DETERMINING EVIDENCE-BASED PSYCHOEDUCATIONAL INTERVENTIONS TO TACKLE NURSE BURNOUT USING THE MODIFIED DELPHI METHOD

Pangie AB[1*], Lee KY[1], Norehan J[1], Nor Haniza Z[1], Ili AS[1], Siti Zubaidah S[1], Izzuan Khirman A[1], Nursyahda Z[1]

[1]Institute for Health Management, National Institutes of Health, Ministry of Health Malaysia

*Corresponding author: Pangie Anak Bakit, Institute for Health Management, Blok B1, National Institutes of Health Complex, Jalan Setia Murni U13/52, Seksyen U13, Setia Alam, 40170 Shah Alam, Selangor. Email: pangiebakit@moh.gov.my

Introduction
Nurse burnout, characterised by emotional exhaustion, depersonalisation, and decreased personal accomplishment, can compromise mental wellbeing of nurses, consequently impacts their quality of care. In Malaysia, one in four (24.4%) of MOH nurses experienced burnout. Psychoeducational interventions are effective in enhancing coping and resilience among nurses experiencing work stressors. However, identifying the most effective interventions which are contextually relevant and ideal to the Malaysian healthcare setting remains challenging. This study aimed to identify psychoeducational burnout interventions suitable for nurses in Malaysian public hospitals using the Modified Delphi method.

Methods
A three-step Modified Delphi process was conducted to ensure systematic consensus-building. Compared to traditional Delphi method, which is fully anonymous and relies on remote surveys, the Modified Delphi approach incorporated direct expert interaction and structured discussions, enabling dynamic and context-sensitive consensus building. In Step 1, subject matter experts (SMEs) comprising psychiatrists, counsellors, and nurse supervisors conducted qualitative assessment of 142 psychoeducational activities identified from 27 studies in a previous systematic review. They deliberated via an iterative process of feedback on whether the activities should be amended to improve readability, combined to reduce redundancy, or removed due to non-relevance. In Step 2, multidisciplinary panellists consisting of 146 nurses, psychologists, psychiatrists, academicians, and occupational health experts rated the cleaned list of activities on a five-point Likert scale from 5: 'very high priority' to 1: 'very low priority'. Activities were endorsed when ≥80% panellists rated activities as 4 or 5. Activities with 70-79% endorsement were deemed as 'no-consensus' and re-rated while those with <70% panellists giving a score 4 or 5 were rejected. Three rounds of online survey were undertaken via REDCap (web-based survey tool). In Step 3, a consensus meeting involving SMEs and stakeholders deliberated on no-consensus items to generate the final list of psychoeducation activities.

Results
From 142 activities covering 19 types of psychoeducation, the experts shortlisted 44 potential activities. The subsequent three rounds of online survey achieved highly satisfactory response rates of 70.5%, 91.3%, and 96.8%. Of the 45 evaluated activities (one was newly added after Round 1), 36 achieved final consensus. Three no-consensus items by the end of Round 3 were deliberated in the Step 3 consensus meeting, whereby all were accepted. Table 1 lists the shortlisted 39 psychoeducational activities, encompassing mindfulness and relaxation, cognitive-behavioural strategies, coping and resilience-building skills, interpersonal skills, social support and self-care practices.

Discussion
This study identified 39 psychoeducational activities for nurse burnout intervention through a structured Modified Delphi process, aligning scientific evidence with practical feasibility by incorporating perspectives from multidisciplinary experts and frontline nurses. These findings will inform the next phase of module development and be evaluated for real-world effectiveness before full implementation in public hospitals.

Keywords: Burnout, nurses, psychoeducational activities, intervention, Modified Delphi

Table 1. List of 39 Endorsed Psychoeducational Activities through Modified Delphi Processes for Nurse Burnout Intervention

Types	Psychoeducational Activities
Mindfulness Techniques (3)	• Non-judgemental awareness • Thought observation • Mindfulness listening
Relaxation Techniques (3)	• Deep breathing exercise • Progressive muscle relaxation • Self-massage
Cognitive-Behavioural Therapy (CBT) Techniques (2)	• Identifying unhelpful thoughts • Cognitive reframing of unhelpful thoughts
Acceptance & Commitment Therapy (ACT) (9)	• Principles such as accepting one's emotions & being present • Emotional regulation: Recognise the impermanence of emotions • Emotional regulation: Acceptance & tolerance of emotion responses • Emotional skills management: Skills to cope with unpleasant emotions • Emotional skills management: Modification of attention • Self-compassion skills: Self-validation & identify & combat self-criticism • Choosing a valued direction • Taking action aligned with values • Psychological flexibility training
Coping Skills (1)	• Coping Skills
Gratitude Exercise (1)	• Positive reflections
Interpersonal Skills (4)	• Interpersonal skills • Developing empathy skills • Developing effective communication skills • Conflict resolution approaches
Social Support (2)	• Social support groups • Connections & support through interaction with support networks
Reflective Practice (1)	• Establishing reflective practice
Building Resilience (6)	• Introduction to resilience & its components • Identifying personal capabilities • Teaching anxiety coping skills • Anger management skills • Efficacy elevation • Empowerment

Self-Care (6)	• Promoting self-care practices • Self-care & revitalisation through exercise • Self-care & revitalisation through appropriate dietary regimens • Sleep formula: Unwinding routines before bedtime • Sleep formula: Promoting sleep according to homeostatic & circadian factors • Sleep formula: Cognitive, physical, & emotional fatigue management
Spiritual Support (1)	• Religious/spiritual support