ISRCTN13821133 https://doi.org/10.1186/ISRCTN13821133

Effects of mindfulness-based interventions on mindfulness and perceived stress for nursing students before clinical practicum

Submission date
19/05/2024

Recruitment status
No longer recruiting

Registration date
24/05/2024

Overall study status
Completed

Last Edited
17/07/2024

Condition category
Mental and Behavioural Disorders

[ ] Prospectively registered
[ ] Protocol
[ ] Statistical analysis plan
[X] Results
[ ] Individual participant data

Plain English summary of protocol

Background and study aims
University nursing students have been shown to experience psychological stress. A mindfulness-based intervention (MBI) may be a helpful tool for stress management. This study aims to look at the effects of an MBI on improving mindfulness and reducing perceived stress in nursing students.

Who can participate?
Adult third-year nursing students aged between 18 and 18.5 years old enrolled in the 5-year nursing program at a university, in southern Taiwan.

What does the study involve?
The intervention group participated in an 8-week mindfulness awareness course, which included 50 minutes of training and practice in mindfulness meditation techniques each week. Over the same eight weeks, the control group watched a 50-minute film each week.

What are the possible benefits and risks of participating?
Benefits: enhancing mindfulness and reducing stress. No risks.

Where is the study run from?
Meiho University

When is the study starting and how long is it expected to run for?
March 2021 and February 2022

Who is funding the study?
Investigator initiated and funded

Who is the main contact?
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Scientific

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Study information

Scientific Title
A mindfulness-based intervention improves perceived stress and mindfulness in University Nursing Students: a quasi-experimental study

Study objectives
This study examines the effects of a mindfulness-based intervention on improving mindfulness and reducing perceived stress in nursing students.

After receiving an 8-week mindfulness-based intervention, nursing students in the experimental group will increase their mindfulness and decrease their perceived-stress over time.

Ethics approval required
Ethics approval required

Ethics approval(s)
Approved 15/07/2021, Antai Medical Care Cooperation Antai- Tian-Sheng memorial Hospital Institutional Review Board Chairman (No.210, Sec. 1, Jhongjheng Rd.,Tong Gang City, Pingtung City, 928, Taiwan; +886 08-8329966#5529; tsmhirb2018@gmail.com), ref: 21-045-B

Primary study design
Interventional

Study design
Longitudinal cluster-randomized quasiexperimental study

Study type(s)
Other

Health condition(s) or problem(s) studied
Workplace perceived stress and mindfulness

Interventions
This study has a longitudinal quasiexperimental design, with repeated measures performed with a 6-month follow-up period to investigate the effects of an 8-week mindfulness awareness course on the mindfulness and perceived stress of nursing students before their clinical practice. Cluster randomization was employed to assign two classes to the experimental and control groups, mitigating the risk of contamination, as participants within clusters are likely to share experiences and similar learning environments.

Participants in the experimental group will take an 8-week mindfulness awareness course that includes training and practice in mindfulness meditation techniques for 50 minutes/week. Those in the control group will watch a 50-minute film once a week for 8 weeks. The participants are taught by the first author who was trained to use mindfulness meditation techniques such as the body scan, a 30-minute exercise in which the individual, while sitting in a relaxed position with the eyes closed, sequentially directs his or her attention to specific areas of the body and carefully observes how each area feels. Participants were instructed in meditation, with the

direction of their attention to the sensations of breathing, tension, and relaxation. They will also learn an exercise in which they focus on the feeling of rolling two wooden balls in the palm of the dominant hand for 15 minutes, repeating the movement dozens of times. They will be taught to practice mindfulness skills in daily activities such as walking, standing, and eating. The participants are asked to practice the skills and techniques for 45 minutes/day, with a final 5-minute period to return to the perception of all bodily sensations. The total duration of observation and the total duration of follow-up.

Outcome measure assessments
Mindful Attention Awareness Scale (MAAS): The 15-item MAAS will be used to determine the degree of individuals' mindfulness. Respondents score items about inattentive states on a Likert scale ranging from 1 (almost always) to 6 (almost never). Perceived Stress Scale (PSS): The 14-item PSS will be used to measure the level of unpredictable, uncontrollable and overloaded stress experienced by the respondents in the past month. Responses are structured by a 5-point Likert scale (0 = never, 4 = always).

Intervention Type
Other

Primary outcome(s)
Mindfulness awareness measured using a Mindful Attention Awareness Scale (MAAS) Scale and the Perceived Stress Scale (PSS) before the intervention (T0), immediately following the intervention (T1), two months after the intervention (T2), and six months after the intervention (T3)

Key secondary outcome(s)
There are no secondary outcome measures

Completion date
28/02/2022

Eligibility

Key inclusion criteria
1. Third-year nursing students enrolled in the 5-year nursing program at a University, in Southern Taiwan
2. Aged between 18 to 18.5 years old

Participant type(s)
Learner/student

Healthy volunteers allowed
No

Age group
Adult

Lower age limit
18 Years

Upper age limit
18.5 Years

Sex
All

Total final enrolment
94

Key exclusion criteria
Not giving consent to participate in the study

Date of first enrolment
16/07/2021

Date of final enrolment
17/07/2021

Locations

Countries of recruitment
Taiwan

Study participating centre
Meiho University
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Sponsor information

Organisation
Meiho University

ROR
https://ror.org/04cjpzj07

Funder(s)

Funder type
Other

Funder Name
Investigator initiated and funded

Results and Publications

Individual participant data (IPD) sharing plan
The datasets generated during and/or analysed during the current study are not expected to be made available because of potential participant identification.

IPD sharing plan summary
Not expected to be made available

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article		08/06/2024	17/07/2024	Yes	No