Workload management and well-being during external crises among nursing staff – a synthesis of research and experience-based evidence

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Background and aim

- The well-being of nursing staff is affected by external crises, such as pandemics. This is largely due to increases in workload[1,2,3].

- However, less is known about strategies to manage nurses' workload in crises and their association with nurses' well-being.

- To fill this gap, we conducted a mixed methods study to investigate the association between workload management strategies and nurses' well-being in the context of external crisis.

[1]Dragioti et al. (2022). Int J Nurs Stud, 131, 104272. [2]Hill et al. (2022). J Adv Nurs, 78(6), 1551-1573. [3]Pappa et al. (2020). Brain Behav Immun, 88, 901-907.

Materials and methods

- Research-based evidence: an umbrella review

  - Databases: OVID Medline, APA PsycInfo, CINAHL, Web of Science and the Cochrane Library.

  - Search period: 1/2013 – 6/2023

  - Examples of keywords: nurses, crisis, emergencies, pandemic, intervention, management, well-being, recovery

  - Review process by PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses)

- Experiential evidence: written preliminary task, semi-structured group interview, workshops

  - 10 representatives of a well-being services county (11 municipalities)

Results – quantitative experiential evidence (workshop materials)

Strategies based on workplace accommodation	Feasibility	Effectiveness
Management, leadership, and communication	3.0	2.9
Working hour arrangements	2.8	3.0
Clearly defined tasks, roles, and responsibilites	2.9	2.9
Instructions and check-lists	2.8	2.9
Patient flow management plan	2.6	2.9
Rest break arrangements	2.5	2.9
Optimal use of human resources	2.2	2.4
Working practices to prevent physical overload	1.4	2.5

Feasibility scale: *1– weak, 2 – moderate, 3 – good*
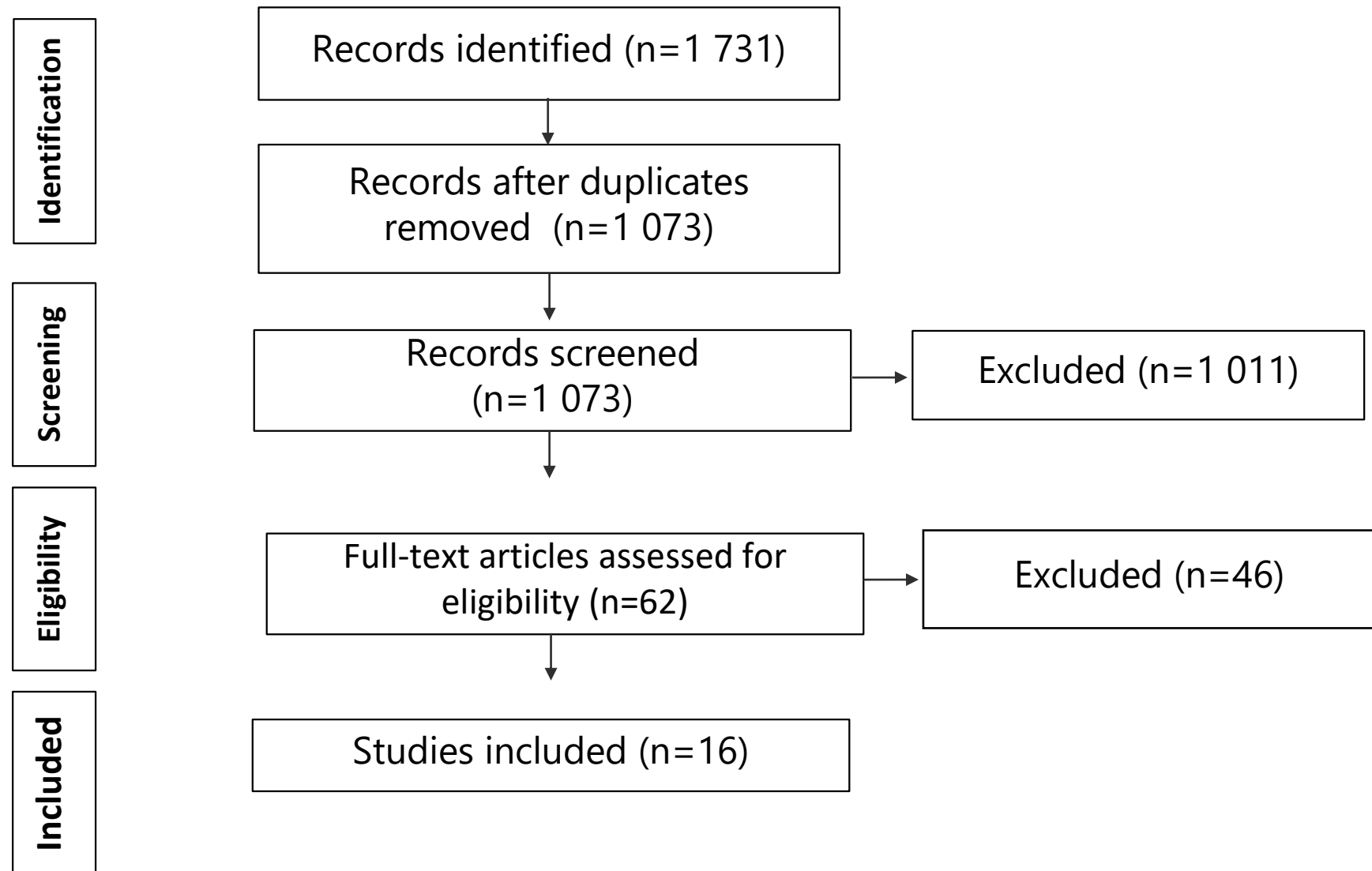Effectiveness scale: *0 – zero, 1 – minor, 2 – moderate, 3 – strong*

Results – quantitative experiential evidence (workshop materials)

Strategies based on strenghtening employees' resources	Feasibility	Effectiveness
<u>Organisational and collegial support</u>	<u>2.5</u>	<u>2.7</u>
<u>Crisis training</u>	<u>2.5</u>	<u>2.6</u>
Maintaining job skills and fitness for duty	2.3	2.8
Stress management training	2.2	2.2

Feasibility scale: *1– weak, 2 – moderate, 3 – good*
Effectiveness scale: *0 – zero, 1 – minor, 2 – moderate, 3 – strong*

PRISMA flow chart of the umbrella review

Identification

Records identified (n=1 731)

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Records after duplicates removed (n=1 073)

Screening

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Records screened (n=1 073) → Excluded (n=1 011)

Eligibility

↓

Full-text articles assessed for eligibility (n=62) → Excluded (n=46)

Included

↓

Studies included (n=16)

Results – research evidence (1)

Publication	Crisis	Workload management strategy
De Brier 2020	COVID-19 pandemic	Organisational and collegial support
Labrague 2021	COVID-19 pandemic	Organisational and collegial support
Sirois 2021	Pandemics / epidemics	Organisational and collegial support
Poon 2022	COVID-19 pandemic	Organisational and collegial support
Temeng 2024	Pandemics	Organisational and collegial support, training
Tolksdorf 2022	COVID-19 pandemic	Organisational and collegial support, training
Lee 2021	Pandemics	Organisational and collegial support, training
Lam 2018	Epidemic events	Organisational and collegial support, training
Rodriguez 2022	All types of disasters	Organisational and collegial support, training
Ma 2021	Military operations	Organisational and collegial support, training
Curtin 2022	Pandemics	Organisational and collegial support, mental health support, training
Ding 2022	COVID-19 pandemic	Mental health support
Ottisova 2022	Disasters	Mental health support
Schoultz 2022	e.g., COVID-19 pandemic	Mental health support
Boone 2023	COVID-19 pandemic	Mental health support, training
Labrague 2018	Disasters	Training

De Brier et al. PLoS One, 2020, 15(12), e0244052; **Labrague** J Nurs Manag, 2021, 29(7), 1893-1905; **Sirois** et al. Front Psychiatry, 2020 11, 589545; **Temeng** et al. J Clin Nurs, 2024, 33(1), 242-254; **Tolksdorf** et al. BMC Nurs, 2022, 21(1), 174; **Poon** et al. Hum Resour Health, 2022, 20(1), 70; **Lee** et al. Int J Environ Res Public Health, 2021, 18(13); **Curtin** et al. Clin Psychol Rev, 2022, 95, 102173; **Lam** et al. J Clin Nurs, 2018, 27(7-8), e1244-e1255; **Rodriguez-Arrastia** et al. J Nurs Manag, 2022, 30(1), 298-309; **Ding** et al. Ther Adv Respir Dis, 2022, 16, 17534666221130215; **Boone** et al. Worldviews Evid Based Nurs, 2023, 20(2), 107-115; **Schoultz** et al. BMC Nurs, 2022, 21(1), 96; **Ottisova** et al. J Trauma Stress, 2022, 35(2), 746-758; **Labrague** et al. Int Nurs Rev, 2018, 65(1), 41-53; **Ma** et al. J Nurs Manag, 2021, 29(5), 869-877.

Results – research evidence (2)

Workload management strategy	Evidence	Type of evidence
Strategies based on workplace accommodation		
Leadership and communication	Yes*	Non-causal
Working hour arrangements	Not found	
Clearly defined tasks, roles, and responsibilities	Not found	
Instructions and check-lists	Not found	
Patient flow management plan	Not found	
Rest break arrangements	Not found	
Optimal use of human resources	Not found	
Working practices to prevent physical overload	Not found	
Strategies based on strengthening employees' resources		
Organisational and collegial support	Yes**	Non-causal
Crisis training	Yes***	Non-causal
Maintaining job skills and fitness for duty	Not found	
Mental health support	Yes****	Non-causal and causal

* Boone 2023; Curtin 2022; De Brier 2020; Labrague 2021; Lam 2018; Ma 2021; Poon 2022; Rodriguez 2022; Sirois 2020; Tolksdorf 2022
** Boone 2023; Curtin 2022; De Brier 2020; Labrague 2021; Poon 2022; Lam 2018; Lee 2021; Temeng 2024; Tolksdorf 2022
**** Boone 2023; Curtin 2022; Labrague 2018; Rodriguez 2022; Temeng 2024
****Boone 2023; Curtin 2022; Ding 2022; Ottisova 2022; Tolksdorf 2022

Results – components of employee support

Organisational and collegial support*

Communication and information
1. Effective communication and provision of useful information

Well-being and preparedness
1. Implementation of well-being programs
2. Access to mental health services
3. Implementation of training

Working conditions
1. Provision of PPE and other supplies
2. Adequate staffing
3. Provision of adequate working conditions
4. Provision of insurance and compensation

Leadership and colleagues
1. Supportive leadership
2. Colleague support

Mental health support**

Primary prevention
1. Well-being programs and centers
2. Pre-traumatic vaccination
3. Mediation and breathing -based techniques

Secondary prevention
1. Eye movement desensitization and reprocessing
2. Emotional freedom techniques
3. Critical Incident Stress Debriefing (modified version)
4. Professional mental health counselling / consultation
5. Professional mental health support incorporated into an organisational package of care
6. Cognitive Behavioral Therapy

**Boone et al. 2023; Curtin et al. 2022; Ding et al. 2022; Ottisova et al. 2022

*Boone et al. 2023; Curtin et al. 2022; De Brier et al. 2020; Labrague 2021; Lam et al. 2018; Lee et al. 2021; Ma et al. 2021; Poon et al. 2022; Rodriguez-Arrastia et al. 2022; Sirois & Owens 2020; Temeng et al. 2024; Tolksdorf et al. 2022

Conclusions

Both experiential and research evidence supports the use of the following strategies:

- Organisational and collegial support, including supportive leadership and useful communication

- Primary and secondary prevention mental health support

- Crisis training in advance

Experiential evidence especially supports the use of the following workplace accommodation strategies:

- Working hour and rest break arrangements

- Clearly defined tasks, roles, and responsibilities

- Instructions and checklists

- Patient flow management plan

Overall, the workplace needs to be <u>proactive</u> in using workload management strategies to support employee well-being in a crisis.

One of the most important proactive measures is to <u>document</u> which strategies will be used in a crisis and how to prepare for their use.

**Finnish Institute of
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Thank you!

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