Building Psychological Competence among undergraduate nursing students in clinical education

Presenter: Leon Wong
Principal investigator: Dr. Angie Lam

Co-I: Ms Chan K. Y., Mr Wong K. H., Ms Yiu Y. M., Ms Cheuk Y. Y., Dr Chan M. K., Dr Lee J. J., Dr. Pun W. M., Dr Wong P. Y., Dr Lam K. K. & Dr Wong Y. H

Conducted by School of nursing with collaborating with student wellness team of Li Ka Shing Faculty of Medicine in HKU, Centre on Behavioral health within the Faculty of Social Science in HKU and School of Nursing in PolyU.

TDG Award Project (Project no. 794), and Faculty matched fund
Contents

01 Introduction: Background & Objective
02 Hypotheses
03 Methodology
04 Expected Results
05 Implication: Significance and impact on medical education
06 Conclusion
Introduction
Introduction

High levels of stress, anxiety & depression arising from clinical placement in HK nursing students especially junior students (Cheung et al., 2016).

1. Fears of Unknown events
2. Making mistakes
3. Handling Medical Equipment
4. Communication with staff and patients
5. Firstly perform nursing skills on the real patient

(Pelwati, McKenna, & Plummer, 2012; Pulido-Martos, Augusto-Landa,& Lopez-Zafra, 2012; Rafati et al., 2017)

- Poor Academic & Clinical Performance
- Psychological Disturbance
- Immediate care from mental health professionals
Introduction: Background

**Mindfulness**

- Enhances the capacity for psychological well-being of healthcare students (Delaney, 2018)
Introduction: Background

Peer Support in clinical practice

• Reduce’ perceived stress
• Increase sense of self-efficacy and confidence
• Mitigate challenge of clinical practice
• Provide a Role model to enhance clinical knowledge, support and feedback

Emotional identification
Safety environment to share and express
Mutual Support & Learning
Mentoring & guiding by leader

(Raymond & Sheppard, 2017; Carey, Kent & Latour, 2018)

(Mead, Hilton and Curtis, 2001)
Introduction: Objectives

• Develop an Online Mindfulness-based Pre-Clinical Practicum Program (iMBCP) to develop students’ psychological competency in clinical learning →
  • Reduce the mood disturbance
  • Reduce Burnout
  • Increase Perceived Self-efficacy
Methodology
Research Design

A mixed method, quasi-experimental study

Check Inclusion Criteria
- Year 2 & 3 undergraduate nursing students,
- aged 18 or above

Baseline assessment

Intervention Group (n = 150)
HKU nursing students (iMBCP)

Post assessment

Control Group (n = 150)
PolyU nursing students

Post assessment

Clinical Practicum

Post Clinical Practicum Assessment
Intervention: iMBCP

1. Online Self-Empowerment Journey
2. Online Student-led Peer Support Group

Online Mindfulness Practice
Clinical Tips
Four bi-weekly online discussion
Subsequential online Support
Intervention: Online Self-Empowerment Journey

Mindfulness mobile app developed by HKU Jockey Club PandA in Social Science Faculty

- Practice mindfulness Online
- Expected to practice at least 5 minutes per day
Clinical Tips (Video Format)

- **Earning Features** (released weekly if practice > 35 mins)
- Mindfulness Coping Skills
- Clinical practice experience sharing
  - 6 themes: knowledge and understanding, willingness, professionalism, communication & interaction, personal attributes, and skills preparation (Chipchase et al., 2012)
  - Aids preparedness for clinical learning
Intervention: Peer Support Group

- Peer leader - 4 & 5 HKU Nursing students (1:10)

4 Bi-Weekly Online Discussion (~1 hr each)
- Experience sharing related to Mindfulness Practice
- Integration of mindful coping into daily and clinical practice.
- Sharing on clinical experience and clinical preparation,
- Prepare future plan for clinical preparation and continuous mindfulness

Monthly Online Support
- Keep track the progress, providing support for clinical learning, promote habit of regular practice
## iMBCP Program

<table>
<thead>
<tr>
<th></th>
<th>1st Month</th>
<th>2nd Month</th>
<th>3rd Month to the end of the clinical Practicum</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Week</td>
<td>2nd Week</td>
<td>3rd Week</td>
<td>4th Week</td>
</tr>
<tr>
<td>(22/2-28/2)</td>
<td>(1/3-7/3)</td>
<td>(8/3-14/3)</td>
<td>(15/2-21/3)</td>
</tr>
</tbody>
</table>

### Activities to Year 2 & Year 3 students

<table>
<thead>
<tr>
<th>Peer Leader’s Duty</th>
<th>Forming Peer Support Group (15/2 - 21/2)</th>
<th>Zoom Group Meeting</th>
<th>Zoom Group Meeting</th>
<th>Zoom Group Meeting</th>
<th>Zoom Group Meeting</th>
<th>Zoom Group Meeting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer Leader Training (6/2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Monthly Peer leader Meeting</td>
</tr>
</tbody>
</table>

### Self-Practice Mindfulness

- Ongoing mindfulness self-practice & Monthly WhatsApp Support
Methodology (Measurement)

Mood symptoms: Depression Anxiety Stress Scale (DASS-21)
(Total score > cut-off point → referred to the HKU Student Wellbeing Team)

Burnout: Oldenburg Burnout Inventory - Student version (OLBI-S)

Self-Efficacy: General Self-Efficacy Scale (GSES)

Technology acceptance: Technology acceptance model (TAM) base response questionnaire
Methodology (Statistical Analyses)

<table>
<thead>
<tr>
<th>Quantitative Data</th>
<th>Qualitative Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>• MANOVA and repeated-measures ANOVA: within-group and between-group difference</td>
<td>• Thematic analysis</td>
</tr>
<tr>
<td>• Regression analysis: the relationships among perceived usefulness, perceived</td>
<td>• Explore the participants’ experience and perception towards the intervention</td>
</tr>
<tr>
<td>ease of use, attitude to use, and intention to use.</td>
<td>• Face-to-face, focused group, semi-structured interviews (audio-tapped)</td>
</tr>
<tr>
<td></td>
<td>• n = 40 - 60 (3-5 each group)</td>
</tr>
</tbody>
</table>
Expected Results
Expected Results

1. Decreased in levels of depression, anxiety and stress after receiving iMBCP compared with control group.

2. Decreased in burnout after receiving iMBCP compared with control group.

3. Increased perceived self-efficacy after receiving iMBCP compared with control group.

4. The benefits on mood symptoms, burnout and perceived self-efficacy will maintain at post clinical practicum assessment.
Implication:

Significance and impact on medical education
Implication: Significance and impact on medical education

An innovation implication in medical education by combining

1. Online mindfulness training (more convenient & easier to learn mindfulness)
2. Clinical learning
3. Peer support group (support and assist transition into clinical learning)

May reduce mood symptoms and burnout related to clinical learning.
Potential to apply this pedagogy in other healthcare students who have clinical learning
Conclusion
iMBCP Program combines an online mindfulness training, clinical learning and peer support group.

May promote mental wellbeing and better clinical learning in nursing students.

May further apply to healthcare students who have a clinical learning.
Reference


Thank You