

# THE ACTIVITY OF THE SPEECH THERAPIST AT THE TIME OF COVID 19: SURVEY OF THE CAMPANIA REGION

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## ABSTRACT

*Our government has enacted restrictive and isolation measures, also in the field of rehabilitation, to combat and contain the spread of the SARS-CoV-2 virus. These have had a major impact on the working methods and activities performed by the Speech Therapist. The Board of Speech Therapists of the Interprovincial Order of NA-AV-BN-CE conducted an anonymous survey to observe the phenomenon.*

*The study aimed to assess how and to what extent the health measures in place influenced occupational activities and work-related discomfort.*

*A questionnaire was structured to investigate, anonymously, different areas of professional interest (how therapeutic activities are carried out, work-related stress management, changes in human relations, specific needs), disseminated via the web thanks to the Google platform, and available from 15/06/2020 to 15/11/2022 for all speech therapists belonging to the interprovincial order of NA-AV-BN-CE.*

*161 Speech Therapists, aged between 21 and 40 years (73.9 per cent), took part in the survey. They worked mainly in a combined telerehabilitation and outpatient setting (64.12 per cent), and were provided with appropriate PPE for the treatment (65.8 per cent). Speech and language therapists reported a low to medium level of frustration (63.9%) and work-related stress (63.4%) for telerehabilitation treatment, to a high level for outpatient or home treatment (69.6%). Medium to high values (81.4%) of anxiety, worry and work-related distress are reported, favoured by social isolation and a perception of less support among colleagues, with a perceived need for psychological support from specialised figures to manage the emotional burden.*

*The results suggest a medium to high level of work-related discomfort during the pandemic period, mainly for speech therapists who performed outpatient/domiciliary activities, entailing the risk of developing psychological distress. Further research should be undertaken, with multicentre and larger sample size studies, to define the relationships between the working methods promoted, work-related stress and the need to manage it.*

## INTRODUCTION

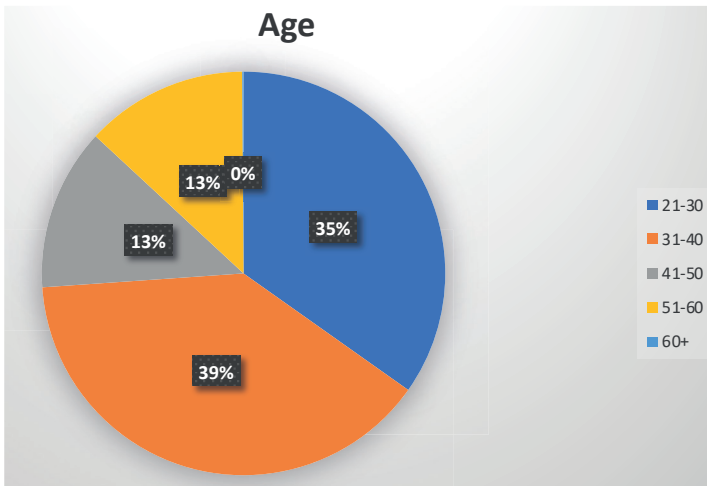
In the last century we have had six events between epidemics and pandemics that have in fact affected the human species causing numerous deaths, but above all have produced social, political and economic transformations along with medical and scientific discoveries. From the first, caused by the H1N1 virus, which raged from 1918 to 1919 under the nickname 'Spanish', to the devastating effects of the SARS-CoV-2 virus, or as we usually know it, Covid-19.

Severe Acute Respiratory Syndrome by Coronavirus-2 (SARS-CoV-2) is the name given to the new coronavirus of 2019, COVID-19 is the name given to the disease associated with the virus, an acronym thus explained CO - Corona, "VI" - Virus and "D" for Disease, while 19 stands for the year in which the virus was first identified. (G. Rezza, A. Bella, F. Riccardo, P. Pezzotti - Infectious Diseases Department, ISS, 2020)

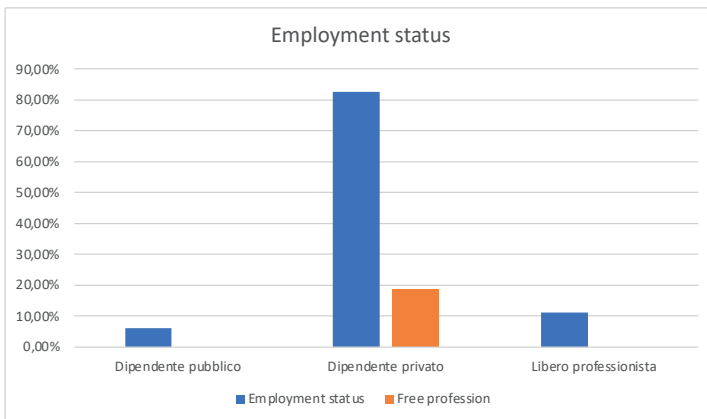
It first emerged as an epidemic and was later declared a pandemic by the World Health Organisation (WHO) in March 2020.

Characteristics of this pathology are low mortality rates, while dangerousness, speed of expansion, and the creation of variants have brought enormous con-

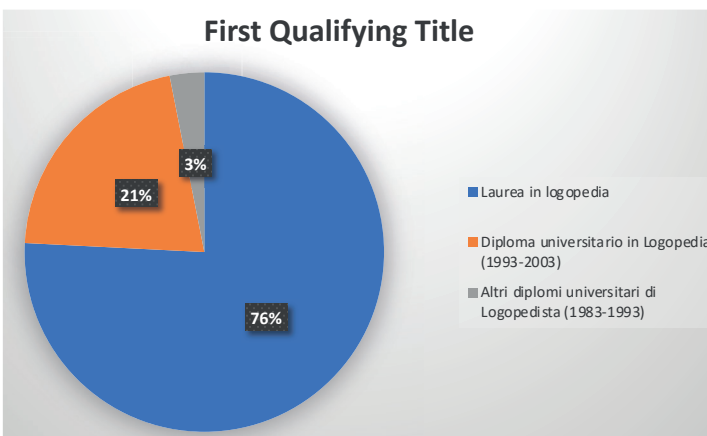
sequences at every level, causing all citizens and all professionals to find themselves in a suddenly peculiar situation. In line with what is indicated by the various DPCMs, rehabilitation activities, including speech therapy, have continued and all professionals, out of ethical and deontological responsibility, have carried out their professional activities both in the presence, through the use of PPE, and at a distance through telerehabilitation. The latter, which was not yet widespread and practised in Italy before, has created the need for a great capacity to reshape work. As highlighted by numerous studies, COVID-19 has significantly implied a large number of psychological consequences on the population ([National Conference for a Community Mental Health, Ministry of Health, 2021](#)). We can consider, therefore, that even more circumstances have subjected healthcare professionals to a significant increase in work stress, exposing them to a greater risk of psychological problems arising from the burden of caring for complex patients, the choice of separation from loved ones, the sudden change in care management directives and protocols and/or personal safety. In the light of all this, it was deemed appropriate to consider distributing a questionnaire among the speech therapists belonging to



Tab. 1 - Age of participants



Tab. 2 - Occupational Status



Tab. 3 - First qualification

the TSRM-PSTRP professional association of Na-Av-Bn-Ce, investigating this phenomenon in different forms and circumstances that will be fully illustrated in the following paragraphs.

## MATERIALS AND METHODS

### Questionnaire structure

The proposed questionnaire was structured in different areas: 6 items deal with the characteristics of the population (employment status, place of work, age, gender, qualification, years of work experience); 1 item investigates the way work was carried out during the first and second period of the COVID-19 pandemic; 3 items detect the Personal Protective Equipment (PPE) provided; 4 items deal with work-related stress;

3 items analyse emotional perception; 1 item studies the characteristics of work organisation; 1 item observes communication between colleagues; finally, 1 item concerns the need for psychological support.

The questionnaire is disseminated via the web thanks to the Google platform (at the link [https://docs.google.com/forms/d/e/1FAIpQLSeiVncR413pbMfhIRD-nR9BTH7M\\_48DS7mG81POQPKi\\_4xPnDQ/view-form?usp=pp\\_url](https://docs.google.com/forms/d/e/1FAIpQLSeiVncR413pbMfhIRD-nR9BTH7M_48DS7mG81POQPKi_4xPnDQ/view-form?usp=pp_url)), since 15/06/2020 trying to reach all speech therapists belonging to the interprovincial order of NA-AV-BN-CE. The data was collected up to 15/11/2020 and concerns 161 participants.

### Population characteristics

The questionnaire reached 161 Speech Therapists in Campania, of whom only 8.1% were male (91.9% female). The participants' ages ranged from 21-30 years (34.8%), 31-40 years (39.1%), 41-50 years (13.1%), 51-60 (13%) (Tab.1).

A high percentage of the population surveyed is employed in the private health sector on a salaried basis (82.61%), of which 18.66% state that they also work on a freelance basis. The remaining part of the population is employed in public healthcare (6.21%) and in free professional activity (11.18%) (Tab.2).

The academic qualifications possessed by the majority of the population are the Degree in Speech Therapy (75.8%), the remainder have the University Diploma in Speech Therapy 1993-2003 (21.1%), and a small percentage have other University Diplomas in Speech Therapy 1983-1993 (3.1%) (Tab.3).

Concerning the work experience gained, assessed in years, the analysis of the sample shows values in line with the ages of the respondents: 21.1% had up to 5 years of work experience, 37.3% were in the range of 6 to 10 years, 21.1% from 11 to 15 years, 6.7% from 16 to 20 years and the remainder (13.7%) more than 20 years of professional experience.

## RESULTS

The questionnaire proposed to the speech therapists belonging to the interprovincial Order of NA-AV-BN-CE revealed the following values.

### Work Activity

The work activity during the pandemic period was mainly carried out in the presence at the outpatient clinics (8.07% worked exclusively in the outpatient clinic and 1.86% carried out first no activity and then outpatient treatment) and in tele-rehabilitation (6.79% worked exclusively remotely and 0.6% carried out first no therapy and then tele-rehabilitation); a large proportion of the professionals used both combined working modes (64.12%). Only 5.6% of the participants continued with home-based activity (of whom 1.2% exclusively performed home-based therapy and 4.4% both outpatient and home-based), 1 participant (0.6%) worked in an RSA, 1 performed hospital-based treatment, 1 participant served in both inpatient ward and telerehabilitation, and 1 suspended all activities for two months and then resumed mixed outpatient and telerehabilitation. A percentage of 10.56% did not perform any type of activity.

### Personal Protective Equipment (PPE)

The survey revealed the accessibility of various PPE, such as: sanitising gel (supplied to 90.7% of partici-

pants)\*, gloves (80.7%)\*, face shields (78.9%)\*, surgical masks (77.6%)\*, disposable labcoats (65.2%)\*, FFP2 masks (50.9%)\*, and disposable overalls (17.4%)\*. Plexiglass breath guards and goggles (both 9.9%)\*, socks (4.3%)\* and FFP3 masks (1.9%)\* were poorly supplied to speech therapists.

\* percentages refer to the provision of individual PPE for each participant who worked during the COVID-19 pandemic period. The questionnaire gave, in fact, the possibility to flag all/some/none of the items entered. (to be put as a footnote)

A large majority of the interviewed colleagues considered that the IPRs concretely provided by the companies were sufficient. On a 4-point Likert scale (from 'not at all' to 'very'), 24.2% considered the IPR provided to be absolutely sufficient, 41.6% quite sufficient, 26.1% not very sufficient and 8.1% not at all sufficient. Furthermore, the participants considered the PPE provided to be effective in ensuring their protection against COVID-19 infection (Table 4).

**Work-related stress**

The management of work-related stress is investigated by 4 items using a 4-point Likert scale (from 'null' to 'high'), and concerns the level of frustration (Tab.5) and emotional overload (Tab.6) perceived by colleagues who used a remote working modality and by professionals who continued in an outpatient and/or home-based modality.

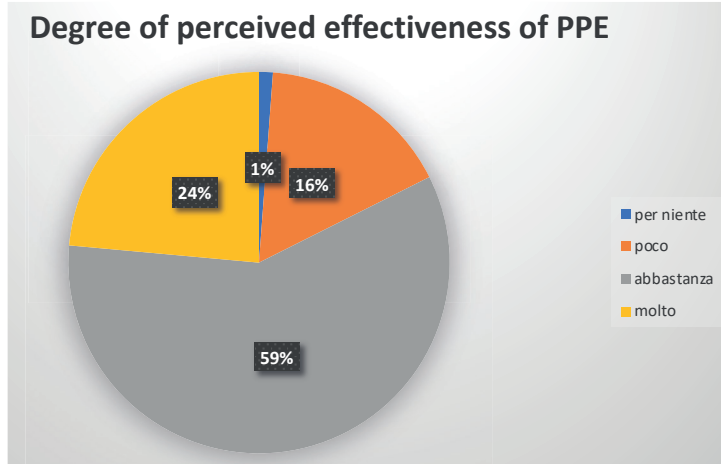
Both the level of perceived frustration and emotional overload were found to be more pervasive in the population that continued rehabilitation activities in the outpatient/domiciliary setting.

**Emotional perception**

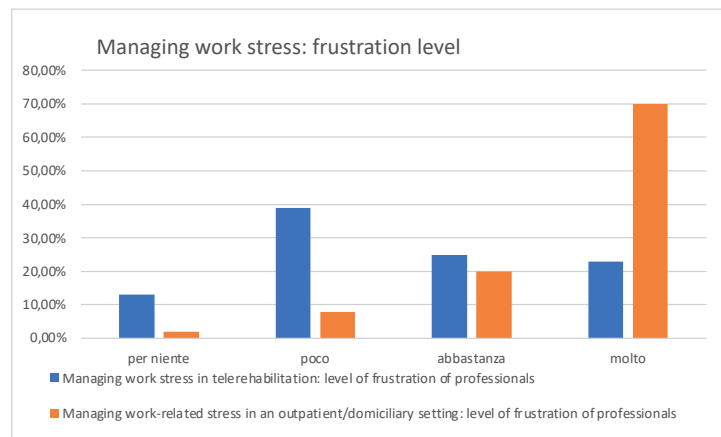
The 3 items which study the emotional perception of the Speech Therapists surveyed, show (on a 4-point Likert scale, from "not at all" to "very much") a high level of concern regarding the possibility of being a vehicle of contagion for family members (57.8% "very much", 33.5% "quite a lot", 6.2% "a little", 2.5% "not at all"); a strong emotional influence determined by social isolation (51.6% "very much", 32.59% "quite a lot", 10.6% "a little", 5% "not at all") and a medium/high perceived risk of developing psychological symptoms - such as distress, depressive symptoms, insomnia, anxiety - (34.2% "a lot", 47.2% "quite a lot", 16.8% "a little", 1.9% "not at all").

**Work organisation**

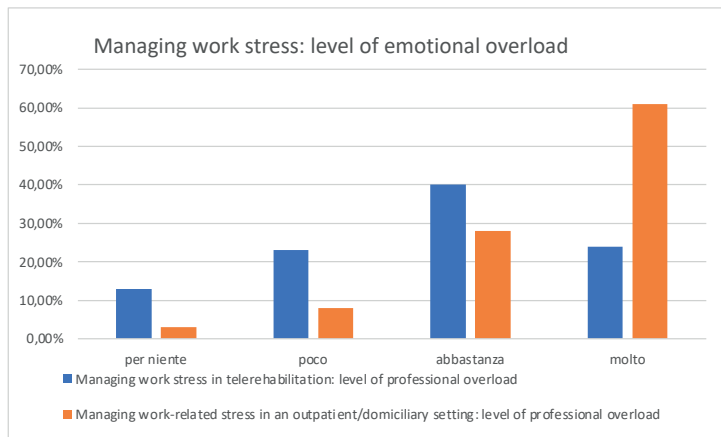
One item investigated the characteristics of the company organisation in which the speech therapists interviewed carry out their activities, referring in particular to the aspects that have negatively influenced performance during the pandemic period. 72.6% of the population believed that inadequate remuneration associated with work overload and unsuitable working hours and shifts (of which 53.4% also associated it with a lack of planning), were the main reasons that generated negative feelings and work-related discomfort. The remaining part of the population believes that it is the management and control methods, associated with non-professional specific operational demands, that negatively influence work. Finally, about 3% of the population lists internal conflicts as the main reason for discomfort.



Tab. 4 - Perceived effectiveness of PPE provided



Tab. 5 - Job stress management: level of frustration



Tab. 6 - Job stress management: level of emotional overload

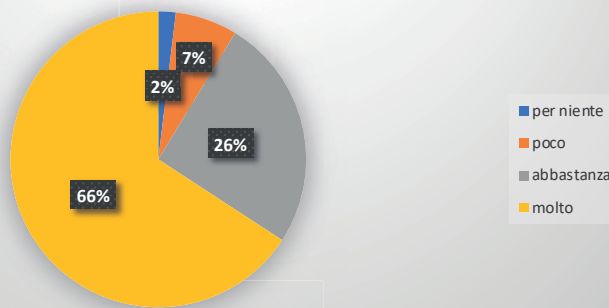
**Relations between colleagues**

In the working environment, a change in the relationship of collaboration, dialogue and support between colleagues was detected, perceived as 'fairly permeating' by 40.4% of the pandemic population (24.2% 'not at all', 27.3% 'a little', 8.1% 'a lot').

**Psychological support**

All the Speech Therapists interviewed in the medical emergency period consider it necessary to have a support figure in managing the emotional burden (Tab. 7).

## Need for a support figure in managing the emotional burden



**Tab. 7** - Professionals' need for a support figure in managing emotional burden

### DISCUSSION

The proposed questionnaire made it possible to observe phenomena, for the most part expected, that affected speech therapists in Campania. In fact, part of the extrapolated data traced what were the governmental indications transposed in the first pandemic waves. The majority of Speech Therapists affirmed that, in line with national and regional directives, they carried out activities in telerehabilitation and in outpatient regimes, that they kept non-deferrable and non-remote treatments in outpatient clinics and at home, and at the same time implemented the telerehabilitation treatment modality (which had previously been adopted little or not at all in the Campania region's territorial speech therapy). Telerehabilitation as an acceptable alternative to non-medication has shown several positive aspects: the protection of one's own and others' health, less emotional distress arising from the fear of illness, therapeutic continuity and the vision of the home as a place of care. The orientation of digital health care, represented in our case by tele-rehabilitation, is also an effective resource with respect to the critical evolution of the epidemiological context.

Many professionals claimed to have been provided with recommended and/or mandatory devices, which differed according to the type of treatment performed. Work-related stress, understood both as the level of frustration and emotional overload, was greater for outpatient and home treatments than for remote treatments; the latter, although requiring a strong adaptive capacity, reorganisation of work and remodelling of rehabilitation treatment, eliminated the variable of fear of falling ill and of being a vehicle for the virus. In fact, a very high percentage of participants stated that they were worried about being a vehicle of infection for their family members (and we may assume for the frail elderly), that they strongly suffered from social isolation (in treatment and rehabilitation pathways characterised by multidisciplinary care), and that they feared the development of psychological discomfort deriving from the pandemic from specific professional activities. To exacerbate the situation, further elements of a changed company organisation have strongly impacted on Speech Therapists: a salary defined as inadequate with respect to working

hours and work overload turns out to be one of the propelling factors for negative feelings. On the other hand, the data on dissatisfaction with inadequate pay is not significant, as it is not linked to the specific time of the pandemic.

We can interpret this element by referring it either to a pre-pandemic situation, already unrewarding for the practitioner, or by associating it with the additional tasks required: disinfecting materials and media between one patient and the next, using PPE correctly and monitoring its proper use also by patients/family members/ carers, rescheduling work and the type of activity, using different computer media, etc...

The final question needs special attention: most professionals state that it would be desirable to have a psychological support figure to manage the personal manifestations described above. The presence of support becomes crucial in an emergency period, where the exacerbation of negative feelings affects all parts of society, aggravating the conditions of the classes of professionals exposed to greater risk. The work management resulting from caring for patients and their families, the need to preserve the network of educational and sociomedical integration to achieve objectives, frustration and emotional overload, expose all professionals involved in helping relationships to the phenomenon of burnout. The need for psychological support aimed at overcoming emotional distress and the feeling of isolation due to poor communication between team members must lead one to reflect on the potential lack of individual tools of *savoir être*: elements that characterise the health professions and are indispensable for operating according to principles of therapeutic effectiveness.

### CONCLUSIONS

The questionnaire proposed to speech therapists in the Campania Region did not return the expected form of participation. Out of 1650 speech therapists operating in the Naples, Avellino, Benevento and Caserta areas, only 161 replies were received (9.76%). The data extrapolated refer, therefore, to raw and uncorrelated percentage variables of a partial population (only Campania, predominantly female, in the 21-40 age bracket).

This makes the results rather meagre, numerically unreliable and therefore not generalisable, so we have focused only on observed data and qualitative considerations.

Interesting phenomena were noted: the new organisation of work, the different way in which rehabilitation treatments are delivered, the potential of telerehabilitation in terms of outcome, and the difficulty in managing the emotional burden.

The questionnaire was proposed as a pilot study to assess its usability and accessibility by colleagues.

For this reason, it lacks validation, as it would have been necessary to carry out a statistical analysis to assess consistency, internal consistency and reliability and to test-retest the test population.

Further research is needed to validate the proposed instrument, examine a larger and more representative population, and perform a statistical analysis of the data in order to establish evidence-based results.

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