participate. Because of a 0% response rate to the online questionnaire, hard copies were distributed at academic day meetings; 62% (n=37) were returned anonymously with informed consent. Descriptive statistics were used to interpret the responses of the registrars, with mean values calculated. Differences between groups were calculated using Pearson’s χ² test for independent variables, with a p-value of <0.05 regarded as statistically significant. Ethical approval for the study was granted by the Humanities and Social Sciences Ethical Committee, University of KwaZulu-Natal, Durban, South Africa (HSS/1185/013D).

**Results**

The mean age of the consultants was 37.8 (range 31 - 55) years. Fifty-four percent were female. English was the first language for the majority of consultants (n=31), while six spoke another language. Six consultants had qualifications other than the Colleges of Medicine of South Africa Fellowship in their respective fields: 1 had a PhD in Surgery, while the other 5 had postgraduate certificates in their respective fields. Thirteen consultants from Paediatrics, 9 from Internal Medicine, 8 from Obstetrics and Gynaecology, 3 from Surgery and 2 each from Psychiatry and Family Medicine responded.

As illustrated in Fig. 1, 62.2% of consultants reported that standards for assessment were not predetermined and communicated to registrars in advance – always or often. All consultants reported that they provided feedback, but only

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**Fig. 1. A divergent stacked bar graph showing consultants’ perceptions on the feedback they give to registrars.**

- Feedback is given about how to be a medical expert
  - Rarely: 32.4%
  - Never: 54%
  - Sometimes: 10.8%
  - Always: 6.8%
  - Often: 4.3%

- Feedback is given about how to be a collaborator
  - Rarely: 48.6%
  - Never: 8.1%
  - Sometimes: 16.2%
  - Always: 27.0%
  - Often: 4.3%

- Feedback is given about how to be a communicator
  - Rarely: 43.2%
  - Never: 5.4%
  - Sometimes: 16.2%
  - Always: 27.0%
  - Often: 4.3%

- Feedback is given about how to be a manager
  - Rarely: 32.4%
  - Never: 13.5%
  - Sometimes: 10.8%
  - Always: 27.0%
  - Often: 35.1%

- Feedback is given about how to be a health advocate
  - Rarely: 29.7%
  - Never: 27.0%
  - Sometimes: 16.2%
  - Always: 27.0%
  - Often: 43.2%

- Feedback is given about how to be a scholar
  - Rarely: 24.3%
  - Never: 37.8%
  - Sometimes: 27.0%
  - Always: 43.2%
  - Often: 27.0%

- Feedback is given about how to be a professional
  - Rarely: 24.3%
  - Never: 27.0%
  - Sometimes: 27.0%
  - Always: 45.9%
  - Often: 27.0%

- Feedback is given about how to be a medical expert
  - Rarely: 24.3%
  - Never: 27.0%
  - Sometimes: 27.0%
  - Always: 45.9%
  - Often: 27.0%

- Feedback is given about how to be a collaborator
  - Rarely: 24.3%
  - Never: 27.0%
  - Sometimes: 27.0%
  - Always: 45.9%
  - Often: 27.0%

- Feedback is given about how to be a communicator
  - Rarely: 24.3%
  - Never: 27.0%
  - Sometimes: 27.0%
  - Always: 45.9%
  - Often: 27.0%

- Feedback is given about how to be a manager
  - Rarely: 24.3%
  - Never: 27.0%
  - Sometimes: 27.0%
  - Always: 45.9%
  - Often: 27.0%

- Feedback is given about how to be a health advocate
  - Rarely: 24.3%
  - Never: 27.0%
  - Sometimes: 27.0%
  - Always: 45.9%
  - Often: 27.0%

- Feedback is given about how to be a scholar
  - Rarely: 24.3%
  - Never: 27.0%
  - Sometimes: 27.0%
  - Always: 45.9%
  - Often: 27.0%

- Feedback is given about how to be a professional
  - Rarely: 24.3%
  - Never: 27.0%
  - Sometimes: 27.0%
  - Always: 45.9%
  - Often: 27.0%

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**Fig. 2. A divergent stacked bar graph showing consultants’ perceptions on the feedback they give to registrars with regard to graduate attributes.**

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Rarely</th>
<th>Never</th>
<th>Sometimes</th>
<th>Always</th>
<th>Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would like to receive peer feedback</td>
<td>24.3</td>
<td>27.0</td>
<td>27.0</td>
<td>45.9</td>
<td>27.0</td>
</tr>
<tr>
<td>I prefer giving group feedback</td>
<td>40.5</td>
<td>16.2</td>
<td>27.0</td>
<td>16.2</td>
<td>64.9</td>
</tr>
<tr>
<td>The registrar agrees with the feedback provided</td>
<td>27.0</td>
<td>8.1</td>
<td>64.9</td>
<td>13.5</td>
<td>37.8</td>
</tr>
<tr>
<td>Support is available to the registrar from different sources after both formal and informal feedback sessions</td>
<td>37.8</td>
<td>54.1</td>
<td>13.5</td>
<td>40.5</td>
<td>27.0</td>
</tr>
<tr>
<td>The effect of feedback on the registrar noted</td>
<td>43.2</td>
<td>24.3</td>
<td>27.0</td>
<td>29.7</td>
<td>64.9</td>
</tr>
<tr>
<td>Feedback is documented</td>
<td>37.8</td>
<td>2.7</td>
<td>40.5</td>
<td>8.1</td>
<td>10.8</td>
</tr>
<tr>
<td>Formal feedback incorporates new learning objectives</td>
<td>37.8</td>
<td>54.1</td>
<td>13.5</td>
<td>40.5</td>
<td>27.0</td>
</tr>
<tr>
<td>Feedback is given about the feedback given</td>
<td>24.3</td>
<td>54.1</td>
<td>43.2</td>
<td>27.0</td>
<td>64.9</td>
</tr>
<tr>
<td>Feedback is influenced by race, gender or ethnicity of the registrar</td>
<td>5.4</td>
<td>75.7</td>
<td>10.8</td>
<td>5.4</td>
<td>5.4</td>
</tr>
<tr>
<td>Feedback is given in non-emotive, non-judgemental language</td>
<td>24.3</td>
<td>18.9</td>
<td>54.1</td>
<td>27.0</td>
<td>45.9</td>
</tr>
<tr>
<td>Feedback incorporates a plan of improvement</td>
<td>18.9</td>
<td>54.1</td>
<td>27.0</td>
<td>45.9</td>
<td>27.0</td>
</tr>
<tr>
<td>Feedback encourages reflection about previous feedback</td>
<td>32.4</td>
<td>80.0</td>
<td>60.0</td>
<td>40.0</td>
<td>20.0</td>
</tr>
<tr>
<td>Feedback is given about procedures and techniques performed correctly</td>
<td>45.9</td>
<td>27.0</td>
<td>27.0</td>
<td>45.9</td>
<td>27.0</td>
</tr>
<tr>
<td>Feedback is given about procedures and techniques performed incorrectly</td>
<td>21.6</td>
<td>7.2</td>
<td>27.0</td>
<td>45.9</td>
<td>27.0</td>
</tr>
<tr>
<td>Standards for assessment are predetermined and communicated to the registrar in advance</td>
<td>40.5</td>
<td>27.0</td>
<td>16.2</td>
<td>11.5</td>
<td>11.4</td>
</tr>
<tr>
<td>Formal feedback sessions are held in an appropriate location</td>
<td>29.7</td>
<td>18.9</td>
<td>18.9</td>
<td>21.6</td>
<td>27.0</td>
</tr>
<tr>
<td>Formal feedback sessions are clearly scheduled in advance</td>
<td>24.3</td>
<td>5.4</td>
<td>27.0</td>
<td>21.6</td>
<td>27.0</td>
</tr>
<tr>
<td>Feedback is formal</td>
<td>56.8</td>
<td>27.1</td>
<td>33.5</td>
<td>45.9</td>
<td>27.0</td>
</tr>
<tr>
<td>Feedback is informal</td>
<td>2.7</td>
<td>2.7</td>
<td>5.4</td>
<td>62.2</td>
<td>32.4</td>
</tr>
</tbody>
</table>
40% provided feedback always or often. The majority of consultants based their feedback on concrete observations of registrar performance (78.4%), incorporated a plan for improvement in their feedback (72.9%), or provided feedback on techniques performed incorrectly (72.9%). However, only 40.5% provided feedback on procedures performed correctly, while 56.7% thought that feedback encouraged reflection about previous feedback. The vast majority gave informal feedback (94.6%). Only 27% gave formal feedback that was clearly scheduled in advance, given in an appropriate location and that incorporated new learning objectives – only half of the time. Feedback given was influenced by race, gender or ethnicity of the registrars – sometimes (10.8%) and often (5.4%). Seventy-three percent reported that feedback was given using non-emotive, non-judgemental language, and 70.2% of consultants gave registrars an opportunity to respond to feedback, but only 32.4% noted the effect of feedback on the registrar. A total of 51.3% reported that support for registrars was available after feedback. While 73% of the consultants felt that the registrar agreed with the feedback, 54% reported that they were proficient at giving feedback and believed that their intended message was received. Most consultants (83.7%) preferred giving feedback one on one, and would have liked to receive peer feedback (72.9%).

Registrars need feedback on both technical and other specific skills and on graduate attributes to improve outcomes. With regard to technical skills, feedback on how to be a professional was provided always or often (59.4%), while the specifics around being a medical expert (56.7%), communicator (64.8%), collaborator (75.6%), manager (75.6%), health advocate (64.8%), and scholar (59.4%) were neglected. Sixty-two percent of consultants believed that they always or often provided feedback about clinical skills, technical skills and evidence-based practice, but feedback about interpersonal skills (67.6%), communication skills (59.5%) and ethics (54%) was rarely or never provided.

This study found that consultants delivered feedback in a variety of settings. While no consultants provided feedback during group teaching, 84% gave feedback during academic days, 62% made use of side-room settings, 50% provided one-on-one feedback, and 32% gave feedback at the bedside. No statistically significant relationship was observed between the age of consultants and how they perceived feedback to be provided. With regard to gender, male consultants believed that they were proficient at giving feedback, significantly more than their female counterparts (p=0.041, mean 21.91).

Consultants whose mother tongue was English showed significant differences compared with other language speakers, as they gave more feedback about how to be a communicator (p=0.031, mean 20.58), a collaborator (p=0.017, mean 20.74) and a manager (p=0.052, mean 20.44). Provision of feedback was significantly influenced by race, gender and ethnicity of registrars, more so in consultants who were English second-language speakers (p=0.05, mean 27.58) than English first-language speakers.

Discussion
The importance of providing feedback in registrar training has been well documented. A good approach to feedback is essential and several necessary elements have been identified for successful feedback to occur and ensure that the process attains the desired end result of improving performance. Two of the fundamental requirements for an appropriate and adequate feedback process involve: (i) the development of the desired standards to be obtained, and for these standards to be clearly communicated to the registrar in advance; and (ii) that the consultant's feedback be based on direct observation of the registrar's performance and compared with the desired standard to be achieved. Such feedback must include an improvement plan to overcome any deficiencies between actual and desired performance. The majority of consultants did not communicate such desired 'gold standards' to the registrars. Furthermore, more than one-quarter did not base their observations on direct observation of performance or provide a plan for improvement in the feedback given. Therefore, registrars did not always have a clearly defined set of rules as a benchmark. These findings highlight essential fundamental flaws in the current practice of feedback across the disciplines at our academic hospital. This study suggests that each department should develop a set of guidelines that should be given to registrars at the beginning of a rotation, and consultants should be made aware that the feedback process hinges on direct observation of performance and incorporates improvement plans. Moreover, while feedback is used to correct deficiencies, it should also enhance good performance. The majority of consultants did not give feedback on procedures performed correctly, hence missing the opportunity to cement good practice.

All consultants reported that they provided feedback, but the majority provided it infrequently and informally. With this approach, registrars will not always recognise feedback as feedback, and may not pay as much attention to it as when it is formally scheduled in advance. Owing to the experiential nature of the clinical teaching setting, it is of concern that consultants do not optimise all opportunities with the registrar to provide feedback. This is an indication that many teaching opportunities are being lost. Many consultants provided teaching at the bedside, a valuable setting for practical demonstration of clinical skills. However, academic days, which could be the best time for emphasising 'softer' skills, including graduate attributes, professionalism and ethics, were not maximised. A specific time should be set aside for discussions around such aspects on these days. Also, care should be taken to highlight the relevant application of such tenets during case presentations or didactic lectures on the effect that key areas have on clinical care to ensure that graduates are equipped with more than clinical competencies.

As feedback has been likened to giving bad news, the effect of the message on the recipient cannot be ignored. This is particularly important in the diverse multicultural setting of this study. Of note, the majority of consultants were not influenced by the race, gender or ethnicity of the registrar. However, this issue needs to be addressed, as not all consultants reported that feedback was given in a non-emotive and non-judgemental way. This is a major concern and counteracts the purpose of giving feedback – to improve performance – as registrars should not be in a position of reacting to how something was being said, rather than what was being said, and so losing the intended message.

Similarly, not noting the effect of consultants’ feedback on registrars, could have a harmful result. In the face of negative criticism, some registrars lack the emotional capacity to recover from this and may flounder in their attempts to improve on their performance. Conversely, others, particularly those with strong personalities, may choose to believe that their consultants are incorrect and persist in their chosen behaviour. It is therefore vital not only to be cognizant of the effect of both formal and informal feedback, but also to ensure referral to appropriate support structures should these be required; however, only 45.9% of consultants were aware of the support structures that registrars could access or be
referred to. While the majority of consultants gave registrars an opportunity to respond to feedback, when this did not occur misunderstandings and misconceptions were not clarified.

Consultants and students need to be skilled in the art of giving feedback.\textsuperscript{5-8} Only half of the consultants felt that they were proficient in providing feedback and gave feedback often. Also, less than a third gave feedback about technical skills. As providing feedback is key to improving academic outcomes and clinical proficiency, inadequacies in being able to provide feedback generally and about essential competencies highlighted a gap in the capability of effectively providing feedback for English second-language consultants than for English first-language speakers. The latter consultants were probably more aware of the barriers that non-proficiency in the medium of instruction could pose and took care to overcome them. Conversely, given that all communication between registrar and consultant is in English, the consultants for whom English was their home language believed that they were skilled in providing feedback, possibly because of their easy use of the language. Consequently, they did not pay as much attention to ensuring that feedback was as successful as it should be, especially for registrars who were not as proficient in English as they were. However, regardless of race or language, generally male consultants believed that they were more proficient at providing feedback than female consultants.

Conclusion

The study found that the art of giving and receiving feedback has to be nurtured so that consultants are more comfortable with and proficient in the process, not only in specific skills, but also with regard to essential graduate outcomes. To train consultants in this process would entail a form of continuing professional development, especially as they are recruited on the basis of their clinical skills and the assumption that knowing how to do a procedure equates to being able to communicate it well, without any formal exposure to didactic instruction. This would encourage a process of reflection and seeking feedback from registrars, starting in the preclinical years. An integral component of this training would have to be recognising the effect of feedback on registrars, so that any undesirable outcomes could be appropriately dealt with, be it refusal to accept the feedback or negative emotional reactions. Support structures and mechanisms must be developed internally by disciplines and the university at large, and referral pathways must be developed and communicated to consultants and registrars so that they are able to access these quickly and confidentially if and when required. While it is gratifying that most consultants were able to embrace the multicultural and diverse setting, a small majority appeared to be affected by race, gender and ethnicity. We recommend that appropriate programmes addressing diversity issues be implemented so that no-one is prejudiced by these apparent biases.

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References