Author’s response to reviews

Title: A nationwide cross-sectional survey of student experiential practice at community pharmacies in South Korea

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Author’s response to reviews:

[To see whole response, please check the attached the supplementary file section 'response to the editor and the reviewers'.]

Tables or some figures are not included in this text version, please see the attached the file.

Response to the Editor and the Reviewers

[A: Response to the Editor]

E-Q1) STROBE guidelines. In accordance with BioMed Central editorial policies (http://www.biomedcentral.com/submissions/editorial-policies#standards+of+reporting), could you please ensure your manuscript reporting adheres to STROBE guidelines (http://www.strobe-statement.org/) for reporting observational research. This is so your methodology can be fully evaluated and utilised. Can you please include a completed STROBE checklist as an additional file when submitting your revised manuscript.

A1) We sincerely appreciate the editor’s comment. After checking each item in the STROBE guidelines, we have adhered to them for the revision of our manuscript. Although this paper is one of several studies of a cross-sectional observational study, this is a survey study. Thus, some of the items on the STROBE checklist are not exactly related to our study. We have denoted such cases as “N/A” (not applicable). We have attached a STROBE checklist in the additional files, as recommended by the Editor, as in the following example:

STROBE Statement—Checklist of items that should be included in the reports of the cross-sectional studies [please see the supplementary file- 'response to the editor and the reviewers'
Q2) BMC Medical Education operates a policy of open peer review, which means that you will be able to see the names of the reviewers who provided the reports via the online peer review system. We encourage you to also view the reports there, via the action links on the left-hand side of the page, to see the names of the reviewers

A) In the following part (part B), we list the revisions made to our manuscript based on the reviewer’s comments.

[B: Response to the Reviewers]

Reviewer #1:

Q) Review of “A nationwide cross-sectional survey of student experiential practice at community

The present study represents the first nationwide survey in Korea to analyze the current status and outcomes of community pharmacy experiential practice (CPEP) since the implementation of the two + four year program in pharmacy schools. Data from 646 students were included in the analysis. 95% of students responded in the affirmative that practical training influenced their future career decision. 78.5% of students were satisfied with the training. Further, they responded that their ability improved based on Community Pharmacy Experiential Practice Model (CPEPM) outcomes. The most positive capability change was in the subdomain "personal and professional development", followed by "inter professional collaboration".

Overall, the paper is well-written. However, one important limitation is that 492 students (43.2%) were excluded due to missing data. The author had mentioned about it.

A) We sincerely appreciate your considerate comment. We have attempted to improve our explanation of this limitation further in the revised manuscript.

Reviewer #2:

Comments to Author:

This study describes the use of a study to assess the current status of CPEP in Korea. The manuscript is well-organized and clear, with adequate justification for the study. The following review is offered in an attempt to help strengthen the manuscript:

RESULTS PART:

Q1) The response rate is missing and needs to be included. I would include a response rate for the number of students that participated (i.e. 1,138 students out of how many total enrolled that
year?) and the number of students that met the inclusion criteria (i.e. 646 out of how many total students enrolled that year?)

A1) Thank you for bringing this missing information to our attention. We sincerely appreciate the reviewer’s insightful comment. Based on this comment, we have included the response rate for the number of students who participated in the study and the number of students who met the inclusion criteria in Results, as follows:

Results (page 5, line 135)

….. Initially, 1,138 students out of a total 1,600 students enrolled in 2017 in the 6th year (response rate (RR): 71.1%) participated in the survey [3]. However, data from 492 students were excluded due to incomplete surveys with missing information. As a result, and the data from a total of 646 students (RR: 40.4%, 646/1600) were finally analysed. ……

References


Q2) As you note in the limitations, the response rate/sampling is the biggest limitation in this study. While higher than other similar studies, this still limits your ability to make claims about the entire population of students in Korea. To help strengthen your ability to make claims, consider adding a column to Table 1 that describes the variables for all students enrolled that year. In other words, is the age distribution for the students in your sample similar to the age distribution of all students that year? Same for gender, practice site, etc....if you can show that the sample is approximately similar to the population of students, it will strengthen your ability to argue that these findings are likely to be similar across all students.

A2) We sincerely appreciate your considerate comment, especially with regards to the suggested solution to help strengthen our study by adding variables for all the students enrolled in 2017. However, these variables can only be obtained from the Korean Association of Pharmacy Education (KAPE) or the “Academy info” website, which provides information concerning all universities in South Korea. We have contacted both entities, but were told that no data were available. We were unable to obtain any variables, except for gender. The proportion of 6th grade male to female students in 2017 was approximately 41.7%: 58.3%. The male to female ratio in our study was 39.0%:61.0%. The gender distribution of students who participated in this survey was not significantly different from that of all students in the year (P = 0.256). As the reviewer suggests, the survey sample should be representative or comparable of all students in
2017. We have decided to discuss this limitation in the Discussion section of the revised the manuscript, as follows:

Methods (page 5, line 127)

…Reliability analysis was conducted on each survey item. Internal consistency reliabilities measured with Cronbach’s alpha of satisfaction (0.871), stress (0.816), change in competency (0.926), and 125 evaluation (0.774) were acceptable. The items were randomized and rotated in each analysis to reduce the response bias. Although all sixth year pharmacy students who had completed core APPE at community pharmacies in 2017 were targeted, this survey was voluntary and self-administered. Thus, we attempted to collect information regarding the basic demographic variables of all students enrolled in 2017 to show that the sample was approximately similar to the population of students [21, 22]. During the statistical analysis, a descriptive analysis was ……..

References


Results (page 5, lines 136-138)

…The demographics are listed in Table 1. Students participated nationwide and were evenly distributed between metropolitan and provincial areas. Although we attempted to collect information regarding the basic demographics of all students enrolled in 2017, in order to demonstrate the similarity between the sample and the general student population, none of these variables were available, except for gender [21, 22]. In this study, 61.0% of participants were female, which is not statistically different from the gender distribution of all school of pharmacy 6th year students (58.3%) in 2017 (P = 0.256).

Discussion (page 14, line 256; Limitations and strengths)

…Second, most of the survey period was during the summer break and the 255 students may have been relaxed before starting the elective APPE. To generalize this study to the entire Korean student population, the basic distribution of characteristics, including age, gender, and practice sites, among others… should have been compared between this sample and the general student population. However, these data were not available, apart from data regarding the gender distribution [21, 22]. Although, Nevertheless the number of respondents was much greater than the 257 students in the nationwide preceptor survey of the United States [23] or in the Korean
KAPE survey [2], it is hard to eliminate the selection bias in this study, or to insist that these findings are likely to be similar across all students. Despite these limitations, this is the first study to report a nationwide pharmacy student……

Q3) page 8, line 182, the CPEPM outcomes do not represent the capability of students - rather, it represents student self-perceptions or student beliefs about capability changes...

A3) According to the reviewer’s advice, we changed the phrase as recommended.

Results (page 8, line 184; CPEPM outcome)

Responses to the 17 survey questions, the majority of the students stated that their self-perceptions about capability changes ability improved after the experiential practice

Q4) There is a lot of information missing about the multivariate regression that needs to be included. For example:

A4) Thank you for bringing this issue to our attention. We appreciate the reviewer’s valuable comment. The manuscript has been revised to including the missing information regarding multivariate regression. To clarify the variables, we address each comment made by the reviewer in the following answers:

Q4-1) how was CPEPM outcome measured? Is it the sum of student responses? Same for the factors are they sums for those items?

A4-1) We apologise for the confusion. The CPEPM outcome is a dependent variable that was transformed into a single variable. Initially, in our original submission, the CPEPM outcome was the total sum of each student’s answer on a 4-point Likert scale for 17 multiple sub-item questions (strongly disagree = 1, disagree = 2, agree = 3, and strongly agree = 4). Assuming that the students strongly disagreed with all 17 CPEPM questions, the sum would be “17,” and, vice versa, the maximum value would be “68.”

In this revision based on the reviewer’s comment, the total sum of 17 CPEPM outcome sub-item questions was divided by 17 to reduce the variation. Thus, inconclusively, the CPEPM outcome is a dependent variable that is the mean sum of the 17 sub-item question responses. We included this description in the Methods section, as follows:

Methods (page 5, lines 122-129)

....... Responses 1/2 1 and 2 were considered negative, and those of 3/4 while 3 and 4 were considered positive. The CPEPM outcome was measured based on 17 sub-items questions
regarding the student’s competency changes after CPEP. The CPEPM outcome is the mean sum of those question responses. Reliability analysis was conducted on each survey item. Internal consistency reliabilities measured………..

Finally, to clarify, “competency changes” (page 5, line 129) was replaced by “the CPEPM outcome.” …(omit)……. To identify factors affecting the CPEPM outcome competency changes in students after practice, univariate analysis was performed, followed by multivariate linear regression analysis using statistically significant variables. …………….

Q4-2) Also, did you ensure that the model did not violate assumptions of multivariate regression (e.g. normality, multicollinearity, etc). i suspect that you may have some items in your model that are correlated....

A 4-2) We would like to thank the reviewer for their comments. Regarding the assumptions of multivariate regression, the linearity, normality, independence of errors, and multicollinearity have been detailed in the revised manuscript as follows:

☞ Normality: Histogram showing the normality of the data

☞ Linearity: P-P plot showing the CPEPM outcome and independent variables residual fit of linearity.

☞ Independence of errors: Durbin Watson value is 2.069, which is close to 2. This indicates that there is almost no autocorrelation between the residuals.

Model summaryb

<table>
<thead>
<tr>
<th>Model summaryb</th>
<th>R</th>
<th>R^2</th>
<th>Adjusted R^2</th>
<th>Standard error of estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.687a</td>
<td>0.472</td>
<td>0.464</td>
<td>0.34134</td>
<td>2.028</td>
</tr>
</tbody>
</table>

a Predictors: (constant) (IV) plan to do elective APPE at community pharmacy; (IV) stress factor; (IV) age; (IV) satisfaction factor; (IV) gender; (IV) practice site; (IV) helpful to make future career decision; (IV) stress increased during CPEP; (IV) CPEP was performed systematically; (IV) satisfaction.

b DV: CPEPM outcome.

☞ Multicollinearity: The VIF values were less than 3, indicating that multicollinearity does not exist.

Coefficienta
<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized coefficient</th>
<th>Unstandardized coefficient</th>
<th>Sig.</th>
<th>95.0% confidence interval for B</th>
<th>Collinearity statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(constants)</td>
<td>1.359</td>
<td>0.200</td>
<td>6.805</td>
<td>0.000</td>
<td>0.967 1.751</td>
</tr>
<tr>
<td>(IV) Age</td>
<td>–0.013</td>
<td>0.005</td>
<td>–0.079</td>
<td>–2.627</td>
<td>0.009 0.009 0.003 0.930 1.075</td>
</tr>
<tr>
<td>(IV) Gender</td>
<td>–0.043</td>
<td>0.029</td>
<td>–0.045</td>
<td>–1.493</td>
<td>0.136 0.099 0.013 0.942 1.061</td>
</tr>
<tr>
<td>(IV) Practice site</td>
<td>–0.003</td>
<td>0.006</td>
<td>–0.015</td>
<td>–0.505</td>
<td>0.614 0.016 0.009 0.913 1.095</td>
</tr>
<tr>
<td>(IV) CPEP was performed systematically</td>
<td>0.100</td>
<td>0.025</td>
<td>–0.179</td>
<td>3.986</td>
<td>0.000 0.051 0.150 0.416 2.403</td>
</tr>
<tr>
<td>(IV) Helpful to make future career decision</td>
<td>0.110</td>
<td>0.026</td>
<td>0.149</td>
<td>4.218</td>
<td>0.000 0.059 0.162 0.677 1.476</td>
</tr>
<tr>
<td>(IV) Stress increased during CPEP</td>
<td>–0.037</td>
<td>0.019</td>
<td>–0.073</td>
<td>–1.902</td>
<td>0.058 0.074 0.001 0.570 1.753</td>
</tr>
<tr>
<td>(IV) Stress factor</td>
<td>–0.015</td>
<td>0.028</td>
<td>–0.021</td>
<td>–0.519</td>
<td>0.604 0.070 0.041 0.536 1.865</td>
</tr>
<tr>
<td>(IV) Satisfaction</td>
<td>0.127</td>
<td>0.026</td>
<td>0.235</td>
<td>4.788</td>
<td>0.000 0.075 0.179 0.349 2.862</td>
</tr>
<tr>
<td>(IV) Satisfaction factor</td>
<td>0.332</td>
<td>0.039</td>
<td>0.264</td>
<td>8.605</td>
<td>0.000 0.256 0.407 0.893 1.120</td>
</tr>
<tr>
<td>(IV) Plan to do elective APPE at community</td>
<td>0.076</td>
<td>0.030</td>
<td>0.076</td>
<td>2.530</td>
<td>0.012 0.017 0.134 0.931 1.074</td>
</tr>
</tbody>
</table>
a Dependent variables: CPEPM outcome.

☞ Homoscedasticity: Scatter plot shows the residuals scattered randomly without a recognized rule, thereby satisfying the independence of the residual.

Results (page 10, line 154)

… The multivariate regression analysis of the changes in the competency of the students after completing their practical training, based on the CPEPM outcomes, is summarized in Table 4. The model did not violate the assumptions of multivariate regression (e.g. normality, multicollinearity, etc.). Factors affecting CPEPM outcomes positively were “satisfied with CPEP,” “satisfaction factors”……

Q5) It's not clear what the footnote "b" means in Table 4 = were these variables controlled for in the model? were they dropped because they were not significant? what do they represent?

A5) We apologise for the confusion. In the revised version of Table 4, all of the independent variables have been included, whereas the table in the original manuscript only showed statistically significant variables. In addition, the analysis was performed again, where the multiple sub-item questions in Appendix 2 (CPEPM outcome, satisfaction factor, stress factor) represented the mean sum of the items. The rest of the independent variables, which were dichotomous, were set as follows, except gender: strongly disagree = 1, disagree = 2, agree = 3, and strongly agree = 4. In this table, the dependent variable is the CPEPM outcome, and the independent variables are shown in Table 4. Statistically significant (P<0.05) variables have been denoted by an asterisk (*). As footnote “b” denoted the independent variables of the previous analysis, these have been excluded. The revised Table 4 is shown below, as well as the revised results.

Table 4. Factors affecting CPEPM outcome changes (multivariate linear regression).

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized coefficient</th>
<th>Standardized coefficient</th>
<th>P-value</th>
</tr>
</thead>
</table>

Results (page 10, line 158)

The “stress factors” “age” were was a negative variable for the outcome.
Thank you for the opportunity to review the article title" A nationwide cross-sectional survey of student experiential practice at community pharmacies in South Korea.

The overall goal of this survey research was to evaluate Korean students' perceptions of their experiential education. There is great amount of information presented and opportunities for improvement. The introduction was clear and provided a good background to the readers. The first descriptive part of survey results was generally clear and easy to follow. The inferential part was not sufficiently described in the methods and subsequently difficult to follow in the results section. Also, the manuscript would benefit from a English review. Specific comments as shown below:

[Abstract part]

Q1) Methods: consider modifying the methods and results based on my comments below.

A1) We appreciate the reviewer’s insightful comment. We have revised the Materials and Methods section and have added the following additional text:

Methods in Abstract (page 2, line 45)

The answers were evaluated using the 4-point Likert scale, used a scoring system from 1 (strongly disagree) to 4 (strongly agree). Responses of 1 and 2 were considered negative, and 3 and 4 were positive. Descriptive analysis was performed to identify the relations between demographics and perception. To identify the factors affecting the CPEPM outcomes, multivariate linear regression analysis was performed.

Q2) The conclusion on the abstract should be more precise and centered on specific findings. I do think that more information is presented in the conclusion of the manuscript that could be used for the abstract.

A2) We have revised the Conclusion section as follows:

Conclusion on the Abstract (page 2, line 56)

Students who were satisfied, whose satisfaction factor was the highest, regarded CPEP as helpful to make a future career decision, and students planning to do an elective APPE at a community pharmacy had a positive CPEP outcome, while age was a negative factor. These are valuable findings as they represent the current student perception of CPEP nationwide.

Conclusion on the Manuscript (page 14, line 266)

The students reported the least improvement in competency in the pharmacy document management area, and expressed the need for more counseling opportunities and to strengthen
their communication skills. More effort is needed to improve experiential pharmacy practice, especially considering these less successful CPEPM outcomes.

The majority of the students stated that their ability improved after experiential practice. Students who were satisfied, whose satisfaction factor was the highest, regarded CPEP as helpful to make a future career decision, and students planning to do an elective APPE at a community pharmacy had a positive CPEP outcome, while age was a negative factor in terms of the regression analysis. These findings are valuable and represent the nationwide perception of student regarding CPEP.

[Manuscript part]


A1) APPE stands for “Advanced Pharmacy Practice Education.” According to the reviewer’s comment, this abbreviation has been defined in the revised manuscript as follows:

Background (page 3, line 69)

During the training, students have to complete 200 hours of Essential core Advanced Pharmacy Practice Education (APPE).

Q2) Line 98: Please consider using the term 6th year instead of 6th grade. What is the population size that was targeted? Can you provide an estimate of how many 6th year students received the survey? This gives an idea of the sample frame

A2) According to the reviewer’s advice, we have corrected the sentence as follows:

Methods (page 4, line 98)

The study population consisted of sixth grade year pharmacy students who had completed an Essential Pharmacy Practice Education (core APPE) at a community pharmacy in South Korea in 2017; the number of students enrolled that year was 1,600 [3].

And also have corrected the sentence in Abstract --Methods as follows:

Abstract --Methods

A nationwide cross-sectional, self-administered online survey was conducted in 2017 for 6th grade sixth year pharmacy students who completed CPEP, using 50 survey items.
Reference:


Q3) Line 112: Consider indicating what type validity was evaluated. Content? Construct? Face validity?

A3) The type of validity was a face validation with small group of students. This information has been added to the revised manuscript.

Methods (page 4, line 112)

After the initial draft of the survey was prepared, face validation was done with a small group of preceptors and students.

Q4) Line 117 Spell out CAPE outcome for the first time

A4) Thank you for pointing out this issue. We have defined “CAPE” (Center for the Advancement of Pharmacy Education) in full in the manuscript in page 4, line 111, already. It is as follows

….Korean Association of Pharmacy Education (KAPE) [17] and the Center for the Advancement of Pharmacy Education (CAPE) outcomes [18, 19].

Q5) Line 127-128: I'm not sure a descriptive analysis can identify associations please rephrase to reflect that this is a descriptive analyses that summarizes items responses

A5) Thank you for bringing this mistake to our attention. We have revised the sentences as follows:

Methods (page 5, lines 127~128)

During the statistical analysis, a descriptive analysis was performed to summarize the item responses. Chi-square and t-tests were used to identify association between any differences between the student responses related to regarding demographics and perceptions (positive, negative) and differences in the CPEPM outcomes.

Q6) Line 129-132: This part present limited details and should be expanded.
Q 6-1) First, please be more specific about what the dependent variables are. It was mentioned that the survey had 17 items related to change in competency of outcomes? Did you run a model for each? Did you select one or two items? How did you assess co-linearity? Since each domains has multiple items what was the approach taken? Please present the items perhaps as an appendix.

A6-1) We apologise for the confusion. The CPEPM outcome was measured based on the answers to 17 sub-questions regarding competency changes after CPEP. The CPEPM outcome is a dependent variable that was transformed into a single variable. Initially, in the original manuscript, the CPEPM outcome represented the total sum of each student's answer for the 17 multiple sub-item questions using a 4-point Likert scale (strongly disagree = 1, disagree = 2, agree = 3, and strongly agree = 4). If all the students were to strongly disagree with all 17 CPEPM questions, the sum would be “17,” whereas, conversely, if all the students “strongly agreed”, the maximum value would be “68.”

Based on the reviewer’s comment, the total sum of 17 CPEPM outcome sub-item questions In in the revised manuscript had been divided by 17 to reduce the variation. Thus, inconclusively, the CPEPM outcome is a dependent variable that is the mean sum of 17 sub-item question responses. We included this description in the Methods section as follows:

Methods (page 5, line 122-129)

....... Responses 1 and 2 were considered negative, while 3 and 4 were considered positive. The CPEPM outcome was measured from the answers to 17 sub-item questions regarding the student’s competency changes after CPEP. The CPEPM outcome represents the mean sum of those question responses. Reliability analysis was conducted on each survey item. Internal consistency reliabilities measured………. …(omit)………. To identify factors affecting the CPEPM outcome competency changes in students after practice, univariate analysis was performed, followed by multivariate linear regression analysis using statistically significant variables. …………..

We would also like to note that “competency changes” (page 5, line 129) has been replaced by “the CPEPM outcome.” This dependent variable is transformed into one variable, as such, no co-linearity exists. Variables such as the CPEPM outcome, satisfaction factor, and stress factor were the mean sum of those sub items.

We have presented the multiple items in Appendix 2, as follows:

Appendix 2. Multiple sub-item questions of the nationwide survey of pharmacy school students after CPEP.

Q 6-2) Second, what was the p value use for model building? What type of approach was used for variable selection? Backwards elimination? Stepwise? How did you assess goodness of fit?.
Which demographic variables were used in the adjusted model if any? All this information should be provided.

A6-2) We set the P-value to less than 0.05. The variables were selected using a stepwise elimination method. Demographic variables including age, gender, and practice sites were analysed, as these were important factors for the experiential practice in the previous study [23, 24]. Information regarding the goodness of fit has been presented as follows.

Model fit: The F ratio in the ANOVA tests indicates that the statistically significantly independent variables predicted the dependent variables. Therefore, the goodness of fit model was satisfied.

\[ F(10, 635) = 56.210, \quad P < .000 \]

ANOVAA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>65.490</td>
<td>10</td>
<td>6.549</td>
<td>56.210</td>
<td>0.000b</td>
</tr>
<tr>
<td>Residual</td>
<td>73.169</td>
<td>628</td>
<td>0.117</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>138.659</td>
<td>638*</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a Dependent variable: CPEPM outcome.

b Predictors: (constant), (independent variable, IV) plan to do elective APPE at community pharmacy; (IV) stress factor; (IV) age; (IV) satisfaction factor; (IV) gender; (IV) practice site; (IV) helpful to make future career decision; (IV) stress increased during CPEP; (IV) CPEP was performed systematically; (IV) satisfaction.

*Among 645 students, 8 students were excluded as outliers.

Methods (page 5, lines 127~132)

During the statistical analysis, a descriptive analysis was performed to summarize the item responses. Chi-square and t-tests were used to identify association between any differences in the student responses related to demographics and perceptions (positive and negative) and differences in the CPEPM outcome.

To identify the factors affecting the CPEPM outcome competency changes in students after their practical experience, univariate analysis was performed, followed by multivariate linear regression analysis, using statistically significant variables, in addition to the data regarding the gender and practice sites [23, 24]. CPEPM outcome is a dependent variable. The independent variables were demographics (age, gender, practice sites) and perception (CPEP was performed...
systematically; CPEP was helpful in future career decision; stress increased during CPEP; stress factor; satisfaction; satisfaction factor; plan to do elective APPE at community pharmacy). Statistical analysis was calculated using SPSS, version 23 (SPSS Inc., Chicago, IL). Statistical significance was set at $P < 0.05$ in two-tailed tests.

References


Q7) Line 136, can you provide an approximate response rate? What percentage of all 6th year students those 646 represent?

A7) We missed this important part and sincerely appreciate the reviewer’s insightful comment. Based on this comment, we have included the response rate for the number of students who participated and the number of students who met the inclusion criteria in the Results, as follows:

Results (page 5, line 135)

…… Initially, 1,138 students out of a total of 1600 students enrolled in 2017 as 6th grade (response rate (RR): 71.1%) participated in the survey [3]. However, data from 492 students were excluded due to incomplete surveys with missing information. As a result, the data from 646 students (RR: 40.4%, 646/1600) were analysed. ……

References


Q8) Table 1 Remove s from "others", what do you mean by handled? Dispensed? Sold?

A8) As per the reviewer’s comments, we have revised the table as follows:

Others ---> Other
Handled ---> Sold
Results (page 5, line 135)

Table 1. Demographics of the students (n = 646).

handled by the pharmacy

Q9) Line 153. Revise style, consider not starting a sentence with a number.

A9) We have rephrased the sentence as follows:

Results (page 6, line 153)

95% of The percentage of the students who responded affirmatively that CPEP had helped them make future career decisions was 95%.

Q10) Table 2. A large percentage of respondents did not plan to undergo elective APPE in a community pharmacy. This is an interesting finding that merit discussion in the discussion section.

A10) To address this issue, the following text has been added to the revised manuscript:

Discussion (page 11, line 187)

…consistent with the purpose of practical training and will further improve student satisfaction. Even though most of the students were satisfied with CPEP, and despite their self-perception that their capability had improved post-CPEP, most of the students (67.6%) stated that they did not plan to do an elective APPE at a community pharmacy.

Although there are several reasons for this, three mains reasons were discussed in the small group face validation. First, the lack of an elective APPE at a community pharmacy site: experiential practice was implemented recently in South Korea, such that there are not enough preceptors at a community pharmacy who wish to do 15 weeks of elective APPE. Second, the policy of the pharmacy school: several pharmacy schools do not allow for elective APPE at a community pharmacy. Finally, the students’ preference of experience: since most of the students will work in pharmacies after graduation, they tend to pursue elective APPE in areas other than pharmacies that they would otherwise not experience. ….

Q11) Line 175-176 Consider rephrasing this sentence. Suggestions for improvement of students about Community Pharmacy Experiential Practice to the preceptors and school of pharmacy Line 182 Delete "whether"

A11) We have rephrased the sentence as follows, based on the reviewer’s comment:

…consistent with the purpose of practical training and will further improve student satisfaction. Even though most of the students were satisfied with CPEP, and despite their self-perception that their capability had improved post-CPEP, most of the students (67.6%) stated that they did not plan to do an elective APPE at a community pharmacy.

Although there are several reasons for this, three mains reasons were discussed in the small group face validation. First, the lack of an elective APPE at a community pharmacy site: experiential practice was implemented recently in South Korea, such that there are not enough preceptors at a community pharmacy who wish to do 15 weeks of elective APPE. Second, the policy of the pharmacy school: several pharmacy schools do not allow for elective APPE at a community pharmacy. Finally, the students’ preference of experience: since most of the students will work in pharmacies after graduation, they tend to pursue elective APPE in areas other than pharmacies that they would otherwise not experience. ….
Results (page 8, line 178)

Student Suggestions for improvement of students regarding the in schools and preceptors in Community Pharmacy Experiential Practice to the preceptors and school of pharmacy (n = 646).

Results (page 8, line 182)

Students were asked whether they were satisfied with CPEP, and 78.5% of them responded positively……..

Q12) Table 3. Please add a footnote that explain where the positive and negative percentages are coming from. Use capital letter consistently.

A12) We apologize for any confusion caused by Table 3. We have added a footnote to explain where the positive and negative percentages. An explanation has also been added to the Results section of the revised manuscript, as follows:

Results (page 8, line 184)

…Responding to 17 questions, the majority of students stated that their ability improved after the experiential practice, except in response to the item “optimizing the medication use system (48.6%).” Positive responses included “agree” or “strongly agree,” while negative responses included “strongly disagree” or “disagree”. The item with the most positive responses was “realization of the importance of improving …………….

Table 3. Capability improvement after community pharmacy practical training evaluated via CPEPM outcomes (n = 646).

Q13) Line 154 again, what was the dependent variable? How was it measure? How model was selected? Independent variables selection? Model fit statistics?

A13) We thought this question was similar to Question 6. The dependent variable is the CPEPM outcome, which is the mean sum of 17 sub-items. The highest adjusted R2 model was selected in order to explain the CPEPM outcome with 10 independent variables, while controlling the rest of the independent variables. Multivariate linear regression was chosen since it satisfies the assumption of multivariate regression. In addition, multivariate linear regression can be used to analyse the changes in the continuous variable CPEPM outcomes based on the effects of 10 independent variables (adjusted R2 = 47.2%). Independent variables were selected using a stepwise elimination strategy. Model fit was also satisfied as F(10, 635)= 56.210, P&lt; .000

Q14) I'm confused about the 95% CI and the p values. I would expect to be related. But for some items the CI crosses zero yet the p value is significant. Additionally, some of the beta coefficients estimates shown are outside the 95%CI. Why? This section needs major revisions.
A14) Sincere apologies for the error. We made a mistake in data mining and believe the asterisks were carried over from the copy and pasting of the tables. The errors have been corrected accordingly.

We have re-analysed the regression model modified based on the reviewers’ helpful comments. As such, we would like to note that many variable definitions have been changed. The satisfaction factor and stress factor, which are multi-item questions, were also applied to the above method. The rest of the independent variables, which were initially dichotomous, were set as follows, except gender: strongly disagree = 1, disagree = 2, agree = 3, and strongly agree = 4. In this table, the dependent variable is the CPEPM outcome. The independent variables are shown in Table 4. Statistically significant (P < 0.05) variables have been denoted by an asterisk (*). All variables shown in the revised version of Table 4 have been changed (only statistically significant variables were shown in Table 4 of the original manuscript). As a result, the result has also been changed. Table 4 has been revised as follows:

Table 4. Multivariate regression analysis comparing independent variables based on CPEPM outcomes [please see 'supplementary material' to see the exact response]

Results (page 10, line 158)

The “stress factors”, “Age” was considered a negative variable for the outcome.