

Results: Four alternative future visions were formulated based on the perceptions of the stakeholders. The visions emphasised different aspects: (1) non-medicalising the school environment, (2) early and extensive intervention by school nurses enabled by work distribution with mental health specialists, (3) a multiprofessional team providing help on overall health questions and (4) a focusing of the services on mental disorders.

Conclusion: The future visions are based on distinct and even opposite perceptions related to the mission and focus of school health care. One extreme emphasises overall health promotion for everyone, and the other treatment for those suffering from mental disorders. Selection of a desirable vision is challenging: the former may lead to inadequate help for mental health problems and the latter insufficient help for other problems.

**Popul. Med. 2023;5(Supplement):A1325**

**DOI: 10.18332/popmed/164136**

### Defense strategies developed by military workers in the intervention in suicide crises

Jeremias Campos Simões<sup>1</sup>, Silvanir Destefani Sartori<sup>2</sup>, Eloisio Moulin De Souza<sup>3</sup>, Gabriela De Brito Martins<sup>1</sup>, Stephania Mendes Demarchi<sup>2</sup>, Rafael Vulpi Caliar<sup>1</sup>, Margareth Nunes Neves Conceição<sup>1</sup>, Caroline Feitosa Dibai De Castro<sup>4</sup>, Rita De Cássia Duarte Lima<sup>1</sup>, Maria Carvalho Andrade<sup>1</sup>

<sup>1</sup>Federal University of Espírito Santo (Ufes) Postgraduate Program in Collective Health Postgraduate Program in Collective Health Federal University of Espírito Santo Av. Marechal Campos, 1468, 29047-105 - Vitória - ES, Brasil, <sup>2</sup>Federal University of Espírito Santo (Ufes), <sup>3</sup>Federal University of Espírito Santo (Ufes) Postgraduate Program in Administration Federal University of Espírito Santo. Postgraduate Program in Administration Av. Fernando Ferrari, 514, Goiabeiras | Vitória - ES - CEP 29075-910 Brazil, <sup>4</sup>Federal University of Espírito Santo (Ufes) Postgraduate Program in Collective Health Postgraduate Program in Collective Health Federal University of Espírito Santo Av. Marechal Campos, 1468, 29047-105 - Vitória - ES, Brasil Brazil

Introduction: Suicide is considered a serious public health problem and has affected an increasing number of people in Brazil and Latin America, consequently leading to an increasing number of people affected by the suicidal crisis, regardless of having a bond with the attempting person.

Objective: To understand defense strategies developed by workers who intervene in suicidal crises.

Methods: This study consists of a qualitative approach, using psychodynamics of work as a theoretical and methodological category. Data were produced through semi-structured interviews, an intersubjective technique that allows the interviewee to speak and the interviewer to listen. The analysis of these data was possible with the use of a content analysis technique: set of techniques that aims to analyze the communications, through the systematization of objective procedures allowing the inference of knowledge related to the messages.

Results: 15 workers with experience in interventions in suicidal crises, members of the military fire brigade, located and operating in the southeastern region of Brazil, were interviewed. Defense strategies were identified that occur in four distinct and interconnected moments: (1) moment when they receive the information that the crisis is happening, (2) followed by the teams displacement to the place of the crisis, (3) the intervention aiming to remove the trying subject from the risk and (4) the return to the base. The flow of work practices allowed us to understand defense strategies that act in the denial of suffering, while others act in the concealment of suffering.

Conclusion: The elaboration of these strategies inserts workers into true traps: dissimulation and denial of suffering allow the continuity of work, but also make suffering difficult to identify.

**Popul. Med. 2023;5(Supplement):A1326**

**DOI: 10.18332/popmed/164217**

### Effectiveness of a meditation technique sudarshan kriya yoga (sky) on depression and anxiety: - A systematic review and meta-analysis

Jwenish Kumawat<sup>1</sup>, Carla Perrotta<sup>2</sup>, Mary Codd<sup>1</sup>, Patrick Wall<sup>1</sup>

<sup>1</sup>University College Dublin School of Public Health, Physiotherapy and Sports science "University College Dublin, Woodview House, Belfield, D04 V1W8, Dublin" Ireland, <sup>2</sup>University College Dublin

Background: Sudarshan Kriya yoga (SKY) is one of the proposed breathing techniques, which has proven to be an effective intervention for depression and anxiety in small studies. This study set out to retrieve, appraise and summarize the existing literature to assess the effectiveness of SKY to improve health outcomes in patients with mild to moderate anxiety and depression.

Methods: A systematic review of the literature was conducted to identify randomized control studies assessing SKY versus pharmacological intervention or placebo in patients with either depression and/or anxiety published from 1998 to June 2020. The studies were identified through database searches. Assessment of the quality of the evidence included risk of bias, heterogeneity, directness of the evidence, risk of publication bias and precision of effect estimates.

Results: The pooled Standardized Mean Difference (SMD) for the effect of SKY on depression was 0.02[-0.20, 0.24] in 6 studies with 388 participants. The pooled SMD for the effect of SKY on anxiety was -0.05 [-0.63, 0.52] based on five studies with 428 participants. The robustness of the results was assisted by a sensitivity analysis that revealed the effect of each study predominantly affected the overall SMD in each clinical outcome. There was also high heterogeneity observed for depression (I<sup>2</sup>=93%; p < 0.001) and for anxiety (I<sup>2</sup>=97%; p < 0.001).

Conclusion: SKY in itself is diverse in nature and when it comes to its overall effectiveness it may be inferred that teaching has shown immense potential in treating depression and anxiety. Many small studies claimed the effects of SKY on a different range of outcomes. It has also shown to be effective among different segments of population with varying physical capabilities. However, future studies are needed to evaluate the short- and long-term impact of SKY on larger samples.

**Popul. Med. 2023;5(Supplement):A1327**

**DOI: 10.18332/popmed/164643**

### Resilience in the covid-19 pandemic: New meanings and evolution

Azzurra Foggia<sup>1</sup>, Nicola Nante<sup>2</sup>, Giovanni Guarducci<sup>1</sup>

<sup>1</sup>University of Siena Post Graduate School Of Public Health, University Of Siena Italy, <sup>2</sup>University Of Siena Gabriele Messina University Of Siena Department Of Molecular Ad Developmental Medicine, University Of Siena Italy

Background and Objective: Since the end of 2019 there were several waves of COVID 19 pandemic. To limit contagion, governments have introduced measures that are able to exacerbate or identify psychopathologies, also because resistance to stressful conditions is helped by socialization and sharing of experiences. The study aimed to analyze the scientific literature produced on the subject of "resilience" during the pandemic, evaluating its evolution and possible new fields of development in psychological disorders.

Methods: Articles on MEDLINE were evaluated dividing them into four periods: first one 2019-2021, second one 2021-2022, total literature 2000-2022 and the sum of the first two periods. The following Medical Subject Headings were used: resilience AND mental health, resilience AND COVID 19. Inclusion criteria: articles in English, studies on psychological aspects in psychopathologies and eutimia. The exclusion criteria: studies on gender differences, psychopathology with disabling conditions, cancer, infirmity, studies on children and adolescents, studies on elderly people rest home, studies focused on single psychiatric pathologies.

Results: The literature on resilience during the COVID period showed a significant increase. Of the 1011 articles on resilience AND mental health written in 2000-2022, 645 were written in 2019-2022. Only 475 articles were written in the pre-COVID period; 645 in the entire period COVID 2019-2022 of which 561 only in the second period COVID 2021-2022. The same increase were for resilience AND COVID 19, highlights 598 articles written from 2019 to 2022, since before 2019 there were no pandemic, of these 506 articles were written from 2021 to 2022.

Conclusion: It highlights the increase of literature on mental health issues during the covid period, mainly on individual resources and the inherent capabilities of response to stress factors. Attention can again be directed to the person not only as an individual but as a social resource

**Popul. Med. 2023;5(Supplement):A1328**

**DOI: 10.18332/popmed/164711**

### Mental Health of those who care: how can epidemiology help address the burden of depression?

Claudio Costantino<sup>1,2</sup>, Vincenza Gianfredi<sup>2,3</sup>, Nuno Amparo<sup>4</sup>, Alessandro Catalini<sup>5,6</sup>, Giovanna Failla<sup>7,8,9</sup>

<sup>1</sup>Department of Health Promotion, Maternal and Child Care "G. D'Alessandro", University of Palermo, Palermo, Italy, <sup>2</sup>Italian Society of Hygiene, Preventive Medicine and Public Health (S.It.I), Italy, <sup>3</sup>University of Maastricht, Maastricht, The Netherlands, <sup>4</sup>Central Alentejo Health Cluster's Public Health Unit, European Network of Medical Residents in Public Health, Évora, Portugal, <sup>5</sup>Department of Biomedical Sciences and Public Health, Università Politecnica delle Marche, Ancona, Italy, <sup>6</sup>Medical Residents' Assembly of the Italian Society of Hygiene and Preventive Medicine (S.It.I), Italy, <sup>7</sup>Section of Hygiene and Public Health, Department of Life Sciences and Public Health, Catholic University of the Sacred Heart, Rome, Italy, <sup>8</sup>High School of Health Systems Economics and Management (ALTEMS),

Università Cattolica del Sacro, <sup>9</sup>European Network of Medical Residents in Public Health (EuroNet MRPH) Cuore, Rome, Italy

Depression is one of the most prevalent mental disorders with a high burden of disease, affecting one in fifteen adults (6%). Moreover, because the COVID-19 lockdown has highly impacted on mental health, in each strata of the population (from the most to the least vulnerable, also including health professionals), projections estimate that depression will become the leading cause of disease burden in 2030. COVID-19 increased the emotional burden on health professionals working at the forefront, including the one involved in the public health field. Furthermore, although the etiology of depression is still not well known, multiple risk factors have been associated with it. How do these several factors interact and have an impact on depression? How has the COVID-19 pandemic played a role on health professionals mental health or even on informal caregivers, especially considering that during the pandemic many healthcare activities have been postponed, further burdening them? The workshop Aims to reply to these still open questions by bringing together experts in public health, epidemiology, statistics, and quantitative social sciences with topic knowledge on depression. The workshop will be structured as follows: we will first set the scene with an introductory presentation. We will then deepen the theme by focusing on two different topics, each presented by two speakers. This will allow us to compare different perspectives and stimulate the final debate. Audience participation will be encouraged with live polls, quizzes or word clouds. The introductory presentation will move from a quick overview of the past, present and future of Public Mental Health. It will then focus on the stigma of psychiatric pathology and the impact of the pandemic on it. Finally, it will approach the theme of mental health among health professionals, residents and students taking cues from the SMS-ME project (Sicilian Medical Student Mental Health). In the first contribution, we will present data from the Italian and European surveys among Public Health Residents deepening the impact of COVID-19 pandemic on their mental health. These two surveys were conducted respectively by the working groups on "Public Mental Health" from the medical residents Assembly of the Italian Society of Hygiene and Preventive Medicine and from the European Network of Medical Residents in Public Health (EuroNet MRPH). The second contribution aims at discussing the most recent evidence on how several lifestyle and socio-economic factors are associated with prevalent and incident depressive symptoms among the general population. A specific focus on the role of social support and informal caregiving will be discussed. Data presented will come from The Maastricht Study, a large population-based cohort study, and from evidence of the literature. Identifying risk factors of depression could guide preventive strategies with the final aim of reducing its high morbidity. We hope that the final debate will lead to a fruitful discussion on the data presented, also aimed at understanding how to inform policy makers about health and economic consequences of the high burden of depression.

**Popul. Med. 2023;5(Supplement):A1329**

**DOI: 10.18332/popmed/165685**

### ABCs of mental health promotion in a world of Turmoil

Christina Pollard<sup>1</sup>, Elin Färnstrand<sup>2</sup>, Emma Hjalte<sup>3</sup>, Magni Mohr<sup>4</sup>, Monika Mohr<sup>5</sup>, Charlotte Meilstrup<sup>6</sup>, Line Nielsen<sup>6</sup>, Steinar Krokstad<sup>7</sup>, Rosa Alati<sup>1</sup>  
<sup>1</sup>Curtin University, School of Population Health, Australia, <sup>2</sup>Region Östergötland, Sweden, <sup>3</sup>Karolinska Institutet, Sweden, <sup>4</sup>University of the Faroe Islands, Faroe Islands, <sup>5</sup>Board of Public Health, Faroe Islands, <sup>6</sup>Department of Psychology, University of Copenhagen, Denmark, <sup>7</sup>HUNT Research Centre, NTNU, Norway

Brief Outline of Workshop

COVID-19[1], natural disasters and protracted conflicts have taken a toll on mental well-being. The Act Belong Commit™ evidence-based campaign is a public health strategy to protect and promote mental well-being[2].

This workshop will engage participants in a journey outlining how the successful Western Australian ACT BELONG COMMIT™ social marketing campaign, first launched in 2008, has been replicated and adapted in Denmark, Norway, Sweden, and the Faroe Islands. Presentations by each country's team, will show how the campaign has evolved to transcend cultural, environmental, and target audience differences.

The campaign encourages individuals and organisations to engage in activities that strengthen mental well-being: ACT, be physically, mentally, socially, spiritually, culturally active; BELONG, connect with others through activities that promote mental wellbeing; COMMIT, to meaningful or personally challenging activities such as volunteering or setting personal goals.

In the Nordic countries the campaign is called the ABCs of Mental Health, and is tailored to the cultural context and settings in each country. Each partner will describe their approach, giving examples of its application to specific populations.

This is the first time all ABC countries have been brought together to share their key learnings. Workshop attendees will participate in the face-to-face panel discussion that explores how to undertake mental health promotion in a world of turmoil.

Specific aims/objectives and components: The workshop aim is to showcase the Act Belong Commit / ABC framework and how it assists countries and organisations to promote mental well-being, in alignment with the UN Sustainable Development Goal #3, Ensure Healthy Lives and Promote Well-being for all at all ages[1][2] and the WFPHA's Global Charter for the Public's Health[3] objectives.

**Popul. Med. 2023;5(Supplement):A1330**

**DOI: 10.18332/popmed/163676**

### Moral distress and moral injury in the public health workforce during the pandemic

Farhang Tahzib<sup>1</sup>, Jutta Lindert<sup>2</sup>, Steven Bow<sup>3</sup>, Adrian Te-Patu<sup>4</sup>, Alison McCallum<sup>5</sup>, Peter Schröder-Bèck<sup>6</sup>

<sup>1</sup>UK Faculty of Public Health, United Kingdom, <sup>2</sup>University of Applied Sciences Emden /Leer, Germany, <sup>3</sup>University College London, London, United Kingdom, <sup>4</sup>World Federation of Public Health, New Zealand, <sup>5</sup>The Centre for Population Health Sciences, Usher Institute, University of Edinburgh, United Kingdom, <sup>6</sup>EUPHA ethics in public health section, Germany

Brief Outline

Moral distress and moral injury are the experience of psychological distress arising from participating in, or witnessing, ethically problematic actions, and the resulting injuries of that distress. Moral distress is said to be "the troubled call of conscience, an expression of fidelity to moral commitments seen as imperiled or compromised". Feeling ill-prepared or unable to pursue ethically-appropriate action – based on personal integrity or professional obligations – causes moral distress, which can lead to stress, burnout, lack of resilience and mental health issues.

The concepts of moral distress and injury were originally described among soldiers during wars and conflict, law enforcement agents, and nurses, with growing interest in their importance in other health professions. Public health professionals routinely face tough ethical decisions and face morally ambiguous situations, and are consequently vulnerable to moral distress. However, to date, this issue has received little attention in the public health arena.

The proposed workshop by a multidisciplinary team of researchers and practitioners will share and reflect on their recent robust cross sectional study on moral distress and injury in the public health workforce in the UK during the pandemic. They will outline the scale, nature, frequency, and severity of moral distress in the public health professional workforce during the pandemic and its resulting impact on mental health. There will also be description of a major international longitudinal study among health care workers in hospitals and primary care units in Brazil, Bolivia and Germany considering the issue.

It was found that 64% of the public health workforce in the UK had one or more experience of moral distress associated with their own action (or inaction), and 26% reported experiencing moral distress associated with a colleague's or organisation's action (or inaction) SINCE THE START OF THE PANDEMIC, AND THAT 14% of those with moral distress, reported MORAL INJURY severe enough to require time off work and/or therapeutic help. The main situations causing moral distress were developing or Implementing National Policy, Guidance and Law, Providing Public Health Advice, and Workplace Relationships and Environments. Moral distress was chiefly precipitated by moral judgements about Having Caused Injury, being Unable to do Good, Dishonest Communications, and Unjust Prioritisation.

The researchers will share analysis and insights on possible causes, aggravating factors and impacts in the public health workforce during the pandemic, and options for its prevention, amelioration and care.

The workshop will:

share recent research and insights on moral distress and injury in the public health workforce and options for its prevention, amelioration and care. Highlight the need to appreciate cultural dimensions and conflicting world views in practice create a space sharing knowledge and hearing the insights of the participants as part of interdisciplinary ethical, professional and policy efforts needed to better understand and consider interventions to increase the moral resilience of the workforce.

Key Questions the Workshop Will Address

What is the nature and impact of moral distress and injury in the public health workforce? What are options for its prevention, amelioration and care?

**Popul. Med. 2023;5(Supplement):A1331**

**DOI: 10.18332/popmed/163877**