ORIGINAL ARTICLE

Clinical supervision in the emergency department: a critical incident study

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Objectives: To identify the key features of effective clinical supervision in the emergency department (ED) from the perspectives of enthusiastic consultants and specialist registrars. To highlight the importance of clinical supervision within emergency medicine, and identify obstructions to its occurrence in everyday practice.

Methods: A critical incident study was undertaken consisting of structured interviews, conducted by telephone or in person, with 18 consultants and higher level trainees selected for their interest in supervision.

Results: Direct clinical supervision of key practical skills and patient management steps was considered to be of paramount importance in providing quality patient care and significantly enhancing professional confidence. The adequacy of supervision varied depending upon patient presentation. Trainees were concerned with the competence and skills of their supervisor; consultants were concerned with wider systemic constraints upon the provision of adequate supervision to juniors.

Conclusions: The value of supervision extends to all patient presentations in the ED. The study raised questions concerning the appropriate attitudes and qualifications for supervisors. Protected supervisory time for those with trainees is mandatory, and must be incorporated within ED consultant job planning.

The role of the senior doctor as a teacher to less experienced colleagues is rooted in the apprenticeship traditions of clinical medicine. This role has more recently been delineated within the concept of clinical supervision. In 1999, the General Medical Council formalised the supervisory commitment between senior and junior doctor in *The doctor as teacher*.¹ The precise meaning of clinical supervision has remained unclear, hampering research into its optimal provision and measurement of its effectiveness. Kilminster *et al* derived the following definition of workplace supervision:²

“a process of professional support and learning which enables individual practitioners to develop knowledge and competence, assume responsibility for their own practice, and enhance safety of care in complex situations”.

Significant features of this definition are the mention of patient safety and professional development as key aims of effective clinical supervision. How best to deliver the supervision needed to meet these aims within the acute care setting has remained a vexed question. *Modernising medical careers* and the General Medical Council both emphasise that supervision of junior doctors should be regular, structured and based upon agreed learning objectives. To date, the clinical supervision of higher trainees in emergency medicine (EM) as a discrete cohort has not been specifically studied.^{3,4}

EM enjoys a reputation for sound clinical teaching. Junior and senior staff members work closely together, providing the appropriate environment for effective clinical supervision and support. However, the dynamics of the supervision relationship can be complex. Senior staff members who are considered to be “good teachers” can nevertheless be unsure of their effectiveness as supervisors,⁵ and it remains unclear whether the skills of clinical supervision are innate or teachable.⁶

Intuitively, effective clinical supervision of junior staff in the emergency department (ED) should ultimately enhance patient care. Turning this assumption into measurable outcomes and proving a causal link is extremely difficult.^{7–9}

This paper focuses on the identification of those key features of supervision relevant to the ED, based upon the perspectives of specialist registrars (SpRs) and supervising consultants in order to inform the development of good supervisory practice.

METHODS

Study design

Critical incident methodology was first used during World War II to analyse specific reasons for failure of trainee pilots to learn to fly.¹⁰ Structured interviews with “expert observers” allow salient features of good and bad practice to be identified within the area being investigated. Collection of sufficient examples detects specific features of the topic under investigation. An extrapolation can then be made to suggest best practice within the topic.

Sampling strategy

Critical incident methodology is based upon participants with an explicit interest in the topic. Hence, consultants in EM with an active interest in supervision were invited to participate via email or telephone. This interest was defined for consultants as current practice as a supervisor, together with known participation in committee work in relation to training within EM, and for SpRs as >2 years in a higher training post, with confirmation of at least 12 months’ supervision. In total, 10 consultants and 10 trainees were invited to participate.

Abbreviations: ED, emergency department; EM, emergency medicine; SpR, specialist registrar

Study procedure

Initial respondents were contacted with further details of the study. Those who agreed to participate underwent a semi-structured interview, either in person or on the telephone (appendix). Confidentiality in the study was assured by confining transcript identification to "C" (consultant) or "T" (higher trainee). Interviews were recorded using contemporaneous notes, which were compiled on the same day into full format notes.

Study measures

The interview form identified instances of "good" and "bad" supervision ("critical incidents") and explored:

- Perceptions of the elements of effective clinical supervision
- Difficulties in the provision of adequate supervision
- Episodes and causes of conflict
- Issues of training in relation to supervisory practice.

Data analysis

Respondents were coded during the initial interview sessions (for example, C2, T3) to allow theme development. In the final documentation, coding was reduced to reflect seniority only. Themes seen to emerge in at least three quarters of all responses within a seniority group were deemed "significant" and entered into the second round of the write up. These themes were then reviewed as a separate set of notes. Response areas where the consultants and trainees expressed the same point were then compiled into a third document. This formed the basis of the study's significant critical incident themes, in accordance with established practice within this technique.¹⁰

RESULTS

In total, 10 trainees and eight consultants participated.

Effective clinical supervision in the ED

Most examples of effective supervision derived from situations involving immediate ad hoc "shopfloor" supervision of particular clinical cases. Within these examples, four types of situation were elucidated:

- Performance of a key practical skill
- Arrival at a key diagnosis
- The performance of a key management step
- Support in dealing with complex referrals.

Consultants and SpRs concurred in their descriptions of effective supervisory episodes. Aspects most commonly cited were:

- A sense of satisfaction in developing (SpR) or teaching (consultant) a skill
- A strengthened sense of teamworking between trainee and consultant where key management decisions were shared and implemented
- A sense of commitment and motivation to learn (as seen by consultants) or to teach (as seen by trainees).

All respondents cited a need to recognise the educational value of time spent in close supervision. Of the 10 trainees, seven identified a lack of awareness by nursing staff of the value of supervision in staff development and inferred improvements in the quality of patient care.

Examples of "effective" supervision are shown in table 1. Each example relates to a clinical episode where the delivery of a key skill or other step in the care pathway was perceived to have been significantly enhanced by the supervision that took place during performance of that skill or step.

Problems with supervision

For both trainees and consultants, time limitation was the predominant factor leading to inadequate supervision. The impact of shift working at junior level, without a reciprocal shift pattern for supervisors, was the commonest source of problems with access to supervised working.

Trainees' perceptions

- A lack of interest from the trainer in undertaking supervised practice
- A perception that the trainer was not skilled in providing clinical supervision
- A lack of effective feedback in relation to supervised practice.

Consultants' perceptions

- Inadequate time to directly supervise the shift-working trainee
- Inadequate recognition from the Trust of the value of protected supervisory time within the New Contract job plan
- Perceptions of inadequacy in the ability to competently supervise a failing trainee

Table 1 Examples of effective and ineffective supervision

Example	Higher trainees	Supervising consultants
Effective supervision		
Key practical skill	Supervised paediatric intubation	Needle cricothyrotomy
Key diagnosis	Insertion of bilateral chest drains	Cardiac pacing
Key management step	Weil's disease	Meningococcal septicaemia
Complex referral support	Guillain-Barré syndrome	Addisonian crisis
	Initial therapy for febrile neutropenia	Initiation of core rewarming
	Establishment of IPPV	Preparing for emergency delivery
	Polytrauma: burns and facial fractures	Rhabdomyolysis: patient wishing to self discharge
	Elderly care: burns and domestic abuse	Paediatric wrist fracture: domestic abuse
Ineffective supervision		
Key practical skill	Trauma intubation	Reduction of dislocated upper limb joint
Key diagnosis	Paediatric rash	Significance of an arrhythmia
Key management step	Initiation of CPAP	Initiation of external pacing
Complex referral support	Social issues: alcoholic mother with DTs and with children in attendance	Arguing with medical registrar in resuscitation room (despite counselling) about a referral

IPPV, intermittent positive pressure ventilation; CPAP, continuous positive airway pressure; DTs, delirium tremens. The examples shown are typical illustrations of the responses received.

- Perceptions of reluctance of some trainees to engage with the process and take advice with equanimity.

Significant examples of problems with supervision are shown in table 1. The examples described relate to clinical situations where the absence of effective clinical supervision was perceived to have hampered the delivery of a key skill or management step.

DISCUSSION

The critical incident methodology is effective for exploring concepts such as supervision; its limitations stem primarily from potential distortion of the true facts based upon volunteered information. Detailed recording and rapid write up of interviews minimises recall bias. Selection of participants based upon "interest" does not reflect a rigorously sampled population, but where there is a need to identify "good" and "poor" aspects of a process, it is sensible to engage with those who have an active interest, as objective measures of what constitutes a "good" or "poor" supervisor do not exist.

This study demonstrates that effective supervision within the ED centres around procedural steps in the patient care pathway: focused diagnosis, the performance of key practical and management interventions, and a succinct disposition outcome. Table 1 shows how effective supervision occurs across the range of patient presentations. The concepts of good supervision centred upon a sense of commitment, team working, and shared learning. It is essential that these values are continually emphasised throughout the training years within EM, and it is apparent that "good" supervisors work within this ethos.

It is interesting that undifferentiated "medical illness" provided the most frequent source of problem supervision (table 1). One could speculate that trainees and trainers find these patients unappealing or uninteresting to manage, leading to perceptions of a lack of interest in supervised care of this group. It may also be the case that the complexities of this group reveal deficiencies in the knowledge or skills of trainees or consultants, which attract diffidence when it comes to effective supervision. It has been recognised elsewhere that SpRs are especially anxious to obtain supervised practice in relation to tasks that are likely to occur in exit objective structured clinical examinations;³ "long case" medicine tends not to feature in this way, which may influence the supervision it attracts in the workplace.

Problems surrounding the provision of supervision were identified by the senior respondents. Shift working, job planning, and limited skills in supervision of problem juniors were mentioned. These are significant areas of concern, and are not easily addressed. Efforts to co-ordinate direct patient care between SpRs and consultants are restricted by differing work patterns, leading to compromise in the available time for supervision to occur. The fact that some respondents had found job planning difficult in relation to the provision of time for supervision reflects the divergent demands for service delivery and effective professional development for trainees. Interestingly, none of the consultant respondents mentioned the potential personal developmental benefits to be had from engaging in a supervisory relationship.

Some trainers perceived limitations to their supervisory skills, suggesting that a structured programme offering training in supervision would be valuable. However, feedback from established programmes has revealed a disparity between participants' rating of course content (almost universally "good" or "very good") and their perceived improvement in supervisory skills as a result of the course (only 50% volunteering an improvement).⁹ The inferences would be that core supervisory skills are inherently complex to acquire, and that we are still unclear whether supervisor

selection should be based upon aptitude, enthusiasm, training, or other factors.

To establish best practice in supervision, we must concede that "on the job" supervision is the backbone of effective working, and efforts to facilitate this through rota alterations or job planning will pay dividends. The role of constructive yet realistic feedback within supervisory relationships has long been established but bears repetition; it facilitates self confidence and insight. Effective feedback may obviate the need for a small problem to escalate. A willingness to engage in reciprocal reflective practice and admit knowledge limitation might well reduce the frequency with which "medical illness" attracts poor supervision. Candid reflection, especially from senior to junior, is a powerful facilitator of learning.¹¹

This study establishes some core aspects and key areas of effective clinical supervision in the ED. It illustrates the fact that there is scope to broaden its applications. Further work may identify the requirements of an effective training programme for supervisors in EM.

The provision of such a programme could enhance the professional development of both trainees and trainers within the specialty, and ultimately enhance clinical care.

CONCLUSIONS

The critical incident technique provides insight into elements of effective supervision within EM. These elements are particularly significant during the performance of key practical procedures and management steps. Trainees and consultants value the sense of shared care, team working, and professional development that direct supervision can afford; trainees are, however, sensitive to perceptions of lack of interest or aptitude from the trainer. Consultants' concerns tend to relate more to practical aspects of the ability to provide for supervisory time.

Supervision has clear benefits for staff at all levels of seniority, including the supervisor. This activity must be maintained and strengthened in spite of the pressures of service delivery. Care must be taken to align the work patterns of junior and senior staff wherever supervisory relationships exist.

The issue of selection and training of clinical supervisors based upon aptitude remains elusive.

APPENDIX

Critical incident interview template

1. Can you give me some examples of clinical situations where supervision proved to be particularly helpful in the ED?
2. What was especially important about the supervision received (given) here?
3. Can you give me some examples of clinical situations where supervision was lacking or ineffective in the ED?
4. What was especially important about the failure of adequate supervision received (given) here?
5. What do you perceive to be the main benefits of clinical supervision in Emergency Medicine?
6. What do you perceive to be the main barriers to clinical supervision in Emergency Medicine?
7. Do you consider the skills of supervision to be innate or can they be learned?
(Information in brackets relates to altered questions posed to consultant supervisors.)

Competing interests: there are no competing interests

A free, open access, online "toolkit", which fully explains the methodological steps in undertaking a critical incident exercise, is

available at www.tiu.edu/psychology/twelker/critical_incident_technique.

Guidance from the Conference of Postgraduate Medical Deans of the United Kingdom (CoPMED) on the roles and responsibilities of clinical and educational supervisors is accessible at www.copmed.org.uk/Publications/GreenGuide/Annex_9.

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