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Descriptive Study the Professional Behavior of Clerkship Student

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Abstract

This study aims to describe the professional behavior of medical clerkship students at the Faculty of Medicine, Muhammadiyah University of Semarang, based on clinical supervisors' perceptions. It employs a descriptive observational design with a cross-sectional approach. The study population included all active clinical supervisors, totaling 34 respondents. Data were collected using a Likert-scale questionnaire assessing professional behavior attributes and analyzed descriptively through frequency and percentage distribution. Results indicate students demonstrate strong professional behavior in Muslim attire, respect, and empathy. However, deficiencies were found in self-awareness, lifelong learning, time discipline, and clinical knowledge and skills competency. The conclusion emphasizes the necessity for enhanced curricular integration of reflective practices, structured feedback, and learning support systems to foster students' independent and professional growth.

Keywords: Clinical Competency, Lifelong Learning, Medical Students, Professional Behavior, Self-Awareness

INTRODUCTION

Professional behavior is a crucial responsibility of medical practitioners alongside cognitive and psychomotor skills, as it directly influences the quality of healthcare delivery. In Indonesia, approximately 23.91% of people reported being victims of medical malpractice, often linked to poor communication and information skills of doctors and healthcare workers. This phenomenon underscores an ongoing concern with professional behavior among medical practitioners, tracing back to deviations and misconduct experienced during their education (Hardisman, 2013; Nurlina et al., 2019). Medical education plays an essential role in shaping ethics and professionalism during clinical training, yet there is evidence that violations of professional conduct, such as academic dishonesty, remain prevalent among medical students (Kusumawati et al., 2018; Krupat et al., 2020).

Academic dishonesty, especially cheating, is one of the most frequently violated professional attributes among medical students with rates reported as high as 30–96% in various institutions. Such behavior predicts future dishonesty in clinical practice, which adversely affects patient care outcomes (Herlambang et al., 2021; Nadzirah, 2017). The deficiency in professional behavior may be attributed to the insufficient explicit teaching of affective competencies and the lack of valid, systematic assessments of these behaviors in medical curricula compared to cognitive and psychomotor domains (Kusumawati et al., 2018; Pamungkasari & Probandari, 2012). The integration of professional values into medical education requires continuous formal instruction

and consistent evaluation to ensure that future physicians uphold these standards throughout their careers.

This study aims to describe the professional behavior of medical clerkship students at the Faculty of Medicine, Muhammadiyah University of Semarang, based on the perceptions of clinical supervisors. Understanding these behaviors is critical to identifying areas for improvement, emphasizing the need for targeted interventions in medical training programs to enhance professional conduct and ultimately improve healthcare quality. The research contributes to addressing gaps in professional behavior education by providing current, localized descriptive data and serves as a foundation for future curricular improvements (Kusumawati, 2011; Rasul et al., 2021).

RESEARCH METHODS

This study employed a descriptive observational research design with a cross-sectional approach, which is appropriate for capturing a detailed snapshot of professional behaviors among medical clerkship students at a particular time (Creswell, 2021; Sugiyono, 2021). The research was conducted from August to September 2023. Total sampling was used as the sampling technique to include all clinical supervisors actively mentoring clerkship students at the Faculty of Medicine, Muhammadiyah University of Semarang, specifically those assigned at RSUD dr. Adhyatma, MPH Semarang during the study period (Sudaryono, 2022). The final sample consisted of 34 clinical supervisors representing diverse specialty disciplines.

The primary data collection instrument was a questionnaire developed by Wiwik Kusumawati (2011), designed to evaluate professional behavior attributes. This instrument contains 15 statements rated on a five-point Likert scale ranging from “Strongly Disagree” to “Strongly Agree,” with additional options for respondents who could not assess or lacked information. The respondent ratings were subsequently categorized into four Likert scale groups for descriptive analysis focusing on professional behavior attributes perceived as insufficient. Using this validated instrument allowed consistent measurement of affective competencies, which are often underassessed compared to cognitive and psychomotor domains in medical education (Emzir, 2022; Kusumawati et al., 2018).

Data analysis was conducted descriptively, summarizing the frequency and percentage distributions of responses to each professional behavior item. This approach facilitated an understanding of which professional behaviors need improvement according to clinical supervisors’ perceptions, maintaining alignment with standards for descriptive quantitative research (Creswell, 2021; Emzir, 2022). Ethical approval was granted by the Health Research Ethics Committee (KEPK) Faculty of Medicine Universitas Muhammadiyah Semarang, ensuring adherence to research ethics and participant confidentiality (Approval No. 047/EC/KEPK-FK/UNIMUS/2023).

RESULTS AND DISCUSSION

Sample Characteristics

Table 1. Sample Characteristics

Respondent characteristics	n	%

Gender		
Male	15	44,12
Famale	19	55,88
Total	34	100
Age		
35-39	4	11,76
40-44	9	26,47
45-49	1	2,94
50-54	6	17,65
55-59	9	26,47
60-64	4	11,76
65-69	-	-
70-74	-	-
75-79	1	2,94
Total	34	100
Discipline of Knowledge		
Major Station		
Obstetrics and Gynecology	3	8,82
Surgery	5	14,71
Internal Medicine	5	14,71
Child Health	4	11,76
Stase Minor		
Anesthesia Science	1	2,94
Neurology	3	8,82
Ophthalmology	1	2,94
Physical Medicine & Rehabilitation	1	2,94
Dermatology and Venereology	2	5,88
ENT (Ear, Nose, and Throat) Medicine	2	5,88
Radiology	3	8,82
Mental Health Science	1	2,94
Forensic & Medicolegal Medicine	3	8,82
Total	34	100

Based on Table 1, the total number of respondents obtained in the study was 34 clinical supervising lecturers. Clinical supervising lecturers in the discipline of obstetrics and gynecology numbered 3 respondents, clinical supervising lecturers in the discipline of surgery numbered 5 respondents, clinical supervising lecturers in the discipline of internal medicine numbered 5 respondents, clinical supervising lecturers in the discipline of pediatric health numbered 4 respondents, clinical supervising lecturers in the discipline of anesthesiology numbered 1 respondent, clinical supervising lecturers in the discipline of neurology numbered 3 respondents, clinical supervising lecturers in the discipline of ophthalmology numbered 1 respondent, clinical supervising lecturers in the discipline of physical medicine and rehabilitation numbered 1 respondent, clinical supervising lecturers in the discipline of dermatology and venereology numbered 2 respondents, clinical supervising lecturers in the discipline of ENT diseases numbered 2 respondents, and clinical supervising lecturers in the discipline of radiology numbered 3 respondents. Clinical supervisors in the field of ENT had 2 respondents, clinical supervisors in the

field of radiology had 3 respondents, clinical supervisors in the field of mental health had 1 respondent, and clinical supervisors in the field of forensic and medicolegal medicine had 3 respondents. The majority of respondents who filled out the questionnaire were female clinical supervisors, with 19 respondents, compared to 15 male clinical supervisors. The age of the respondents ranged from 35 to 79 years.

Description of Professional Behavior of Medical Profession Students

Table 2. Frequency distribution of professional behavior of medical profession students

No	Values / Attributes of Professional Behavior (PB) and Islamic PB	STS		TS		S		SS		Others	
		n	%	n	%	n	%	n	%	n	%
1	In my opinion, students show respect towards lecturers, instructors, lab supervisors, or tutors.	-	-	1	2,94	17	50	16	47,06	-	-
2	In my opinion, students show respect towards employees, administrative staff, or nurses/midwives.	-	-	2	5,88	19	55,88	13	38,24	-	-
3	Students show a disciplined attitude *(commitment)* towards time and arrive on time for learning activities	-	-	8	23,53	22	64,71	4	11,76	-	-
4	Students demonstrate good teamwork or collaboration in a team or group	-	-	3	8,82	22	64,71	8	23,53	1	2,94
5	Students demonstrate a caring attitude and provide help or attention according to their abilities to friends, others, or patients	-	-	3	8,82	26	76,47	4	11,76	1	2,94
6	Students demonstrate a good attitude of taking care of and maintaining all facilities, including teaching aids, library books, laboratory equipment, etc.	-	-	2	5,88	27	79,41	5	14,71	-	-

7	In my opinion, students demonstrate an attitude of prioritizing the interests of the group, others, or patients over personal interests *(altruism)*.	-	-	3	8,82	24	70,59	6	17,65	1	2,94
8	In my opinion, students are able to reflect, recognize their shortcomings, and strive to improve from the learning process *(self-awareness)*.	-	-	9	26,47	20	58,82	5	14,71		-
9	In my opinion, students are capable of acting as lifelong learners.	-	-	7	20,59	21	61,76	5	14,71	1	2,94
10	In my opinion, students are able to communicate well, politely, and with full attention *(empathy)* towards others or patients.	-	-	1	2,94	26	76,47	7	20,59	-	-
11	In my opinion, students show an appearance in accordance with prospective Muslim doctors by dressing in proper Muslim attire for both men and women.	-	-	-	-	25	73,53	9	26,47	-	-
12	In my opinion, students who are honest *(honesty or siddiq)* in learning activities, including exams, do not engage in cheating.	-	-	4	11,76	23	67,65	5	14,71	2	5,88
13	In my opinion, students are capable of giving Islamic and health-related sermons or short religious talks *(tabligh)*.	-	-	2	5,88	19	55,88	4	11,76	9	26,47
14	In my opinion, the student demonstrates good knowledge and skills competence and is	-	-	7	20,59	22	64,71	5	14,71	-	-

	smart in carrying out their tasks *(fathanah)*										
15	Students demonstrate a sense of responsibility *(responsibility or trustworthiness)* in carrying out their tasks	-	-	3	8,82	25	73,53	6	17,65	-	-

Based on Table 2, medical profession students are rated well in dressing according to Muslim and Muslimah standards (34), respect (33 and 32), and empathy (33). Medical profession students are still considered lacking in demonstrating self-awareness (25), as lifelong learners (26), time discipline in learning activities (26), as well as competence in clinical knowledge and skills (27).

RESULTS

Based on the research conducted, it shows that the professional behavior attributes of medical students that need to be improved according to the perception of clinical supervisors are self-awareness, being a lifelong learner, time discipline, and competence in clinical knowledge and skills. The self-awareness attribute referred to means that medical students are able to reflect on themselves during learning, recognize their shortcomings, and strive to improve from that learning.

Self-reflection is a metacognitive process that produces an understanding of oneself and broader situations so that when faced with similar situations again, one can formulate new thoughts. (Sandars 2009) This study found that the self-reflection abilities of medical students still need improvement. The results of this study are in line with the research by Wiwik Kusumawati, which found that students in the medical profession stage are still lacking in performing self-reflection. (Kusumawati 2011) This is also similar to the research by Puspita, where self-reflection among medical students is still categorized as adequate. (Puspita & Widjaja 2023) However, this is not in line with one of the competency areas for Indonesian doctors, namely self-awareness, where students are expected to become lifelong learners and be able to recognize learning needs to overcome personal deficiencies.

The lack of self-reflection among medical students can be caused by the fact that the concept of self-reflection has not been fully integrated into the medical education curriculum. (Ruitan, Manoppo & Wariki 2020) Efforts to improve students' reflective abilities and provide structured and continuous opportunities for self-reflection within the curriculum are still carried out in a limited manner. In addition, the assessment of self-reflection skills is still rarely conducted. Some obstacles in carrying out the assessment include the personal nature of self-reflection, which makes students uncomfortable to open up, the loss of the dynamic nature of self-reflection due to rubrics or evaluation criteria, and the vulnerability to inconsistency in self-reflection assessment results

(Oktaria et al., 2022). Feedback that is not provided regularly also affects suboptimal reflection, even though the use of questions in regular feedback can provoke students' thinking in the hope of enhancing reflection.

When reflecting, a conducive environment also needs to be created so that students feel safe while reflecting. (Ritunga, Rahayu & Suhoyo 2018) Other factors that lead to a lack of reflection include limited knowledge of concepts and the process of self-reflection that students have, unawareness of the benefits gained from self-reflection, a heavy workload during clinical clerkships leaving little time for self-reflection, or feelings of discomfort if shortcomings are known by others. (Oktaria 2015) Additionally, for the development of deep and meaningful reflection, repeated reflection throughout the curriculum is needed so that students are stimulated to become accustomed to reflecting. (Ritunga & Rambung 2020) Student engagement and motivation are also challenges in conducting self-reflection. (Ritunga et al. 2018) Low engagement may result from students' lack of knowledge about the purpose of reflection or from instructors not providing guidance Clear guidance on reflection is one of the obstacles in the implementation of reflection. (Oktaria 2015)

The lack of self-reflection among medical students in this study is accompanied by lifelong learning that still needs improvement. An important component of lifelong learning implementation requires self-reflection skills with feedback or assessment because by realizing their limitations through self-reflection, students will engage in lifelong learning. (Ritunga & Rambung 2020) The implementation of self-awareness is carried out entirely out of one's own conscious willingness, without coercion from any party. Self-awareness refers to reflection, which encompasses all activities of improving self-identity, developing potential, building human resources, facilitating performance, and enhancing quality in achieving dreams. The synergy of self-awareness and self-development in learning results in optimal lifelong learning. (Ritunga & Rambung 2020)

The research results also found that the competence in knowledge and clinical skills of medical profession students still needs improvement. This is similar to the study by Wiwik Kusumawati and Nurlina, where medical profession students were lacking in knowledge and clinical skills competence (Kusumawati 2011). In the clinical clerkship learning process, students are required to adapt to patient management in real situations under the high psychological pressure of the hospital work environment. This condition necessitates that the knowledge acquired and the implementation of clinical skills can be applied optimally by the students.

The lack of knowledge and clinical skills competence can be influenced by several factors, namely the quantity and quality of guidance during clerkship learning, the support of the learning environment in hospitals, and clinical experience with patients. In the learning process, there are several challenges, such as uncooperative patients, a low patient-to-student ratio resulting in limited clinical experience with patients. To achieve the expected level of knowledge and clinical skills competence, students must have an optimal variety and number of cases within sufficient time. (Hardisman & Yulistini 2010)

The difficulty in time allocation by clinical supervising lecturers due to other duties such as providing healthcare services, mentoring resident doctors, and teaching undergraduate students also constitutes an obstacle in clinical clerkship learning. (Pamungkasari & Probandari 2012) Other challenges that arise include clerkships taking place alongside healthcare services, where

the management of healthcare services in hospitals and community health centers used as educational facilities also has an impact.

Low student engagement, limited problem-solving practice, low student activity in direct observation and feedback, and insufficient time for reflection and discussion are also factors contributing to the lack of knowledge and clinical skills competence. (Malahayani, Kiki Riezky & Maulanza 2019) Given the many challenges faced in clinical clerkship learning, medical students should possess self-directed learning abilities so that they can identify their learning needs and how to fulfill them to overcome obstacles in achieving their competencies. The role of clinical instructors as role models, educating students' knowledge and skills, and teaching professional values is necessary in developing students' self-directed learning abilities. (Pamungkasari & Probandari 2012)

The success of an active and experiential process in clinical clerkship learning is also related to the capability for reflection and the accuracy of self-assessment by students, which can influence students' motivation to learn and critical thinking. (Pamungkasari & Probandari 2012) Students' activeness in terms of curiosity is also necessary to support medical students' clinical knowledge and skills because curiosity is fundamental to understanding patients concerning the course of their illness. Several professional education theories suggest that developing self-awareness and reflective capacity is an important bridge between curiosity and high cognitive abilities, such as problem-solving and critical thinking. (Dyche & Epstein 2011)

The research results also showed that medical professional students lack time discipline, as in the learning process, students often arrive late. This is consistent with the study by Wiwik Kusumawati, where the discipline of medical professional students also needs improvement. (Kusumawati 2011) However, this is not in line with Nurlina's research, which found that students in the professional stage are already good at managing discipline. (Nurlina et al. 2019) The achievement of numerous competencies, along with clinical supervision schedules that must be coordinated with supervising lecturers, requires students to be able to manage their time efficiently. The busy schedule and high workload, such as mandatory night shifts in several rotations, preparing duty reports, presentations, or reading assignments, can also affect students' ability to manage their time well. (Hanafi & Widjaja 2021)

Self-regulation is also an aspect that can influence time discipline. Students with good self-regulation in learning have good time management. Self-regulation is a constructivist process in which students strive to organize and control their motivation, awareness, and behavior according to the learning goals that have been set. (Yulita Simaremare, Sandayanti & Silvia 2020) Achievement motivation also affects time management ability. High achievement motivation tends to make students require significant feedback and feel more capable when choosing tasks, taking risks, being responsible, and being diligent. (Hanafi & Widjaja 2021)

From the explanation above, if medical students are able to perform self-reflection optimally, a high intrinsic motivation will emerge, which can stimulate curiosity, learning motivation, learning independence, and learning goals. This intrinsic motivation is necessary because it can foster higher commitment and perseverance than extrinsic motivation, which can enhance knowledge and clinical skills, lifelong learning, and time discipline among medical students.

In this study, the limitations lie in the research being conducted at only one institution and only a portion of the clinical supervisors consenting to participate as respondents.

CONCLUSION

The study identified key areas in the professional behavior of medical clerkship students at the Faculty of Medicine, Muhammadiyah University of Semarang that require improvement, specifically self-awareness, lifelong learning, time discipline, and clinical knowledge and skills competency. Clinical supervisors perceived that students often struggle with reflecting on their learning experiences and recognizing their weaknesses, which limits their growth as lifelong learners. Furthermore, challenges in managing time effectively and acquiring adequate clinical competencies were linked to limited mentorship quality, hospital learning environment constraints, and insufficient patient interaction. These findings emphasize the need for enhanced curricular integration of reflective practices, structured feedback mechanisms, and stronger support systems to foster independent learning and professional development among medical students.

The study's limitations include its focus on a single institution and a relatively small sample size of clinical supervisors, which may affect the generalizability of the results. Future research should explore multi-center studies with larger populations to validate these findings and examine the effectiveness of targeted interventions addressing the identified gaps. Practically, medical education programs should prioritize embedding reflective exercises, timely feedback, and mentorship improvements to cultivate professional behaviors that ultimately improve patient care quality. Strengthening these areas can lead to better prepared physicians who demonstrate professionalism consistently throughout their careers.

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