

Best Evidence Summaries of Topics in Mental Healthcare

BEST *in* **MH** *clinical question-answering service*

Question

“For staff on inpatient wards for people with dementia, how effective are staff wellbeing interventions for improving staff wellbeing, the wellbeing of service-users, and/or the quality of service-user care?”

Clarification of question using PICO structure

Patients: Staff on inpatient wards
Intervention: Staff wellbeing interventions
Comparator: Any
Outcome: Staff wellbeing, wellbeing of service-users, and/or the quality of service-user care

Clinical and research implications

Limited evidence suggest that some staff well-being interventions may be effective at improving staff well-being. The evidence for any single intervention is weak – mindfulness based stress reduction is the only intervention to show beneficial effects in more than one study. Other interventions were complex, varied between studies and may be difficult to replicate. Potentially effective interventions include therapeutic programmes targeting either patients or caregivers, ergonomic and psychosocial training, dementia care mapping, “snoezelen” (not described), and a creative expression programme in dementia care. None of the identified studies assessed the wellbeing of service-users or the quality of service-user care. The identified systematic review and RCT had some methodological limitations, in particular there is concern that the review may have overemphasised the beneficial effects of the interventions. Studies were mainly of short duration (<6 months) evidence future studies should consider whether effects are maintained longer term.

What does the evidence say?

Number of included studies/reviews (number of participants)

One systematic review (SR) of sixteen studies (2253 Participants) including ten randomised controlled trials (RCTs) and one additional small short term RCT (33 participants) were identified. A variety of interventions were evaluated. These included systematic pain assessment, various therapeutic programmes targeting either patients or caregivers, ergonomic and psychosocial training, dementia care mapping, “snoezelen” (not described), creative expression programme in dementia care. The systematic review was restricted to studies conducted in geriatric care settings with many of the interventions specifically targeting staff involved in dementia care.

Main Findings

In the SR, seven studies (3 RCTs) found a reduction in staff burnout: two studies with a work-directed (systematic pain assessment and a therapeutic programme of exercise and activity for patients with dementia), two with a person-directed (communication training in dealing with individuals suffering from dementia and with colleagues and brief mindfulness based stress reduction) and three with a combined approach (training in person-centred care, dementia care mapping and “snoezelen”). Five studies showing a beneficial effect were short term (<6 months) in duration; the two longer term studies were or work-directed and combined interventions.

In the RCT, participants in the mindfulness based stress reduction group showed significant greater improvements compared to control for the following components of the symptom checklist 90-revised: obsessive compulsive (MD -0.33, 95% CI -0.61, -0.06), anxiety (MD -0.26, 95% CI -0.52, -0.01), phobic anxiety (MD -0.06, 95% CI -0.1, -0.01), psychoticism (MD -0.19, 95% CI -0.32, -0.06), global severity index (MD -0.26, -0.48, -0.05) and positive symptom distress index (MD -0.28, 95% CI -0.48, -0.07). There were no differences between treatment groups for somatization, interpersonal sensitivity, depression, hostility, paranoid ideation, positive symptom total or on the caring efficacy scale.

Authors Conclusions

The systematic review concluded that work-directed and combined interventions are able to achieve beneficial longer-term effects on staff burnout. Person-directed interventions achieve short-term results in reducing staff burnout. However, the evidence is limited. The RCT concluded that results

support preliminary effectiveness of a 4-week mindfulness based stress reduction in reducing self-reported stress symptoms among nursing leaders.

Reliability of conclusions/Strength of evidence

Both the systematic review and the additional RCT were judged at high risk of bias. The systematic review restricted the searches to studies reported after 2000, did not consider the quality of the included studies and did not report sufficient numerical results in the synthesis. In particular, only results were reported for outcomes where statistically significant differences were found between groups and it was unclear whether multiple other outcomes (or subscales) had also been assessed. Relevant studies may therefore have been missed, the reliability of the included studies is unclear, and the results presented overemphasise beneficial effects. The primary study did not appear to have blinded study participants or personal and no details were provided on whether outcome assessors were blinded or whether allocation was concealed.

What do guidelines say?

Neither National Institute for Health and Care Excellence (NICE) nor Scottish Intercollegiate Guidelines Network (SIGN) guidelines comment upon the use of wellbeing interventions for staff working on inpatient wards.

Date question received: 09/12/2014
Date searches conducted: 31/12/2014
Date answer completed: 29/01/2015

References

SRs

Westermann, C., Kozak, A., Harling, M., & Nienhaus, A. (2014). Burnout intervention studies for inpatient elderly care nursing staff: Systematic literature review. *International Journal of Nursing Studies*, 51(1), 63-71.

RCTs

Pipe, T. B., Bortz, J. J., Dueck, A., Pendergast, D., Buchda, V., & Summers, J. (2009). Nurse leader mindfulness meditation program for stress management: A randomized controlled trial. *Journal of Nursing Administration*, 39(3), 130-137.

Results

Systematic Reviews

Author (year)	Search Date	Inclusion criteria	Number of included studies	Summary of results	Risk of bias
Westermann et al. (2014)	01/2012	<p><i>Participants:</i> Nursing staff in inpatient elderly and geriatric long-term care settings.</p> <p><i>Intervention:</i> Any intervention for preventing or treating burnout.</p> <p><i>Comparator:</i> Any.</p> <p><i>Outcome:</i> Burnout among staff</p> <p><i>Study design:</i> Primary studies (design not specified)</p>	16 (10 RCTs, 5 quasi-experimental (QE), 1 pre-post design (PP))	<p>Work directed intervention approach (1 QE, 1 PP; n=82): Both medium term studies (<1 year) showed beneficial effects on staff burnout. The QE study reported significant reduction in the MBI sub scale emotional exhaustion compared to control (p<0.03) and a decline in work related stress. The PP study reported significant improvements in all MBI subscales at follow-up compared to baseline (p<0.05). Interventions evaluated were a systematic pain assessment and a therapeutic programme of exercise and activity for patients with dementia.</p> <p>Person directed intervention approach (6 RCTs, 3 QE; n=972): Two short term studies (one quasi-experimental study and one RCT) reported beneficial effects on staff burnout compared to control assessed using the stress screening system for human service providers (BHD) system and MBI subscales. Interventions evaluated included communication training in dealing with individuals suffering from dementia and with colleagues and brief mindfulness based stress reduction. Other studies did not find beneficial effects, generally assessed using the MBI, of the interventions evaluated. These included training programmes in dementia care, manage behavioural symptoms of dementia and peer support, ergonomic and psychosocial training, and an educational course to increase stage skills in dealing with abuse of the elderly.</p>	High






Author (year)	Search Date	Inclusion criteria	Number of included studies	Summary of results	Risk of bias
				<p>Combined interventions (4 RCTs, 1 QE; 1199)</p> <p>Two RCTs and one QE study reported decreased emotional exhaustion (2 studies) and improved personal accomplishment (1 study) as assessed using the MBI. Interventions evaluated included training in person-centred care, dementia care mapping and “Snoezelen” (not described). Interventions which were not shown to be effective included a creative expression programme in dementia care, co-operative communication programme for staff and families on dementia units, and emotion oriented care for cognitively impaired elderly persons and supervision meetings.</p>	

RCTs







Author (year)	Inclusion criteria	Number of participants	Summary of results	Risk of bias
Pipe et al. (2009)	<p><i>Participants:</i> Nurse leaders employed full-time for a healthcare system in the USA. Exclusions: active infectious disease, active haematologic malignancy, major psychiatric disorder, previous participation in Mindfulness-based Stress Reduction (MBSR).</p> <p><i>Intervention:</i> MBSR course, five 2-hour sessions and 20 minutes daily practice outside of the five sessions.</p> <p><i>Comparator:</i> Facilitated learning experience. Topics included stress and leadership strategies.</p> <p><i>Outcome:</i> Staff psychiatric symptoms and staff efficacy</p>	33	<p>Participants in the MBSR group showed significant greater improvements from based compared to control for the following components of the symptom checklist 90-revised: obsessive compulsive (MD -0.33, 95% CI -0.61, -0.06), anxiety (MD -0.26, 95% CI -0.52, -0.01), phobic anxiety (MD -0.06, 95% CI -0.1, -0.01), psychoticism (MD -0.19, 95% CI -0.32, -0.06), global severity index (MD -0.26, -0.48, -0.05) and positive symptom distress index (MD -0.28, 95% CI -0.48, -0.07). There were no differences between treatment groups for somatization, interpersonal sensitivity, depression, hostility, paranoid ideation, positive symptom total or on the caring efficacy scale.</p>	High


Risk of Bias:


SRs


Author (year)	RISK OF BIAS				
	Inclusion criteria	Searches	Review Process	Quality assessment	Synthesis
Westermann et al. (2014)					

RCTs

Study	RISK OF BIAS					
	Random allocation	Allocation concealment	Blinding of participants and personnel	Blinding of outcome assessment	Incomplete outcome data	Selective Reporting
Pipe et al. (2009)						

 Low Risk

 High Risk

 Unclear Risk

Search Details

Source	Search Strategy	Number of hits	Relevant evidence identified
SRs and Guidelines			
NICE	inpatient hospital staff wellbeing stress intervention	220	0
DARE	1 (psychotherap* OR therap* OR (psycholog* adj2 intervention*) OR counsel* OR support*) IN DARE 22923 Delete 2 MeSH DESCRIPTOR Psychotherapy EXPLODE ALL TREES 1958 Delete 3 MeSH DESCRIPTOR Therapy, Computer-Assisted EXPLODE ALL TREES 380 Delete 4 (staff OR employee* OR personnel) IN DARE 1000 Delete 5 MeSH DESCRIPTOR Inpatients EXPLODE ALL TREES 181 Delete 6 (inpatient*) IN DARE 340 Delete 7 #1 OR #2 OR #3 23726 Delete 8 #5 OR #6 441 Delete 9 #4 AND #7 AND #8 22 Delete	22	1
Primary studies			
CENTRAL	#1 MeSH descriptor: [Medical Staff] explode all trees 324 #2 MeSH descriptor: [Nursing Staff] explode all trees 524 #3 MeSH descriptor: [Personnel, Hospital] explode all trees 786 #4 ((hospital* or nurs* or medic*) adj2 staff) 475 #5 ((hospital* or nurs* or medic*) adj2 employee*) 111 #6 ((hospital* or nurs* or medic*) adj2 personnel) 774 #7 ((hospital* or nurs* or medic*) adj2 worker*) 188 #8 MeSH descriptor: [Counseling] explode all trees 3355 #9 (counsel* or (support* adj2 intervention) or (support* adj2 service*) or (support* adj2 therap*)) 12909 #10 #1 or #2 or #3 or #4 or #5 or #6 or #7 1875	24	1

	#11 #8 or #9 13006 #12 #10 and #11		
PsycINFO	66. PsycINFO; MEDICAL STAFF/ OR NURSING STAFF/ OR STAFF/ OR STAFF NURSE/; 0 results. 67. PsycINFO; HOSPITAL PERSONNEL/; 0 results. 68. PsycINFO; ((hospital* OR nurs* OR medic*) adj2 staff).ti,ab; 6614 results. 69. PsycINFO; ((hospital* OR nurs* OR medic*) adj2 employee*).ti,ab; 704 results. 70. PsycINFO; ((hospital* OR nurs* OR medic*) adj2 personnel).ti,ab; 1947 results. 71. PsycINFO; COUNSELING/; 19506 results. 72. PsycINFO; 66 OR 67 OR 68 OR 69 OR 70 OR 35; 10744 results. 73. PsycINFO; 72 AND 19; 619 results. 74. PsycINFO; trial.ti,ab [Limit to: Publication Year 1860-2014]; 71811 results. 75. PsycINFO; CLINICAL TRIALS/ [Limit to: Publication Year 1860-2014]; 8206 results. 76. PsycINFO; random*.ti,ab [Limit to: Publication Year 1860-2014]; 136520 results. 77. PsycINFO; (doubl* adj3 blind*).ti,ab [Limit to: Publication Year 1860-2014]; 18843 results. 78. PsycINFO; (singl* adj3 blind*).ti,ab [Limit to: Publication Year 1860-2014]; 1731 results. 79. PsycINFO; EXPERIMENTAL DESIGN/ [Limit to: Publication Year 1860-2014]; 9410 results. 80. PsycINFO; controlled.ti,ab [Limit to: Publication Year 1860-2014]; 84564 results. 81. PsycINFO; (clinical adj3 study).ti,ab [Limit to: Publication Year 1860-2014]; 8259 results. 82. PsycINFO; trial.ti,ab [Limit to: Publication Year 1860-2014]; 71811 results. 83. PsycINFO; "treatment outcome clinical trial".md [Limit to: Publication Year 1860-2014]; 28550 results. 84. PsycINFO; 74 OR 75 OR 76 OR 77 OR 78 OR 79 OR 80 OR 81 OR 82 OR 83 [Limit to: Publication Year 1860-2014]; 259094 results. 85. PsycINFO; 73 AND 84 [Limit to: Publication Year 1860-2014]; 28 results.	28	
Embase	4. EMBASE; MEDICAL STAFF/ OR NURSING STAFF/ OR STAFF/ OR STAFF NURSE/; 87010 results. 6. EMBASE; HOSPITAL PERSONNEL/; 20751 results. 12. EMBASE; ((hospital* OR nurs* OR medic*) adj2 staff).ti,ab; 33469 results. 13. EMBASE; ((hospital* OR nurs* OR medic*) adj2 employee*).ti,ab; 2215 results. 14. EMBASE; ((hospital* OR nurs* OR medic*) adj2 personnel).ti,ab; 11289 results. 15. EMBASE; ((hospital* OR nurs* OR medic*) adj2 worker*).ti,ab; 4933 results. 16. EMBASE; COUNSELING/; 41395 results. 17. EMBASE; (counsel* OR (support* adj2 intervention) OR (support* adj2 service*) OR (support* adj2 therap*)).ti,ab; 113390 results.	138	

	<p>18. EMBASE; 4 OR 6 OR 12 OR 13 OR 14 OR 15; 136684 results. 19. EMBASE; 16 OR 17; 129623 results. 20. EMBASE; 18 AND 19; 2522 results. 21. EMBASE; CLINICAL TRIAL/; 837236 results. 22. EMBASE; RANDOMIZED CONTROLLED TRIAL/; 355354 results. 23. EMBASE; RANDOMIZATION/; 64127 results. 24. EMBASE; SINGLE BLIND PROCEDURE/; 19202 results. 25. EMBASE; DOUBLE BLIND PROCEDURE/; 116683 results. 26. EMBASE; CROSSOVER PROCEDURE/; 40890 results. 27. EMBASE; "Randomi?ed controlled trial\$.ti,ab; 106713 results. 28. EMBASE; rct.ti,ab; 15444 results. 29. EMBASE; "Random allocation".ti,ab; 1351 results. 30. EMBASE; "Randomly allocated".ti,ab; 21214 results. 31. EMBASE; ((allocated adj2 random)).ti,ab; 719 results. 32. EMBASE; "Single blind\$.ti,ab; 14987 results. 33. EMBASE; "Double blind\$.ti,ab; 145543 results. 34. EMBASE; (treble ADJ blind\$.ti,ab; 0 results. 35. EMBASE; (triple ADJ blind\$.ti,ab; 409 results. 36. EMBASE; Placebo\$.ti,ab; 205530 results. 37. EMBASE; PROSPECTIVE STUDY/; 269427 results. 38. EMBASE; 21 OR 22 OR 23 OR 24 OR 25 OR 26 OR 47 OR 27 OR 28 OR 29 OR 30 OR 31 OR 32 OR 33 OR 34 OR 35 OR 36 OR 37; 1404594 results. 39. EMBASE; "case report".ti,ab; 270399 results. 40. EMBASE; ABSTRACT REPORT/; 71430 results. 41. EMBASE; LETTER/; 837890 results. 42. EMBASE; 60 OR 39 OR 40 OR 41; 1203133 results. 43. EMBASE; 38 not 42; 1366224 results. 44. EMBASE; 20 AND 43; 138 results.</p>		
Medline	<p>21. MEDLINE; MEDICAL STAFF/ OR NURSING STAFF/ OR STAFF/ OR STAFF NURSE/; 19622 results. 22. MEDLINE; HOSPITAL PERSONNEL/; 13945 results. 23. MEDLINE; ((hospital* OR nurs* OR medic*) adj2 staff).ti,ab; 26440 results. 24. MEDLINE; ((hospital* OR nurs* OR medic*) adj2 employee*).ti,ab; 1999 results.</p>	71	

25. MEDLINE; ((hospital* OR nurs* OR medic*) adj2 personnel).ti,ab; 10299 results.

26. MEDLINE; ((hospital* OR nurs* OR medic*) adj2 worker*).ti,ab; 4184 results.

27. MEDLINE; COUNSELING/; 29541 results.

28. MEDLINE; 21 OR 22 OR 23 OR 24 OR 25 OR 26; 70440 results.

29. MEDLINE; 28 AND 19; 1390 results.

30. MEDLINE; RANDOMIZED CONTROLLED TRIALS AS TOPIC/; 101187 results.

31. MEDLINE; RANDOMIZED CONTROLLED TRIAL/; 405463 results.

32. MEDLINE; RANDOM ALLOCATION/; 84631 results.

33. MEDLINE; DOUBLE-BLIND METHOD/; 133543 results.

34. MEDLINE; SINGLE-BLIND METHOD/; 20876 results.

35. MEDLINE; CLINICAL TRIAL/; 503176 results.

36. MEDLINE; "clinical trial, phase i".pt; 15604 results.

37. MEDLINE; "clinical trial, phase ii".pt; 25014 results.

38. MEDLINE; "clinical trial, phase iii".pt; 10283 results.

39. MEDLINE; "clinical trial, phase iv".pt; 1056 results.

40. MEDLINE; "controlled clinical trial".pt; 91129 results.

41. MEDLINE; "randomized controlled trial".pt; 405463 results.

42. MEDLINE; "clinical trial".pt; 503176 results.

43. MEDLINE; exp CLINICAL TRIALS AS TOPIC/; 297613 results.

44. MEDLINE; (single\$ ADJ blind\$).ti,ab; 12546 results.

45. MEDLINE; (doubl\$ ADJ blind\$).ti,ab; 123760 results.

46. MEDLINE; (treb\$ ADJ blind\$).ti,ab; 0 results.

47. MEDLINE; (trip\$ ADJ blind\$).ti,ab; 374 results.

48. MEDLINE; (single\$ ADJ mask\$).ti,ab; 338 results.

49. MEDLINE; (doub\$ ADJ mask\$).ti,ab; 2828 results.

50. MEDLINE; (treb\$ ADJ mask\$).ti,ab; 0 results.

51. MEDLINE; (trip\$ ADJ mask\$).ti,ab; 44 results.

52. MEDLINE; PLACEBOS/; 34192 results.

53. MEDLINE; placebo\$.ti,ab; 171203 results.

54. MEDLINE; "randomly allocated".ti,ab; 18540 results.

55. MEDLINE; (allocated adj2 random\$).ti,ab; 21234 results.

56. MEDLINE; 30 OR 31 OR 32 OR 33 OR 34 OR 35 OR 36 OR 37 OR 38 OR 39 OR 40 OR 41 OR 42 OR 43;

	<p>1006674 results.</p> <p>57. MEDLINE; 44 OR 45 OR 46 OR 47 OR 48 OR 49 OR 50 OR 51 OR 52 OR 53 OR 54 OR 55; 252759 results.</p> <p>58. MEDLINE; 56 OR 57; 1056308 results.</p> <p>59. MEDLINE; "case report".ti,ab; 218076 results.</p> <p>60. MEDLINE; LETTER;/; 891833 results.</p> <p>61. MEDLINE; HISTORICAL ARTICLE;/; 314103 results.</p> <p>62. MEDLINE; 59 OR 60 OR 61; 1411721 results.</p> <p>63. MEDLINE; 58 not 62; 1027434 results.</p> <p>64. MEDLINE; 29 AND 63; 71 results.</p>		
Cinahl	<p>39. CINAHL; MEDICAL STAFF/ OR NURSING STAFF/ OR STAFF/ OR STAFF NURSE/; 317 results.</p> <p>40. CINAHL; HOSPITAL PERSONNEL/; 0 results.</p> <p>41. CINAHL; ((hospital* OR nurs* OR medic*) adj2 staff).ti,ab; 15111 results.</p> <p>42. CINAHL; ((hospital* OR nurs* OR medic*) adj2 employee*).ti,ab; 990 results.</p> <p>43. CINAHL; ((hospital* OR nurs* OR medic*) adj2 personnel).ti,ab; 2833 results.</p> <p>44. CINAHL; COUNSELING/; 13604 results.</p> <p>45. CINAHL; 39 OR 40 OR 41 OR 42 OR 43 OR 35; 20873 results.</p> <p>46. CINAHL; 45 AND 19; 523 results.</p> <p>54. CINAHL; trial.ti,ab [Limit to: Publication Year 1860-2014]; 68602 results.</p> <p>55. CINAHL; CLINICAL TRIALS/ [Limit to: Publication Year 1860-2014]; 80740 results.</p> <p>56. CINAHL; random*.ti,ab [Limit to: Publication Year 1860-2014]; 114037 results.</p> <p>57. CINAHL; (doubl* adj3 blind*).ti,ab [Limit to: Publication Year 1860-2014]; 14072 results.</p> <p>58. CINAHL; (singl* adj3 blind*).ti,ab [Limit to: Publication Year 1860-2014]; 2439 results.</p> <p>59. CINAHL; EXPERIMENTAL DESIGN/ [Limit to: Publication Year 1860-2014]; 0 results.</p> <p>60. CINAHL; controlled.ti,ab [Limit to: Publication Year 1860-2014]; 65946 results.</p> <p>61. CINAHL; (clinical adj3 study).ti,ab [Limit to: Publication Year 1860-2014]; 10704 results.</p> <p>62. CINAHL; trial.ti,ab [Limit to: Publication Year 1860-2014]; 68602 results.</p> <p>63. CINAHL; "treatment outcome clinical".md [Limit to: Publication Year 1860-2014]; 1 results.</p> <p>64. CINAHL; 54 OR 55 OR 56 OR 57 OR 58 OR 59 OR 60 OR 61 OR 62 OR 63 [Limit to: Publication Year 1860-2014]; 207406 results.</p> <p>65. CINAHL; 46 AND 64 [Limit to: Publication Year 1860-2014]; 53 results.</p>	53	
Summary	NA	NA	

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