

# Curriculum development using VR technology to enhance empathetic communication skills in future health care professionals

The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.



Co-funded by the  
Erasmus+ Programme  
of the European Union

# Curriculum development using VR technology to enhance empathetic communication skills in future health care professionals

## Project Coordinator:



[www.mmclearningsolutions.com](http://www.mmclearningsolutions.com)

## Project partners



UNIVERSITY  
of NICOSIA  
MEDICAL SCHOOL

<https://www.unic.ac.cy/el/>



<http://www.cycert.org.cy/index.php/el/>



<https://www.vub.be/>



<https://www.charite.de/en/>



UNIVERSITY OF  
THESSALY

<https://www.uth.gr/>



<http://www.omegatech.gr/>



# Work Area 3.2: *Challenges to Empathy*

Unit 3.2: Challenges to empathy in healthcare and how to overcome these

Duration: 4 hours

Trainer:



# Learning Outcomes (knowledge)

- You should be able to:
42. Identify and label challenges to empathy in care
  43. Define burnout and describe the relationship between empathy and burnout
  44. Identify and Label evidence-based instruments for assessing burnout and stress-related conditions in care Professionals
  45. Identify and label methods for preventing and/or treating burn out



# Learning Outcomes (skills)

46. Use self-reflection to recognise symptoms that you might be burnt out
47. Use appropriate resources for testing your symptoms of burn-out
48. Practice techniques to reduce stress and burn-out
49. Know what to do in care of burnout



# Learning Outcomes (competences)

50. Advocate and model self-caring attitudes
51. Increase self-confidence in self-caring under stressful situations
52. Model a positive, calm and mindful approach when dealing with stressful situations



## Some helpful rules

- ▶ Mobile Phones
- ▶ Breaks
- ▶ Other



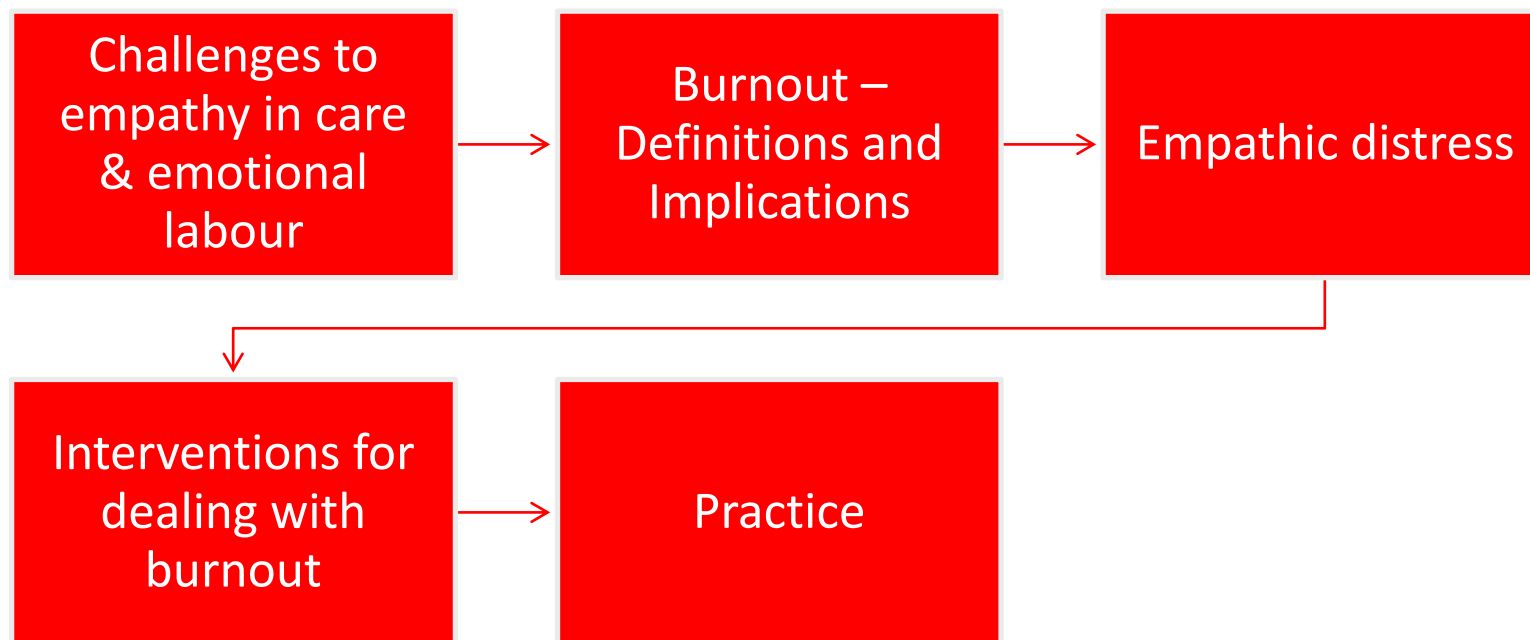
# Participation

# Respect

# Express your opinion

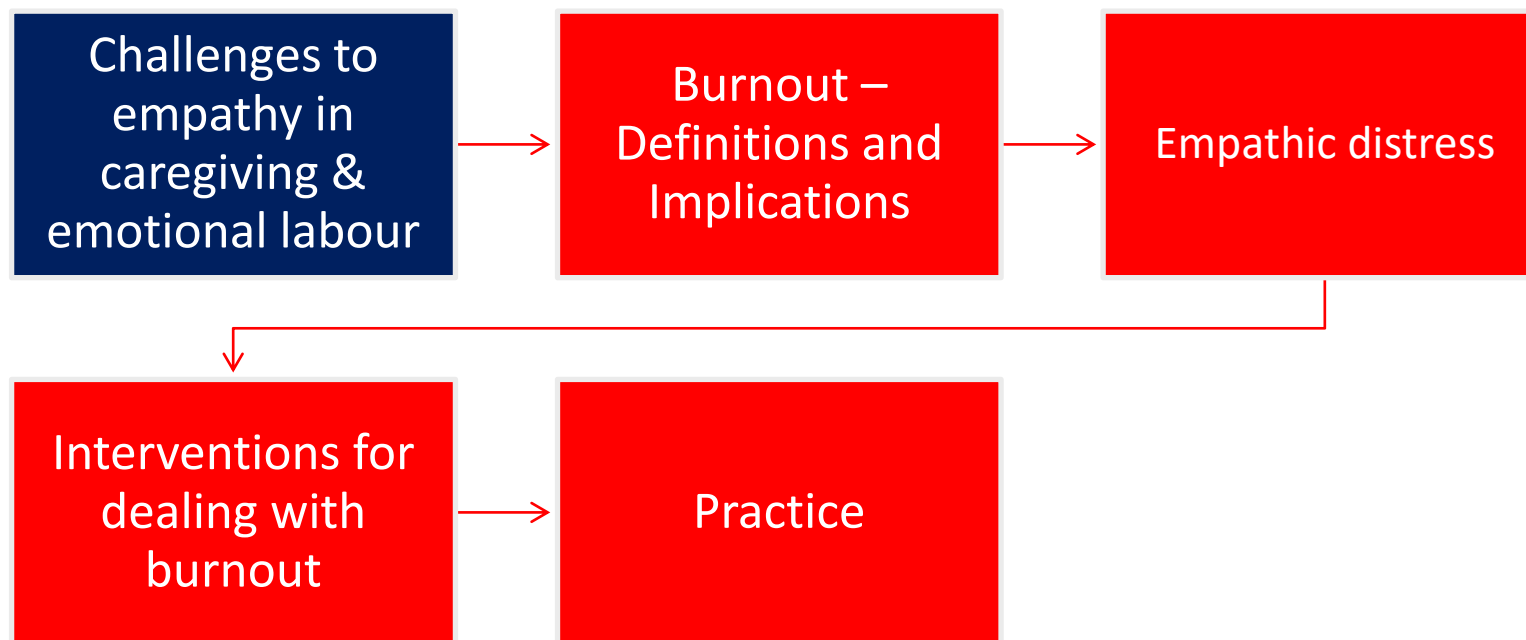


# Route Map





# Route Map



# Challenges to empathy in caregiving

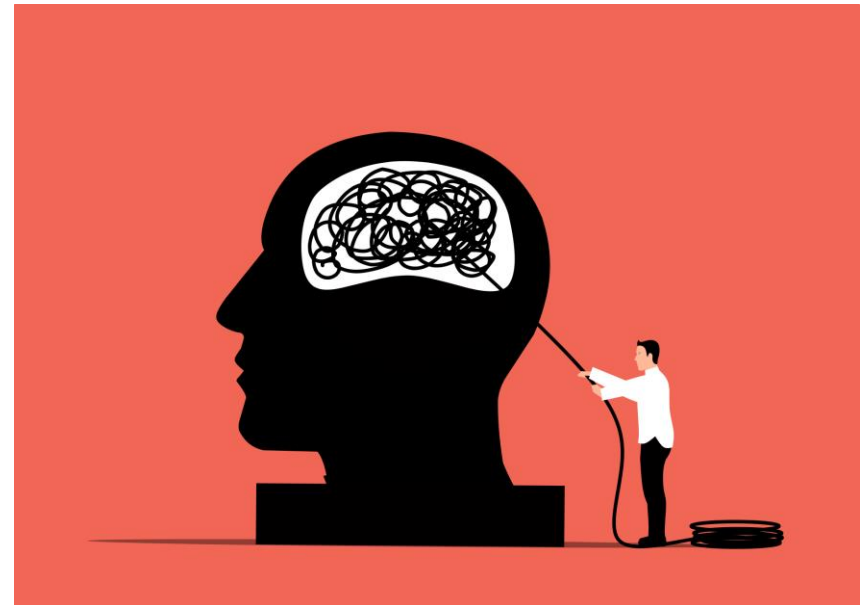
# Impact of stress



# Challenges to Empathy in Caregiving

- ▶ Workplace stress = threat to professionals **empathic ability**
- ▶ Stress can cause anxiety and trigger individuals to fall back on what they know to be true —namely, their **own perspectives and feelings**

(Ahrweiler et al., 2014)



# Challenges to Empathy in Care

- ▶ High levels of workplace stress among health care professionals (Rice, Glass et al. 2014)
- ▶ Survey in the US indicated that 55%, **more than half** of health care workers reported burnout



# Factors Related to Workplace Stress in Care Professionals

## ▶ Cultural and organization factors:

- ▶ Undervaluing of carers
- ▶ Staff shortages

## ▶ Care related factors

- ▶ Personally demanding encounters
- ▶ Exposure to strong emotions in patients
- ▶ Requirement to be empathic

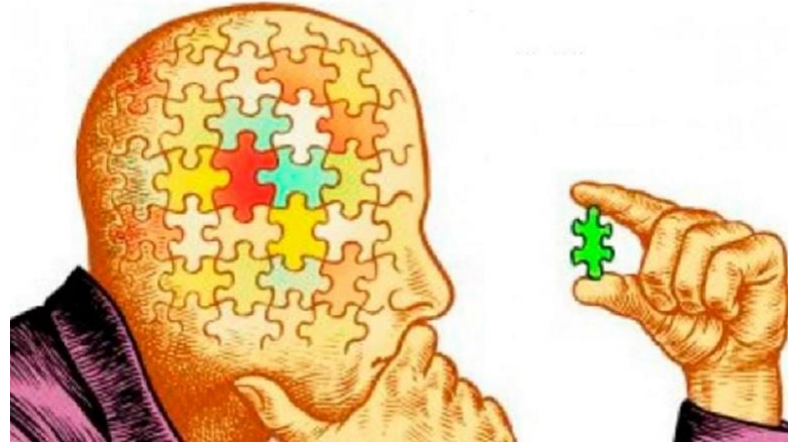
## ▶ Individual factors

- ▶ Age
- ▶ Work experience
- ▶ Emotional response



# Group exercise: Stressors in my work environment

- ▶ Please reflect in groups:
  - ▶ Which of the factors described are relevant to your current work situation/to your work environment?
  - ▶ Give some examples



# The Concept of Emotional Labour

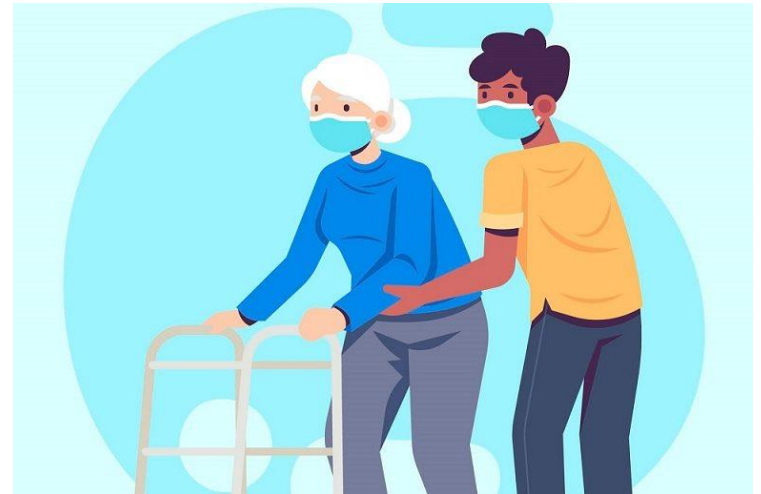
- ▶ Emotional labour
- ▶ = effort involved in managing feelings when the work role specifies that **particular emotions (e.g. empathy)** should be displayed and others should be hidden.





# The Concept Of Emotional Labour: Strong elements of care

- ▶ Care has **strong elements** of jobs requiring emotional labour:
  - ▶ need for connection with clients
  - ▶ coping with isolation
  - ▶ managing extremely stressful situations
  - ▶ need for providing specialised care



# Brainstorming – Is Empathy Emotion Work for Care Professionals?

- ▶ The concept of **emotional work** is based on the assumption that the “appropriate” emotional response (e.g. in health care = empathy) will not always arise spontaneously
- ▶ Please ‘think, pair, share’:
  - ▶ Do you find it always easy to be empathic?
  - ▶ Have you ever experienced/or witnessed a situation where it was difficult for you/ a colleague to show empathy?
  - ▶ How did you/your colleague deal with that situation?



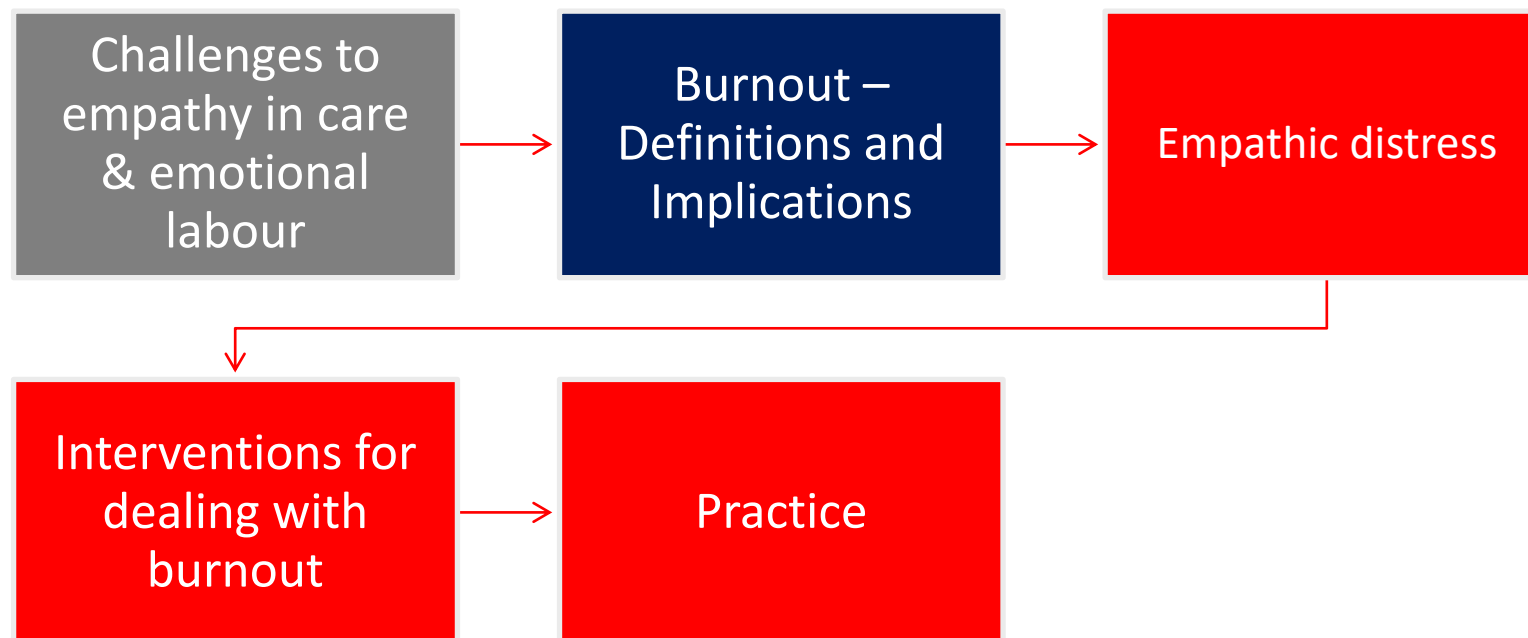
# Empathy as Emotional Labour in Healthcare

- ▶ Empathy = fundamental requirement in all healthcare professions
- ▶ Showing empathy and avoiding expressions of negative feelings toward clients are **essential job role expectations** in health care
- ▶ Showing empathy whilst dealing with clients' illness and suffering represents **emotional labour** (Hunter 2001; Riley and Weiss 2016)
- ▶ Emotional labour is a source of workplace stress in health care and can lead to **burnout**

(Kerasidou and Horn 2016)



# Route Map



# Burnout: Definitions

# Burnout - Definition

- ▶ Burnout is a work-related stress syndrome resulting from chronic exposure to job stress.
- ▶ Healthcare professionals often experience caregiver burnout which is a common term for physical, mental and emotional stress



# What is carer burnout?

- ▶ Burnout is characterized by
  1. emotional exhaustion
  2. depersonalization and
  3. (Maslach et al., 2001)
- ▶ also described a low sense of personal accomplishment as **decline of engagement** with ones' job that happens **gradually over time**  
(Bakker and Costa, 2014)



# Burnout - Implications

- ▶ Burnout has personal and interpersonal implications and affects health care
- ▶ personal implications:
  - overwhelming exhaustion and feelings of incompetence
- ▶ interpersonal implications:
  - cynicism and depersonalisation – **reduces empathy**  
(Maslach et al., 2001)
- ▶ Implications for care
  - Contributes to **poor outcomes**, including worse patient safety, and to lower patient satisfaction  
(Poghosyan, Clarke et al. 2010)





# Burnout - Symptoms

- ▶ Physical symptoms
  - ▶ Fatigue
  - ▶ Sleep disturbances
  - ▶ Headaches
  
- ▶ Behavioural symptoms
  - ▶ Social retreat
  - ▶ Work avoidance
  - ▶ Substance use
  
- ▶ Emotional symptoms
  - ▶ Depression
  - ▶ Low self-esteem



## Burnout – More examples

- ▶ Negative outlook of work – dreading going to work
- ▶ Having low energy and fatigue at work
- ▶ Getting easily irritated by colleagues – Pulling away and avoiding them
- ▶ Blaming others for your mistakes
- ▶ Your work and contribution is not recognized
- ▶ You are thinking of quitting your job



# Exercise: Assessment of burnout

► Assessment **using single item**: “I feel burned out from my work.”

1. Never
2. A few times a year or less
3. Once a month or less
4. A few times a month
5. Once a week

6. A few times per week

7. Every day

(West, Dyrbye et al. 2012, 2009)

} *high burnout risk*



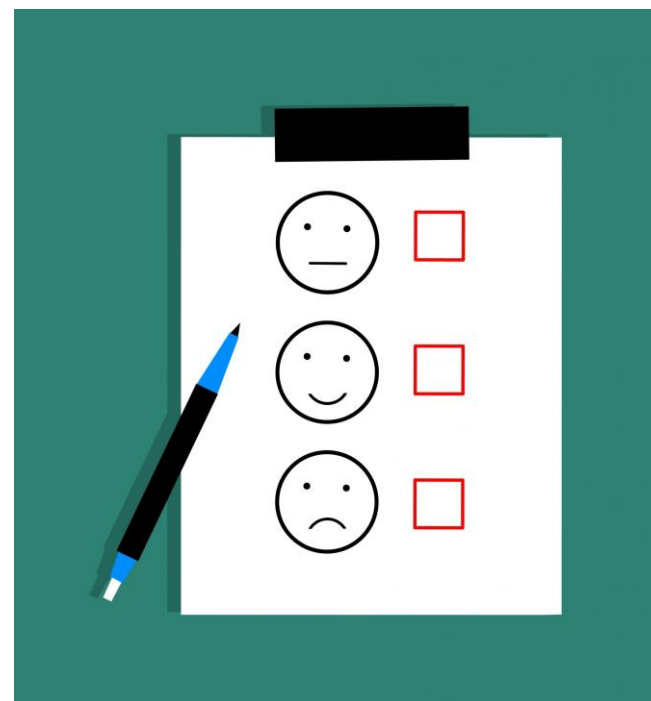
# Individual Exercise: Checking Yourself For Risk Of Burnout

► Please perform

1) the single item assessment

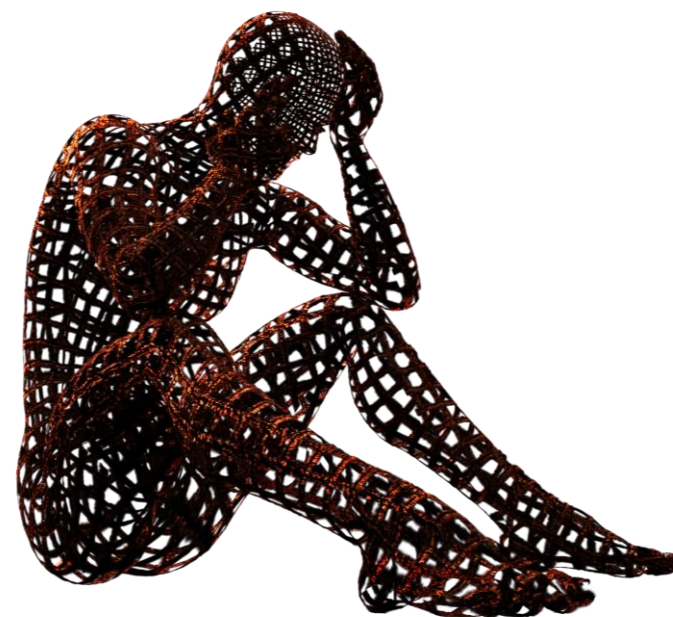
and then

2) the Burnout – Self Test to get information about your burnout risk



# Stress versus burnout: what's the difference

- ▶ Stress is short-term and it is related to specific situations (e.g., deadline).
- ▶ Once stressful factors are removed, stress subsides.
- ▶ Burnout takes over a longer period of time. It is connected to a feeling that your work is meaningless.
- ▶ Burnout is a deep sense of disillusionment and hopelessness
- ▶ However, stress is the driving force behind burnout



# How To Seek Appropriate Help

- ▶ Health care professionals who suffer from burnout frequently delay seeking support

(Putnik, de Jong et al. 2011)

- ▶ However, it is important **that you seek help before the burnout symptoms get worse:**
  - ▶ **Reach out** to co-workers, friends or loved ones - support and collaboration might help you cope.
  - ▶ Check if there are **employee assistance** programs or **counselling** services - take advantage of relevant services.



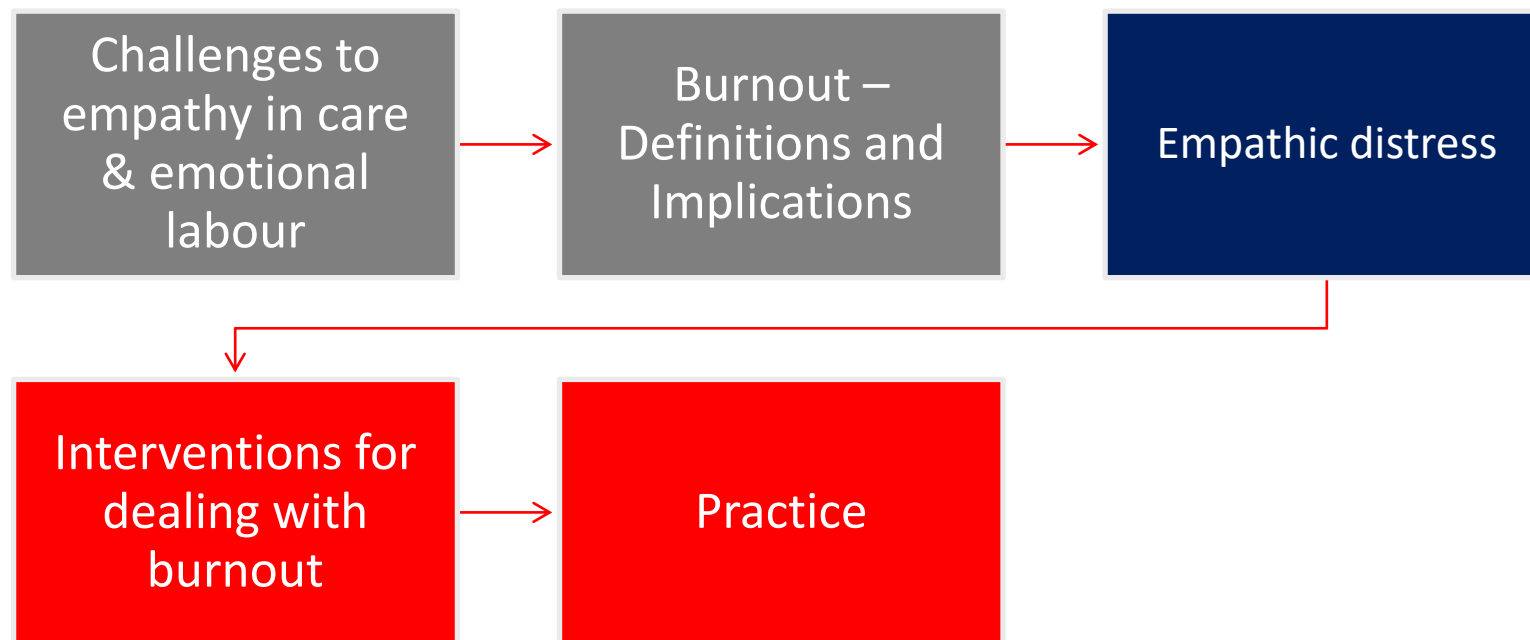
# Research on burnout and empathy

(Narme, 2018)

- ▶ **Objective:**
  - ▶ To understand the role of empathy towards burnout.
  - ▶ How can empathic skills and burnout can be affected by empathy-focused training?
- ▶ **Method:**
  - ▶ 124 nursing staff from 10 geriatric residential facilities. They filled out three questionnaires (Maslach and others) in cognitive (perspective taking) and emotional empathy (compassionate care)
  - ▶ 41 caregivers before and after an empathy-based training programme.
- ▶ **Results:** Burnout and personal distress decreased after the training. Nursing staff reported lower depersonalization and higher accomplishment.



# Route Map





# Empathic distress

# Emotional And Cognitive Components Of Empathy

- ▶ Empathy has both **affective (=emotional)** and **cognitive** components
- ▶ The affective component of empathy relates to sharing the emotions of the other person
  - ▶ This sharing of emotions, or **emotional contagion**, is an automatic response
  - ▶ Sharing emotions for the empathiser leads to feelings of **empathic concern, which is key for an empathic exchange**
  - ▶ However, if emotions are over aroused, **personal/empathic distress** can develop

(Decety and Hodges, 2006; Decety and Yoder 2016)



# Empathic Distress

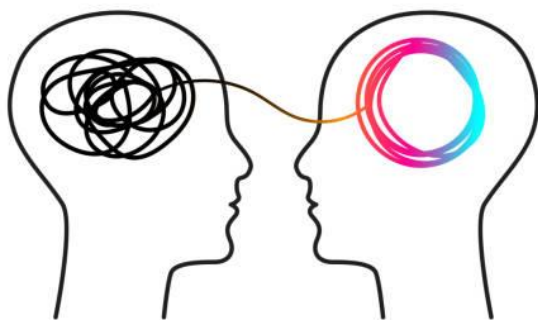
- ▶ Strong aversive and **self-oriented response** to the suffering of others
  - **Form of empathic overarousal** that results from **poor emotion regulation** and reduced distinction of the self from the other



(Decety and Lamm 2009; Dowling 2018; Wacker et al., 2016)



# Empathic Distress

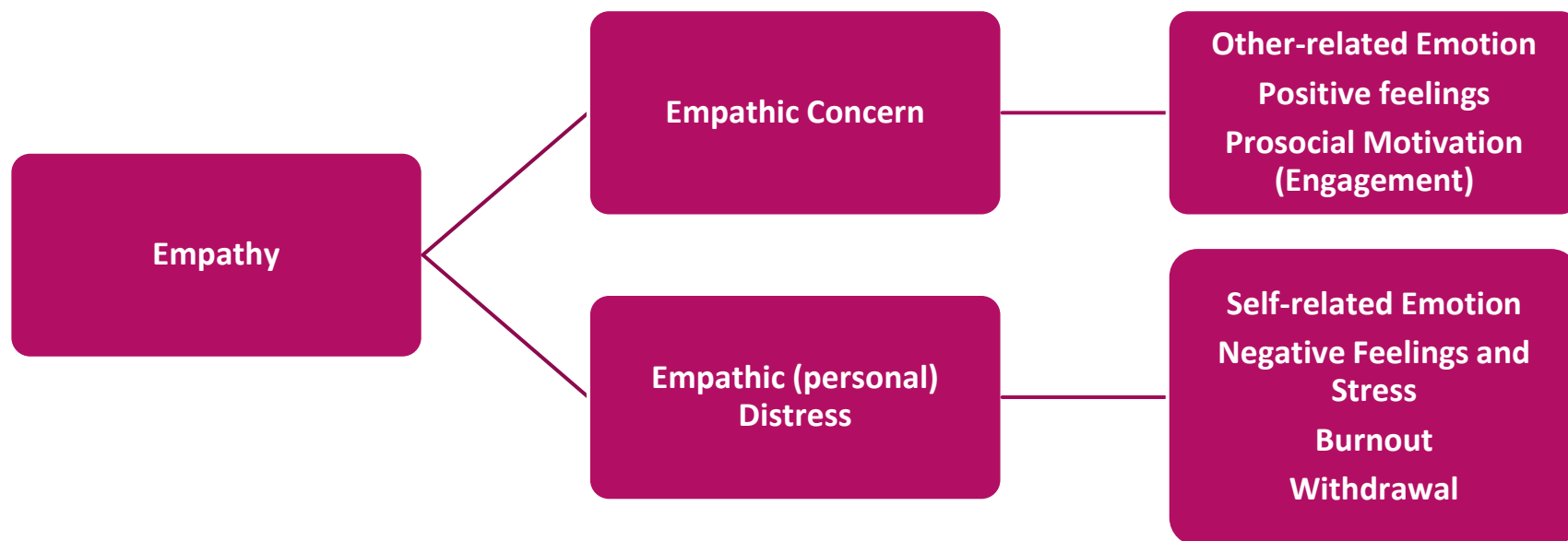


- ▶ Empathic distress can lead to the **desire to withdraw** from a situation in order to protect one's self from excessive negative feelings

(Decety and Lamm 2009; Dowling 2018; Wacker et al., 2016)



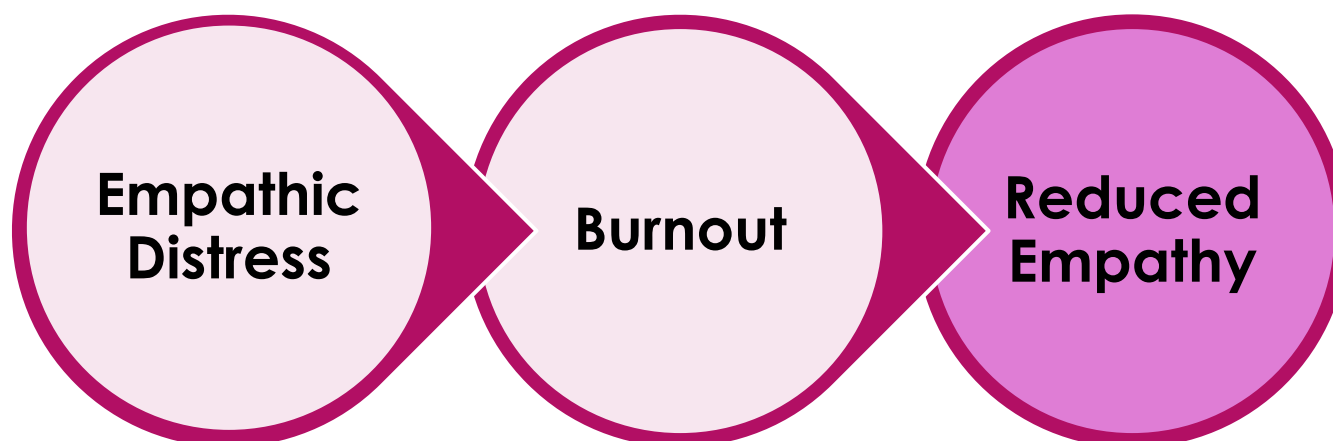
# Effects Of Empathic Concern And Empathic Distress



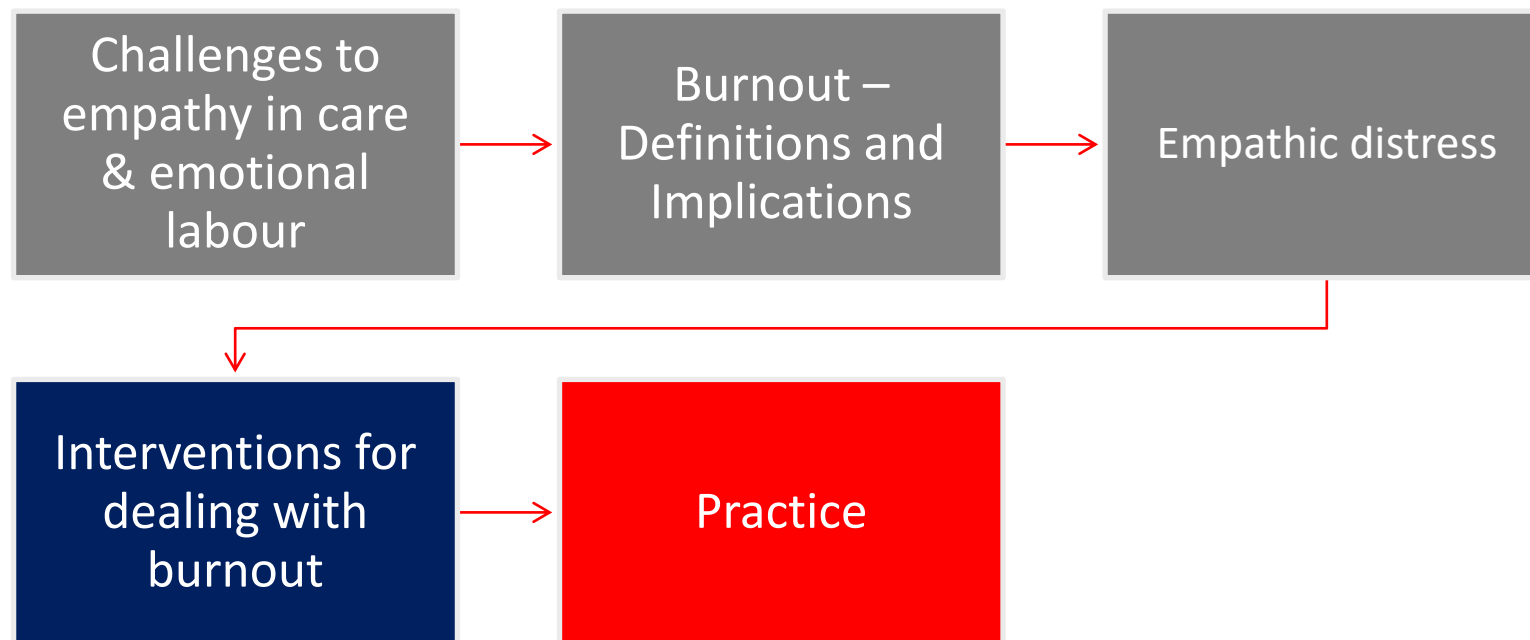
(figure adapted from Dowling, 2018)



# Empathic Distress, Burnout And Empathy



# Route Map



# Interventions for dealing with stress and burnout



# Techniques for coping with stress

1. **Identify** what's causing stress
  - ▶ Look closely at your habits, attitude and excuses
  - ▶ Accept responsibility for creating it
  
2. **Replace unhealthy ways** of coping with healthy ones
  - ▶ No single methods for everyone
  - ▶ Focus on what makes you feel calm and in control
  
3. Practice the 4 A's of **stress management**
  - ▶ Avoid unnecessary stress
  - ▶ Alter the situation
  - ▶ Adapt to the stressor
  - ▶ Accept what you can't change



# Techniques for coping with stress

4. **Get moving**
  - ▶ Physical activity is a huge stress reliever
  - ▶ Release of feel good hormones
5. **Build strong relationships**
  - ▶ Relationships stress buffers
  - ▶ Reach out to family or friends
6. **Walk away when you are angry**
  - ▶ Before reacting, regroup by counting to 10
  - ▶ Exercise increases endorphins – feel good hormones

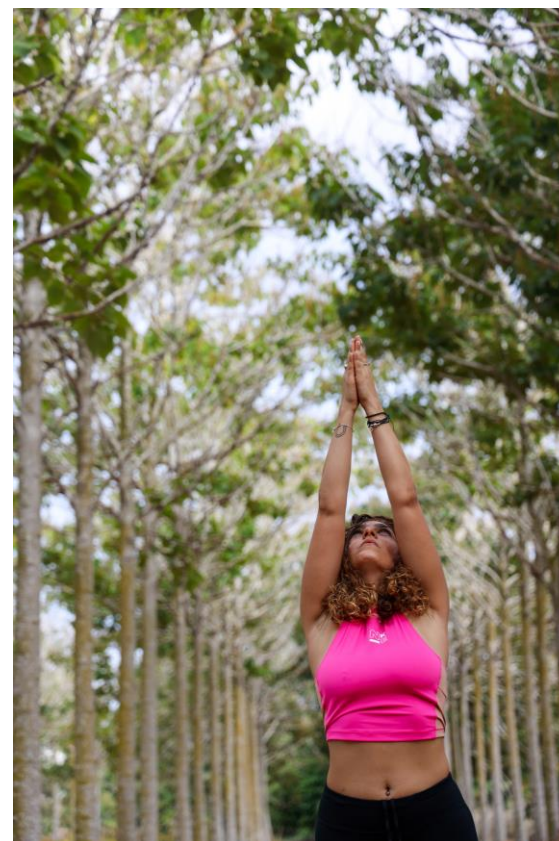


(Robinson et al, 2021)



# Techniques for coping with stress

6. **Make time for fun and relaxation**
  - ▶ Set aside leisure time
  - ▶ Do something you enjoy every day
  - ▶ Keep your sense of humour
7. **Rest your mind**
  - ▶ Reduce caffeine intake
  - ▶ Remove bright screen distractions
8. **Manage your time better**
  - ▶ Don't over-commit
  - ▶ Prioritise tasks
  - ▶ Give responsibility to others



(Robinson et al, 2021)

# Reducing Empathic Distress Using Emotional Regulation

- ▶ Emotional regulation in health care refers to the **processes where someone manages emotions** during engagement with patients
  - ▶ also described as **self-awareness during empathic engagement** with patients (Tei, Becker et al. 2014)
  - ▶ strongly related to empathy (Thompson et al.,2019)
- ▶ Without the ability to regulate one's own emotions, excessive emotional empathy may lead to burnout (Zeidner, Hadar et al. 2013)
- ▶ **Emotional regulation training** has been found to be successful in reducing workplace stress and burnout in health care professionals

(Weilenmann, Schnyder et al. 2018; Kharatzadeh, Alavi et al. 2020)



# Individual Exercise: Can you regulate your emotions?

- ▶ Please fill in the Difficulties in Emotion Regulation **Scale Short Form (DERS-SF)** to get information about your emotion regulation skills
  - ▶ Calculate total score by adding everything up
    - ▶ Higher scores suggest greater problems with emotion regulation
  - ▶ Reflect: are you surprised by the result?



# Emotion Regulation Through Cognitive Reappraisal

- ▶ **Cognitive reappraisal** involves thinking about a negative or challenging situation in a more **positive** way.
  - ▶ Example: Imagine a friend did not return your calls or texts for several days. Rather than thinking that this reflected something about yourself, such as "my friend hates me," you might instead think, "my friend must be really busy."



# Group Exercise: Cognitive Reappraisal

- ▶ Please remember a situation at work that has caused you stress and negative thinking. Choose one occasion between you.
- ▶ Please work with the thoughts-feeling-behaviour worksheet
  - ▶ first describe the situation using your original interpretation
  - ▶ following this try to think of at least two different ways to reappraise the situation and describe them as required in the worksheet



# Reducing Empathic Distress Using Mindfulness Interventions

- ▶ Mindfulness interventions have been found to have a **significant impact** on health care professional's level of burnout  
(Conversano, Ciacchini et al. 2020, van der Riet, Levett-Jones et al. 2018)
- ▶ Mindfulness meditation reduce stress, depression and anxiety in nurses and nursing students





# Mindfulness exercise



# Individual Exercise: 4-7-8 Breathing (Relaxing Breath)

- ▶ Rationale: The focus on breathing helps to **reduce stress**  
(Varvogli & Darviri 2011)
- ▶ Technique: Adopt a **comfortable sitting position**
  - ▶ place the tip of the tongue on the tissue right behind the top front teeth
- ▶ Focus on the following breathing pattern
  - ▶ empty the lungs of air
  - ▶ breathe in quietly through the nose for **4** seconds
  - ▶ hold the breath for a count of **7** seconds
  - ▶ exhale forcefully through the mouth, pursing the lips and making a “whoosh” sound, for **8** seconds



## Group discussion: Remaining Calm And Mindful During Stressful Situations

- ▶ Please think of an example when you or someone you observed had a calm and mindful approach during a stressful professional situation
  - ▶ Describe the behavior that went with the calm and mindful approach
  - ▶ How did the environment react to this?
  - ▶ How did it make you feel?



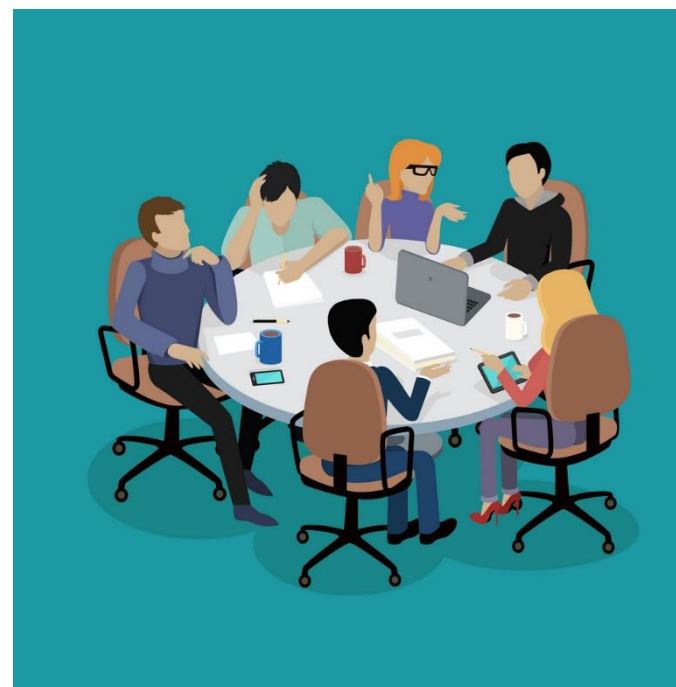
# Self-Care

- ▶ They are practices that individuals initiate and perform to maintain their life, health and wellbeing (World Health Organization 2018)
- ▶ Self-care practices can buffer workplace stress in health professionals (Nahm, Warren et al. 2012)
- ▶ Self care can be physical, psychological or spiritual
  - ▶ E.g. eating, sleeping, and moving well are achievable self care goals (Couser, Chesak et al. 2020)



# Group Discussion: Self-care Strategies

- ▶ **Please pair up** with another learner and have an exchange about the following points:
- ▶ What are activities/ things you do to take care of yourself, e.g. after a stressful working day or week
- ▶ Have you observed other, e.g. your educators, friends, family, role – models practice self-caring?
  - ▶ What does this look like?



# Exercise: Goals For Self-Care In Daily Life

- ▶ In pairs of two, please discuss which self-care measures you would like to incorporate in your daily life
- ▶ Create a SMART goal (see below) for one of these self-care measures





*Role play*

**Stress in the work environment**

# Revision Questions

- ▶ What challenges our capacity for empathy in health care?
  - ▶ name two threats to empathy in health care?
- ▶ How is burnout defined and assessed?
- ▶ In what way can empathy lead to burnout in health care professionals?
  - ▶ which two components of empathy are relevant here?
- ▶ Please name two evidence based strategies to prevent burnout
  - ▶ describe one exercise for each strategy





- Challenges to empathy in health care
- Definition and assessment of burnout
- Relationship between empathy and burnout
- Strategies to prevent burnout



Key Points

# References (1)

- Ahrweiler, F., Neumann, M., Goldblatt, H., Hahn, E. G., & Scheffer, C. (2014). Determinants of physician empathy during medical education: hypothetical conclusions from an exploratory qualitative survey of practicing physicians. *BMC Med Educ*, *14*, 122.
- Bakker, A. B., Le Blanc, P. M., & Schaufeli, W. B. (2005). Burnout contagion among intensive care nurses *Journal of Advanced Nursing*, *51*(3), 276-287.
- Brooke, T., Brown, M., Orr, R., & Gough, S. (2020). Stress and burnout: exploring postgraduate physiotherapy students' experiences and coping strategies. *BMC Medical Education*, *20*(1), 1-11.
- Conversano, C., Ciacchini, R., Orrù, G., Di Giuseppe, M., Gemignani, A., & Poli, A. (2020). Mindfulness, Compassion, and Self-Compassion Among Health Care Professionals: What's New? A Systematic Review. *Front Psychol*, *11*, 1683. doi:10.3389/fpsyg.2020.01683
- Couser, G., Chesak, S., & Cutshall, S. (2020). Developing a Course to Promote Self-Care for Nurses to Address Burnout. *OJIN: The Online Journal of Issues in Nursing*, *25*(3).
- Crumpei, I., & Dafinoiu, I. (2010). Secondary traumatic stress, the side effect of clinical empathy. *Rev Med Chir Soc Med Nat Iasi*, *114*(4), 1092-1100.
- Decety, J., & Lamm, C. (2009). Empathy vs. personal distress. In J. Decety & W. Ickes (Eds.), *The social neuroscience of empathy*. Cambridge, UK: MIT Press.
- Decety, J., & Yoder, K. J. (2016). Empathy and motivation for justice: Cognitive empathy and concern, but not emotional empathy, predict sensitivity to injustice for others. *Social neuroscience*, *11*(1), 1-14.
- Dowling, T. (2018). Compassion does not fatigue! *The Canadian veterinary journal = La revue veterinaire canadienne*, *59*(7), 749-750.
- Hochschild, A. R. (1983). *The Managed Heart. Commercialisation of Human Feeling*. CA.
- Hunter, B. (2001). Emotion work in midwifery: a review of current knowledge. *Journal of Advanced Nursing*, *34*(4), 436-444.
- Kerasidou, A., & Horn, R. (2016). Making space for empathy: supporting doctors in the emotional labour of clinical care. *BMC Medical Ethics*, *17*(1), 8. doi:10.1186/s12910-016-0091-7
- Kharatzadeh, H., Alavi, M., Mohammadi, A., Visentin, D., & Cleary, M. (2020). Emotional regulation training for intensive and critical care nurses. *Nursing & Health Sciences*, *22*(2), 445-453. doi:https://doi.org/10.1111/nhs.12679



## References (2)

- Leinweber, J., Creedy, D. K., Rowe, H., & Gamble, J. (2016). Responses to birth trauma and prevalence of posttraumatic stress among Australian midwives. *Women Birth, 30*(1), 40-45. doi:10.1016/j.wombi.2016.06.006
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annu Rev Psychol, 52*, 397-422. doi:10.1146/annurev.psych.52.1.397
- McRae, K., Ciesielski, B., & Gross, J. J. (2012). Unpacking cognitive reappraisal: goals, tactics, and outcomes. *Emotion, 12*(2), 250.
- Nahm, E.-S., Warren, J., Zhu, S., An, M., & Brown, J. (2012). Nurses' self-care behaviors related to weight and stress. *Nursing Outlook, 60*(5), e23-e31. doi:<https://doi.org/10.1016/j.outlook.2012.04.005>
- Nielsen, H. G., & Tulinius, C. (2009). Preventing Burnout Among General Practitioners: is There a Possible Route? *Education for Primary Care, 20*(5), 353-359. doi:10.1080/14739879.2009.11493817
- Pérez-Fuentes, M. d. C., Herrera-Peco, I., Molero Jurado, M. d. M., Oropesa Ruiz, N. F., Ayuso-Murillo, D., & Gázquez Linares, J. J. (2020). A Cross-Sectional Study of Empathy and Emotion Management: Key to a Work Environment for Humanized Care in Nursing. *Front Psychol, 11*(706). doi:10.3389/fpsyg.2020.00706
- Poghosyan, L., Clarke, S. P., Finlayson, M., & Aiken, L. H. (2010). Nurse burnout and quality of care: cross-national investigation in six countries. *Research in Nursing & Health, 33*(4), 288-298. doi:10.1002/nur.20383
- Putnik, K., de Jong, A., & Verdonk, P. (2011). Road to help-seeking among (dedicated) human service professionals with burnout. *Patient Education and Counseling, 83*(1), 49-54. doi:<https://doi.org/10.1016/j.pec.2010.01.004>
- Rice, V., Glass, N., Ogle, K., & Parsian, N. (2014). Exploring physical health perceptions, fatigue and stress among health care professionals. *Journal of multidisciplinary healthcare, 7*, 155-161. doi:10.2147/JMDH.S59462
- Riley, R., & Weiss, M. C. (2016). A qualitative thematic review: emotional labour in healthcare settings. *Journal of Advanced Nursing, 72*(1), 6-17. doi:<https://doi.org/10.1111/jan.12738>
- Rogan, S., Verhavert, Y., Zinzen, E. et al. Risk factor and symptoms of burnout in physiotherapists in the canton of Bern. *Arch Physiother 9, 19* (2019). <https://doi.org/10.1186/s40945-019-0072-5>
- Sheen, K., Slade, P., & Spiby, H. (2014). An integrative review of the impact of indirect trauma exposure in health professionals and potential issues of salience for midwives. *Journal of Advanced Nursing, 70*(4), 729-743. doi:10.1111/jan.12274



## References (3)

- Tei, S., Becker, C., Kawada, R., Fujino, J., Jankowski, K. F., Sugihara, G., . . . Takahashi, H. (2014). Can we predict burnout severity from empathy-related brain activity? *Translational Psychiatry*, 4(6), e393-e393. doi:10.1038/tp.2014.34
- van der Riet, P., Levett-Jones, T., & Aquino-Russell, C. (2018). The effectiveness of mindfulness meditation for nurses and nursing students: An integrated literature review. *Nurse Education Today*, 65, 201-211. doi:https://doi.org/10.1016/j.nedt.2018.03.018
- Varvogli, L., & Darviri, C. (2011). Stress management techniques: evidence-based procedures that reduce stress and promote health. *Health science journal*, 5, 74-89.
- von Harscher, H., Desmarais, N., Dollinger, R., Grossman, S., & Aldana, S. (2018). The impact of empathy on burnout in medical students: new findings. *Psychology, Health & Medicine*, 23(3), 295-303. doi:10.1080/13548506.2017.1374545
- Wacker, R., & Dziobek, I. (2018). Preventing empathic distress and social stressors at work through nonviolent communication training: A field study with health professionals. *J Occup Health Psychol*, 23(1), 141-150. doi:10.1037/ocp0000058
- Weilenmann, S., Schnyder, U., Parkinson, B., Corda, C., von Känel, R., & Pfaltz, M. C. (2018). Emotion Transfer, Emotion Regulation, and Empathy-Related Processes in Physician-Patient Interactions and Their Association With Physician Well-Being: A Theoretical Model. *Frontiers in psychiatry*, 9, 389.
- West, C. P., Dyrbye, L. N., Sloan, J. A., & Shanafelt, T. D. (2009). Single item measures of emotional exhaustion and depersonalization are useful for assessing burnout in medical professionals. *J Gen Intern Med*, 24(12), 1318-1321.
- World Health Organisation. (2018). Health education of self-care: possibilities and limitations. Geneva, Switzerland.
- Xie, Z., Wang, A., & Chen, B. (2011). Nurse burnout and its association with occupational stress in a cross-sectional study in Shanghai. *J Adv Nurs*, 67(7), 1537-1546. doi:10.1111/j.1365-2648.2010.05576.x
- Zeidner, M., Hadar, D., Matthews, G., & Roberts, R. D. (2013). Personal factors related to compassion fatigue in health professionals. *Anxiety, Stress & Coping*, 26(6), 595-609.



THANK YOU

