



Perception Gap Between Preceptors and Pharmacy Students on Clinical Pharmacy Practice Education (CPPE) in Hospital Pharmacy

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OBJECTIVES

Since the adoption of the 6-year pharmaceutical college curriculum in Korea, the role of preceptors who conduct clinical pharmacy practice education (CPPE) has become more important. This study was conducted to assess the differences in perception and satisfaction of the CPPE through a survey of students and preceptors who completed CPPE from 2022 to 2023 at Veterans Hospital in Seoul, Korea.

METHOD

The survey composed of 17 questions for both students and preceptors, and additional 7 questions for only preceptor. The responses of “excellent” was considered as a positive responses and “average” – “insufficient” was considered as a negative responses. Statistical analysis was performed using the Chi square test and Fisher’s exact test, with a p-value less than 0.05 defined as statistically significant.

RESULTS

Total 70 respondents (48 students and 22 preceptors) responded to the survey. 63.6% of preceptors had master's degrees, 77.3% were certified pharmacy specialists from the Korean Society of Health-system Pharmacists, and 59.1% had >10 years of experience. About overall evaluation of CPPE, “Providing positive educational environment” has the largest difference in positive evaluation rate between students and preceptors (85.4% vs 50.0%, $p<0.05$). In the evaluation of preceptor competency, “Providing systematic education” has the largest difference (97.9% vs 50.0%, $p<0.05$). In the preceptor subgroup analysis, clinical lecture preceptors and preceptors with more than 10 years of experience had higher positive response rates than practice preceptors and preceptors with less than 10 years of experience. Especially, “Providing opportunities to acquire and develop qualifications and capabilities as a pharmacist” had a difference of more than 3 times. The most disability influencing factor to performing the preceptor role was “Pressure of concurrent work” (55.3%), and the most promotional factor was “financial compensation” (39.5%). The detailed results were as shown in the following table (Result 1-4). Only the results with $p<0.05$ are shown in the table.

Result 1) General Characteristics of responders : N (%)

Characteristics	Total (n=70)	
	Preceptors (n=22)	Students (n=48)
Preceptor subgroup		
Practice preceptor	10 (45.5)	
Clinical lecture preceptor	12 (54.5)	
Final degrees of preceptor		
Bachelor's degree	8 (36.4)	
Master's degree	14 (63.6)	
Experiences as a hospital pharmacist		
< 5 years	0 (0.0)	
5 ~ 10 years	9 (40.9)	
10 years <	13 (59.1)	
Certified pharmacy specialists pharmacist by Korean Society of Health system Pharmacists		
Qualified	17 (77.3)	
Not Qualified	5 (22.7)	
by the Ministry of Health and Welfare		
Qualified	10 (45.4)	
Not Qualified	12 (54.6)	
Academic year of CPPE		
1 st session of 2021		12 (25.0)
2 nd session of 2021		12 (25.0)
1 st session of 2022		12 (25.0)
2 nd session of 2022		12 (25.0)

* The data are reported as n (%).

Result 2) Comparison of evaluations between preceptors and students : Overall Evaluation of CPPE

Questionnaires	Preceptors (n=22)	Students (n=48)	Total (n=70)	P-value
Providing opportunities to acquire and develop qualifications and capabilities as a pharmacist				
Positive responses	14 (63.6%)	46 (95.8%)	60 (85.7%)	0.001
Negative responses	8 (36.4%)	2 (4.2%)	10 (14.3%)	
Providing positive educational environment that could improve student achievement				
Positive responses	11 (50.0%)	41 (85.4%)	52 (74.3%)	0.004
Negative responses	11 (50.0%)	7 (14.6%)	18 (25.7%)	
Playing a positive role in career decision-making				
Positive responses	13 (59.1%)	42 (87.5%)	55 (78.6%)	0.012
Negative responses	9 (40.9%)	6 (12.5%)	15 (21.4%)	
Overall evaluation of CPPE at institutions				
Positive responses	15 (68.2%)	44 (91.7%)	59 (84.3%)	0.029
Negative responses	7 (31.8%)	4 (8.3%)	11 (15.7%)	

* The data are reported as n (%)

* P values were calculated using the Chi square test or Fisher's exact test.

Result 3) Comparison of preceptor evaluations based on work experience as hospital pharmacist : 5 ~ 10 vs <10 years

Questionnaires	5~10 years (n=9)	<10 years (n=13)	Total (n=22)	P-value
Providing opportunities to acquire and develop qualifications and capabilities as a pharmacist				
Positive responses	2 (22.2%)	12 (92.3%)	14 (63.6%)	0.001
Negative responses	7 (77.7%)	1 (7.7%)	8 (36.4%)	
Utilizing informatics to evaluate patient's drug therapy and learn skills to solve problems				
Positive responses	5 (55.5%)	13 (100.0%)	18 (81.8%)	0.017
Negative responses	4 (44.4%)	0 (0.0%)	4 (18.2%)	
Overall evaluation of CPPE at institutions				
Positive responses	3 (33.3%)	12 (92.3%)	15 (68.2%)	0.007
Negative responses	6(66.7%)	1 (7.7%)	7 (31.8%)	

* The data are reported as n (%)

* P values were calculated using the Chi square test or Fisher's exact test.

Result 4) Comparison of preceptor evaluations by task performed : Practice preceptor vs Clinical lecture preceptor

Questionnaires	Practice (n=10)	Clinical (n=12)	Total (n=22)	P-value
Providing opportunities to acquire and develop qualifications and capabilities as a pharmacist				
Positive responses	3(30.0%)	11(91.7%)	14(63.6%)	0.006
Negative responses	7(70.0%)	1(8.3%)	8(36.4%)	
Providing positive educational environment that could improve student achievement				
Positive responses	2(20.0%)	9(75.0%)	11(50.0%)	0.032
Negative responses	8(80.0%)	3(25.0%)	11(50.0%)	
Overall evaluation of CPPE at institutions				
Positive responses	4(40.0%)	11(91.7%)	15(68.2%)	0.020
Negative responses	6(60.0%)	1(8.3%)	7(31.8%)	

CONCLUSIONS

The results of the study showed that students perceived CPPE more positively than the preceptors (93.8% vs 68.2%, $p<0.05$). The purpose of this study was to analyze the differences in perception between preceptors and students at in CPPE, and to improve the quality of CPPE.

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***Disclosure**
Authors of presentation have the following to disclose concerning possible financial or personal relationships with commercial entities that may have a direct or indirect interest in the subject matter of this presentation.
Nayoung Kim, Younjoo Jung, Soyoung Baek, Soojung Yoon, Kyungsook Yeon: Nothing to disclose