

Burnout and Resilience in Hospital-based Nursing and Medical Personnel and Trainees (RESIST)

EHSREC2024_06_02

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Rationale

Resilience of healthcare professionals in hospital settings is challenged. Healthcare professionals and those in training to become one are experiencing symptoms of burnout as never before. Within healthcare, job commitment is at stake leading to staff shortages which place further stress on the healthcare system, creating a vicious circle of healthcare personnel leaving the job and even more staff shortages [1, 2]. A severe negative impact on the healthcare system is on the horizon with a shortfall of 15 million health care workers worldwide in 2030 [3]. Although healthcare professionals take pride in taking care of their patients, their own mental stretch and physical capacity is not unlimited; especially when much less attention is put towards the care of professionals themselves [4]. The Covid-19 pandemic has exacerbated the problems of the healthcare workforce shortfall by impacting the emotional wellbeing of health and care professionals in the frontline. An estimated 60% now expresses symptoms of burnout, with 30-50% of nurses and 13-21% of physicians in the hospital contemplating to leave the workplace [2, 5]. This is especially problematic considering the current historically low influx of new healthcare professionals. “Our health systems are struggling to retain and attract the next generation of health workers”, according to Dr. Hans Kluge, WHO regional Director for Europe. It is important to act now, as compressed wellbeing in healthcare professionals impacts the health and care system overall.

Although the pandemic is a factor of bias levelling up burnout percentages to unparalleled numbers, it has been much more a catalysing than a triggering factor. Pre-Covid literature showed that already 20-40% of physicians and nurses in hospitals experienced severe burnout symptoms [2]. People working in the surgical domain in various capacities are particularly at risk, although they seem to ignore/suppress alarming signals associated with burnout [2]. It is obvious that the pandemic has not only further overburdened the health and care workforce, but it also exposed the fragilities of the current health system in Europe [1]. As we recover from the pandemic, we need increased investments in multiple areas using the best science, tools and technologies available [6].

The KEEPCARING project thus strives towards better resilience of our healthcare professionals and aspiring ones through structural and multidimensional organisational support of individuals and teams. Within KEEPCARING's Work Package 2 (WP2), RESIST (Burnout and Resilience in Hospital-based Nursing and Medical Personnel and Trainees), an observational research component, builds an evidence-based framework of stress and resilience of healthcare professionals.

Objective

The primary objective of this study is to identify the risk and protective factors of resilience among healthcare professionals and how job demands, resources, support, and leadership styles affect resilience and burnout. The secondary objective is to identify individual and organizational level factors that are associated with resilience in Gen-Z among current healthcare workers, and how they relate to their health and well-being. This objective is implemented through the qualitative component of the study.

Methodology

This will be an observational cross-sectional design whereby psychosocial risk and protective factors associated with resilience and burnout in healthcare professionals will be assessed. Our intent here is to bring together different strengths in quantitative and qualitative approaches to develop a better understanding of burnout and resilience.

Appropriate assessment of psychological phenomena of burnout, leadership styles, job demands and resources, including resilience for our survey instrument will be measured through well-validated psychometric indices. A literature search was performed and several relevant scales for each construct were identified, published articles using and employing the scale were also reviewed and those meeting criteria of validity, acceptability and brevity were presented to the wider WP2 group for consideration. WP members included multiple social scientists with expertise in psychometrics and theoretical application and measurement and relevant stakeholder groups who brought insight into practical applications of the

survey to the hospital setting. Scales were deemed suitable if they met all of the above criteria, and in cases where multiple language versions and shorter item scales were available this also shaped selection.

A key criterion of the non-social science stakeholder group as well as from our initial piloting was the survey had to be between 10-12 minutes in duration. This is also consistent with good survey design practice. Below are the key psychometric scales included in the RESIST survey.

Resilience: This will be captured by the 8-item Short Resilience Survey (SRS) developed for measuring resilience in healthcare setting [7]. It has two subscales of decompression (e.g., “I can enjoy my personal time without focusing on work matters”) and activation (e.g. “I care for all patients/clients equally even when it is difficult.”) An examples of Decompression items include “can enjoy my personal time without focusing on work matters” and Activation “I care for all patients/clients equally even when it is difficult.” These measures exist independent of employee engagement, indicating an empirical distinction between the two concepts. Response categories on the items were Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree, and Not Applicable (1 =Strongly Disagree, 5 = Strongly Agree), with total resilience score ranging from 8 to 40 with higher scores indicating higher resilience.

Burnout: This will be captured by the shorter version of the Burnout Assessment Tool (BAT), a 12-item scale [8]. The scale’s deductive approach is based on the principle that the BAT should be in line with the theoretical description of burnout, as provided by Schaufeli and Taris [15]. They followed Edward Thorndike (1874-1949), a psychological fatigue researcher, who maintained that the basic principle of fatigue is “both the inability *and* the unwillingness to spend effort”, which is reflected by its energetic and motivational component of BAT, respectively. The 12-item BAT scale consists of items of four core symptoms of exhaustion, mental distance, emotional impairment and cognitive impairment [9]. The following scoring categories are used: 1 “never”, 2 “rarely”, 3 “sometimes”, 4 “often”, and 5 “always”. This means that the value of the average scale scores varies from 1 to 5. By adding the scores on all BAT items and dividing the sum by 12, the total score is obtained, which also ranges between 1 and 5 [9].

Work-related Stress: The Health and Safety Executive Stress Indicator Tool (SIT) is a 35-item questionnaire to assess exposure to seven common psychosocial factors involved in the genesis of work-related stress. The seven common psychosocial factors or the seven-factor model consists of demands, control, managerial and peer support, role clarity, relationships, and change processes [16]. Recent work conducted in the UK has provided evidence that the SIT may be reduced to a 25-item questionnaire (the SIT-25) showing the same seven-factor model and criterion-related validity of the SIT [17]. It includes five-point Likert scales ranging from 'Never' to 'Always' and 'Strongly agree' to 'Strongly disagree'. This the 25-item SIT will be used to measure work-related stress among healthcare professionals in hospital settings.

Leadership styles: According to some theoretical considerations and recent research, leaders with a toxic leadership style usually display deviant personality traits (psychopathic, Machiavelism, narcissistic), impacting on the mental health and wellbeing of the workforce [10]. However, there is a lack of research focused on the identification and characterization of toxic leadership styles in health care leaders, as well as its impact on the mental health of the workforce. Developing a compassionate motivation (i.e., sensitivity to the suffering of the self and others, allied with the wisdom, strength, and commitment to prevent and/or alleviate that suffering) is considered an accurate strategy and a fundamental therapeutic goal for the rehabilitation of individuals with several psychopathological symptoms/disorders (e.g., anxiety, stress, burnout, and deviant personality traits) and for the establishment of healthy relationships with friends, family, and coworkers [11.12]. It has been documented not only that leaders scoring high in dark triad traits [18] may have direct repercussions on employees' well-being [19], but also indirectly, through the adoption of a toxic, abusive, and demeaning leadership style [20, 21]. Thus, our interest in studying both variables: the dark triad and the toxic leadership described by Schmidt [13]. Thus, it is crucial to assess (toxic) leadership styles and toxic deviant traits in leaders within the KEEPCARING project using validated assessment tools, which is the case of the 15-item Toxic Leadership Scale [13] and the 12-item Dirty-Dozen scale [14], respectively.

The Dirty Dozen (DD) [14] is a brief 12-item questionnaire that aims to measures the "Dark Triad". The Dark Triad [18] can be defined as a constellation of three overlapping, although distinct, constructs:

Machiavellianism (i.e., a manipulative and cold interpersonal style), Psychopathy (i.e., a callous, unemphatic and impulsive style), and Narcissism (i.e., A grandiose and dominant style). The 12-item scale aims to reflect and assess these three constructs [14]. Items are scored using a 5-point Likert-type scale ranging from 1 (Totally Disagree) to 5 (Totally Agree). Higher total scores indicate higher levels of Dark Triad traits. The other-report version of the scale will be used in the present study to assess employees' perception of their direct leader's Dark Triad traits.

The Toxic Leadership Scale (TLS) is a 15/30-item instrument that aims to measure the five toxic leadership dimensions: Abusive Supervision (i.e., the demonstration of hostile verbal and nonverbal behaviours), Authoritarian Leadership (i.e., an absolute control over his/her subordinates and all decision making), Narcissism (i.e., a grandiose and self-centred style”), Self-promotion (i.e., a presentation of the self as a smart and capable person), and Unpredictability [13]. The 15/30 item scale, TLS, aims to measure these five dimensions on a 6-point Likert-type scale ranging from 1 (Strongly Disagree) to 6 (Strongly Agree). Higher total scores indicate higher levels of toxic leadership style. The TLS will be used in the present study to assess employees' perception of their direct leader's toxic leadership traits.

Qualitative Component

In the qualitative online interview study, the experiences of aspiring health care professionals (Gen Z) and current healthcare professionals in relation to resilience in the healthcare setting will be captured through semi-structured interviews. The interviews will be conducted focusing on participants' understanding of resilience, current experiences of coping under pressure, needs to be able to bounce back from workplace adversity and/or for better group resilience. Resourced data generated will provide contextual information on resilience in the healthcare professionals and how best to develop it in these settings. Interview transcripts will be transferred and analysed using inductive reflexive thematic analysis. The interview schedule for the semi-structured interviews is on the appendix below (Appendix C).

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KEEPCARING
Future Proofing Health- and Care Systems Safeguarding
Health Care Workers in Hospital Settings



EHSREC No: 2024_06_02

DETAILED VOLUNTEER INFORMATION SHEET

Dear Volunteer,

We are carrying out a study on the experiences of hospital-based doctors and nurses across the EU. This information sheet will tell you what the study is about.

What is the study about?

As part of an EU funded KEEPCARING project (101137244) the study aims to find out what are the current risks and levels of burnout among hospital-based doctors and nurses in the EU and how do factors like work setting, leadership and resilience influence it, and what the health services can do about it.

KEEPCARING Project

This survey is part of a larger research project, KEEPCARING, funded by the EU (grant no. 101137244). The KEEPCARING project aims to address the stress and burnout among healthcare professionals in the European Union. Healthcare professionals, especially those working in hospital settings, face extraordinary levels of stress and pressure. The COVID-19 pandemic further intensified these stressors, revealing systemic vulnerabilities in healthcare systems across Europe. While some interventions to improve wellbeing and resilience exist, there is still a significant gap in understanding what combination of solutions works best, especially in high-stress, surgical environments.

The KEEPCARING project was initiated with the goal of fundamentally improving the well-being of healthcare professionals across the European Union. The project seeks to co-create a comprehensive solution package specifically designed to reduce stress and enhance resilience in healthcare workers at every level—individuals, teams, and organizations. This study is the first stage of the project, which includes finding the levels of burnout, what factors hinder and support it, such as work environment, leadership, and resilience. Further details about KEEPCARING can be found [here](#).

What are the benefits of participating in the survey?

We hope that you will benefit as a participant by having a space to share your knowledge and experience and have your voice heard.

However, in particular, the findings of the study will help raise awareness of the levels of burnout among hospital-based doctors and nurses working at the coalface. A snapshot of the findings will be made available to your relevant associations/organisations so they can also raise awareness of these burnout levels.

Other potential benefits include.

- Contributing to development of best management and intervention practices to manage burnout in hospital nursing and medical staff.
- New empirical research that will drive innovation on addressing burnout in hospital-based doctors and nurses.

What are the risks?

You might decide that you do not want to answer a question. If this happens, you do not have to answer any question you do not wish to. If you get upset and need support, we will be happy to signpost you to support services.

As with all research surveys/interactions, there are data protection and privacy risks. The survey is administered through a University of Limerick approved Qualtrics account. Please note, your IP address may be collected once you complete the survey, but this will be deleted when we transfer the data from Qualtrics for analysis. The University has invested in commercial Microsoft accounts which have the highest level of security, and if you ticked the box for the interview part this will also be done on MS Teams and is also secure. All the Universities' policies and procedures for IT security and data protection will be followed.

What if I do not want to take part?

Participation in this study is completely voluntary and you can choose whether or not to take part. You can stop your involvement in the survey at any time simply by exiting the survey.

What happens to the information?

Please note, that while we do not collect direct identifiers about you, if you provide your email address we will be able to link your answers with your email address. Be assured however, that all the information that is collected will be kept private including your email address and stored securely and safely on the researchers' University of Limerick's One Drive. All our devices are encrypted, and also protected with a password, anti-virus software and VPN.

For future studies using non-invasive biomarkers such as heart rate variability and breathing rate, we aim to link your survey responses to this data, and your email address will be deleted after research partner responsible for this part of the project, Universidade NOVA de Lisboa, contacts you. In case of the interview study, your email address will be deleted after we contact you in relation to that study.

All email addresses will be deleted after 36 months. The data that is gathered in the study will be kept for seven years. After this time, it will be destroyed. We have also included a link to our Research Privacy Notice which has more information as to what happens to your information.

Who else is taking part?

Doctors and nurses, as well as trainee doctors and nurses aged 18 or over from several EU countries including Ireland, Germany, Denmark and the Netherlands.

What if something goes wrong?

It is unlikely that something will go wrong during the survey. Possible scenarios: poor connection or loss of internet connection.

What happens at the end of the study?

At the end of the study the information will be used to present results, including in academic forums

such as journal articles and conferences. The researcher has agreed a plan to communicate the results to any of the support organisations that sent out the study information including providing a copy to any pre-print article. A copy of the written research paper will be freely available through the UL repository, and the link to this will be published on social media including your support organisations.

Anonymised data from data collection will be made available to used by in academic papers, conference presentations and posters, and other academic forums. This may also be used in other communications to share the results such as blog posts, newsletter articles. No names or any participant identifiers, or third parties names will appear in any of the results or communication materials.

As mentioned above, this study is part of a wider EU-funded project KEEPCARING (see partners below) on burnout in healthcare workers in EU countries, therefore, after being anonymised, the data collected will be shared with the other data controllers - partners of the project (Universidade NOVA de Lisboa, Portugal, University of Coimbra, Portugal, Copenhagen University Hospital, Rigshospitalet, Denmark, and Universitätsklinikum Hamburg-Eppendorf, Germany.

We are also subject to the policies and procedures of University of Limerick (UL) and the EU Commission. As an institution, UL and EU commission are committed to Open Science. This means that anonymised data sets (such as anonymous survey data sets) may be made available to other researchers following a strict set of guidance criteria.

What if I have more questions or do not understand something?

If you have any questions about the study, you may contact stephen.gallagher@ul.ie.

It is important that you feel that all your questions have been answered at any stage during the research process.

How do I take part?

You can take part by following the link to the survey [here](#) or using the QR code to access it.

Contact information of Project Investigators:

Principal Investigator

Prof. Stephen Gallagher, Dept of Psychology. University of Limerick, Tel (061) 234899

Email: Stephen.Gallagher@ul.ie

Co-Investigator

Dr. Trina Tamrakar, Department of Psychology. University of Limerick,

Email: Trina.Tamrakar@ul.ie

Thank you for taking the time to read this. We would be grateful if you would consider participating in this study.

This research study has received Ethics approval from the Education and Health Sciences Research Ethics Committee [2024_06_02].

If you have any concerns about this study and wish to contact someone independent, you may contact:

Chair Education and Health Sciences Research Ethics Committee

EHS Faculty Office

University of Limerick, Tel (061) 234101

RESEARCH PRIVACY NOTICE

Introduction

This Research Privacy Notice governs the use and storage of your personal data by the University of Limerick (the “University”). The processing of this data is carried out in accordance with the General Data Protection Regulation (GDPR) / Data Protection Acts 1988-2018 (“Data Protection Law”) and in accordance with this Research Privacy Notice.

Any personal data which you provide to the University as part of this research project will be treated with the highest standards of security and confidentiality, in accordance with Irish and European Data Protection Law. This Notice sets out details of the information that we collect, how we process it and who we share it with. It also explains your rights under data protection law in relation to our processing of your data.

1. Title and Purpose of the research project

1. Title : Burnout in hospital-based healthcare nursing and medical personnel

This research project is part of a larger research project, KEEPCARING, funded by the EU (grant no. 101137244, “the Project”). The KEEPCARING project aims to address the stress and burnout among healthcare professionals in the European Union. You can find the project’s partner [here](#).

Over the last several years burnout, i.e., emotional, physical and mental exhaustion has increased in healthcare workers globally including Ireland. This was made worse by COVID-19 pandemic where healthcare workers faced the brunt of the fallout of this while working at the coalface. This increase in burnout has resulted in poor mental and physical health, higher levels of fatigue, lower job satisfaction, as well as having a negative impact job recruitment and retention making a chronic situation even worse. This study aims to examine, via a survey, levels of burnout among hospital-based nursing and medical personal in several EU countries (starting with Ireland, Denmark, Germany and Netherlands) and to explore the determinants of this from an individual, social, management and systems level.

A sub-aim will be to give an option (tick box yes or no answer) to healthcare workers if they wanted to take part in future studies on burnout (e.g. have a one-to-one interview with us to elaborate on these experiences or if they wanted to or to wear a vest that monitors heart rates similar to a fit bit, i.e. non-invasively and unobtrusively without impacting your day-to-day work lives.)

The aim of this project is to understand levels of burnout in healthcare workers in the EU, and the factors that may be important in increasing or mitigating its risk. At the end of the research process, recommendations for good practice will be developed to raise better awareness of burnout in nursing and medical personnel and shape better work practices to alleviate the negative effects of burnout.

2. Research Ethics Committee

2.1 Ethical approval was granted by EHS Research Committee on [date to be added]. The research ethics approval number is [to be added].

3. Identity of the Data Controller(s)

3.1 The Data Controller

- University of Limerick, Plassey, Limerick.

4. Identity and Contact Details of the Data Protection Officer of the Data Controller(s)/

4.1 You can contact the University of Limerick’s Data Protection Officer at dataprotection@ul.ie or by writing to Data Protection Officer, Room A1-073, University of Limerick, Limerick.

5. The Identity of the Principal Investigator

5.1 The Principal Investigator for this Research Project is Stephen Gallagher, Associate Professor in Psychology at the University of Limerick.

6. How we will use your personal data

6.1 The University must process personal data in order to undertake research relating to this project.

For this study, we are running an online survey and an interview study about burnout in healthcare workers groups. The research is using personal data to understand what the determinants and experiences of burnout in hospital-based nursing and medical personnel are. The survey is the main part of the study and it is completed without collecting directly identifiable information. We just use your IP address while you are completing the survey but we will not save this IP address, therefore once you have completed the survey we cannot identify you anymore. If you provide an email address because you choose to be contacted for the interview, we will be able to link your survey with your email address.

In addition, if you wish, you can also participate in future studies using non-invasive biomarkers such as heart rate, heart rate variability and breathing rate. In this case you will receive further information before starting the investigation.

6.2 Personal data collected and used for this survey is, for example: gender, age, work role and speciality, and ethnicity (aggregated for statistical information); some health-related personal data such as level of stress in the workplace.

7. **Lawful Basis for University Processing Personal Data**

7.1 Data Protection Law requires that the University must have a valid legal reason to process and use your personal data. This is often called a 'lawful basis'. GDPR requires us to be explicit with you about the lawful basis upon which we rely in order to process information about you.

7.2 The University is carrying out this research in the public interest and for scientific, historical or statistical purposes. In doing so, we are relying on Article 6(1)(e) of the GDPR. Where we are processing special category or sensitive personal data, we are relying on Article 9(2)(j) of GDPR. As required under Data Protection Law, we have appropriate safeguards in place in order to protect your personal data; these are set out in the next section.

8. **Protecting Your Personal Data**

8.1 We have the following measures in place to help ensure we keep your personal data safe:

- *All researchers at the University must adhere to University policies and procedures that tell our staff and students how to collect and use your information safely;*
- *Training is made available to all researchers to ensure our staff and students understand the importance of data protection and how to protect your personal data;*
- *The University has security arrangements and technical measures in place that ensure your information is stored safely and securely;*
- *All research projects involving personal data are reviewed and approved by a research ethics committee in line with University policies and procedures;*
- *Where a research project may involve a high risk, we first carry out a data protection impact assessment to assess risks and ensure adequate safeguards are in place;*

Further, our research partners at the Universidade NOVA de Lisboa, Portugal, University of Coimbra, Portugal, Copenhagen University Hospital, Rigshospitalet, Denmark, and Universitätsklinikum Hamburg-Eppendorf, Germany are joint data controllers abiding by these same regulations.

9. **Sharing Your Personal Data with Third Parties**

9.1 The University and KeepCaring Partners will not disclose your personal identifying information to third parties. We will share anonymous data with the partners of the Project for achieving the purposes of this Project. We may share anonymous and aggregated data with third parties for scientific research purposes.

10. **Transfer of personal data to Other Countries Outside the EEA**

We store the data in the EU. However, we rely on our suppliers Microsoft and Qualtrics which can have access to the data from outside the EU for the provision of some services. In this case, the transfer occurs in accordance with the safeguards set out in Chapter V of the GDPR (adequacy decision or, in the absence, on the basis of the Standard Contractual Clauses adopted by the EU Commission). If you wish to know more about these transfers please contact our DPO at Personal Data collected, dataprotection@ul.ie

11. **How Long Will We Keep Your Data**

11.1 Email addresses are stored for 36 months starting from the end of the survey. All research data will be kept for 7 years from the end of the survey.

12. Your Rights

12.1 You have the right to request that we:

- provide you with information as to whether we process your data and details relating to our processing, and with a copy of your personal data;
- rectify any inaccurate data we might have about you without undue delay;
- complete any incomplete information about you;
- under certain circumstances, erase your Personal Data without undue delay;
- under certain circumstances, be restricted from processing your data;
- Furnish you with the Personal Data which you provided us within a structured, commonly used and machine-readable format when the processing is based on the consent or on the contract.

You also have the right to object to the processing of your personal data.

12.2 Requests for any of the above should be addressed by email to the Principal Investigator at Stephen.gallagher@ul.ie and the Data Protection Officer at dataprotection@ul.ie. Your request will be processed within 30 days of receipt. Please note, however, it may not be possible to facilitate all requests, for example, where the University is required by law to collect and process certain personal data including that personal information that is required of any research participant.

12.3 It is your responsibility to let the Principal Investigator know if your contact details change.

13. Queries, Contacts, Right of Complaint

13.1 Further information on Data Protection at the University of Limerick may be viewed at www.ul.ie/dataprotection. You can contact the Data Protection Officer at dataprotection@ul.ie or by writing to Data Protection Officer, Room A1-073, University of Limerick, Limerick.

13.2 You have a right to lodge a complaint with the Office of the Data Protection Commissioner (Supervisory Authority). While we recommend that you raise any concerns or queries with us first at the following email address stephen.gallagher@ul.ie, you may contact that Office at info@dataprotection.ie or by writing to the Data Protection Commission, 21 Fitzwilliam Square South, Dublin 2, D02 RD28.

Appendix C: Interview Schedule

SEMI-STRUCTURED INTERVIEW SCHEDULE

(Add-on to the Quantitative Study)

Thank you for agreeing to participate on this one-on-one interview. We are grateful that you have volunteered in the survey to come and talk to us a bit more about your experience and views of burnout in the workplace. During this conversation I will ask specific questions to guide our discussion.

This conversation will be recorded so that we have an accurate record of your thoughts. As outlined in the information sheet, the recording and your transcript will be kept completely confidential. Only the research team will have access to the recording and transcript, and it will be anonymised. The recording will be destroyed as soon as the transcript is verified and analysed by the research team. I'm going to start recording now.

This conversation is voluntary. Speak as openly as you feel comfortable. You may also skip any questions you wish during our conversation. There are no right or wrong answers, we just want to gather your views and experiences.

Logistics

- *The conversation will last about a half hour.*
- *If you lose your connection, you can log back in using the link you already joined with.*
- *If possible, please put your mobile phone on silent mode and ensure you are in a quiet place to participate.*

Before we begin, do you have any questions?

Are you ready to begin?

Questions

1. In your opinion, what does it mean for a healthcare worker to be experiencing 'burnout'?
 - a. How would you describe it?
2. Have you experienced burnout in the workplace?
 - a. If yes, what was that like for you?
 - b. If no, can you tell me what you think has prevented burnout/ what supports you in the workplace?
3. Is there anything in particular in your work environment that causes stress/burnout?
 - a. Are there aspects of your role or your supervisor's role that contribute to it?
4. Do you feel supported by your manager/supervisor/the organisation in managing burnout and stress in the workplace?
 - a. Why? Or why not?
5. What do you think is needed to address/prevent burnout among healthcare staff?
 - a. In an ideal world, what would you like to see done?
6. Do you see yourself working in your current role over the next year/ longer term?
 - a. Why?
7. Is there anything else that you think is relevant for us to know about stress and burnout in your workplace?

Thank you for taking part in this research study.

If possible, can you share the survey with your colleagues?

Provide assurances about confidentiality.



KEEPCARING: Have your say

KEEPCARING is an EU-wide solution-focused project on burnout and resilience among hospital-based doctors and nurses



Are you burnt out?

Are you stressed? Is anyone listening? Take our 12-minute survey and have your voice heard!

Why take part? We want to tell your story about stress and burnout in EU hospital-settings

Click [here](#) or scan the QR code to find out more



KEEPCARING

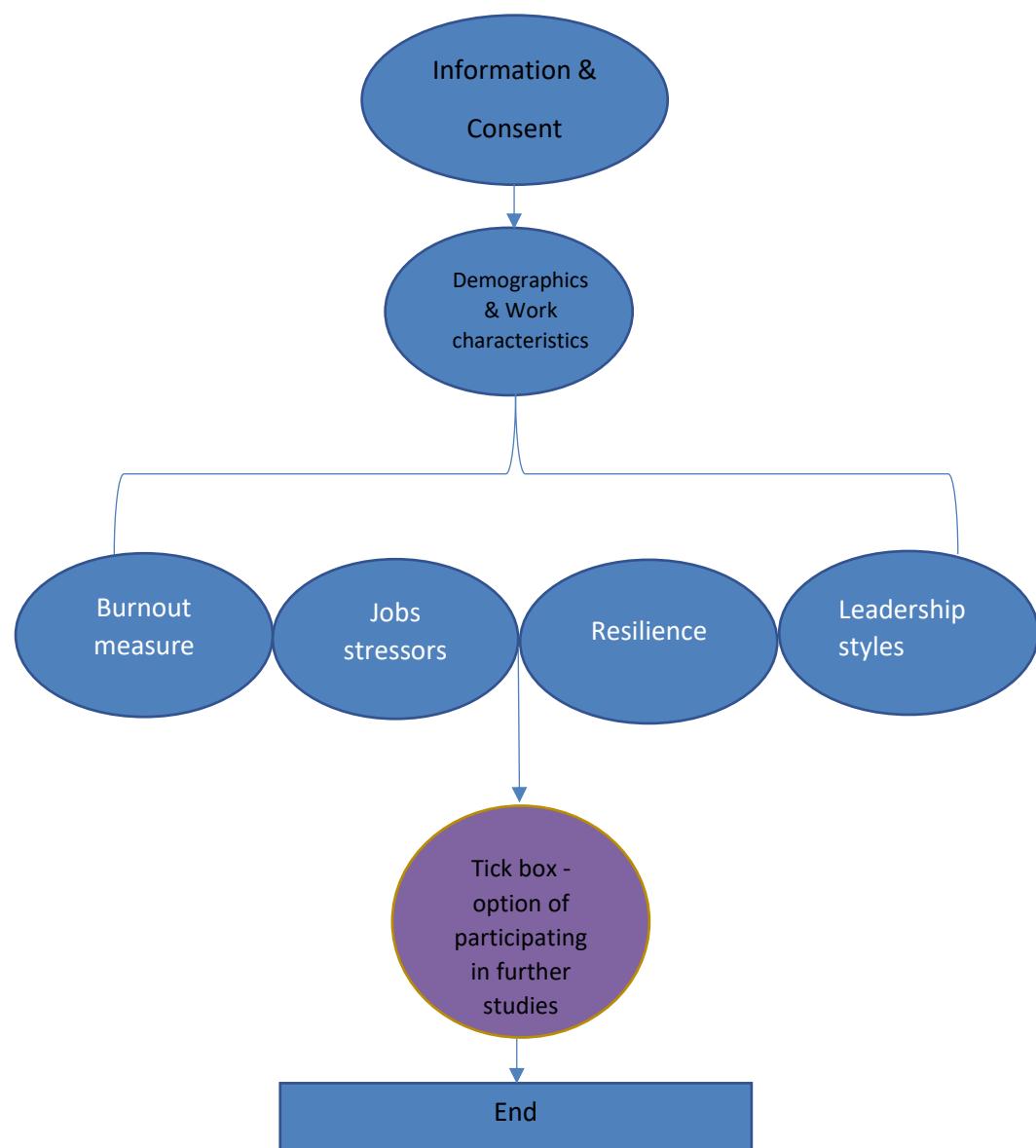
Future Proofing Health- and Care Systems Safeguarding Health Care Workers in Hospital Settings

UNIVERSITY OF
LIMERICK
OLSCOIL LUIMNIGH

 stephen.gallagher@ul.ie

Appendix E: Survey Instrument

Broad Survey Design





VOLUNTEER INFORMATION SHEET

Burnout in hospital-based doctors and nurses

As part of an EU funded KEEPCARING project (101137244) this study aims to find out what the current risks and levels of burnout are among hospital-based doctors and nurses in the EU, and what the health services can do about it.

Why should I participate?

Your input will help us find if and how factors like work setting, leadership and resilience strategies influence burnout. Participation in this study is completely voluntary and anonymous. By completing the survey, you indicate your consent to use your responses for the stated research purposes. You can stop your involvement at any time simply by exiting the online survey. The survey will take approximately 12 minutes.

At the end of the survey, you will be given the option to be invited for future studies if you are working in (or training for) one of the surgical specialties. More information about this will be provided at the end of the survey and at this link [here](#). This is optional, and for us to reach you, we will ask for your email address. Your email will be used by us only to invite you to take part in the studies you have indicated interest in, and then it will be deleted. Your responses will be coded to protect your anonymity. Under no circumstances will your responses be shared to your employer.

What happens to the information?

Detailed information on the project and how your anonymised data will be used is available [here](#). Our [Research Privacy Notice](#) has further details on what happens to your information.

If you have any questions on the study, please contact us:

Principal Investigator

Prof. Stephen Gallagher, Dept of Psychology. University of Limerick, Tel (061) 234899
Email: Stephen.Gallagher@ul.ie

Co-Investigators

Dr. Trina Tamrakar, Department of Psychology, University of Limerick,

Email: Trina.Tamrakar@ul.ie

Thank you for taking the time to read this. We would be grateful if you'd consider participating in this study.

This research study has received Ethics approval from the Education and Health Sciences

Research Ethics Committee [2024_06_02]. If you have any concerns about this study and wish to contact someone independent:

Chair Education and Health Sciences Research Ethics Committee

EHS Faculty Office

University of Limerick

Tel (061) 234101

To continue, please confirm that you are over 18 years of age

Yes, I am over 18

Do you consent to take part in this survey?

Yes
 No

Confidentiality Notice

Please note that while all the information collected on this form is completely anonymous, should you provide your email address for us to invite you for future studies (optional), we will have this information. Your email address will ONLY be used for this purpose and then deleted.

Although all information provided by you will be coded to anonymise, please be careful not to include any personally identifiable information about yourself or any other person when responding to the questions. You can save or leave the online survey at any time. Your responses will be saved for up to 7 days for you to resume, unless you delete the cookies on

your browser. If you do not continue within the 7 days, your data will automatically be deleted.

Section 1: Demographics

Demographic Details

These questions help us understand more about personal circumstances when investigating stress and resilience.

What is your age? (Please put numbers only, for e.g. 36)

What gender do you identify as?

- Female
- Male
- I use another term, please specify:
- Prefer not to say

What is your relationship status?

- Single, living alone
- Single, living with others
- Cohabiting with a partner
- Married or in a registered civil partnership
- Widowed
- Separated
- Prefer not to say

How would you best describe your cultural and ethnic background?

(Categories extracted from a research publication on 'Ethnic and cultural diversity in Europe: validating measures of ethnic and cultural background.' DOI: 1369183X.2018.1550150)

- European

- Sub-Saharan African
- North African/Middle Eastern/Central Asian
- South and South-East Asian
- East Asian
- Latin American
- Caribbean
- North American and Australasian
- Mixed ethnicity, please specify:
- Other, please specify:
- Prefer not to say

Do you have children you are a primary caregiver for?

- Yes
- No

If yes, how many children do you currently care for at home?
(Please answer only in numbers, eg. 3)

What country do you work in?

What is your current profession?

- Medical, qualified
- Medical, in training (student)
- Nursing, qualified
- Nursing, in training (student)
- Other medical professional, please specify:

Do you work in one of the surgical pathways in the hospital? (Surgical pathways include not only surgical disciplines but also associated specialties like anaesthesiology, gynaecology, ENT, ophthalmology etc.)

- Yes
- No

As a doctor, what is your current clinical role?

- Non-consultant Doctor (Intern / Senior House Officer / Registrar / Specialist Registrar)
- Consultant / Senior Consultant / Fellow
- Clinical Director / Chief Consultant
- Chief of Staff
- Other
- Prefer not to say

As a doctor, do you have a current academic/teaching role? Please choose the one most applicable:

- Teacher (to students, nurses, doctors)
- Researcher (actively researching yourself)
- Assistant Professor
- Associate Professor
- Full Professor
- Prefer not to say
- Not applicable

As a nurse, what is your current clinical role?

- Registered Nurse
- Specialized Nurse
- Nurse Practitioner
- Clinical Nurse Specialist

- Nurse Manager/ Head Nurse / Chief Nurse
- Other
- Prefer not to say

As a nurse, do you have a current academic/teaching role? Please choose the one most applicable:

- Teacher (to students, nurses, doctors)
- Researcher (actively researching yourself)
- Assistant Professor
- Associate Professor
- Full Nursing Professor
- Prefer not to say
- Not applicable

As a doctor, what is your main specialty?

As a nurse, what specialty/ward do you primarily work in?

In your medical training, where are you at?

In your nursing training, where are you at?

How long have you been in your current role/job?

- Less than 1 year
- 1-2 years

- 3-5 years
- 6-10 years
- 11-15 years
- 16-20 years
- More than 20 years
- Prefer not to say

On average, how many hours a week do you work?

How many days a month do you usually work at night, on average?

On average, how many days a month are you on call?

How long is your longest uninterrupted shift? (Please put number of hours only, for example, if it's 24 hours, please write 24.)

In an average week, what percentage (%) of the total hours you work is spent on administrative tasks? (Please respond only in numbers, for eg. 25)

To what extent do you agree with this statement:

'Administrative tasks obstruct me from delivering quality patient care.'

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

What percentage (%) of time are you unable to provide complete patient care to the standard that you would like?

(For any reason.) Please respond in numbers only, for eg. if it's 15% of the time, please write 15

If there is an inability to provide complete patient care to the standard you would like, how bothersome or stressful would that be to you?

- Extremely
- Very
- Moderately
- Slightly
- Not at all

On a score from 0 to 10, at the moment, I would rate my stress level at:

(Please move the arrow)



Section 2: Psychometric Scales

For the next set of questions, please read each statement and then decide how frequently you may experience these at work.

Please select the most appropriate response.

Never Sometimes Regularly Often Always

At work, I feel
mentally exhausted

-
-
-
-
-

| | Never | Sometimes | Regularly | Often | Always |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| After a day at work, I find it hard to recover my energy | <input type="radio"/> |
| At work, I feel physically exhausted | <input type="radio"/> |
| I struggle to find any enthusiasm for my work | <input type="radio"/> |
| | Never | Sometimes | Regularly | Often | Always |
| I feel a strong aversion towards my job | <input type="radio"/> |
| I'm cynical about what my work means to others | <input type="radio"/> |
| At work, I have trouble staying focused | <input type="radio"/> |
| When I'm working, I have trouble concentrating | <input type="radio"/> |
| | Never | Sometimes | Regularly | Often | Always |
| I make mistakes in my work because I have my mind on other things | <input type="radio"/> |
| At work, I feel unable to control my emotions | <input type="radio"/> |
| I do not recognize myself in the way I react emotionally at work | <input type="radio"/> |
| At work I may overreact unintentionally | <input type="radio"/> |

It is recognised that working conditions affect worker well-being.
Your responses to the questions below will help us determine current

working conditions.

It is important that your responses reflect your work in the last six months.

| | Never | Seldom | Sometimes | Often | Always |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| I am subject to personal harassment in the form of unkind words or behaviour | <input type="radio"/> |
| I have unachievable deadlines | <input type="radio"/> |
| If work gets difficult, my colleagues will help me | <input type="radio"/> |
| I am given supportive feedback on the work I do | <input type="radio"/> |
| I have a say in my own work speed | <input type="radio"/> |
| | Never | Seldom | Sometimes | Often | Always |
| I am clear what my duties and responsibilities are | <input type="radio"/> |
| I have to neglect some tasks because I have too much to do | <input type="radio"/> |
| I am clear about the goals and objectives for my department | <input type="radio"/> |
| I have a choice in deciding how I do my work | <input type="radio"/> |
| I understand how my work fits into the overall aim of the organisation | <input type="radio"/> |

| | Never | Seldom | Sometimes | Often | Always |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| I am pressured to work long hours | <input type="radio"/> |
| I have a choice in deciding what I do at work | <input type="radio"/> |
| I am subject to bullying at work | <input type="radio"/> |
| I have unrealistic time pressures | <input type="radio"/> |
| I can rely on my line manager to help me out with a work problem | <input type="radio"/> |

Your responses should reflect your work in the last six months.

| | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| I get help and support I need from colleagues | <input type="radio"/> |
| I have some say over the way I work | <input type="radio"/> |
| I have sufficient opportunities to question managers about change at work | <input type="radio"/> |
| I receive the respect at work I deserve from my colleagues | <input type="radio"/> |
| Staff are always consulted about change at work | <input type="radio"/> |
| | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| I can talk to my line manager about something that has upset or annoyed me about work | <input type="radio"/> |

| | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| My colleagues are willing to listen to my work-related problems | <input type="radio"/> |
| When changes are made at work, I am clear how they will work out in practice | <input type="radio"/> |
| I am supported through emotionally demanding work | <input type="radio"/> |
| My line manager encourages me at work | <input type="radio"/> |

For the next set of questions, please read each statement and then decide how much each applies to you in the past month.

| | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| I can enjoy my personal time without focusing on work matters | <input type="radio"/> |
| I am able to disconnect from work communications during my free time (emails/phone etc.) | <input type="radio"/> |
| I rarely lose sleep over work issues | <input type="radio"/> |
| I am able to free my mind from work when I am away from it | <input type="radio"/> |
| | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| I see every patient/client as an individual person with specific needs | <input type="radio"/> |

| | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| I care for all patients/clients equally even when it is difficult | <input type="radio"/> |
| My work is meaningful | <input type="radio"/> |
| The work I do makes a real difference | <input type="radio"/> |

Please indicate your level of agreement (or disagreement) with each of the following statements based on your supervisor right now.

Please take a moment to think about it..

My current supervisor...

| | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Tends to manipulate others to get their way | <input type="radio"/> |
| Has used deceit or lied to get their way | <input type="radio"/> |
| Has used flattery to get their way | <input type="radio"/> |
| Tends to exploit others towards their own end | <input type="radio"/> |
| | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| Tends to lack remorse | <input type="radio"/> |
| Tends to be unconcerned with the morality of my actions | <input type="radio"/> |
| Tends to be callous or insensitive | <input type="radio"/> |
| Tends to be cynical | <input type="radio"/> |

| | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| Tends to want others to admire them | <input type="radio"/> |
| Tends to want others to pay attention to them | <input type="radio"/> |
| Tends to seek prestige or status | <input type="radio"/> |
| Tends to expect special favours from others | <input type="radio"/> |

Please indicate your level of agreement (or disagreement) with each of the following statements based on your supervisor right now.

My current supervisor...

| | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Drastically changes their demeanour when their supervisor is present | <input type="radio"/> |
| Will only offer assistance to people who can help him/her get ahead | <input type="radio"/> |
| Accepts credit for successes that do not belong to him/her | <input type="radio"/> |
| Holds employees responsible for things outside their job descriptions | <input type="radio"/> |

| | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Publicly belittles employees | <input type="radio"/> |
| | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| Reminds employees of their past mistakes and failures | <input type="radio"/> |
| Allows their current mood to define the climate of the workplace | <input type="radio"/> |
| Expresses anger at employees for unknown reasons | <input type="radio"/> |
| Varies in their degree of approachability | <input type="radio"/> |
| Has a sense of personal entitlement | <input type="radio"/> |
| | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| Thinks that he/she is more capable than others | <input type="radio"/> |
| Believes that he/she is an extraordinary person | <input type="radio"/> |
| Controls how employees complete their tasks | <input type="radio"/> |
| Does not permit employees to approach goals in new ways | <input type="radio"/> |
| Determines all decisions in the unit whether they are important or not | <input type="radio"/> |

Final

Please rate how satisfied you are with your current work position/role

- Very satisfied
- Satisfied
- Neutral
- Dissatisfied
- Very dissatisfied

Please rate how often you think about quitting your current profession

- Never
- Rarely
- Sometimes
- Often
- Always

We have further studies within this project, please click which ones you'd like to be approached for:

| | Yes |
|---|--------------------------|
| A) One-to-one interview study | <input type="checkbox"/> |
| B) Future studies using non-invasive biomarkers such as heart rate, heart rate variability and breathing rate. (Only if you work at one of our study sites: UAMC Amsterdam, Rigshospitalet Copenhagen or UKE Hamburg) | <input type="checkbox"/> |
| C) Any other studies | <input type="checkbox"/> |

Please provide your email address if you clicked yes for any option above:

Last Page

Please click next to submit your response.

Below are some organizations that provide support:

Samaritans

Samaritans services are available 24 hours a day, for confidential, non-judgmental support.

Freephone 116 123, any time

jo@samaritans.ie

samaritans.ie

Practitioner Health

Confidential support and help for doctors, dentists and pharmacists.

Phone 085 760 1274

confidential@practitionerhealth.ie

practitionerhealth.ie

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