Objectives: To explore the current status of performance feedback (debriefing) in the operating room and to develop and evaluate an evidence-based, user-informed intervention termed “SHARP” to improve debriefing in surgery.

Background: Effective debriefing is a key educational technique for optimizing learning in surgical settings. However, there is a lack of a debriefing culture within surgery. Few studies have prospectively evaluated educational interventions to improve the quality and quantity of performance feedback in surgery.

Methods: This was a prospective pre- and post-study of 100 cases involving 22 trainers (attendings) and 30 surgical residents (postgraduate years 3–8). A trained researcher assessed the quality of debriefings provided to the trainee using the validated Objective Structured Assessment of Debriefing (OSAD) tool alongside ethnographic observation. Following the first 50 cases, an educational intervention termed “SHARP” was introduced and measures repeated for a further 50 cases. User satisfaction with SHARP was assessed via questionnaire. Twenty percent of the cases were observed independently by a second researcher to test interrater reliability.

Results: Interrater reliability for OSAD was excellent (ICC = 0.994). Objective scores of debriefing (OSAD) improved significantly after the SHARP intervention: median pre = 19 (range, 8–31); median post = 33 (range, 26–40), P < 0.001. Strong correlations between observer (OSAD) and trainee rating of debriefing were obtained (median ρ = 0.566, P < 0.01). Ethnographic observations also supported a significant improvement in both quality and style of debriefings. Users reported high levels of satisfaction in terms of usefulness, feasibility, and comprehensiveness of the SHARP tool.

Conclusions: SHARP is an effective and efficient means of improving performance feedback in the operating room. Its routine use should be promoted to optimize workplace-based learning and foster a positive culture of debriefing and performance improvement within surgery.

Keywords: assessment, debriefing, education, surgery, workplace

The operating room has traditionally been regarded as the focal point for teaching and learning in surgery.1 However, duty-hour restrictions, increased ethical concerns, and the advent of newer techniques are resulting in fewer opportunities for trainees to hone their skills through practice in the OR.2,3 Simulated technologies are being introduced to help combat this decline in experiential learning.4 However, such technologies are not widely accessible, are expensive, and require significant faculty input—factors difficult to contend with in today’s financial climate.5

Emphasis is therefore being placed back into maximizing learning from the available opportunities that do exist in the workplace. Toward this end, there has been an introduction of workplace-based assessments into postgraduate training such as those advocated by the United Kingdom’s Intercollegiate Surgical Curriculum Project.6,7 However, although intended for formative learning, their use often degenerates into a “tick-box exercise”; they are viewed as an administrative burden by trainees and tutors alike.8 A reconsideration of the strategy for teaching and learning in the OR is thus required. Educational approaches that allow every surgical case to be an active learning encounter encouraging residents to augment knowledge and skill must be sought.

Debriefing or the use of performance feedback is one such strategy that facilitates trainer-trainee interaction in the OR so as to help “make every moment count.”9 Debriefing refers to the process wherein participants engage in reflective dialogue to consolidate learning and develop strategies for improving future performance.10,11 Debriefing has been shown to improve surgeons’ technical performance,12 reduce adverse events,13 and ensure clinically relevant learning.14 However, although extensively employed in many high-risk industries and in the field of simulation,15 there is evidence to suggest a relative lack of a debriefing culture within the OR.16 A recent study by our group with surgeons across the United Kingdom, United States, and Australia highlighted how educational debriefings are seldom formally provided by trainers—much to the dismay of their juniors, who would value explicit feedback on their performance.16 This prevailing absence of a debriefing culture in clinical practice is reflected in the surgical literature. Despite its central importance, few studies have systematically developed and/or tested approaches to improving debriefing in surgery.17–19 One case study has described the “Briefing, Intraoperative Teaching, Debriefing” model; however, its evaluation is limited to anecdotal observations.19

Recently, reports have emerged identifying key components of an evidence-based approach to effective debriefing.16,20 These components of an effective debriefing have been incorporated into a tool, termed “Objective Structured Assessment of Debriefing” (OSAD), used to assess the quality of debriefing practices in surgery.20 OSAD has been deemed a feasible, reliable, and valid assessment tool of debriefings in the simulation setting.20 However, there is no evidence to date to demonstrate whether evaluating or measuring the quality of debriefing using OSAD translates into improved feedback and learning in the real OR—a key concern, given the complex demands of such an environment which may make the delivery of any training intervention a particular challenge.

The aims of this study were to assess the current status of educational debriefings in the OR using both quantitative and qualitative techniques and to determine whether an educational intervention termed “SHARP: 5-step Feedback Tool for Surgery” could improve
the quantity and quality of performance debriefings in the OR. A secondary aim was to determine the feasibility and reliability of using the OSAD tool to assess debriefing practices in the real OR setting.

METHODS

Study Population and Design

This was a prospective, pre– and post–cross-sectional study of 100 cases involving 22 trainers (general surgery attendings) and 30 trainees (general surgery residents, postgraduate years 3–8, males = 19, females = 11) from a University Teaching Hospital in London, United Kingdom. Fifty consecutive cases were observed preintervention and 50 consecutive cases postintervention. Criteria for inclusion were cases involving a trainer and a trainee during which the trainee served as primary operator for at least part of the case (to ensure that there was opportunity for performance feedback to occur). Other inclusion criteria pertained to those performed under general anesthetic and in an elective setting so as to minimize bias from an awake patient or an emergency scenario precluding trainee feedback. Cases were observed across a range of surgical specialties including general surgery, breast surgery, vascular surgery, orthopedics, and urology. This was to gain a comprehensive view of the current status of debriefing in the OR and to determine the impact of the intervention on debriefing across different specialties.

Study Procedure

Preintervention Phase

A trained clinical researcher (MA) present in the OR evaluated 50 cases in real time for feedback/debriefing provided to the trainee by the trainer either during the case, immediately after the case, or at the end of the completion of the list that day. The researcher used both ethnographic observations and quantitative methodologies to record the quality of debriefing (see the “Outcome Measures” section for more detail). Twenty percent of the cases were observed by a second calibrated researcher with a background in behavioral science (SR) to test interrater reliability. At the end of each case, the trainee was also asked to complete a short questionnaire eliciting his/her perceptions of the debriefing (if any) received.

Intervention Phase

Regarding development of an intervention to improve debriefing, a critical review of the literature and 33 semistructured interviews with trainees and trainers across 3 different continents (United Kingdom, United States, and Australia) were used to elicit user requirements and best evidence. Full details of these interviews and their results are reported elsewhere.16 This information was used to develop and provide content validity for the intervention termed “SHARP: 5-step Feedback Tool for Surgery” (Fig. 1). The SHARP tool is a 5 × 3-in card describing 5 “prompts” to guide trainers and trainees in providing/receiving a structured debrief. The first prompt “Set learning objectives” should be completed before the case commences, with the remaining 4 prompts to be discussed after the case completes. Importantly, as per user requirements, the SHARP tool was designed to be short and fit into a surgeon’s scrub pocket, thereby encouraging its use in a busy surgical setting.

A structured approach was used to deliver the intervention in real time to surgeons. To ensure joint responsibility for debriefing both trainers and trainees were coached in the use of the SHARP tool at the beginning of each observed list (10 minutes). The findings of the preintervention phase were highlighted together with findings from the previously conducted user needs analysis19—that showed that feedback is generally provided only during the case and is often rushed and unstructured. Surgical trainees would value a structured feedback at the end of every case to reinforce learning and next steps.

Each of the 5 “prompts” of the SHARP tool was described in turn and the rationale explained for each item. A copy of the tool was provided to both trainer and trainee. Trainers were asked to “Please work through these steps in order to provide feedback to your trainee”; trainees were asked to “Please prompt your trainer to request feedback along the steps outlined”—at the end of every case. Both were advised to complete the 4 postcase prompts upon case completion or at the latest by the end of the list to ensure immediacy of feedback.

Postintervention Phase

A further 50 cases were evaluated over a 3-month period using the same protocol as the preintervention phase with another 20% of the cases observed by a second researcher to test interrater reliability. The second observer was blinded to the intervention as she was a psychologist by background and therefore was not aware of routine surgical practice in terms of feedback provided at the end of the case. Thus, when SHARP was used, this second observer was unaware that this actually was an intervention. The same researchers were used as the preintervention phase of the study to minimize observer bias in scoring across the study phases. Once the SHARP tool had been administered in the intervention phase of the study, the researchers did not prompt the team to use it or encourage the provision of feedback.

Outcome Measures

Quantitative outcome measures were the quality of debriefing assessed using the OSAD tool, trainees’ assessment of debriefing, and user satisfaction with the SHARP tool. These were supplemented by real-time qualitative ethnographic field observations.
Quality of Educational Debriefing

Quality of debriefing was quantitatively assessed using the validated (OSAD) tool (see Supplemental Digital Content Appendix 1 available at: http://links.lww.com/SLA/A364). OSAD consists of 8 categories relating to the core components of an effective debrief: approach, environment, engagement, reaction, reflection, analysis, diagnosis, and application. Each category is rated on a scale of 1 (minimum) to 5 (maximum) regarding how well that element of the debriefing is conducted by the trainer. The total score for OSAD therefore ranges from a minimum of 8 to a maximum of 40, with higher scores indicating higher quality debriefings. The OSAD rating was supplemented with ethnographic, real-time observational notes recorded during the case to provide a richer understanding of context and practice.

Trainee Assessment of Debriefing

Trainees were asked to complete a short questionnaire at the end of every case to evaluate the feedback/debriefing received either during or after the case. The questionnaire items mapped onto the OSAD categories and responses were based on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

User Satisfaction and Face Validity of SHARP Tool

In the intervention phase, both trainees and trainers were asked to complete a short questionnaire at the end of every OR session to evaluate satisfaction and face validity of the SHARP tool. Users were asked to rate its usefulness, comprehensiveness, feasibility of use in practice, overall satisfaction, and the likelihood of future use. Responses were based on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree). In addition, free-text, qualitative comments were recorded from both trainees and their trainers to capture further reactions to the tool.

Statistical Analyses

SPSS version 18.0 was used for all analyses. Interrater reliability of OSAD was assessed using intraclass correlation coefficients (ICC). Cronbach \( \alpha \) was used to determine the internal consistency of OSAD (based on the primary observer’s data, MA). Descriptive statistics (median and range) were calculated for the quality of debriefing, assessed both objectively by the primary observer using OSAD and subjectively by trainee scores. Correlations between trainee assessment of debriefing and OSAD scores were assessed using Spearman \( \rho \) coefficient. To test for differences in quality of debriefing pre and postintervention, the Mann-Whitney \( U \) test was deployed. For all tests, a \( P \) level of less than 0.05 was determined to be statistically significant.

RESULTS

Psychometric Properties of OSAD

OSAD was a feasible tool to assess debriefings in the OR, taking only 5 minutes to complete per case. The interrater reliabilities (intraclass correlations) between the 2 independent assessors were excellent for all domains of OSAD: Approach (0.967), environment (0.991), engagement (0.950), reaction (0.980), reflection (0.892), analysis (0.921), diagnosis (0.957), application (0.983), and for the total score (0.994). The internal consistency of OSAD was high preintervention (Cronbach \( \alpha = 0.898 \)) and postintervention (Cronbach \( \alpha = 0.721 \)).

TABLE 1. OSAD Scores Pre and Postintervention

<table>
<thead>
<tr>
<th>Item</th>
<th>Preintervention Median (Range)</th>
<th>Postintervention Median (Range)</th>
<th>( P )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approach</td>
<td>4 (1–5)</td>
<td>5 (4–5)</td>
<td>( P &lt; 0.001 )</td>
</tr>
<tr>
<td>Environment</td>
<td>1 (1–2)</td>
<td>4 (2–5)</td>
<td>( P &lt; 0.001 )</td>
</tr>
<tr>
<td>Engagement</td>
<td>3 (1–5)</td>
<td>4 (3–5)</td>
<td>( P &lt; 0.001 )</td>
</tr>
<tr>
<td>Reaction</td>
<td>1 (1–3)</td>
<td>3 (2–5)</td>
<td>( P &lt; 0.001 )</td>
</tr>
<tr>
<td>Reflection</td>
<td>2 (1–4)</td>
<td>4 (3–5)</td>
<td>( P &lt; 0.001 )</td>
</tr>
<tr>
<td>Analysis</td>
<td>2.5 (1–4)</td>
<td>4 (3–5)</td>
<td>( P &lt; 0.001 )</td>
</tr>
<tr>
<td>Diagnosis</td>
<td>3 (1–4)</td>
<td>4 (2–5)</td>
<td>( P &lt; 0.001 )</td>
</tr>
<tr>
<td>Application</td>
<td>2 (1–4)</td>
<td>4 (3–5)</td>
<td>( P &lt; 0.001 )</td>
</tr>
<tr>
<td>Total score</td>
<td>19 (8–31)</td>
<td>33 (26–40)</td>
<td>( P &lt; 0.001 )</td>
</tr>
</tbody>
</table>

Debriefing Pre- and Post-SHARP Intervention

Debriefings were provided to the trainee in a significantly higher number of cases after the SHARP intervention [pre = 36/50 (72%) cases, post = 50/50 (100%) cases, \( P < 0.001 \)]. In addition, the number of cases in which learning objectives were set before the case significantly increased after the SHARP intervention [pre = 12/50 (24%) cases, post = 43/50 (86%), \( P < 0.001 \)].

There was a significant improvement in OSAD scores—both in terms of overall score (Fig. 2) and for each domain of the tool (Table 1). This means that after implementation of SHARP performance debriefs to the trainees were more common and of an objectively higher standard. Regarding the more subjective assessment of debriefings as rated by the trainee, these also significantly improved when the SHARP tool was utilized in the postintervention phase of the study (Table 2). The median score significantly improved and the range narrowed for each questionnaire item indicating greater consistency in the quality of feedback.

Significant correlations were also obtained between objective scores of debriefing (OSAD) and trainees’ subjective assessments (Table 3), indicating that the trainees have insight into the quality of feedback they receive.

Ethnographic Observations

The improvement in debriefings as noted by enhanced OSAD scores was also reflected qualitatively in the ethnographic observations. Before the intervention, when debriefing was provided it was often rushed, unstructured, and nonspecific for example, “...Yes that went well...” (attending, general surgery). What actually “went...
Debriefing was commonly unidirectional with trainees rarely encouraged to contribute to the discussion of their performance “...So what you should do next time is...” (attending, general surgery). In the majority of cases, trainers de-scrubbed at the time of skin closure stage, leaving the trainee to finish the case alone—hence missing the perfect opportunity for debriefing to take place—and consequently “actions plans” for improvement were rarely set. Although feedback was sometimes provided as the case progressed, this often focused on the most immediate task at hand, for example, in a laparoscopic cholecystectomy, one attending mentioned, “...Put the suture in first, that way when you come to closing the port, you just have to tie it...” No specific discussion took place either during or after the case regarding what the trainee did well or could have done better next time. The point about port insertion and closure was also not reinforced at the case end of the case.

After the intervention, in 42 (84%) cases, trainees reported having set learning objectives with their trainer before the case commenced—the “S” of SHARP “...So what do you want to take away from this case?...” (attending, general surgery) “I want to perform an umbilical hernia repair independently, particularly focussing on how to select and size the mesh appropriately...” (PGY 3, general surgery). This was mostly done while scrubbing or in the coffee room before the case commenced. In the 8 cases in which learning objectives were not set, this was due to the trainer not being present at the start of the case—he/she joined the case later and was prompted to use the SHARP tool by his/her trainee. Feedback was more structured and balanced in terms of both positive and negative aspects of performance “...I think you did very well here, it was a complex case and the mesh was tricky to place. Make sure you make best use of your assistant in ensuring a good field of view...” (attending, general surgery). Trainers took time to explain the rationale for certain steps and the questioning characteristic of the prompts encouraged trainees to contribute to the discussion. For example, “...I don’t think I used enough tension...” (PGY 3, general surgery); “...Yes, remember tension is your friend. You need to pull it tight otherwise you will undo all the good work you’ve done...” (attending, general surgery). In the majority of cases, feedback took place in the OR after the operation notes had been written and histology forms completed. In a minority of cases, feedback was provided in the coffee room. Irrespective of location, the intervention led to feedback being provided within 30 minutes of case completion and effectively ensured that the trainer either remained in the OR until case completion or arranged to meet with the trainee to provide feedback in the coffee room. Interestingly, completion of SHARP was invariably initiated by the trainer (as opposed to the trainee) in the majority of cases observed—possibly reflecting the still hesitance of trainees in initiating/requesting feedback.

As regards case complexity, it was noted that in more complex cases, training took less priority over patient care and trainee participation as primary operator was less in such cases. Consequently, there was less feedback offered to trainees during the case. After such cases, trainer-trainee dialogue typically comprised a discussion of the approach used and its rationale rather than feedback on trainee performance per se. In the postintervention phase, we found that despite the lower level of trainee participation in complex cases, SHARP proved helpful in structuring the postcase discussion whereby trainers reflected on both their own and their trainee’s performance to promote mutual learning.

### User Satisfaction With SHARP Tool

Both trainers and trainees reported high levels of satisfaction with the SHARP tool. In particular, they felt that it was a useful tool (median, 4; range, 3–5) because “...It forces you to sit down and talk... ‘make every moment count’...” (attending, orthopedics). It was also deemed to be comprehensive (median, 4; range, 3–5) “...It’s a good prompter and well structured. It does cover the main components of feedback...” (attending, vascular). Participants thought that it was feasible (median, 4; range, 3–5) “...I think it could be implemented into routine practice like at the end of the case ‘Have you done your SHARP?’...” (attending, vascular) and stated that they would use it further (median, 4; range, 3–5) “...I think it’s good. I would definitely use it again in future...” (attending, breast surgery).

<table>
<thead>
<tr>
<th>Questionnaire Item</th>
<th>Preintervention Median (Range)</th>
<th>Postintervention Median (Range)</th>
<th>Mann-Whitney U Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The feedback was delivered in a nonthreatening but honest way</td>
<td>4 (1–5)</td>
<td>5 (4–5)</td>
<td>P &lt; 0.001</td>
</tr>
<tr>
<td>2. I contributed to the discussion of my performance</td>
<td>4 (1–5)</td>
<td>4 (3–5)</td>
<td>P &lt; 0.001</td>
</tr>
<tr>
<td>3. My reaction and views on my performance were acknowledged/discussed</td>
<td>4 (1–5)</td>
<td>4 (3–5)</td>
<td>P = 0.001</td>
</tr>
<tr>
<td>4. I was encouraged to reflect upon how I performed during the case</td>
<td>4 (1–5)</td>
<td>4 (3–5)</td>
<td>P &lt; 0.001</td>
</tr>
<tr>
<td>5. The feedback helped me to understand the consequences of how I performed</td>
<td>4 (1–5)</td>
<td>4 (3–5)</td>
<td>P &lt; 0.001</td>
</tr>
<tr>
<td>6. The feedback gave me a clear idea of what I did well</td>
<td>4 (1–5)</td>
<td>4 (3–5)</td>
<td>P &lt; 0.001</td>
</tr>
<tr>
<td>7. The feedback gave me a clear idea of what I did not do well</td>
<td>3 (1–5)</td>
<td>4 (2–5)</td>
<td>P &lt; 0.001</td>
</tr>
<tr>
<td>8. The feedback provided me with strategies to improve my future practice</td>
<td>4 (1–5)</td>
<td>5 (3–5)</td>
<td>P &lt; 0.001</td>
</tr>
<tr>
<td>9. Overall, I am satisfied with the feedback on my technical skills</td>
<td>4 (1–5)</td>
<td>5 (3–5)</td>
<td>P &lt; 0.001</td>
</tr>
<tr>
<td>10. Overall, I am satisfied with the feedback on my team-working skills</td>
<td>3 (1–5)</td>
<td>4 (2–5)</td>
<td>P &lt; 0.01</td>
</tr>
</tbody>
</table>

### Table 2. Trainee Assessment of Debriefing

### Table 3. Correlation Between OSAD and Trainee Assessment Scores

<table>
<thead>
<tr>
<th>OSAD Category</th>
<th>Trainee Questionnaire Item</th>
<th>Spearman ρ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approach</td>
<td>1</td>
<td>0.683*</td>
</tr>
<tr>
<td>Engagement</td>
<td>2</td>
<td>0.561*</td>
</tr>
<tr>
<td>Reaction</td>
<td>3</td>
<td>0.365*</td>
</tr>
<tr>
<td>Reflection</td>
<td>4</td>
<td>0.601*</td>
</tr>
<tr>
<td>Analysis</td>
<td>5.6 and 7 (mean)</td>
<td>0.525*</td>
</tr>
<tr>
<td>Diagnosis</td>
<td>9 and 10 (mean)</td>
<td>0.566*</td>
</tr>
<tr>
<td>Application</td>
<td>11</td>
<td>0.700*</td>
</tr>
<tr>
<td>Total OSAD score†</td>
<td>Sum of all items</td>
<td>0.717*</td>
</tr>
</tbody>
</table>

*P < 0.01.
†Excludes “environment” component of OSAD score.

Excludes "environment" component of OSAD score.
DISCUSSION

This study aimed to explore and improve performance feedback and debriefing in the OR. Our results show that implementation of the SHARP intervention led to significant improvements in the quality of debriefing and in setting learning objectives. In addition, it also reduced variability by enabling the delivery of consistently higher feedback. This suggests that SHARP is particularly useful for inexperienced faculty members, bringing up their debriefing skills to the standard of their more experienced counterparts. Objective scores and trainees’ own perceptions of debriefing also correlated well across domains. Users, both junior and senior, reported high levels of satisfaction with the SHARP intervention and found it to be comprehensive yet feasible and expressed a willingness to use it in the future. Finally, the interrater reliabilities and internal consistency of OSAD were excellent both pre and postintervention, demonstrating its feasibility and psychometric robustness as a scientific tool to assess debriefing in the real-OR setting.

The SHARP intervention introduces a structured approach to debriefing and ensures that key components of an effective feedback are covered in the dialogue between trainer and trainee. “Setting learning objectives” ensures that debriefing is tailored to well-defined objectives set at the start of each case in line with existing evidence.11,21 “How did it go?” encourages trainee engagement and reflection on performance—both core features of an effective debrief, well documented in the literature.11,22,23 The associated prompt “What went well” encourages trainee and trainer to first reflect on the positive aspects of performance before moving on to the negative aspects and helps facilitate balanced feedback. “Address concerns” intends to prompt trainees to enquire into trainee’s reactions to the event, another core element of debriefing.10 “Review learning points” and its associated prompts ensure that debriefing is tailored to the learning objectives set at the outset of each case and that both technical and nontechnical aspects of performance are considered.24 Finally, “Plan ahead” and its associated prompt encourages trainer and trainee to consider how to translate learning to improved future practice.11,24

To the best of our knowledge, this is the first study to systematically evaluate the effectiveness of an evidence-based intervention to improve debriefing within the real OR. One study has described the “Briefing, Intraoperative Teaching, Debriefing” model for teaching in the OR, but although reporting positive reactions from trainers and trainees, its effect upon actual debriefing practices remains to be empirically tested.19 Another study examining the effectiveness of debriefing within the simulation-based OR concluded that effective debriefing can occur even when time and space are limited, offering support to our findings.17

With regard to potential limitations, this study was conducted on a sample of 100 cases within a single institution, so generalizability to a wider population could be questioned. However, the study was conducted across a number of different surgical specialties involving trainees and trainers of varying experience, thus enabling a comprehensive assessment of the validity and feasibility of SHARP as a means of improving the quality of debriefing within the OR. During the intervention phase, it was not feasible to blind the primary researcher to the intervention, thus risking observer bias. However, a second observer (who was blinded as to whether cases were pre or postintervention) rated the debriefings in 20% of cases and demonstrated excellent interrater reliabilities, thereby overcoming any potential bias. Furthermore, the improved trainee ratings postintervention correlated with the improved objective ratings further increasing our confidence that observer bias was minimized. As observers were present for both the pre and postintervention phase, any potential Hawthorne effect was also minimized. Further research is required to determine the sustainability of SHARP in routine surgical practice. In addition, it is essential to determine the impact of SHARP on the actual performance of trainees and ultimately patient care.25 Comparative studies using other debriefing interventions (such as the Briefing, Intraoperative Teaching, Debriefing tool)19 would help determine the most effective and efficient means of improving the quality of debriefing in the OR.

This study has a number of implications for future practice. We have shown that a brief intervention “SHARP, 5-step Feedback Tool for Surgery” significantly improves the quality of debriefing in the OR and is well received by surgical trainees and trainers. In the light of these findings and also existing evidence, we propose systematic use of SHARP in ORs as an inexpensive, practical, and evidence-based intervention that allows attending surgeons to conduct better performance debriefs and residents to be more engaged in their own training (manual for debriefing including SHARP and OSAD are freely available from the corresponding author). Its use at the end of every case would improve debriefing culture in the OR, optimize formative learning, and help combat the “tick-box culture” often prevalent through misuse of workplace-based assessments. Through creating an opportunity to engage in structured, 2-way feedback, SHARP could effectively ensure “Time-out for Debriefing.”16 This need not be onerous and could be accommodated within the time allotted to the “Time-out” of the Surgical Safety Checklist which many OR teams are expected to complete (mandatory in the United Kingdom).25 Initiatives such as SHARP and the WHO Checklist are potentially powerful means by which to foster wider cultural change in the OR, whereby performance feedback for individual residents and entire OR teams becomes commonplace as part of ongoing efforts to improve performance and promote patient safety.

CONCLUSIONS

The SHARP 5-step Feedback Tool for Surgery is an effective and efficient means of improving performance feedback in the OR. Its routine use should be promoted to optimize workplace-based learning and foster a positive culture of debriefing within surgery.

REFERENCES


