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RESEARCH ARTICLE

Importance–performance analysis: Perception gap between community pharmacy preceptors and students

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Abstract

This study compared students' and preceptors' perceptions of the latter's role importance and performance during community pharmacy experiential practice (CPEP) under the newly implemented two + four-year programme in South Korea. This cross-sectional study was based on two nationwide surveys and adopted importance–performance analysis (IPA) and multivariate analysis. A total of 390 preceptors and 1138 preceptees of CPEP participated. Overall evaluation was positive in both groups. Students rated the importance of the preceptors' role higher than preceptors did (average gap: 0.13). Further, students rated their performance lower than preceptors (average gap: −0.22). In IPA, both considered that the "*pharmacists' ethics adherence*" was crucial and that their performance was great, while they regarded "*systematically organising practice activities*" as highly important with low performance. Students regarded preceptors as "*being a role model or mentor*" (3.56/4.0) but evaluated their performance as low (3.12/4.0). More efforts are needed to reduce discrepancies between preceptors and students in CPEP.

Introduction

The goal of practical training in pharmacy education is to connect theory and practice so that students can apply what they have learned in school and fulfil professional duties at work. The role of preceptors in community pharmacies is therefore essential under Korea's community pharmacy experiential practice (CPEP) programme (Lee *et al.,* 2013; Kim, Jeong, & Kim, 2021). Various studies have emphasised the importance of the community pharmacy preceptors' role (Kim, 2012; Saramunee *et al.,* 2014; Zeitoun *et al.,* 2020; Kim, Jeong, & Kim, 2021).

Further, many previous studies have analysed the role, importance and performance of preceptors (Fejzic, 2013; Lee *et al.,* 2013; Martensson *et al.,* 2013; Seo *et al.,* 2018; Girotto *et al.,* 2019). The majority dealt with nurses (Lee *et al.,* 2013; Martensson *et al.,* 2013), hospital pharmacies (Seo *et al.,* 2018), and medical students (Girotto *et al.,* 2019). A few studies that have analysed community pharmacies are either small or localised (Fejzic, 2013; Lee *et al.,* 2013; Park *et al.,* 2015).

In South Korea, the pharmacy education system has changed from a four-year programme to a six (two + four)-year programme since 2014 (KAPE, 2015; Kim, Jeong, & Kim, 2021). In the newly implemented pharmacy education system, most Korean pharmacy students practice for 200 hours for core advanced pharmacy practice education (APPE) and 600 hours for elective APPE at community pharmacies, although this varies from school to school (Lee *et al*., 2016; Kim, Jeong, & Kim, 2019). To date, there have been few nationwide studies on the perceptions regarding the role, importance and performance of community pharmacy preceptors. Additionally, irrespective of how positively the preceptor views their practice, if the apprentice's opinion differs, this should be addressed.

For the practical training to be successful, perception gaps should be minimised (Charr *et al.,* 2011). Therefore, a process of comparing the students' evaluation of the preceptor's role against the perceptions of the preceptors themselves and analysing the difference can be extremely helpful in improving the quality of experiential practice (Kassam, Poole, & Collins, 2008; Park *et al.,* 2015).

In 2017, the Korean Pharmaceutical Association (KPA) conducted two nationwide surveys of community pharmacy preceptors' and preceptees' views on practical training. The present study draws on data gathered from these previous surveys and focuses on the importance and performance of the preceptors' role, which was not covered in the previous two studies (Kim, Jeong, & Kim, 2019; Kim, Jeong, & Kim, 2021). This nested study sought to investigate, compare, and analyse the perceptions of students and preceptors regarding the importance and performance of the preceptors' role at community pharmacies.

Methods

Study design

This cross-sectional study was a part of the KPA nationwide surveys of community pharmacy preceptors' and preceptees' views on practical training conducted in 2017 (Kim, Jeong, & Kim, 2019; Kim, Jeong, & Kim, 2021). Initially, the authors developed the KPA nationwide survey instrument by reviewing previous literature and utilising KPA reports (Korean Pharmaceutical Association Statistics about Pharmacists (2017) and guidelines (Lee *et al.,* 2013; Lee *et al.,* 2016). After preparing draft questionnaire items, face validation was performed on the responses of community pharmacy preceptors and students. Seven active preceptors who work at a community pharmacy and five sixth-year pharmacy students who had already experienced CPEP participated in it. Modified questionnaires were subsequently pilot-tested by 12 active community pharmacy preceptors and three students who had already conducted CPEP. These were then further modified and confirmed based on their feedback. The same 12-item questionnaires of preceptors' role importance and performance were presented to both preceptors and students (Appendix A).

For the preceptors' role importance, preceptors and students were asked to provide their own opinions. However, regarding their role performance, preceptors recorded their own self-evaluation, while students were asked to record their level of satisfaction with the preceptors' performance. The survey period was March to June 2017 for preceptors and June to October 2017 for students.

The survey company (Now & Survey, Inc) forwarded mobile phone messages and e-mails containing a link to the online survey to each preceptor and to the student presidents at each school. In particular, for student surveys, the president of each school distributed the survey link to the students via the popular private social media network service KakaoTalk. To improve the response rate, follow-up notifications were sent to non-responders every two weeks by the company. Informed consent was obtained, and the survey was anonymous. To protect the respondents' privacy, no identifiable information was included in the completed questionnaires. The Institutional Review Board of Chung-Ang University approved the study protocol, and the study conducted all procedures prior to data collection (NO. 1041078-201702-HRZZ-025-01).

The inclusion criterion for preceptors was that they should be active community pharmacy preceptors in South Korea, and preceptees were sixth-year pharmacy school students who had completed CPEP in 2017.

Data analysis

The study collated and processed the role importance and performance data, as well as the characteristics of the respondents. The survey answers on importance and performance employed a four-point Likert scale (Dolnicar & Grün, 2013). For role importance, "*not important at all (score 1)"* or "*not important (score 2)*" responses were regarded as negative, while "*important (score 3)*" or "*very important (score 4)*" responses were considered positive. For role performance, "*very poor (score 1)*" or "*poor (score 2)*" responses were regarded as negative, while "*good (score 3)*" or "*excellent (score 4)*" responses were considered positive.

The study undertook importance–performance analysis (IPA), which has been widely discussed in existing literature (Bond *et al.,* 2013; Lee *et al.*, 2013; Seo *et al*., 2018). The study conducted IPA using Microsoft Excel 2013 (Microsoft Corporation, Redmond, WA). To test internal reliability, it used Cronbach's *alpha*, with > 0.9 interpreted as excellent, > 0.8 as good, > 0.7 as acceptable, > 0.6 as questionable, > 0.5 as poor, and < 0.5 as unacceptable (Cronbach, 1951; Tavakol & Dennick, 2008). The study used the Statistical Package for the Social Sciences software (IBM SPSS Statistics for Windows, Version 23.0. Armonk, NY) for statistical analysis and set statistical significance at $p < .05$ for two-tailed tests.

Results

Socio-demographic characteristics of preceptors and students

In 2017, there were 681 active community pharmacy preceptors and 1600 sixth-year pharmacy school students nationwide in South Korea. The calculated survey sample size for each group to set the confidence level as 95% and margin of error as 5% was at least 246 for preceptors and 310 for students (Sample size calculator & complete guide). Respondents to the nationwide survey comprised 390 preceptors (response rate: 57.3%) and 1138 students (response rate: 71.1%) (Park & Choi, 2011). This study excluded five preceptors and 492 students due to missing data, but it analysed data from 385 preceptors and 646 students and therefore has adequate power. The precise demographic characteristics of preceptors and students are listed in previously published articles (Kim, Jeong, & Kim, 2019; Kim, Jeong, & Kim, 2021). The age of preceptors was 50.48 ± 8.38 (mean ± standard deviation), and students were aged 26.75 ± 2.86. The details of the location and numbers of participating preceptors and students are illustrated in Figure 1.

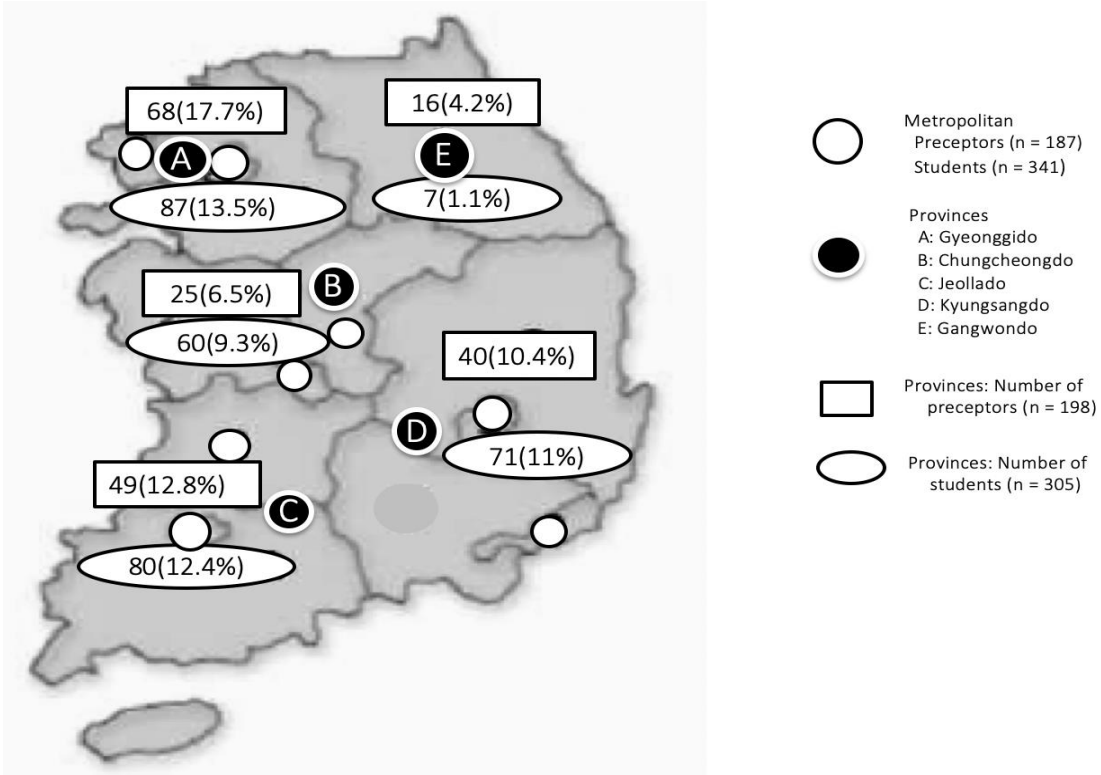


Figure 1: Number of participating preceptors and pharmacy school students in the survey

Analysis of role importance and performance

Preceptors and students responded positively to most of the questionnaire items relating to the importance and performance of the preceptors' roles. The mean rating scores and positive response rates are reported in Table I.

Preceptors' self-assessment answers indicated that they had a high perception regarding the importance of their roles (mean = 3.39); moreover, they perceived the performance of their roles highly (mean = 3.42). Further, they rated the majority of their role-performance items higher than their role-importance items. In particular, "*tailoring practice education content to the level of the student*" displayed the largest difference between role importance and performance (−0.21).

The students, in their evaluations, rated the preceptors' role higher in terms of importance (3.52) but lower in terms of performance (3.20) compared to the preceptors' self-evaluations. The greatest difference between the preceptors' and students' perceptions regarding the former's role importance was observed in "*tailoring practice education content to the level of the student*" (0.30). Regarding the preceptors' role performance, "*pharmacist ethics adherence*" exhibited the greatest difference between preceptors and students (−0.34), although both preceptors and students ranked this item the highest.

Table I: Preceptors' role importance–performance analysis: mean and mean difference of ratings, and positive response percentages

Questionnaire items regarding the preceptors' role	Role importance (a)					Role performance (b)					Role importance–performance (mean difference)	
	Score			Positive response* (%)		Score			Positive response* (%)			
	Average		GAP			Average		GAP				
	Preceptors	Students	S – P	Preceptors	Students	Preceptors	Students	S – P	Preceptors	Students	Preceptors (a – b)	Students (a – b)
Understanding contents, goals, and evaluation of practice experience	3.46	3.61	0.15	98.9	97.0	3.47	3.26	−0.21	95.4	81.9	−0.01	0.35
Systematically organising practice activities	3.39	3.60	0.21	96.6	96.9	3.36	3.10	−0.26	91.7	73.6	0.03	0.50
Expressing enthusiasm for teaching	3.48	3.63	0.15	97.6	97.7	3.56	3.24	−0.32	94.8	78.4	−0.08	0.39
Tailoring contents of practice education to the level of the student	3.13	3.43	0.30	89.9	93.4	3.34	3.11	−0.23	91.5	73.8	−0.21	0.32
Being a role model or mentor	3.48	3.56	0.08	97.7	95.3	3.44	3.12	−0.32	92.4	75.3	0.04	0.44
Providing sufficient opportunity to experience direct pharmacy practice	3.43	3.66	0.23	97.6	98.3	3.43	3.33	−0.10	93.5	83.2	0.00	0.33
Providing appropriate assignments	3.16	3.06	−0.10	89.6	79.5	3.29	3.15	−0.14	87.3	77.9	−0.13	−0.09
Providing appropriate feedback	3.29	3.43	0.14	94.3	94.8	3.31	3.06	−0.25	89.4	73.1	−0.02	0.37
Encouraging students to inspire confidence	3.46	3.51	0.05	97.4	94.1	3.53	3.24	−0.29	94.0	79.6	−0.07	0.27
Good communication with patients	3.46	3.61	0.15	95.6	97.2	3.29	3.33	0.04	87.8	83.4	0.17	0.28
Mutual bond among employees	3.30	3.48	0.18	93.5	94.4	3.40	3.16	−0.24	91.9	76.0	−0.10	0.32
Pharmacists' ethics adherence	3.62	3.63	0.01	99.0	98.8	3.67	3.33	−0.34	97.1	83.2	−0.05	−0.30
Total	**3.39**	**3.52**	**0.13**			**3.42**	**3.20**	**−0.22**			**−0.03**	**0.32**

Preceptors (P; n = 385), Students (S; n = 646)
S – P = mean difference between ratings by students and preceptors;
Role importance of preceptors: Likert scale score, 1 (not important at all), 2 (not important), 3 (important), 4 (very important)
Role performance of preceptors: Likert scale score 1 (very poor), 2 (poor), 3 (good), 4 (excellent)
* Positive response (%): rated 3 or 4 on the Likert scale.

Regarding the preceptor role performance rate, there was no significant difference in the self-evaluations of the 385 preceptors involved in the study. Students considered "*systematically organising practice activities*" followed by "*being a role model or mentor*" as the categories with the largest discrepancy between preceptor role importance and performance. Both groups rated "*providing adequate feedback*" as low, both in terms of importance and performance; students rated this item the lowest in terms of performance.

Preceptors evaluated themselves positively when performing the most important tasks (mean difference (MD): −0.03), while students responded that the preceptors' role performance was insufficient compared to its importance (MD: 0.32).

In addition, the study used IPA, an easy-to-use matrix-based analytical technique, to illustrate the importance and performance results in one graph (Figure 2). The internal consistency reliability (Cronbach's *alpha*) of the preceptors' role importance (0.84, preceptors; 0.83, students) and performance (0.913, preceptors;

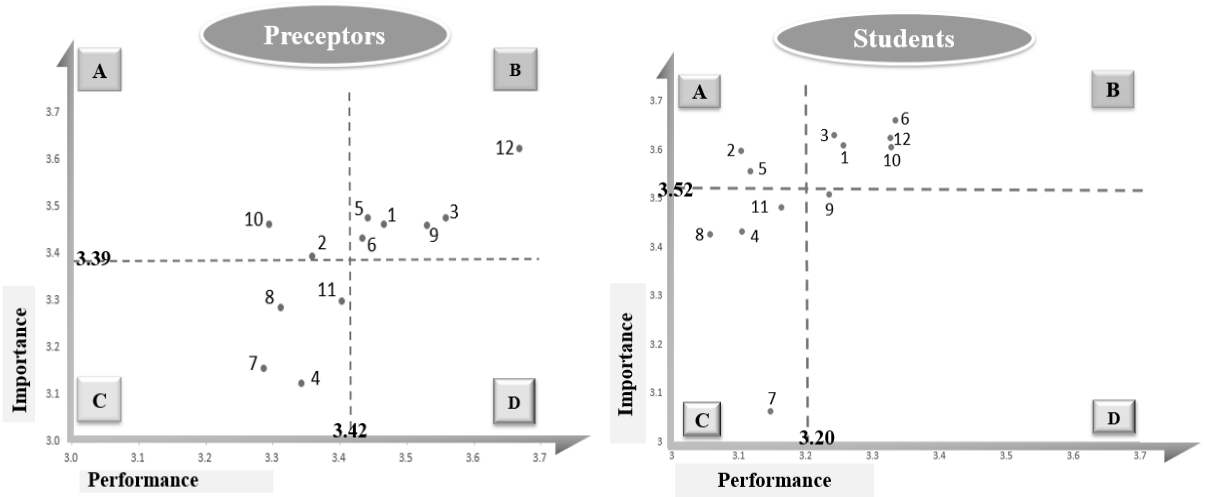
0.955, students) were considered to be good and excellent, respectively.

Zone A (Figure 2) is the top priority area; items categorised in this area are crucial, but their performances are below average. Thus, preceptors should concentrate on these items. The preceptors and students both agreed with regard to items such as "*systematically organising practice activities".* Although the preceptors placed the item "*good communication with patients*" in Zone A, the students placed it in Zone B. Further, the students responded that it is essential for a preceptor to act as a role model or mentor, and there is a need for further improvement in terms of actual performance.

Zone B comprises important items, and those who perform very well should continue the good work. The preceptors and students both responded that "*understanding content, goals, and evaluation of practice experience*", "*expressing enthusiasm with regard to teaching*", "*providing sufficient opportunity to experience direct pharmacy practice*", and "*pharmacists' ethics adherence*" fell into this category. In particular, the preceptors ranked "*pharmacists' ethics adherence*" the highest. The students also ranked "*pharmacists' ethics adherence*" along with "*providing sufficient opportunity to experience direct pharmacy practice*" and "*good communication with patients*" under Zone B.

In Zone C, the students and preceptors both responded to the same four items: "*tailoring contents of practice education to the level of the students*", "*providing appropriate assignments*", "*providing appropriate feedback*", "*good communication with patients*") belonged to the lower-priority domain, indicating that these items were considered less important and their performance below average.

Fortunately, no items are placed in Zone D, which comprises items that are of low importance but are performed excessively.



Area A: Concentrate Here; Area B: Keep up the good work; Area C: Low Priority; Area D: Possible Overkill
Numbers on the graph represent preceptor role importance and performance questions.
Intersections of the IPA grid are divided into four quadrants using the mean of the importance and performance score.
Questions: 1. Understanding contents, goals, and evaluation of practice experience; 2. Systematically organising practice activities; 3. Expressing enthusiasm for teaching; 4. Tailoring contents of practice education to the level of the student; 5. Being a role model or mentor; 6. Providing sufficient opportunity to experience direct pharmacy practice; 7. Providing appropriate assignments; 8. Providing appropriate feedback; 9. Encouraging students to inspire confidence; 10. Good communication with patients; 11. Mutual bond among employees; 12. Pharmacist ethics adherence

Figure 2: Preceptor role importance and role performance analysis (IPA) matrix

Discussion

The experiential practice has a significant influence on future career decision-making (Kim, Jeong, & Kim, 2019; Nguyen *et al*., 2012). Moreover, it contributes to improving productivity as it shortens the time needed to become proficient at work (Ryan *et al.,* 2012). To achieve better performance in experiential practice, a common outlook between preceptors and students is essential for training to be successful. It is, therefore, imperative to identify the perception gap between students and preceptors. This nested study investigated discrepancies between preceptors' and students' perceptions regarding the importance and performance of the preceptors' role in CPEP (Lacher & Harril, 2010).

Both the preceptors and students regarded the importance of the formers' role highly and responded that it performed well. However, the students rated preceptors' role performance lower than the preceptors did. This result is consistent with previous research indicating that preceptors tended to overestimate their own performance (Sonthisombat, 2008, Nisley *et al*., 2020).

In this study, the preceptors and students both agreed that "*pharmacists' ethics adherence*" was the most important factor and that it was compiled with the most. Pharmacists in Korea have a code of ethics (2021) similar to the International Pharmaceutical Federation oath, which covers topics such as compliance with the law and dedication to promoting public health. In accordance with the Personal Information Protection Act, similar to the Health Insurance Portability and Accountability Act in the USA, Korean medical professionals treat patients' personal information with great care. Adherence to pharmacist ethics is vital for healthcare providers, and preceptors, therefore, regard it as a top priority. In addition, as ethical education is progressively added to the six-year curriculum, students attach a very high value to this item and consider preceptors to be executing it well. Practical training is essential to learn not only the skills but also the attitudes and ethics that healthcare professionals should possess as pharmacists. The present study confirms that the preceptor pharmacists' priorities for ethical awareness were accurately perceived by the students undergoing practical training.

While 95% of community pharmacy preceptors responded that they had a passion for education, the perceptions of only 78% of students concurred with this. This result is positive compared to a domestic study conducted in 2017, in which 30% of hospital pharmacy preceptors responded that they lacked a passion for education (Seo *et al*., 2018). The reason that most community pharmacy preceptors answered positively may be that they participated voluntarily, while the hospital preceptors were obliged to educate preceptees as part of their duties. The discrepancy in issues relating to the importance of preceptor roles, such as "*tailoring practice education content to the level of the student*", could indicate that preceptors are not familiar with their roles because the practice has been recently implemented under the new curriculum (Kim, Jeong, & Kim, 2019; Kim, Jeong, & Kim, 2021).

This study yielded several important findings in terms of the IPA results. The preceptors and students both agreed that "*systematically organising practice activities*" was the top priority, and improvement was needed to achieve the best performance during experiential training; several studies have also discussed this (Hasse, Smythe, & Orlando, 2008). Thus, the necessity for standard experiential guidelines has been proposed, and manuals have been amended to cope with difficult and complex situations (Kim, Jeong, & Kim, 2021). Regarding the preceptor "*being a role model or mentor*", the preceptors believed they were performing very well, but the students did not share this belief. This finding is consistent with those of other studies (Sonthisombat, 2008; Park *et al.,* 2015). This discrepancy could be because most preceptors have little experience with the practical training that students are undergoing, having themselves graduated under the earlier four-year pharmacy programme. Thus, they were not accustomed to being mentors in an experiential programme. In addition, the role of the preceptor as a mentor is strongly associated with qualified preceptors (Haase, Smythe, & Orlando, 2008). Thus, in the near future, role-model-related factors that may be relevant to the quality of experiential education and preceptor training should be investigated (Fejzic, 2013; O'Sullivan *et al.,* 2015).

Another perception gap was that the students regarded the preceptors as good communicators, but the preceptors did not. With their emphasis on health-related communication, preceptors may view communication as a distinct skill set that must be learned. In addition, preceptors may argue that, owing to a lack of time, it is difficult to provide patients with sufficient medication guidance and that the limited time available is consumed by consultations in the field related to, for example, prescription drugs, over-the-counter drugs, and functional foods. However, most preceptors are likely excellent communicators because they have had many years of experience communicating with patients. Thus, after observing their conversations with patients, the students perceived the preceptors as good health-related communicators. The recently established Pharmacy Health Communication Association (Kim, 2018) will be helpful in strengthening the capacity for health-related communication along with preceptors' self-confidence.

Unlike in previous studies (Hartzler, Ballentine, & Kauflin, 2015), both the preceptors and students in this study regarded "*providing appropriate feedback*" as a low priority. Previous studies emphasised the importance of appropriate feedback and regarded it as the most difficult challenge in experiential practice (Hartzler, Ballentine, & Kauflin, 2015). As experiential education is still in its early stages in South Korea, "*appropriate feedback*" is regarded as less important than other issues. However, feedback from preceptors through day-to-day practice is an essential part of the formation of students' professionalism as pharmacists, and efforts between schools and preceptors are needed for improvement in this aspect.

Limitations

These surveys have some limitations, such as the Dunning–Kruger effect, and the students' responses have considerable missing data, as explained in previous studies (Jonson, Rafferty, & Griffith, 2021). In addition, as the survey respondents participated voluntarily, there may be a selection bias. However, this study is innovative in measuring gaps at the national level between the perceptions of community pharmacy preceptors and preceptees about the importance and performance of the preceptors' role since the introduction of the new six-year pharmacist education system at the College of Pharmacy in South Korea.

Conclusions

For practical education, the role of preceptors is essential, as is a common outlook between preceptees and their preceptors. This nationwide nested study detected gaps between students' and preceptors' perceptions of the IPA. To minimise this discrepancy, relevant parties should strive toward common perspectives between preceptors and students. It is necessary to create an educational curriculum that closes the gaps, frequently open a discussion section between the preceptors' and the students, and periodically monitor the gaps, such as the survey in this study. Such cooperative efforts are expected to become driving forces in the future for nurturing excellent pharmacists through CPEP.

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Conflicts of interest

The authors declare no relevant conflicts of interest or financial relationships.

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Appendix A: Survey questionnaire of preceptors' role importance and performance

Preceptors
Q1. How would you rate your opinion about the importance as a preceptor while conducting community pharmacy experiential practice? 1. Understanding contents, goals, and evaluation of practice experience 2. Systemically organising practice activities 3. Expressing enthusiasm for teaching 4. Tailoring contents of practice education to the level of the student 5. Being a role model or mentor 6. Providing sufficient opportunity to experience direct pharmacy practice 7. Providing appropriate assignments 8. Providing appropriate feedback 9. Encouraging students to inspire confidence 10. Good communication with patients 11. Mutual bond among employees 12. Pharmacists' ethics adherence ① Not important at all ② Not important ③ Important ④ Very important
Q2. How would you rate your performance as a preceptor while conducting community pharmacy experiential practice? 1. Understanding contents, goals, and evaluation of practice experience 2. Systemically organising practice activities 3. Expressing enthusiasm for teaching 4. Tailoring contents of practice education to the level of the student 5. Being a role model or mentor 6. Providing sufficient opportunity to experience direct pharmacy practice 7. Providing appropriate assignments 8. Providing appropriate feedback 9. Encouraging students to inspire confidence 10. Good communication with patients 11. Mutual bond among employees 12. Pharmacists' ethics adherence ① Very poor ② Poor ③ Good ④ Excellent
Q3. What is your age? ① 20s ② 30s ③ 40s ④ 50s ⑤ Over 60
Q4. What is your gender? ① Male ② Female
Q5. What is your final degree? ① Bachelor of Science ② Master of Science ③ Doctor of Philosophy
Q6. What is your job status at your community pharmacy? ① Pharmacy owner ② Pharmacy staff

Preceptors

Q7. How many pharmacists work in your pharmacy?
- ① One
- ② Two
- ③ Three
- ④ Four
- ⑤ More than five

Q8. How many years have you been practiced at your community pharmacy?
- ① Less than five years
- ② Five to less than ten years
- ③ Ten to less than 20 years
- ④ More than 20 years

Q9. What is your field experience after graduation? (Hospital pharmacies, local pharmacies)
- ① Less than three years
- ② Three to less than five years
- ③ Five to less than ten years
- ④ Ten to less than 20 years
- ⑤ More than 20 years
- ⑥ More than 20 years

Q10. Where is the pharmacy you precepted located in?
- ① Seoul and Metropolitan
- ② Gyeonggi-do
- ③ Gangwon-do
- ④ Chungcheong-do
- ⑤ Jeolla-do and Jeju-do
- ⑥ Gyungsang-do

Q 11. What kind of medical institutions are located near your pharmacy?
- ① Adjacent to the hospital
- ② Adjacent to the clinics
- ③ Without nearby clinics

Q 12. How many students practiced in your pharmacy during the previous three years?
- ① Five or less students
- ② Six to ten students
- ③ 11 to 20 students
- ④ More than 21 students

Students

Q1. What is your opinion as a trainee on the preceptor's role importance in the community pharmacy experience practice?
1. Understanding contents, goals, and evaluation of practice experience
2. Systemically organising practice activities
3. Expressing enthusiasm for teaching
4. Tailoring contents of practice education to the level of the student
5. Being a role model or mentor
6. Providing sufficient opportunity to experience direct pharmacy practice
7. Providing appropriate assignments
8. Providing appropriate feedback
9. Encouraging students to inspire confidence
10. Good communication with patients
11. Mutual bond among employees
12. Pharmacists' ethics adherence
    - ① Not important at all
    - ② Not important
    - ③ Important
    - ④ Very important

Q2. What is your opinion as a trainee on the preceptor's role performance in the community pharmacy experience practice?
1. Understanding contents, goals, and evaluation of practice experience
2. Systemically organising practice activities
3. Expressing enthusiasm for teaching
4. Tailoring contents of practice education to the level of the student
5. Being a role model or mentor
6. Providing sufficient opportunity to experience direct pharmacy practice
7. Providing appropriate assignments
8. Providing appropriate feedback
9. Encouraging students to inspire confidence
10. Good communication with patients
11. Mutual bond among employees

Students
12. Pharmacists' ethics adherence ① Very poor ② Poor ③ Good ④ Excellent
Q3. How old are you? ( ) years old
Q4. What is your gender? ① Male ② Female
Q5. Where is the community pharmacy in which you practiced? ① Seoul and Metropolitan ② Gyeonggi-do ③ Gangwon-do ④ Chungcheong-do ⑤ Jeolla-do and Jeju-do ⑥ Gyungsang-do
Q6. Factors affecting practice site selection ① Transportation time (distance to home) ② College policy (random assignment) ③ Awareness of pharmacy ④ Other
Q7. Was the community pharmacy experiential practice helpful in future career decision-making? ① Not at all ② Not helpful ③ Helpful ④ Very helpful