

Interim guidance for the appropriate support of the health workers in the SARS-CoV-2 emergency scenario

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ISS Working Group Mental Health and Emergency COVID-19

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As a consequence of the current SARS-CoV-2 emergency scenario, professionals working in the health services had to deal with a series of activities such as the reorganization of professional services and procedures in response to different biohazard situations. Unfortunately, they found themselves experiencing contexts of stress and personal discomfort. During the SARS-CoV-2 emergency, it has been challenging to implement the usual problem management strategies both at an organizational/structural and individual level, and the scale of the phenomenon and the types of needs of COVID-19 patients involved some categories of health workers, with limited possibility of replacement, resolution and rostering. This report contains some operational indications for the prevention of stress and the predisposition of interventions aimed at the physical and psychological protection of health workers.

The original Italian versions of ISS COVID-19 Reports are available from: https://www.iss.it/rapporti-covid-19
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Acronyms

CNOAS Consiglio Nazionale Ordine Assistenti Sociali

(National Council of the order of social assistants)

ECM Educazione Continua in Medicina

(Continuing Medical Education)

FAD Formazione a Distanza

(Distance Training)

PPE Personal Protective Equipment

OSA Operatore Socio Assistenziale

(Social worker)

OSS Operatore Socio Sanitario

(Health Care worker)

OTA Operatore Tecnico Addetto all'Assistenza

(Technical service operator)

RSA Residenze Sanitarie Assistenziali

(Long-term care facilities)

RSD Residenze Sanitarie per Disabili

(Residential facilities for people with disabilities)

Glossary

Long-term care facilities: include residential facilities for non-self-sufficient people, like elderly and disabled, and extra-hospital residential facilities with high healthcare commitment, for intensive residential treatment and functional maintenance (RSA or similar, and RSD), long-term care rehabilitation, rest homes, social structures in the local area.

Professionals working in the health services: include doctors, nurses, technicians, health care workers (OSS), technical service operator (OTA) and all those who act their activities within health (hospital and territorial) or social workers, health and social areas and are therefore directly exposed to risk and overload (including corporate management, general practitioners and pediatricians, cleaning workers, technicians, computer technicians, administrative, etc.).

Corporate management: managers and executives that oversee the various departments and leadership positions

Introduction

The SARS-CoV-2 emergency and law enforcement actions taken to contain the epidemic, have exposed the community to entirely new living and working conditions. In addition to the psychological effects of the national state of emergency, professionals working in the health services have experienced specific critical situations and have been exposed to circumstances of discomfort and with limited possibilities of resolution (1-3). The very rapid evolution of the pandemic and the consequent progressive updating of national and local operational indications has made it necessary to continuously modify the strategies implemented, particularly in areas with a high COVID prevalence, committing workers to equally continuous organizational adaptations. In some cases, within a few days, entire health facilities, or parts of them, have been reorganized and wholly dedicated to the COVID-19 emergency (4). The workers found themselves exposed to risk factors for their safety and were asked to immediately and repeatedly modify activities and procedures, but even more so, teams and workspaces/places in a new and unpredictable situation. Also, the measures needed to counter the spread of the virus have subverted the usual ways of proximity and contact, with patients and relatives, between caregivers, with one's family members, making it particularly challenging to find ways to recover energy, both physical and emotional. Finally, the different impact of the SARS-CoV-2 emergency in the national territory has determined local scenarios and diversified needs. Workers have been called to identify and test intervention methods adapted to specific contexts.

As a consequence of the SARS-CoV-2 emergency scenario, professionals working in the health services are therefore facing professional experiences and personal contexts characterized by very high-stress levels, which could have significant implications for their physical and emotional well-being (5).

The exposure to biological risk, the initial generalized difficulty in finding Personal Protective Equipment (PPE), excessive workload and lack of rest, the management of complex patients, the lack of treatment of proven effectiveness, the discrepancy between patient needs and resources available at peak times are to be considered specific stress factors. Additional sources of discomfort for professionals working in the health services may include feelings of vulnerability or loss of control, concern about their health and spreading the infection to their family members, lack of contact with families and even more difficulty in sharing work-related emotions with them, concern about the sudden and prolonged interruption of relationships with their sons, especially young children (6, 7). Moreover, among the stress factors to which the workers are exposed, are reported the high responsibility, the burden of expectations, the fear of not doing enough and the anger towards the organization, possible experiences of guilt in case of time dedicated to themselves, the alteration of the relational distance doctor-patient and phenomena of stigmatization (1).

During the SARS-CoV-2 emergency, it has been challenging to implement the usual problem management strategies at an organizational/structural and individual level. Also, the speed and the scale of the phenomenon and the types of needs of COVID-19 patients involved some categories of health workers, with limited possibility of replacement, resolution, and roster. In situations of major epidemic importance, health workers from other Operating Units have been co-opted, albeit voluntarily, to guarantee the indispensable coverage of shifts, with the additional effort to act in clinical areas even very different from their own.

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doctors, nurses, technicians, health care workers (OSS), technical service operator (OTA) and all those who act their activities within health (hospital and territorial) or social workers, health and social areas and are therefore directly exposed to risk and overload (including corporate management, general practitioners and pediatricians, cleaning workers, technicians, computer technicians, administrative, etc.).

Overburdening and prolonged stress also influence attention, understanding, and decision making, and can have a lasting effect on overall well-being (8). Therefore, the protection of professionals working in the health services is an essential component of public health measures to address the COVID-19 epidemic (7, 9, 10), and promoting their mental health is a key element (8, 11).

Organisational and practical-operational procedures

The stress level and burnout risk of professionals working in the health services are influenced by numerous structural, logistical, organizational, and relational climate variables. Although the evidence in the specific context of the COVID-19 pandemic is still limited (12, 13), it is hypothesized that some organizational interventions defined in other areas may have positive effects in supporting health and social workers in the management of work-related stress also during the present emergency scenario (14-16).

It is essential that each health or social structure verifies, through an integrated multi-professional group², the possibility of adopting all the organizational and practical-operational procedures necessary to reduce workers' discomfort.

Interventions must be implemented and adapted flexibly according to different needs, considering both elements related to the pandemic (level of local spread, the trend over time, phase) and professional, personal, and context elements that can determine higher risk of distress for workers.

Organize workers' roles and activities

It is essential to maintain an effective communication flow between top management, the individual operating units/supply units, and workers, through clear and regular communications on the internal situation and the strategies progressively implemented to reorganize activities, as well as to ensure and strengthen coordination and integration between the various operating areas.

Those responsible for long-term care facilities³ must pay close attention to the following activities:

Organize and coordinate communication

Those responsible for health and social care facilities should plan, organize, and coordinate communication with and between professionals (1). Health and social care professionals should receive clear, timely, and up-to-date communications on procedures and measures to be implemented in different contexts and their motivations, including priority criteria to be applied when temporary shortages in availability and supply (PPE, swabs or other) may occur.

Organize workspace and time

Consistent with the epidemic levels, those responsible for health and social care facilities must pay the utmost attention to the organization of space and time. The assignment of roles and tasks must consider the workers' s professional skills and personal and health conditions. Efforts should be made to avoid as far as possible protracted work overloads and to ensure that breaks and rest periods, which are essential for physical and mental wellbeing and encourage self-care activities (1), are observed.

Encourage sharing and teamwork

Maintaining a high level of cohesion between workers fosters a welcoming and supportive climate. Communicative exchanges with colleagues are important to reduce the sense of isolation and

² Including, for example, depending on specific realities, psychology, psychiatry, occupational medicine, neuropsychiatry of childhood and adolescence, health management, health professions management, quality and risk management, clinical nutrition, etc.

³ Both at the top management level (health management, management of the entity) and the individual units/supply units.

stimulate a sense of belonging (1). The managers of the structures should promote collaboration between the workers trying to support those who experience specialist activities to which they are not familiar.

Favour homogeneous practices between operative units

Also, moments of sharing between the different teams should be structured concerning to how to manage communication with patients and relatives, and as far as possible between patients and relatives, favouring the dissemination of the strategies and good practices developed and in the direction of homogeneous modalities between operational units (17).

Enhance workers

Facilities managers should also recognize and value the personal and professional contributions of individuals and the value of their efforts in the collective interest.

Ensuring training

Lack of knowledge of appropriate measures to reduce risks to workers's physical and mental health lead to a feeling of inadequacy, contradiction and uncertainty, and lack of support. Workers should receive appropriate training to reduce their physical and mental health risks and provide adequate adaptation and recovery strategies (4, 6). Managers of health and social care facilities should promote training and education of health and care personnel by improving the dissemination of national and regional regulatory information for COVID-19 emergency management, including psychological and behavioural protection measures.

Distance training

The Istituto Superiore di Sanità (ISS) has made available a platform (https://www.eduiss.it/course/index.php?categoryid=51) dedicated to distance training in public health, within which the following courses dedicated to health workers are available:

- "Infection prevention and control in the context of the COVID-19 emergency". Dedicated to all
 continuing medical education (ECM) professions. All disciplines. Duration: 5 hours; ECM credits 6.5
- "Infection prevention and control in the context of the COVID-19 emergency". Dedicated to Healthcare Support Workers (OSS, OTA, social workers (OSA), etc.); Duration: 5 hours
- "Infection prevention and control in the context of the COVID-19 emergency" Dedicated to social assistants; Duration: 5 hours; 5 National Council of the order of social assistants (CNOAS) training credits

Technical reports

The ISS has prepared the publication of a series of technical reports to guide professionals working in the health services. These are interim reports, updated continuously in light of the evolution of the pandemic and emerging scientific evidence. It is recommended that all workers consult the technical reports on the ISS website (https://www.iss.it/rapporti-covid-19) and monitor their progressive updating. In particular, the following ISS COVID-19 reports are suggested:

 Rapporto ISS COVID-19 n. 2/2020 Rev. 2 "Indicazioni ad interim per un utilizzo razionale delle protezioni per infezione da SARS-COV-2 nelle attività sanitarie e sociosanitarie (assistenza a soggetti affetti da COVID-19) nell'attuale scenario emergenziale SARS-COV-2". This document is

- about the rational use of SARS-COV-2 infection protection in health and social activities (care for people with COVID-19) in the current SARS-COV-2 emergency scenario.
- Rapporto ISS COVID-19 n. 4/2020 Rev. "Indicazioni ad interim per la prevenzione e il controllo dell'infezione da SARS-CoV-2 in strutture residenziali sociosanitarie". This document is about indications for the prevention and control of SARS-CoV-2 infection in long-term care facilities.
- Rapporto ISS COVID-19 n. 6/2020 "Procedura per l'esecuzione di riscontri diagnostici in pazienti deceduti con infezione da SARS-CoV-2". This document is about procedure for performing diagnostic findings in deceased patients with SARS-CoV-2 infection.
- Rapporto ISS COVID-19 n. 8/2020 Rev. "Indicazioni ad interim per un appropriato sostegno delle persone nello spettro autistico e/o con disabilità intellettiva nell'attuale scenario emergenziale SARS-COV-2". This document is about guidance for appropriate support of people in the autistic spectrum and/or with intellectual disabilities in the current SARS-COV-2 emergency scenario.
- Rapporto ISS COVID-19 n. 11/2020 Rev. 2- "Raccomandazioni per il corretto prelievo, conservazione e analisi sul tampone oro/rino-faringeo per la diagnosi di COVID-19". This document is about recommendations for proper collection, storage, and analysis of oral/rhinopharyngeal swab for the diagnosis of COVID-19.
- Rapporto ISS COVID-19 n. 12/2020 "Indicazioni ad interim per servizi assistenziali di telemedicina durante l'emergenza sanitaria COVID-19". This document is about indications for telemedicine care services during the COVID-19 health emergency.

Resources

The scientific societies Italian Society of Anesthesia Analgesia Reanimation and Intensive Care Therapy (SIAARTI), National Association of Critical Area Nurses (Aniarti), Italian Society of Palliative Care (SICP), Italian Society of Emergency Medicine (SIMEU) have produced a document concerning communication with family members in conditions of complete isolation. The document "COMUNICOVID. How to communicate with family members in conditions of complete isolation" deals with theoretical-organizational problems, practical-operational needs and presents ten fundamental indications for communication between the healthcare team and the family.

The document is accessible at:

https://www.aniarti.it/wp-content/uploads/2020/04/ComuniCoViD_ita-18apr20.pdf

The Department of Epidemiology and Occupational and Environmental Health (DiMELIA) of National Institute for Occupational Accident Insurance (INAIL) and the National Council of the Order of Psychologists (CNOP) have made available methodological and operational indications for the activation of dedicated task forces. The document is about stress management and burnout prevention in health care workers in emergency COVID-19.

The document is accessible at:

https://www.inail.it/cs/internet/docs/alg-pubbl-gestione-stress-operatori-sanitari-covid-19_6443145764145.pdf

Promoting material support interventions

The availability of material supports can help to reduce the stress load on workers. In particular, material support interventions include the provision of adequate availability of PPE, the organization of places of recovery and rest in the context of work, support in the supply of necessities (e.g., food), the provision of dedicated housing to avoid return home or for the management of isolation, support in the management of children, and economic awards.

Resource

Among the initiatives of support and assistance for workers involved in the emergency, the National Observatory of Good Practices on Safety in Health reports the purchase of equipment, medical and PPE and the provision of facilities for the provision of essential assistance services (free accommodation, purchase, and delivery of food, etc.).

For more information, consult the document "Le iniziative di sostegno e assistenza per gli operatori sanitari impegnati nell'emergenza" about support and assistance initiatives for health workers involved in the emergency. Please refer to the document presented on the website of the Good Practices for Patient Safety Observatory, accessible at:

https://buonepratichesicurezzasanita.it/images/Covid-

19/Documenti/SOrsola/Le_iniziative_di_sostegno_e_assistenza_per_gli_operatori_sanitari_impegn ati_nellemergenza.pdf

Promote and monitor psychological well-being

Managers of health and social care facilities and individual operating units/supply units should promote an environment that fosters communication and social support and develop strategies to monitor staff welfare.

Some individual and group interventions have shown positive effects in supporting workers in the management of work-related stress (14-16, 18-20).

The promotion and monitoring of the psychological workers' well-being can be pursued through the dissemination and facilitation of access to the elements that protect against stress and where and how to access psychosocial and psychiatric support services (4).

Individual support strategies

For workers involved in the SARS-CoV-2 emergency, some of the following stress management strategies could be useful to strengthen physical and mental health (13).

It may be useful to produce targeted psychoeducational materials (intranet, stamp posters, e-mails, webinars, or other modalities) available to workers.

Nutrition, sleep and exercise

- Take a light and nutritious diet
- Try to ensure a restful sleep
- Practice deep breathing 2~3 times a day with a slow exhalation of the breath
- Perform practicable physical activities and exercises, e.g. limb stretching and other physical activities, where possibilities exist, including indoor physical activity (use of treadmills, exercise bikes, etc.)

Stress and emotions

- Accept anxiety. Containing anxiety can help to improve the ability to cope with difficulties and realize
 potential. Express negative emotions by talking, sharing, or crying with a friend or colleague you trust
- Enjoy relaxing music and enjoyable activities during the breaks
- Maintain as much contact as possible even remotely with family and loved ones for the necessary emotional support

Activities and working group

- Avoid prolonged work overload and provide for breaks that allow you to leave your job
- Accept the fact that right now there are limits to the possibilities for intervention and medical possibilities
- Collaborate with colleagues to accomplish tasks and encourage each other
- Recognizing one's contribution and professional skills to improve the sense of self-efficacy and self-esteem

Information exposure management

Avoid overexposure to COVID-19 emergency content and information through the media. Excessive exposure to unofficial information disseminated through social media could encourage the development of malaise (9, 21). Good quality communication can help to mitigate concerns arising from the emergency experience and convey a sense of control (1, 22). In the current emergency, there has been an overload of information on the epidemic's issues, the risks associated with it and prospects, with possible negative psychological repercussions. The excessive attention, cognitive and emotional, to this theme can interfere with the shift towards other themes, not directly related to the emergency (21)

Monitoring of reactions related to discomfort

Monitoring well-being and recognizing signs of discomfort for oneself and colleagues may be important to consider asking for help and aiding colleagues (1). Workers should pay attention to the appearance, duration, and persistence of the following psychophysical symptoms (1):

- Food, sleep: persistent difficulty in relaxing or poor quality of sleep; poor or excessive appetite and decreased or increased body weight.
- Fatigue and physical symptoms: excessive tiredness, recovery difficulties, and reduced psychophysical energy; the appearance of physical pain without an organic cause (somatizations), such as: heartburn, gastro-intestinal problems, chest pain, headaches or other physical pain.
- Tension and psychological symptoms: excessive tension, hypervigilance and constant state of alert; nervousness, irritability, and aggressiveness; mood and negative thoughts (mood deflection, anxiety, pessimism) most of the time throughout the day; constant feelings of guilt and feelings of inadequacy; feelings of apathy (towards one's affections); feelings of alienation (e.g. "I feel out of place at home"); feelings of confusion or dullness.
- Stress management behaviour: increasing or taking substances such as nicotine, alcohol, or drugs; taking medications for anxiolytic purposes (including sleeping medication).

In case of discomfort, it is appropriate that workers consider asking for help and talking to their managers and colleagues to reduce the perceived stress load and activate all available interventions.

Activate psychological and psychiatric support

It may be appropriate to schedule meetings in each unit/supply unit or professional area, possibly by telematic means, to allow workers to express their concerns and encourage support among colleagues (1). Particular attention should be paid to workers experiencing difficulties in their personal lives or who have had mental health problems in the past or lack social support (1).

The possibility of offering specific support according to needs must be considered (23), activating a network of resources dedicated to listen to workers and respond to possible psychological or psychiatric problems that may arise during activities carried out in COVID-19 emergencies (4). The availability of these services and related interventions should be facilitated and should be prepared considering that workers' psychological or psychiatric problems may persist well beyond the emergency period, even if the data available are limited (24, 25).

Psychological support interventions

It is appropriate to activate the staff of psychological area for the predisposition of interventions of work and organizational psychology and clinical and health psychology, to prevent and treat stress-related pathologies and stress chronicization in the work environment and promote psychological resources and resilience (empowerment).

The support services' objective is to listen to the needs and respond to possible psychological problems that may arise in workers during activities carried out in COVID-19 emergencies (4).

Psychiatric and psychopharmacological interventions

In the face of situations where there is a high pervasiveness of clinical symptoms, seriousness, and interference with social functioning and daily life, psychiatric and, where appropriate, psychopharmacological interventions must be guaranteed to workers, preferably within the local Mental Health Department, with clinics dedicated to health and social workers in the COVID-19 emergency, with priority access, and with all appropriate confidentiality safeguards.

Resource

Toll free number 800.042.999. The toll-free number has been activated by the Italian Society of Psychiatry specifically for the management of workers' discomfort. The number has been made available by Telecom Italia (TIM) and provides telephone answering contacts that are supervised by the experts of the Italian Society of Psychiatry.

Differentiate responses according to the context

It is important that the planning of responses, although based on the common lines described above, is done in a differentiated way, considering specific contextual elements that may require different priorities and mix of interventions. The types of stress and support needs can take on very variable characteristics, depending on the level of COVID prevalence in the reference territory and the phase and course of the epidemic, the area in which the workers carry out their activities, the possible COVID positivity and many other aspects.

For example, the experiences and stress levels experienced by those who have suddenly found themselves acting in the epicentre of the pandemic can be particularly intense and initially require more proactive interventions, focused on communication and organizational aspects and material support interventions. Workers have found themselves more exposed to biological risks and difficult situations with limited possibilities of resolution (1, 22). They have experienced significant concern for their health and fear of spreading the infection to their families (6, 7) and, at the same time, the fatigue of social distancing from their loved ones.

Supporting material interventions, targeted support, and psychoeducational materials can be particularly relevant for female workers with children, especially if they are young. Female workers may have found themselves from one day to the next totally absorbed by their work needs and, at the same time, without any support for the management of children, with the concern of how to explain emotionally complex aspects (their sudden distance, the impossibility of contact, the risks related to their activity) and without the possibility of exercising their role in supporting their children in elaborating their emotions or in managing the school at a distance (26).

As the epidemic progressed, professionals working in the front line with COVID patients found themselves particularly exposed to contact with symptoms of distress and depression in assisted patients. Frequent death despite care efforts can adversely affect the motivation to engage in care. Moreover, professionals working in the front line with COVID patients go through emotional fatigue in providing daily information to patients' relatives and even more so in managing death's communication. Training in communication with the patient's family members in the specific context of the COVID emergency becomes particularly relevant, including attention to fostering, also through the use of video calling technologies, eye contact with the family member in critical condition. Good communication can reduce stress not only for the patient and the family member but also for the healthcare professional (17).

Training and coaching also play a crucial role in reducing the stress of health professionals who have worked in the COVID area from other disciplines and even more health and social workers.

Particular attention should be paid to non-medical workers who have supported the whole COVID reorganization and the general operation of the facilities or provide non-medical services in the COVID area such as cleaning or other.

Interventions in support of stress management and psychological support are also very relevant for non-COVID area workers. They may have experienced a sense of futility due to slowing down or stopping their activities, concern about difficulties in accessing care for non-COVID patients, and identification of them-self with the suffering of colleagues and users (27). In areas with high COVID prevalence, workers were found to be infected due to the initial presence in non-COVID areas of SARS-CoV-2 positive patients with atypical symptoms.

Particular attention should be paid to bringing workers closer to the possibility and usefulness of stress management and psychological support interventions. Despite the widespread perception that they are in a very high-stress situation and that this could put their health at risk and the consequent demand for psychological support services to be activated as soon as possible, there are still many difficulties and little habit of individuals to use these services (28). Solidarity between colleagues is an important protective element in the more intense phases of activity, but the return to more normal rhythms or a new epidemic phase can be particularly critical moments to monitor.

Finally, proactive stress management interventions and psychological support for COVID positive workers in quarantine, with severe forms of COVID, or who have had relatives or friends severely ill should be put in place. Indeed, they are at particular risk of manifesting important symptoms of discomfort related (29), among other things, to the concern of having infected others, forced immobility and dilated time after a prolonged overload, anxiety about the progress of the disease and the possible prognosis. It is in this category that some suicides have been reported.

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APPENDIX

OPERATIVE PROCEDURES for the appropriate support of the health workers in the SARS-CoV-2 emergency scenario

Organize workers' roles and activities

- Organize and coordinate communication
- Organize work space and time
- Encourage sharing and teamwork
- Favour homogeneous practices between operative units
- Enhance workers

Ensuring training

- ISS distance training (https://www.eduiss.it/course/index.php?categoryid=51)
- ISS technical reports on topics of specific interest (https://www.iss.it/rapporti-covid-19)
- Documents and resources of scientific societies

Promoting material support interventions

- Availability of Personal Protective Equipment
- Organization of places of recovery and rest in the context of work
- Support in the supply of basic necessities (e.g. food)
- Provision of dedicated housing to avoid returning home
- Support in the management of children
- Economic awards

Promote individual support strategies

Nutrition, sleep and exercise

- Take a light and nutritious diet
- Try to ensure a restful sleep
- Practice deep breathing 2~3 times a day with a slow exhalation of the breath
- Perform practicable physical activities and exercises

Stress and emotions

- Accept the anxiety
- Expressing negative emotions by talking, sharing or crying with a friends or colleagues you trust
- Enjoy relaxing music and enjoyable activities during the breaks
- Maintain as much contact as possible even remotely with family and loved ones for the necessary emotional support

Activities and working group

- Avoid prolonged work overload and provide for breaks that allow you to leave your job
- Accept the fact that right now there are limits to the possibilities for intervention and medical treatments

- Collaborate with colleagues to accomplish tasks and encourage each other
- Recognizing one's personal contribution and professional skills to improve the sense of selfefficacy and self-esteem

Information exposure management

Avoid overexposure to COVID-19 emergency content and information through the media.

Monitoring of reactions related to discomfort

- Food, sleep: persistent difficulty in relaxing or poor quality of sleep; poor or excessive appetite and decreased or increased body weight
- Fatigue and physical symptoms: Excessive tiredness, recovery difficulties and reduced psychophysical energy; appearance of physical pain without an organic cause (somatization)
- Tension and psychological symptoms: Excessive tension, hypervigilance and constant state of
 alert; nervousness, irritability and aggressiveness; mood and negative thoughts (mood deflection,
 anxiety, pessimism) most of the time throughout the day; constant feelings of guilt and feelings of
 inadequacy; feelings of apathy or estrangement; feelings of confusion or dullness
- Stress management behaviour: Increasing or taking substances such as nicotine, alcohol, or drugs; taking medications for anxiolytic purposes (including sleeping medication)

In case of discomfort, it is appropriate that workers consider asking for help and talking to their managers and colleagues to reduce the perceived stress load and activate all available interventions.

To find out more: https://www.iss.it/en/rapporti-covid-19

Rapporti ISS COVID-19 in Italian

Available at the link: https://www.iss.it/rapporti-covid-19

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