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Final-Year Undergraduate Medical Students' Feedback-Seeking Behaviour in Primary and Secondary Healthcare Centre Placement

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ABSTRACT

Feedback is essential in medical education. Constructive feedback provision from teachers and learners receiving and seeking feedback themselves are both important, particularly in clinical clerkships where students interact with authentic clinical settings. This study aims to explore the feedback-seeking behaviour of final-year undergraduate medical students in primary and secondary healthcare centres and to determine factors influencing this behaviour. A qualitative phenomenology study design was used involving final-year undergraduate medical students at the Faculty of Medicine Universitas Indonesia. A maximum variation sampling approach, considering gender and healthcare centre placement, was conducted. Data was collected through semi-structured interviews until data saturation was reached. Data was then analysed using a thematic analysis approach. A total of 10 (4 males, 6 females) students were interviewed. Students displayed acts of both seeking and not seeking feedback in clinical learning environments in primary and secondary healthcare centres. Acts of seeking feedback included asking for feedback on performance when it was not provided, taking the initiative to seek feedback in life-saving situations, confirming feedback, clarifying supervisors' reasoning and indirect feedback-seeking methods. Acts of not seeking feedback included not seeking further feedback, not clarifying supervisors' reasoning and not seeking feedback when it was not provided. This study found that supervisor, student and environmental factors may influence feedback-seeking behaviour. This study provides further insights on feedback-seeking behaviour, which must be considered in workplace-based clinical learning environments.

Keywords: *Feedback-seeking, Medical students, Clinical clerkship, Primary healthcare centre, Secondary healthcare centre*

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INTRODUCTION

Feedback has been regarded as an essential aspect of medical education as it promotes better performance and increases self-regulated learning skills (1–4). Therefore, ensuring an effective feedback process for learners is crucial. The feedback process consists of giving, receiving and seeking feedback. Feedback is primarily given by teachers, but receiving and seeking feedback is primarily carried out by students who are engaged as active learners (1–2).

The process of receiving and seeking feedback can be challenging for students. Students may be unfamiliar with feedback and may not recognise it or understand how to apply it to their learning. Creating a culture of improvement where feedback is valued as a pathway to improvement is desirable (2, 5–7). Feedback-seeking skills are aligned with adult learning principles in which learners are accountable for their own learning (5, 7). Student who sought feedback attained higher goals and enhanced learning than students who did not (8). Feedback-seeking behaviour is influenced by learning experiences, such as learning culture and learner beliefs or attitudes, perceptions, such as teacher attributes, and by learner relationships with teachers (5, 7).

Five aspects are considered when students decide to seek feedback: method, frequency, timing, topic and characteristics of the person from whom the feedback is sought. Both direct and indirect methods are used to attain feedback. Direct methods of feedback-seeking, also known as inquiry, involve an individual directly asking for or seeking feedback. Indirect methods, also known as monitoring, refer to instances where individuals observe situations to gather information about their performance without directly ask for feedback (8–9). Students prefer to seek feedback on performance or specific information on success or failure from experts and accessible targets. Various personal and contextual factors, as well as the

consideration of risks and benefits, may also influence feedback-seeking behaviour (8). For example, students can think that they need feedback on their performance, yet the busy environment might lead them to delay seeking feedback.

Several conceptual frameworks have been used to explore feedback-seeking behaviour, with most focused on internal individual factors (8–12). Feedback-seeking behaviour is driven by motives of self-assessment, self-improvement, self-enhancement and self-verification (8). Ashford et al.'s theory further posits three main motivators for feedback-seeking behaviour, the instrumental motive (i.e., the desire for useful information), the ego-based motive (i.e., the desire to defend one's ego), and the image-based motive (i.e., the desire to protect/enhance others' impressions of oneself). These motivators interact with situational factors, resulting in certain feedback-seeking behaviours (9). The importance of situational factors and the culture of feedback was highlighted in a study by Ramani et al., who examined the feedback process using a sociocultural lens (12). Since this study aims to emphasise the dynamics of various factors in the feedback process, the use of Ashford's theory enriched with a sociocultural lens is considered appropriate.

Student placement in clinical learning settings at primary and secondary healthcare centres is an increasing trend in medical education. This practice poses a challenge for supervision and feedback delivery (13). Learning in primary healthcare settings is critical for undergraduate medical students for several reasons, such as students gaining a clear picture of how they will work as a professional, reframing the theories they have learned with available field resources, and strengthening their professional identity (13–14). However, learning in primary healthcare settings also has its shortcomings, such as less-structured activities. Additionally, centres are often understaffed, so supervisors may

have many other responsibilities, leading to a lack of adequate supervision. In turn, this lack of supervision may become a barrier to feedback behaviours in learning activities (13–16). Due to the uncertainty of receiving feedback in these settings, students must take an active role in seeking feedback (8).

Studies exploring feedback-seeking behaviour vary from academic and clinical undergraduate medical students to medical residents. However, there are currently few studies that explore feedback-seeking behaviour in clinical placements in primary and secondary healthcare centres, particularly in Indonesia (17–19). Therefore, this study aims to explore the feedback-seeking behaviour of final-year undergraduate medical students who are placed in primary and secondary healthcare centres and to determine factors influencing this behaviour.

METHODS

Context

This study was conducted among year 6 undergraduate medical students at the Faculty of Medicine at Universitas Indonesia (FMUI). The undergraduate medical curriculum consists of an academic phase (7–8 semesters) and a clinical phase (4 semesters), utilising a competency-based curriculum approach. Final-year undergraduate medical students who have finished their clinical rotations are entitled to participate in primary and secondary healthcare centre placement. The rotation takes about four months, including one month of orientation and one month each of placement in primary healthcare centres, primary care clinics and secondary healthcare centres (district hospitals). Students are placed in groups of four to five and are paired with supervisors. Supervisors can be “home tutors” who are faculty members, and “field tutors” who are appointed healthcare centre staff responsible for students’ learning activities

in the healthcare centre. Supervisors receive prior training by the faculty on required supervisory and teaching-learning activities, including giving constructive feedback, principles of clinical supervision, conducting clinical teaching activities and workplace-based assessment.

Design

This is a qualitative phenomenological study involving final-year undergraduate medical students at FMUI, aiming to explore the feedback-seeking behaviour in primary and secondary healthcare centre placements based on students’ experiences (20).

Respondents

A total of 10 respondents were purposively selected using a maximum variation sampling approach that considered gender and healthcare centre placement (14). Respondents who agreed to participate in the study completed a written informed consent form.

Data Collection

Data was collected through semi-structured interviews. Data saturation was reached after the eighth interview, but all ten interviews were included in the data analysis. Interview questions were constructed based on the relevant literature and were reviewed by the two authors. Interviews consisted of three main topics: students’ feedback experiences, feedback-seeking behaviours and perceptions of feedback. Interview questions are shown in Table 1. Interviews were conducted by the first author and were recorded with the respondent’s consent, being transcribed verbatim. At the time of the study, the first author was a new graduate medical doctor at FMUI who had completed a rotation similar to the ones in which participants were engaged. Therefore, the first author was knowledgeable of the clinical learning environment and was able to facilitate a more relaxed interview given the similarity

between the author and the respondents in areas such as age and clinical expertise.

The second author is an expert in medical education, with experience as a home tutor in the clinical rotation.

Table 1: Questions in student interview

General questions (Opening)
We will talk about feedback you have ever received in the pre-internship module on the final year of FMUI. Can you elaborate on what kind of feedback you received?
<ol style="list-style-type: none">1. What was the content and context of the feedback? Can you describe it?2. When did you receive the feedback?3. Where did you receive the feedback? In what kind of setting?4. Who gave you the feedback?
Key questions
<ol style="list-style-type: none">1. Regarding the aforementioned feedback, did you ask for the feedback?2. What made you ask/not ask for the feedback?3. Regarding the aforementioned feedback, did you clarify the feedback further?4. What made you clarify/not clarify the feedback?
Finishing question
In your opinion, what did you think about the aforementioned feedback? Was it useful? Why do you think so?

Data Analysis

The data was analysed using a thematic analysis approach. The first two transcripts were analysed independently by both authors, and the following transcripts were analysed by the first author alone. All themes and subthemes were discussed and reconciled. The analysis used Ashford et al.'s theory of feedback-seeking behaviour as the framework, considering the characteristics of students and clinical tutors and the context of clinical placement sites (9, 21). All excerpts from student interviews are presented using pseudonyms to protect the students' identities.

RESULTS

A total of 10 respondents participated in this study. Respondents consisted of four male and six female final-year undergraduate students from FMUI. Respondents were placed in five district hospitals and nine primary healthcare centres.

Three main themes were identified, the act of seeking feedback, the act of not seeking feedback and the factors influencing feedback-seeking behaviour. The findings on these themes explored students' actions and perceptions of their feedback-seeking behaviour. Findings are summarised in Table 2.

Table 2: Students' feedback-seeking behaviour in primary and secondary healthcare clinical placements

Theme	Subtheme	Number of quotes in each subtheme
Act of seeking feedback	Asking for feedback on student's performance	40
	Taking initiative in life-saving conditions	3
	Clarifying supervisors' reasoning	9
	Confirmation of knowledge/feedback	9
	Observations of supervisors' reactions	7
Act of not seeking feedback	Not confirming feedback/knowledge	12
	Not asking for/seeking further feedback	25
	Not clarifying supervisors' reasoning	12
Factors influencing feedback-seeking behaviour	Supervisor factors	160
	Student factors	40
	Environmental factors	60

Act of Seeking Feedback

The act of seeking feedback refers to actions taken to seek further feedback, such as confirming knowledge/feedback, clarifying supervisors' reasoning, asking for feedback on performance, taking the initiative to seek feedback on life-saving conditions and indirect feedback-seeking methods.

This study found that students sought feedback in various forms and under various conditions. For instance, if feedback was not provided, students asked for feedback regarding their performance. At times, such as during life-saving situations, students took the initiative to ask for feedback, deeming the issue crucial for future practice. For example, one respondent described an instance in which feedback was deemed vital for future success.

For really important things, like when you have to inject and dilute epinephrine to 1:10,000, I would often ask the doctor. It's very important. If we meet such [a] case in real life, it must be done correctly. (AI,17)

When feedback was provided, some students sought further feedback to clarify a supervisor's reasoning or to confirm their

clinical knowledge or comprehension of the feedback. For instance, students sought to clarify a supervisor's reasoning in order to understand a practice in the clinical learning environment that might differ from what they learned in theory.

This module has a lot more practical [knowledge], so a lot of us were shocked because it's not the same as the textbook. Those things make us excited to ask [for feedback], to clarify. (AA,17)

Students might confirm their clinical knowledge or understanding of feedback to summarise the feedback dialogue. For instance, students sought to confirm their clinical knowledge for physical examination findings they had not previously encountered.

That time I asked, "Can I perform [an] examination with [the] otoscope [on the patient]?" and then I asked whether it's correct, because I'm not sure if I can see the tympanic membrane, and then the doctor confirms, "No, this one is covered by cerumen." (AB,39)

In addition to direct inquiry methods, students also used indirect methods to seek feedback. Indirect feedback-seeking

measures included observing the verbal and non-verbal reactions of the feedback provider.

The doctor just observed (the performance), and like...he's okay with it, so I thought it is (okay)... if I think his body language is okay (with the performance), then it is okay. But I didn't say anything. (AJ,29)

Act of Not Seeking Feedback

The act of not seeking feedback refers to not taking any action to further seek feedback, which includes not confirming knowledge or understanding of feedback, not seeking further feedback, and not clarifying supervisors' reasoning.

Some students displayed acts of not seeking feedback by not confirming their own knowledge and not seeking feedback when it was not provided.

I think it (the performance) is enough. At that time, I thought "Yeah, it's enough." Because I already know the theory, what to do when examining [the patient]. (AE,19)

Students tended not to seek further feedback when some feedback had already been provided, and they felt satisfied with the feedback.

I didn't ask [for further feedback]. Well...because I feel like I already understand it (the feedback). (AB,24)

Students also showed acts of not seeking feedback by not clarifying their supervisor's reasoning.

Because the doctor already said it's impossible, so I thought 'okay'—the doctor is way more experienced, so maybe he had already met the same case several times. (AB,33)

Another respondent expressed doubts about questioning the supervisor's reasoning, alluding to the country's high-power distance culture and uncertainty avoidance culture.

I still have questions on my mind, but I feel hesitant [to ask], he's more senior, after all. If he doesn't look enthusiastic, I'm afraid I'd sound like [I'm being] patronizing. (AC,16)

Factors Influencing Feedback-Seeking Behaviour

The feedback process involves multiple components, from supervisors giving feedback to students receiving and formulating responses to the feedback. This process involves multiple parties and is highly contextual. Therefore, various factors can influence feedback. This study identified supervisor factors, student factors and environmental factors that influenced feedback-seeking behaviour.

Supervisor factors

Supervisor factors included accessibility, communication skills, knowledge or expertise and commitment to adequate observation. Supervisor accessibility refers to the role of supervisors in giving adequate supervision to students. As district healthcare centres were often limited in staff numbers, supervisors were often not present due to their other obligations in the centre.

The doctor's busy because aside from being a field tutor, he's also in...[a] structural [position] in the healthcare centre. (AH,13)

However, supervisors could still be in touch with the students, creating an opportunity to supervise them. Students appreciated supervisors who made time for them and encouraged feedback-seeking behaviour. Supervisors who were welcoming, open to discussion, treated students as equals and

gave detailed explanations were greatly appreciated by students.

She's very welcoming to us, actually. I really can't [comprehend] with grumpy teachers. So, if the teacher is already open [for discussions with] us, I will ask, ask, and ask. She's really kind, she doesn't mind [discussing]. (AC,11)

Since the primary and secondary district healthcare centres where the students were placed had limited staff numbers and saw a high volume of patients daily, some of the healthcare staff seemed exhausted at times, which discouraged students from seeking feedback.

There are two of them (doctors) who are very grumpy. They're too exhausted. One of their children is sick or something, so they don't have any more energies left. I can see, it's like the important thing is they finish their patients, and they don't want anyone or students to disturb them. We (students) can see that. (AC,22b)

Another factor that influenced students' feedback-seeking behaviour was their perception of the staff's knowledge and expertise. Students tended to seek feedback from supervisors they saw as experts and knowledgeable in their field. "Expert" did not only apply to medical doctors but also to other professions, such as nurses who were considered experts in performing certain procedures.

Inserting [an] intravenous line, suturing, intubation, and others (procedures), I tend to ask whoever I can ask, like nurses who are used to inserting IV lines, ER doctors. 'Was it correct, did I insert it well?' It's possible in the district hospital because there are a lot of pros with supporting skills." (AD,19)

Supervisors' commitment to adequate observation in clinical education also influenced students' feedback-seeking behaviour.

If there's anything we could ask directly [to the supervisors], that would be great. It's somewhere between being independent and being supervised. We work by our own, but we confirm the results to the supervisors. (AA,21)

Student factors

Student factors that influenced feedback-seeking behaviour were motivation, self-assessment and learning styles. Students who were highly motivated viewed the placement in healthcare centres as an opportunity to learn and further refine their skills.

When there's a random patient, I'd take history and [perform a] physical examination until giving the therapy. Was it all correct? If not, then what should I do? I want to make use of this [placement] facility and tutors, to know how far I've ticked the checklist of what it takes to be a doctor. (AD,17)

Students who were aware of their strengths and limitations seemed to actively seek further feedback, with some finding that doing so helped strengthen their skills.

I want to know where I was incorrect. If I was already confident [with my performance], then I'd be okay. But, if I was insecure [with the performance], I want to be confident in that area, and if I'm wrong, I'd like to know where I was wrong, so I can be even more confident. I want to get more experiences. (AC,13)

This study also found that students' learning styles influenced their feedback seeking-behaviour. Learning styles varied between students. Some students viewed their learning style as a supporting factor, while others considered it an inhibiting factor to feedback-seeking behaviour.

I'm quite happy because I'm an audiovisual [learner], so I need a

discussion that's not just two-ways (communication) but also inputs from other people in learning. (AE,8)

If it's about therapy and management as (described) in the guidelines, then no, I'd rather read it myself. (AC,27)

Environmental factors

Three environmental factors were identified, a busy clinical environment, healthcare centres and educational policy. Healthcare centre situations influenced students' opportunity to have the appropriate time and place for feedback. Heavy caseloads and busy clinical environments were particularly influential. Healthcare centres with less hectic atmospheres had more flexibility regarding the opportunity for appropriate times for feedback. The venue was also an important factor.

For instance, one student pointed out the importance of choosing a time to ask for feedback when doctors were not busy.

In the emergency room (ER), I'd ask based on whether they (ER doctors) are busy or not. Basically, everyone was very welcoming, but what differentiates [when to ask for feedback] is whether they are occupied or not. (AF,13)

Healthcare centre policies and curriculum also played a role in feedback. Formal opportunities in the curriculum for feedback, such as Mini-Clinical Evaluation Exercise (Mini-CEX) and case discussions, facilitated students' acquisition of feedback. A lack of direct observation was mentioned by students as a barrier to feedback provision by supervisors, as observation sometimes had to be delegated to other available staff members. As one respondent described, the situation and the supervisor's presence influenced the giving of feedback.

Actually, [feedback] is given. We did [performance] in front of them

(the supervisor) because it is part of an assessment. Automatically, they will provide feedback. If it's not an assessment, the doctor won't be here. He'll be in another place doing other things. (AA,7)

Finally, real practices that were observed by students, which did not always reflect evidence-based practice, could also influence students' feedback-seeking behaviour. Students felt hesitant to seek feedback that appeared to challenge clinic practices.

All coughs and runny noses were bombed by antibiotics, and I was like, how would I ask for feedback when it's certainly not a "lege artis" practice in front of my own eyes? (AC,27)

DISCUSSION

This study highlights that in clinical learning environments, particularly in primary and secondary healthcare centres, students display both acts of seeking and not seeking feedback. This study also underscores that these feedback-seeking behaviours are influenced by the dynamic interaction of three factors: supervisor, student and environment.

Medical curricula have taken a student-centred approach that strives to engage students by having them take responsibility for their own learning (22). Thus, the process of feedback—a powerful and well-known learning method in medical education—has also shifted from a teacher-centred to a student-centred approach, involving students in active roles of receiving, understanding, seeking and using feedback in their learning (8–9, 18, 23–24).

This study identified students' acts of seeking and not seeking feedback. The act of seeking feedback included asking for feedback on performance when it was not provided, taking the initiative to seek feedback in life-saving situations,

confirming knowledge/feedback, clarifying supervisors' reasoning when it was provided, and indirect feedback-seeking methods. Direct and indirect feedback-seeking methods are also known as inquiring and monitoring methods. Studies have found that students use both methods and that various contextual factors, such as motives, perceived costs and benefits of feedback-seeking and feedback content determine the feedback method chosen (9, 18). Acts of not seeking feedback included not seeking further feedback, not clarifying supervisors' reasoning when provided and not seeking feedback when it was not provided.

Ashford et al. (9) demonstrated that motives and contexts played a role when an individual decided to seek feedback. In the current study, instrumental motives, which underpin the need for useful information, were the most apparent motive exhibited by students. Final-year medical students in this study tended to seek feedback for its informational value to further refine their clinical knowledge and skills. Curriculum learning outcomes also encouraged students to make use of their healthcare centre placements to broaden their clinical experience, knowledge and skills. Ego-based motives were found in the study, such as students seeking feedback to boost their confidence regarding their performance (9). Image-based motives were also present, as students were hesitant to seek feedback from their seniors, in accordance with Indonesia's high power distance culture and culture of reluctance (9, 25). This behaviour may stem from students' fear of offending others and because, in Indonesia's hierarchical and collectivist culture, senior colleagues are regarded as possessing more knowledge than their juniors (25–26).

The current study explored factors that influenced feedback-seeking behaviour, including supervisor, student and environmental factors. The importance of supervisors' roles in encouraging feedback-seeking behaviour has been emphasised, particularly regarding providing feedback and building an educational relationship

with students (27–28). Supervisors' roles become more important during healthcare centre placements, as they are responsible for students' learning activities (14). The current study found that the main supervisor factors that influence feedback-seeking behaviour are the supervisors' accessibility, communication skills, expertise and commitment to adequate observation. Accessibility and communication skills encouraged feedback dialogue and feedback-seeking behaviour to occur through the creation of a safe learning environment (18, 28). Supervisors with good communication skills can also help dissipate the hierarchical atmosphere between students and supervisors, enabling them to communicate as respectful colleagues. Students in this study appreciated a certain degree of independence, as they were in their final year of medical school and wanted to refine their clinical skills, clinical reasoning and professionalism. Nonetheless, students felt supervision was important, as they were still engaged in the learning process. Supervisors' knowledge, expertise and observation contributed to the credibility of their feedback (12, 26). Credible feedback was more easily received by students and credible supervisors encouraged students' feedback-seeking behaviour (12, 18).

The current study also found that student or feedback recipient factors can influence feedback-seeking behaviour. These factors included motivation, self-assessment and learning styles, similar to what has been reported in previous studies (8–9, 18). Students' feedback-seeking behaviour has been shown to correlate with their goal orientation (8–9, 28–29). The "motivation" factor found in this study refers to learning motivation, which encouraged students' feedback seeking-behaviour (8–9). Self-assessment skills also influenced students' feedback-seeking behaviour and their receiving of feedback (12, 18). However, self-assessment may contain biases and blind spots, and, therefore, feedback plays an important external assessment role (6, 30). In this study, students who assessed

their performance positively tended to not engage in further feedback-seeking behaviour and vice versa. A study by Bok et al. (18) found that students' self-assessed knowledge and performance, along with motives, influenced feedback-seeking behaviour. The current study offers insight into the possible influence of learning style on feedback-seeking behaviour. Students with different learning styles had different ways of gaining and processing information, such as feedback. For instance, some students preferred to seek feedback by communicating with the supervisors or their friends, whereas others sought further information from reading books. These differences in learning styles might be related to the way students process information and decide on further actions for their learning. Therefore, learning styles might influence students' feedback processes (31).

The environments of the primary and secondary healthcare centres are characterised by high caseloads and busy supervisors and, as a result, influence students' feedback-seeking behaviour. The feedback process, of which feedback-seeking behaviour is a component, is a social interaction that cannot be separated from its situational and cultural context (9, 32). The learning environment is a critical factor for feedback-seeking behaviours (9, 28, 33), which might be more influential in clinical settings given their unpredictable nature (14). Busy clinical environments might influence the timing and frequency of feedback-seeking behaviour due to limited opportunities for appropriate times and places to do so (34). The current study highlights the strategic approach of workplace-based assessments, such as Mini-CEX, which ensure supervisors' commitment to observing students' clinical performances and providing feedback. Such policies play a part in creating opportunities for appropriate times and places for feedback-seeking behaviour to occur (19, 32). In the current study, formal feedback opportunities

were deemed helpful by students in order to ensure that they would acquire feedback. Additionally, these opportunities enabled feedback dialogues to occur.

Discrepancies between real-life clinical practices and what students learn in theory were also found to influence students' feedback-seeking behaviour. This finding highlights the importance of quality in both education and healthcare in order to bridge the gap between theory and reality (34–35). The clinical learning environment and the healthcare standard of primary and secondary healthcare centres should be considered when student placements in these centres are made. Therefore, medical schools should ensure that the clinical learning environment is appropriate regarding both teacher training and the curriculum (in relation to the instructional design). Likewise, the medical school should also ensure the medical students who are sent to clinical placements are ready for the learning opportunities such placements present. Moreover, faculty members should also provide support to ensure students' optimal learning. Regarding healthcare standards, bridging theory and practice is a challenge. However, this challenge could serve as an opportunity for collaboration between institutions in order to sustain a high quality of healthcare and education (36).

Students in this study underscored the importance of adequate supervision. Various studies have highlighted the importance of supervisor-student relationships in the feedback process and for feedback-seeking behaviours (18–19, 27, 32). Long-term relationships with supervisors can encourage feedback dialogue and feedback-seeking behaviours (18, 32). Supervisors and students should prioritise student improvement in learning activities and promote a culture of improvement (12, 32). Interpersonal relationships in the feedback process between supervisors and students can only occur by considering supervisor factors (accessibility, communication skills, knowledge and commitment to

adequate observation), student factors (motivation, self-assessment and learning style), and environmental factors (clinical environment, supporting policies and curriculum design). These factors should be adequately considered and incorporated when designing and implementing students' clinical placements, particularly in primary and secondary healthcare centres, in order to balance best practices for feasible supervision.

The current study presents implications for education and future research. An array of contextual factors affecting feedback-seeking behaviour were highlighted. Thus, the results of this study could inform supervisors, students and faculty on strategies to optimise feedback in clinical learning environments, particularly in primary and secondary healthcare centres. The current study explores feedback-seeking behaviour in primary and secondary healthcare centre placements. As a healthcare centre, the primary goal of the facility is healthcare delivery rather than educational activities, further emphasising the importance of facilitating feedback-seeking behaviour for students. Further research should explore students' feedback-seeking behaviours during placement in primary and secondary healthcare centres from the perspective of healthcare staff and supervisors in order to gain additional insights on this phenomenon. Further quantitative studies involving more students, such as surveys regarding feedback-seeking behaviour in primary and secondary healthcare centre placements, could also corroborate and expand on the findings of the current study. Such studies would also inform a pattern of students' feedback-seeking behaviour, which could, in turn, be considered in the development of strategies to optimise feedback in a clinical learning environment.

This phenomenological study was conducted in a single institution in Indonesia. However, the purposive sampling method enabled the study sample to be considered representative for achieving

the aim, namely the exploration of feedback-seeking behaviour in final-year undergraduate medical students in primary and secondary healthcare placements. The current study did not conduct source triangulation in data collection, nor did it confirm the demographic data of each healthcare facility, despite their known variations. However, both authors had adequate knowledge and experience with the module related to the phenomenon that this was not an issue. This study focused on the contextual factors of feedback-seeking behaviour, rather than the students' internal drives for the behaviour, despite the authors' awareness that motivation is an internal factor in feedback-seeking behaviour. Future studies should focus on the internal factors of feedback-seeking behaviours in order to support further student-centred learning processes in clinical learning environments.

CONCLUSION

Feedback is essential in medical education, particularly in clinical learning settings. Student-centred learning approaches encourage students to play an active role in their learning, including feedback. In this study at primary and secondary healthcare centres, final-year undergraduate medical students displayed acts of seeking and not seeking feedback. These behaviours were influenced by contextual factors, namely supervisor, student and environmental factors. This study provides further insights into the feedback-seeking behaviours of undergraduate final-year medical students, which must be considered when developing a feasible supervision system in the workplace-based and clinical learning environments.

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ETHICAL APPROVAL

This study was approved by the Research Ethics Committee of FMUI with protocol number 20-02-0086.

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