

# Surgical Nursing Students' Perception of Feedback in Clinical Education: A Mixed-method Study

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## ABSTRACT

**Background:** Feedback is a critical component of education but may not always be delivered in a useful manner. This study assessed surgical nursing students' perception of the feedback they received on a clinical rotation. **Methods:** This is a sequential mixed-method study. The first stage surveyed surgical nursing students in surgical units about the feedback they received. In the second stage, participants' experiences receiving feedback were explored in interviews, and analyzed by a conventional content analysis approach. **Results:** The majority of nurses found that feedback was not helpful, citing a lack of constructive feedback. Negative feedback was often delivered in a public setting. Comments were frequently based on secondary information rather than direct observation. **Discussion:** Feedback to nurses on the surgical unit is not perceived by students as constructive. Clinical teachers did not appear to be aware of the educational effect of the feedback on the learning process of students. In addition, the setting for feedback often undermined its effectiveness. Staff development on effective feedback for teachers on the surgical unit is recommended.

**Keywords:** Clinical education, feedback, nursing, operating units, surgical nursing students, surgery, workplace-based learning

## Background

The learning cycles of learners in clinical education are completed by feedback as a crucial component.<sup>[1,2]</sup> Feedback encouraged the learners to self-monitoring, self-assessment, reflection, and self-regulation in the learning process.<sup>[3,4]</sup> By receiving feedback, students can better understand their learning process, identify their weaknesses, and plan for improvement.<sup>[3,4]</sup> According to Noble's study, the outcome of learning from the student's viewpoint was influenced by the quality and quantity of feedback. Feedback has a greater impact on outcomes in cognitive and psychomotor domains, as shown by Wisniewski *et al.* in a meta-analysis study. Feedback is a complex component that encompasses multiple forms with

diverse effects on student learning.<sup>[5]</sup> Furthermore, the feedback assists the clinical teacher in ensuring the effectiveness of teaching and recognizes students' developmental paths in their learning cycles.<sup>[2,3]</sup>

Although feedback is thought to be a means of improving learners' performance, some studies have found that it has a negative impact and reduces their performance.<sup>[2,6,7]</sup> According to Mills *et al.*, feedback in clinical education has not always been successful.<sup>[7]</sup> The characteristics of effective feedback were influenced by the learner's perception of the teacher's clinical expertise and emotional investment in the learning process, as shown by Jug *et al.* Further research was suggested to examine the perception of students and teachers regarding the impact of feedback and influencing factors.<sup>[2]</sup> The purpose of the present study was to evaluate the feedback status in

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surgical units and explore the challenges of feedback from the perspective of students.

## Methods

The study was designed as a sequential mixed method (quantitative-qualitative). A survey was conducted to investigate the status of feedback provision in surgical units in the quantitative stage from the students' perspective. A conventional content analysis method introduced by Graneheim and Lundman was used to explore the participants' experiences related to the challenges of receiving feedback in the second stage.

### Setting

The study was carried out at Shahid Sadoughi University of Medical Sciences. Traditional educational strategies were used in the clinical education at the university. In the surgical units, a group of students ( $n = 8-10$  students) were supervised by one instructor.

### Participants

#### *The quantitative stage*

All 105 surgical nursing students who studied in surgical units for at least 3 months of their internship course met the inclusion criteria. One hundred and five students participated in this stage. They included 72 students in surgical technology (68.6%) and 33 students in anesthesia (31.4%). The mean age was 22.34, with 33.3% males and 66.7% females.

#### *The qualitative stage*

The stage students who rated the quality of feedback with the highest and lowest scores in the first stage were involved through purposeful sampling. There were 18 students involved, with 9 (50%) males and 9 (50%) females.

### Data collection instrument

#### *Quantitative stage*

The "Evaluation of Status of Feedback in Clinical Education" questionnaire was used in this study. Safaei *et al.* designed and validated the 23-item questionnaire in the nursing education context.<sup>[8]</sup> The scoring range was from never (1) to always (5).

#### *Quantitative data analysis*

Descriptive tests (frequency, percentage, mean, and standard deviation) were used to analyze data.

#### *Qualitative stage*

Qualitative data were collected through a semi-structured interview.

The research objectives were explained during the interviews. Interviews began with opening questions such as "Would you

please tell me about your experience of clinical feedback?" and "What challenges did you experience in clinical feedback?" Probing questions were asked during the interviews to explain their experiences.

The interview location and time were determined by the participant's agreement. The interviews were conducted by a trained interviewer. The interviews lasted approximately 40–60 min. The data collection was continued until data saturation was achieved.

### Qualitative data analysis

Content analysis described by Graneheim and Lundman was used for data analysis.<sup>[9]</sup> The data analysis process included transcribing the interviews and extracting the meaning unit, opening codes, category, and theme. Open code was labeled as meaningful segments of data. Differences and similarities were used to compare the extracted codes. Subcategories and categories emerged and themes were extracted by comparing the extracted categories.<sup>[9]</sup>

### Rigor

In the present study, several methods were used to ensure trustworthiness.<sup>[10]</sup> The credibility of the results was provided by prolonged and in-depth engagement with data. In addition, the extracted codes and categories were examined and confirmed by research team members (peer-checking) and the students (member-checking) to obtain credibility criteria. In this regard, the extracted results of the interviews were reviewed and confirmed by participants. In addition, field notes and memo writing were conducted. The extracted results were audited by two qualitative experts (expert-checking). Transferability criteria were achieved by describing the research process and context in detail.

### *Ethical considerations*

The present study was approved by the ethics committee of Shahid Sadoughi University of Medical Sciences (ID: IR.SSU.REC.1400.200). The principles of confidentiality were adhered to by this research. An informed consent was obtained to participate in the research. The students were informed about the right to withdraw from the study at any stage and the recording of interviews.

## Results

### Quantitative results

About 54.28% of students indicated that feedback was not timely, 69.52% stated it was often hard to understand, 67.61% said feedback was frequently negative, 61.9% reported that feedback did not always address students' learning needs, and 54.28% indicated it did not offer the opportunity for

**Table 1: Evaluation of the status of feedback in clinical education from viewpoints of surgical nursing students in surgical units**

Items	Always, n (%)	Sometimes, n (%)	Rarely, n (%)
High frequency of feedback provision	14 (13.33)	45 (42.85)	46 (43.80)
Timely feedback provision	19 (18.09)	29 (27.61)	57 (54.28)
Simple and understandable feedback	7 (6.66)	25 (23.80)	73 (69.52)
Friendly and private feedback provision	9 (8.57)	18 (17.14)	78 (74.28)
Providing descriptive feedback, instead of judging	12 (11.4)	31 (29.52)	62 (59.04)
Delivering feedback just in case of errors	56 (53.3)	31 (29.52)	18 (17.14)
Giving time of reflection after feedback provision	19 (18.09)	29 (27.61)	57 (54.28)
Giving encouraging and motivating feedback	23 (21.90)	30 (28.57)	52 (49.52)
Giving feedback based on student's learning needs	11 (10.47)	29 (27.61)	65 (61.90)
Giving feedback based on direct observation	13 (12.38)	33 (31.42)	59 (56.19)
Feedback provision on student's personality traits	28 (26.66)	34 (32.38)	43 (40.95)
Expressing both positive and negative aspects of student's performance	20 (19.04)	43 (40.95)	42 (40)
Giving evidences based feedback, instead of personal views of professors	11 (10.47)	33 (31.42)	61 (58.09)
Giving corrective feedback in front of others	56 (53.33)	39 (37.14)	10 (9.521)
Feedback provision just at the end of internship course	50 (47.61)	41 (39.04)	14 (13.33)
Giving feedback along with developmental recommendations	7 (6.66)	30 (28.57)	68 (64.76)
Giving feedback with respect to student	10 (9.52)	24 (22.85)	71 (67.61)
Re-evaluation of student's performance after feedback provision	18 (17.14)	35 (33.33)	52 (49.52)
Giving overall and ambiguous feedback	51 (48.57)	46 (43.80)	8 (7.61)
Giving feedback based on other's views	34 (32.38)	47 (44.76)	24 (22.85)
Comparing student's with together while feedback provision	23 (21.90)	47 (44.76)	35 (33.33)
Usage of negative and critical words during feedback	20 (19.04)	40 (38.09)	45 (42.85)
Delivering corrective feedback (negative feedback)	7 (6.66)	27 (25.71)	71 (67.61)

reflection [Table 1]. In addition, 56.19% of students felt that feedback was based on impressions rather than on observed behaviors.

### Qualitative results

The experiences of the students were categorized as “impact of negative feedback” and “infrastructure challenges in learning from feedback.”

#### Impact of negative feedback

The perceived challenges by the students were explained in two subcategories, including unconstructive feedback and the impact of negative feedback.

#### Unhelpful feedback

This category addressed the issue of neglecting the educational impact in the feedback process. According to the students, unconstructive feedback was not beneficial to their learning. A participant stated:

*An instructor once observed my mistake. I felt embarrassed when the instructor corrected me in front of others. I was unable to determine the appropriate method for completing the task (Female-23 years old).*

#### Demotivating feedback

Students stated that they received feedback only about mistakes, which tended to reduce their motivation. In addition,

negative feedback was less likely to be retained. A student stated:

*I diminished my minimal motivation due to negative feedback from my teachers in surgical units (Male-24 years old).*

#### Infrastructure challenges in learning from feedback

##### Low priority of feedback provision

Students indicated that clinical teachers prioritized clinical duties over educational responsibilities.

*I was not able to identify my strengths and weaknesses from the instructor's feedback because they only could observe a student once or twice during the shift. They mostly involved in perform their therapeutic responsibilities and duties (Female-25 years old).*

##### Limited human resources

Faculty appeared to have limited time to provide feedback.

*The instructor was unable to observe the students' performance due to time constraints. Our instructor provided us with a series of general feedback (Male-25 years old).*

## Discussion

Students indicated that feedback was not timely, often hard to understand, frequently negative, did not always address students' learning needs, and did not offer the opportunity

for reflection. The ineffectiveness of negative feedback is supported by Stagini and Peres<sup>[11]</sup> and Farsi reported that nursing students expressed dissatisfaction with educator's constant criticism during clinical procedures.<sup>[12]</sup> In addition, feedback was based on impressions rather than on observed behaviors, as has been noted in other studies (Walker), who noted that clinical teachers frequently gave feedback based on reports of senior students' actions without having observed them directly.<sup>[13]</sup> Reasons for giving limited feedback from faculty vary. Walker reported that clinical teachers were reluctant to give feedback due to the fear of hurting learners' feelings or damaging their self-esteem.<sup>[13]</sup> Similarly, Gaunt found that faculty avoided giving feedback that may hurt learners' feelings.<sup>[14]</sup> Studies also have shown that limited time for clinical education during clinical rounds inhibited students' learning.<sup>[12,15]</sup>

To maximize the learning experience, clinical teachers must establish a respectful dialogue, create a shared goal, and share constructive and descriptive feedback based on direct observation. Teachers must make sure that their students comprehend feedback and develop an action plan to enhance their abilities. Feedback must be constructive, timely, nonjudgmental, and fair.<sup>[2]</sup>

### Limitations

The generalizability of the results is limited to feedback on surgical units at one hospital. Assessment of other types of units and at other institutions would broaden the strength of the inferences. Impressions of the quality and quantity of feedback came solely from the learners; independent observation would help validate results.

### Conclusion

Feedback to students on the surgical units is perceived by most learners as unhelpful and demotivating, according to our study. Similar deficiencies have been reported in other settings. Faculty development to improve the effectiveness of feedback may be useful, as would greater time allocated for feedback. Since feedback has been shown to be the single most important factor in learning,<sup>[5]</sup> improving feedback practices is likely to result in improved nursing education.

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### Conflicts of interest

There are no conflicts of interest.

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