Pilot Evaluation of a Preceptor Development Program for Continuing Health Professional Education Programs in Qatar the “Practice Educators’ Academy”

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Background

• Experiential education is a fundamental component of health profession education programs (1)
• Clinical preceptors are indispensable in the experiential training of health professional students; however, the vast majority of preceptors do not possess formal training as educators (2)
• The “Practice Educators’ Academy” Program is an innovative educational intervention that was informed by an empirical evidence in the form of a preceptor-focused needs assessment (3)
• The “Practice Educators’ Academy” aims to develop the teaching knowledge, skills, and attitudes of multi-disciplinary healthcare professionals who serve as clinical preceptors for students at Qatar University (QU)-Health Cluster (HC) (Colleges of Pharmacy (CPH), Medicines (CMED), and Health Sciences (CHS))

Aims

Primary aim • To evaluate the program’s impact on self-efficacy and knowledge of multi-disciplinary preceptors who precept students across the HC at QU.

Secondary aim • To assess the preceptors’ satisfaction with the program’s comprehensiveness, appropriateness and relevance.

Methods

• The program’s impact was assessed utilizing a pretest-posttest (before-after) pilot intervention study on a single group of preceptors
• Preceptor self-efficacy was assessed using a Preceptor Self-Efficacy Questionnaire (PSEQ) which is a validated 21 item, 4-point Likert-scale questionnaire
• Preceptor knowledge was assessed through a 25 item multiple choice question (MCQ) test
• Preceptor satisfaction with the course was assessed through a 5-point Likert-scale questionnaire with open comments

Results

1st Primary outcome: Self-efficacy

• A significant improvement in preceptors’ self-efficacy median score was demonstrated after the program

Table 1: Overall change in self-efficacy scores of participants after attending the “Practice Educators Academy”

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>PSEQ median score</th>
<th>IQR</th>
<th>Z value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td>50</td>
<td>3.33</td>
<td>0.93</td>
<td>-3.33</td>
<td>0.001</td>
</tr>
<tr>
<td>Posttest</td>
<td>50</td>
<td>3.57</td>
<td>0.89</td>
<td></td>
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</tbody>
</table>

• Profession: Dieticians showed higher self-efficacy score than physicians at the posttest assessment

• Years as a preceptor: Preceptors who had more than 20 years of preceptorship experience showed higher self-efficacy score than preceptors with 1-9 years of experience at the pretest assessment

• 12 out of 21 self-efficacy questionnaire items showed a statistical difference between pretest and posttest assessments

2nd Primary outcome: Knowledge

• A significant improvement in preceptors’ knowledge mean score was demonstrated after attending the program

Table 2: Overall change in knowledge score of participants after attending the “Practice Educators Academy”

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Knowledge score Mean (SD)</th>
<th>Mean difference (SD)</th>
<th>95% CI</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td>26</td>
<td>10.15 (5.17)</td>
<td>-5.50 (5.26)</td>
<td>Lower: -7.626</td>
<td>Upper: -3.374</td>
</tr>
</tbody>
</table>

• Number of students: preceptors who precept more than 20 students per year showed higher knowledge score than preceptors who precept 1-10 students at the pretest assessment

• 11 out of 25 knowledge test items showed a statistical difference between pretest and posttest assessments

Secondary outcome: Satisfaction

Examples of positive feedback provided by participants

“This is a world class workshop. I have finished 2 years in UK and acquired higher certificate in education, but I still found this extremely helpful. I learnt so much”

“Some activities can be given to participants as assignments to practice.”

Examples of suggestions for program improvement

“To teach each module in a separate time; like a day for assessment and evaluation, and another day for teaching methods.”

“To be physically attended is better.”

Conclusions

• The program appears to be effective educational intervention to improve preceptors educational knowledge and skills, as demonstrated through a favorable impact on preceptor self-efficacy, knowledge, and satisfaction

• The inter-disciplinary nature of this program allowed for preceptors of different professional backgrounds to share their knowledge and interact

Future Directions

• Strong preceptor training results in improved student training (4), which has significant long term effects on patient care, health outcomes, and organizational effectiveness.

• The assessment of these downstream effects was outside the scope of this study but should be considered when implementing such a program in the future research

References


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