J. Psychosoc. Rehabil. Ment. Health
https://doi.org/10.1007/s40737-024-00406-2

ORIGINAL ARTICLE

Staff Opinions on the Most Positive and Negative Changes in Mental Health Services During the 2 Years of the Pandemic Emergency in Italy

Lorenza Magliano · Chiara Papa · Ginevra Di Maio · Tommaso Bonavigo

Received: 4 January 2024 / Accepted: 20 March 2024

Abstract This mixed-methods study investigated healthcare staff members' opinions on the most positive and negative changes in mental health services (MHSs) during the 2-year COVID-19 pandemic emergency in Italy, and whether those changes differed by professional role and type of service. At the end of the national health emergency (March–April 2022), staff members from 17 MHSs completed the MHS Transformations Questionnaire, which includes a quantitative section with 30 multiple-choice items addressing positive changes and a qualitative section with two open-ended items on the most positive and negative changes. The 714 participants who responded to at least one open-ended item in the qualitative section formed the sample. Qualitative responses were categorised according to the textual content of the response and the themes of the quantitative section. Flexibility and Ability to Reinvent the Service was the subscale with the highest mean score. The most positive and negative changes fell into the following categories: practices (49.1 and 39%), organisation (34.5 and 36.9%), teamwork values (45.0 and 34.5%), and relationships with users and their families (31.9 and 40.6%). The most positive changes differed by type of service (i.e. in the relationship with users and their families category) and by professional role (i.e. in the practices and relationship with users and their families categories), whereas the most negative changes differed by type of service (i.e. in the practices category). The results may elucidate the complex experiences with the COVID-19 pandemic in MHSs and reveal lessons to be considered in post-pandemic service planning.

Keywords COVID-19 · Healthcare staff · Mental health services · Positive changes · Negative changes · Mixed-methods study

Introduction

From the earliest stages of the COVID-19 pandemic, the impact of COVID-19 on people's lives has been extensively documented, and the disease's negative consequences for general health and the burden on health services have been highlighted (Singh et al., 2021; Duden et al., 2022). In many countries, it has been difficult to meet the increased demands for care and to integrate mental and physical health services (Giorgi et al., 2020; Thome et al., 2021). Particularly in the early months of the pandemic, shortages of staff and protective equipment, along with unclear guidance for safety procedures, were frequently cited

L. Magliano (✉) · C. Papa · G. Di Maio
Department of Psychology, University of Campania "Luigi Vanvitelli", Viale Ellittico 31, 81100 Caserta, Italy
e-mail: lorenza.magliano@unicampania.it

T. Bonavigo
Department of Mental Health (Azienda Sanitaria Universitaria Giuliano Isontina – ASUGI), University Health Authority Giuliano Isontino, Trieste, Italy

Published online: 10 April 2024

as reasons for difficulties in ensuring citizens' access to health services and care (De Girolamo et al., 2020; Koralnik and Tyler, 2020; Qiu et al., 2020). Increased anxiety, depression, burnout, and post-traumatic stress disorder were observed among staff members in mental health services (MHSs), particularly in inpatient settings (Rapisarda et al., 2020).

Although the literature documents COVID-19's negative impact on the general population and healthcare workers, some studies have also underscored the potential for positive change that the pandemic has brought to healthcare settings (Bommersbach et al., 2021; Amerio et al. 2023; Magliano et al. 2022, 2023). MHS staff have remained a point of reference for users in charge, and have tried to respond to people's psychological distress by providing treatment and psychosocial support. In some cases, the process of adapting to emergencies has led to positive changes in clinical practice, staff–user relationships, and the organisation of MHSs (Carpiniello & Vita, 2022; Magliano et al., 2023). The provision of remote care ensured a greater continuity of care for people with serious clinical situations, while forced adaptation to the pandemic emergency led to streamlined bureaucratic procedures (Johnson et al., 2021). Healthcare workers also developed strategies for coping with unforeseen difficulties (Pinkham et al., 2020; Italia et al., 2021) and, in the process, (re)discovered a sense of cohesion in their teamwork (Magliano et al., 2022).

Italy was the first country in Europe to be severely affected by COVID-19 (Carpiniello et al., 2020) and one of the first countries worldwide to take national security measures to prevent the further spread of infection (Onder et al., 2020; Carpiniello and Vita, 2022). In Italy, from the beginning of the pandemic until 31 March 2022, a public health emergency was in force, with restrictive measures whose intensity varied over time and that significantly affected the organisation of health services throughout the country (Magliano et al., 2022). In MHSs, in the first wave of the pandemic (i.e. February–May 2020) mental health centres were able to provide basic clinical treatment for the most severely affected users along with crisis management. Residential facilities greatly reduced their rehabilitative activities and users' contacts with their families, and day care centres partly converted rehabilitative activities into remote activities (Carpiniello et al., 2020). Although the standard of care was gradually restored in summer 2020 (Carpiniello & Vita, 2022), subsequent waves of COVID-19 significantly affected MHS activities in the first 2 years of the pandemic.

Coinciding with the end of the 2-year public health emergency, a study was conducted in Italy on the responsiveness of MHS staff to the pandemic (Magliano et al., 2023). Data were collected online using the MHS COVID-19 Transformation Questionnaire (QT-19; Magliano et al., 2022), an instrument containing a main section of 30 quantitative multiple-choice items answered on a 6-point scale ranging from 1 (*not really true*) to 6 *(really true*) about positive changes and a qualitative section with two open-ended items examining the most positive and negative changes experienced by respondents. The 1077 participants who completed the main section of the QT-19 reported that in the 2 years of the pandemic, they discovered unexpected resources in users, experienced greater closeness with colleagues, paid more attention to users' physical health and environmental hygiene, revised users' care plans, and learned digital skills. Those quantitative results provided a snapshot of staff members' perceptions of the positive changes in their work environment in terms of MHS practices and staff–user relationships.

However, the results did not capture the complexity of each participant's experience, nor did the data describe which changes were perceived as being the most positive and negative from the participants' perspectives. Understanding the significance of the impact of the pandemic on MHS staff may be helpful for understanding what aspects of COVID-19 should be considered in designing MHSs in the post-pandemic period.

In this secondary analysis study, the responses of the 714 participants who completed at least one item on the qualitative QT-19 section were analysed using a mixed-methods approach. The approach can be particularly useful for investigating the nature of novel phenomena such as the pandemic emergency (Pluye & Hong, 2014). In particular, qualitative responses were categorised according to the content of the quantitative subscales, after which qualitative responses were examined in relation to professional role and type of service.

Methods

Study Design and Participants

The study was coordinated by the Department of Psychology of the University of Campania "Luigi Vanvitelli"—Italy and conducted in accordance with the Declaration of Helsinki. The protocol was approved by the ethics committee of the Department of Psychology of the University of Campania "Luigi Vanvitelli" (authorization no. 1 dated 2/2/2021).

The study was conducted in 17 MHSs located in 15 regions of Italy: nine in northern Italy, two in central Italy, and six in southern Italy. The sample included professionals working in the adult patient sector of the participating MHSs and third sector agencies (i.e. cooperatives) contracted with the participating MHSs. Data were collected online from 1 March to 30 April 2022, a period that coincided with the end of the national health emergency. Eligible staff members were invited via email from the head of the department to participate in an online study about their views regarding the pandemic's impact on their MHS. The invitation email contained a link to the QT-19, and reminder messages to complete the questionnaire were sent via email and WhatsApp to potential participants during data collection. Participants completed the QT-19 anonymously using their personal devices. Details of the study protocol, data collection procedures, and the sample's characteristics are reported in Magliano et al. (2023). Of the 1077 professionals who participated in the study, 714 (66.3%) responded to at least one of the two open-ended items in the qualitative section of the questionnaire and were thus included in the sample for our secondary analysis study. As shown in Table 1, most of the 714 participants were women, middle-aged, and highly educated; they were mostly psychiatrists, nurses, and psychosocial staff who were working primarily in mental health centres, residential facilities, and social cooperatives.

Assessment Instrument

The QT-19 is a self-report tool developed in an ad hoc way following a participatory research approach

Table 1 Participants' socio-demographic and professional characteristics (N = 714)

Variables	Values
Sex, % (N)	
Female	70.6 (501)
Male	29.4 (209)
Age, mean ± sd (N)	48.4 ± 10.5 (687)
Educational level, % (N)	
High school degree	22.8 (163)
Bachelor degree	30.5 (218)
Master degree	46.6 (333)
Professional role, % (N)	
Psychiatrist	25.0 (178)
Psychologist	9.0 (64)
Nurse	29.3 (208)
Health care assistant	7.6 (54)
Rehabilitation specialists, educators, other rehabilitation staff	25.9 (184)
Other	3.2 (23)
Years of work in the mental health field, mean ± sd (N)	17.0 ± 10.8 (692)
Main place of work, % (N)	
Community Mental Health Centre—CMHC	60.5 (408)
Day Centre—DC	6.4 (43)
General Hospital Psychiatric Unit—GHPU	9.1 (61)
Residential Facilities—RF	12.6 (85)
Social Cooperative—SC	11.4 (77)

(Magliano et al., 2022). The tool consists of three sections. Section 1, as mentioned, is a 30-item quantitative section addressing healthcare staff members' opinions on five subscales: (a) Acknowledgement of Users' Capabilities (i.e. 5 items), (b) Awareness and Value of Teamwork (i.e. 8 items), (c) Flexibility and Ability to Reinvent the Service (i.e. 4 items), (d) Maintenance and Introduction of Best Practices (i.e. 12 items), and (e) Acknowledgement of Positive Aspects of the Pandemic Experience (i.e. 1 item). Those 30 items are rated on a 6-point scale ranging from 1 (*not really true*) to 6 (*really true*), and each respondent's mean score is calculated for each subscale. Section 2 contains two open-ended items addressing the most positive and most negative changes in the MHS during the pandemic from the staff member's perspective (Table 2). Last, Section 3 addresses the staff member's socio-demographic and professional characteristics. The psychometric properties of Section 1 had previously been tested and found to be satisfactory (confirmatory factor analysis: c2(396) = 900.24, $p <$. 001; nonnormalized fit index [NNFI] = 0.90; comparative fit index [cfi] = 0.91; root mean square error of approximation [RMSEA] = 0.087, c.i. 90% (0.080; 0.095; standardized root mean square residual [SRMR] = 0.086. All factor loadings significant at the $p < 0.001$ level. Cronbach's α values from 0.68 to 0.83; Magliano et al., 2022). Responses to the 30 items in that section and Section 3 were previously analysed in the full sample of 1077 respondents in Magliano et al.'s (2023) study, whereas responses to items in Section 2 ($n = 714$) had not previously been analysed.

Statistical Analysis

Frequencies and means, as appropriate, were calculated for the main socio-demographic and professional characteristics of the participants indicated in Section 3 of the QT-19. Meanwhile, percentages and mean subscale scores were calculated for items in Section 1. Based on the textual content and themes addressed on the quantitative subscale, one author (LM) developed a preliminary set of operational criteria to code the responses to the open-ended items in Section 2 dichotomously as "yes" or "no" into eight thematic categories. Responses that fell into more than one thematic category were coded into all appropriate categories. Next, two authors (CP and GDM) independently coded 40 randomly selected sets of responses according to the preliminary operational criteria. Inter-rater reliability was found to be poor (Cohen's kappa = 0.40–0.69) in five of the eight thematic categories but adequate (Cohen's kappa = 0.70–0.74) in the remaining three categories. Following a collegial discussion among the authors about the discrepancies in scores, the operational criteria were revised to reduce ambivalence in coding (Table 2). The two authors (CP and GDM) classified another 40 randomly selected sets of responses, and inter-rater reliability was satisfactory for all categories (Cohen's kappa = 0.80–1.0). Those authors next independently scored all responses to open-ended items according to the revised operational criteria, and frequencies of the scores assigned to the yes or no categories were calculated. A chi-square test was performed to examine differences in the assigned scores for categories in relation to the respondents' professional roles (i.e. psychiatrist, psychologist, nurse, rehabilitation staff, and healthcare assistant) and work settings (i.e. community mental health centre, day care centre, general hospital psychiatric unit or day hospital, residential facility, and cooperative). All analyses were performed in SPSS version 21 (IBM, 2012), with the level of statistical significance set at $p < 0.05$.

Results

Quantitative Data

As reported in Table 3, the Flexibility and Ability to Reinvent the Service subscale in Section 1 of the QT-19 had the highest mean score, followed by the Maintenance and Introduction of Best Practices subscale. Across the five subscales, the highest item response rates at levels 5 (*true*) and 6 (*really true*) and related to recognising the importance of simple gestures and habits (83%), the ability to mediate between users' requests and the procedures necessary to work safely (80.7%), increased attention to the work environment's cleanliness (87%), and discovery of users' unexpected personal resources (54.6%). Last, 57.5% of participants agreed with the statement "I found positive aspects in this experience".

Table 2 Operational criteria for coding responses to open-ended items addressing the most positive and negative changes in Mental Health Services (MHSs) during the 2-year pandemic emergency ($N=714$)

Please answer the following two questions based on your work experience. It is very important to know what you think has changed most positively and negatively in your work during the pandemic

Positive changes

Q: *From your point of view, what are the most positive changes that the pandemic has brought to the MHS where you work? You can mention different aspects—for example, in relation to the organisation and practices of the MHS, relationships with colleagues and users, and the meaning of your work*

OPERATIONAL CRITERIA

MHS practices: Interventions and care provided, including the use of digital technology for remote interventions, and what has been done for and/or with users and their families, both in the maintenance of good practices and the introduction of new practices, including remote interventions (e.g. telemedicine and video and telephone interventions), positive aspects of community MHSs (e.g. "The pandemic has shown that community-based work is a very effective core element in meeting health needs"), practices to reduce the risk of contagion, the review of treatment programmes (e.g. rehabilitation programmes), and the maintenance or introduction of individual and group interventions in different MHS sites and at home

MHS organisation: Ability of the MHS to be flexible and reorganise and manage staff, both in specific activities and in relation to the overall organisation, including the management and scheduling of visits, work planning, the acceleration of bureaucratic procedures, compliance with rules, discipline, organisational functionality, staff's flexibility and shift organisation, and the restoration and/or maintenance of team meetings

Teamwork values: Relationships between teams and individual staff, including a positive change in communication, rediscovery of the meaning of one's work, increased sense of closeness, and collaboration between colleagues

Relationships with users and their families: Recognition and/or appreciation of the abilities of people using mental health services, perceiving users from a different and/or more positive perspective including both positive aspects in terms of the recognition of users' abilities and perceptions of positive or improved relationships between the respondent and users and their family members, increased closeness between users and between users and their family members, increased appreciation of MHS staff by users and family members, and improved relationships between staff and users, between staff and family members, between family members and users, and between users (e.g. mutual support and self-help)

Negative changes

Q: *From your point of view, what are the most negative changes that the pandemic has brought to the MHS where you work? You can mention different aspects—for example, in relation to the organisation and practices of the MHS, relationships with colleagues and users, and the meaning of your work*

OPERATIONAL CRITERIA

MHS practices: Reduction in socialising practices, clinical and rehabilitative interventions, excessive use of telemedicine and remote interventions, reduced use of potentially therapeutic spaces within and outside services, discontinuation of structured situations that are potentially a source of relational exchange and mutual support, and reduction or discontinuation of best practices, care, and interventions

MHS organisation: Organisation of the work environment, facilities, and personnel—that is, organisational aspects that do not depend on the will of the individual worker, including rigid procedures, too many rules (e.g. related to pandemic containment), increased bureaucracy, shortcomings of the MHS (e.g. lack of availability of psychological support from the personnel service), confusion, shortcomings in personal safety procedures, difficulties in accessing facilities, staff shortages and reductions, staff transfers, lack of human and material resources (e.g. personal protective equipment, digital devices), and excess of organisational meetings

Teamwork values: Negative aspects that depend on the will and actions of the individual worker and the team, negative effects on the worker's mental health, deterioration of relationships between colleagues, negative psychological effects on the individual operator, stress, isolation, loneliness, conflicts with uncooperative or anti-vaccination colleagues, perceived decrease in the quality of work performance, distance between colleagues, and fear of contagion

Relationships with users and their families: Negative aspects affecting users and families, clinical and relational aspects, isolation, loneliness, remoteness, lack of sharing, increase in people coming to MHS, worsening and increase in mental disorders, and distance from users and families

Others: Aspects not included in the above categories

Table 3 Participants' opinions on positive changes in the mental health service (MHS) during the 2 years of the COVID-19 pandemic emergency (total sample N = 714)

QT-19 items	Subscale score	Item score			Missing
	Mean ± sd	1–2%	3–4%	5–6%	N
Acknowledgement of Users' Capabilities	3.8 ± 1.0				
*, people with severe mental disorder demonstrated good adaptive skills		17.5	48.8	33.7	1
*, I discovered personal resources in users that I did not believe they had		6.4	39.0	54.6	5
*, users organized themselves into peer support groups		45.0	37.5	17.5	9
*, users showed that they were able to self-organize and find new solutions		17.4	47.6	35.0	10
*, I realized that there were users who know how to use digital technologies better than I did		27.3	33.7	39.0	4
Awareness and Value of Teamwork	4.3 ± 1.0				
*, we realized the importance of simple gestures like drinking coffee together, shaking hands, hugging each other		3.2	13.7	83.1	4
*, there was more sharing of responsibilities within the team		13.9	34.4	51.7	6
*, more centrality was given to the meetings and to dialogue with the other person		11.0	39.2	49.8	3
*, I had more time to think about my work		26.3	35.3	38.4	3
*, we colleagues strengthened each other to face the fear		7.2	27.0	65.8	6
*, the sense of being part of a team strengthened		18.9	42.3	38.8	3
*, service meetings were an opportunity for group reflection on work practices		16.0	35.9	48.1	3
*, Local Health Authority's guidelines on how to work safely made us feel more reassured		23.5	43.3	33.2	3
Flexibility and Ability to Reinvent the Service	4.9 ± 0.8				
*, we became more flexible toward remaining close to users		8.0	28.9	63.1	5
* We reinvented our way of working in line with government mandates		4.0	17.2	78.8	3
*, we were able to make organizational/operational changes very quickly		6.1	26.9	67.1	1
*, we mediated between user demands and the procedures needed to work safely		5.7	16.9	80.7	4
Maintenance and Introduction of Best Practices	4.8 ± 0.7				
*, we increased phone contact with users		4.5	14.4	81.1	10
*, we took more better care maintaining cleanliness in the work environment		2.3	10.3	87.4	3
*, we placed more importance on family members and the close relationships of users		7.0	34.2	58.8	6
*, we learned to use digital communication technologies to work with other public institutions and the third sector		3.0	15.6	81.4	7
*, we paid more attention to the physical health of users		5.6	35.3	59.1	3
*, we redefined the use of service spaces in a more rational way		7.4	22.8	69.8	2
*, we revised the users' programs according to their new needs		5.2	30.0	64.8	8
*, learned to use the PC and digital technologies better (e.g., video calling and conferencing platforms)		7.9	26.2	65.9	0
*, the CMHC remained the key point of referral for people with a fragile/absent family network		8.8	23.5	67.7	17
*, during hospitalization we guaranteed the contact of users with their families		12.1	31.3	56.6	62
*, we managed people in crisis as much as possible at home		13.3	29.3	57.4	37
*, we informed users about the pandemic and how to reduce individual risk of infection		1.7	12.4	85.9	5
Acknowledgement of Positive Aspects of the Pandemic Experience	4.5 ± 1.4				
*, I found some positives in this experience		10.3	32.2	57.5	1

Table 4 Participants' opinions on the most positive and negative changes in the mental health service (MHS), by thematic category (N = 714)

Thematic categories	Responses to open-ended item on the most positive changes (respondents, N = 611)		Responses to open-ended item on the most negative changes (respondents, N = 667)	
	N	%	N	%
MHS practices	300	49.1	260	39.0
MHS organisation	211	34.5	246	36.9
Teamwork values	275	45.0	287	43.0
Relationships with users and their families	195	31.9	271	40.6

Qualitative Data

Overview

Of the 714 participants, 611 (85.5%) answered the item about the most positive changes and 667 (93.8%) answered the item about the most negative changes (Table 4). Participants provided 981 and 1064 responses to the two open-ended items, respectively. The content of the thematic categories is detailed in the following subsections, and examples of the content appear in Tables 5, 6, 7, 8.

Changes in MHS Practices

Responses concerning the most positive changes were in the thematic category of MHS practices in 49.1% of cases (Table 4). Those changes were reported more frequently by psychiatrists (63.4%) and psychologists (61.1%) than by rehabilitation staff (49.4%), nurses (37.1%), and healthcare assistants (43.2%; $\chi 2 = 26.1$, df 4, $p < 0.001$). Responses related to aspects such as increased attention to users' physical health, closer collaboration with professionals in other medical disciplines, and the review of treatment plans (Table 5). Some practices were reported to have been delivered remotely in the early stages of the pandemic and later in a hybrid form. Pilot experiences in the first wave of the pandemic sometimes led to the development of structured interventions in later waves. The usefulness of digital platforms for delivering remote clinical interventions and socialisation initiatives was also highlighted. A proactive attitude of staff towards users emerged, supported by increased telephone contact with them and the delivery of home-based interventions. Increased attention to environmental hygiene to reduce the risk of nosocomial infections and COVID-19 was highlighted as well.

Responses concerning the most negative changes were in the thematic category of changes in MHS practices in 39% of cases (Table 4). Those responses were more frequently reported by staff at mental health centres (42.9%) and day care centres (45.9%) than by staff at cooperatives (38.4%), residential facilities (29.3%), and general hospital psychiatric units (22%; $\chi 2 = 13.5$, df 4, $p < 0.01$). Difficulties included the disruption of socialisation and rehabilitation activities and the reduced availability of beds for crisis care (Table 5), which were compounded by difficulties in ensuring the continuity of community care, over-medicalisation, and detrimental effects on rehabilitation interventions. The increased use of digital technology was reported to have hindered relationships with users in the long term, while cleaning rooms was seen as taking time away from working with users.

Changes in the MHS Organisation

Responses regarding the most positive changes were in the thematic category of changes in the MHS organisation in 34.5% of cases (Table 4). Greater flexibility in organising shifts and adapting schedules to sudden changes was reported, as were benefits resulting from recruiting new staff and introducing operational protocols to regulate access to services (Table 6). The improved planning of service activities and reduced bureaucracy, including the greater use of IT-based procedures, were highlighted as well, along with a clearer allocation of tasks among staff.

Responses about the most negative changes were in the thematic category of changes in the MHS organisation in 36.9% of cases (Table 4). The disorganisation and rigidity of the MHS, staff reductions and transfers to other departments, and changes in assigned tasks were among the most negative organisational changes reported by participants (Table 6). Staff members' difficulties in adapting to new regulations, sometimes perceived as being meaningless or confusing, were also mentioned. Poor links between

Table 5 Examples of responses regarding the most positive and negative changes in the mental health service (MHS) in the category of MHS practices

Subthemes	Statements about the most positive changes
Attention to physical health	• Increased promotion and awareness of the importance of physical health in psychiatry • Increased integration with other departments
New practices or practices modified ad hoc	• Listening groups have been set up to address the need for emotional support and to counter the isolation and withdrawal of psychiatric patients • As part of recovery activities, new ways of connecting with patients without access to day care centres have been developed (activities proposed and shared via tutorials and WhatsApp)
Digital literacy	• The use of video communication platforms has allowed the implementation of clinical–therapeutic settings other than the traditional ones. In group interventions (e.g. psycho-educational groups for parents), it has facilitated the recruitment and participation of more users
Telephone contact	• The increase in telephone contact with users and family members, not only in relation to pathology but also on a daily basis
Peer support	• Strengthening of the presence of peer support in the life of the community mental health centre
Centrality of the community	• Consolidation of the centrality of territorial work in crisis and post-crisis support • Greater development of personalised and home-based programmes for the user and the household
Proactivity towards users	• Partial restrictions of access to services made it necessary to increase proactive contact with users through telephone calls and home visits, as well as to increase the involvement of family members in care
Review of care programmes	• Review of rehabilitation programmes • The need for more focused and precise definitions of goals and projects
Cleanliness	• Increased attention to environmental hygiene and infection prevention standards for both inpatient and outpatient infections
Subthemes	**Statements about the most negative changes**
Disruption of rehabilitation activities	• Suspension of group activities • Interruption of therapeutic or socialising projects
Medicalisation	• Over-medicalisation
Poor community activities	• Increased difficulty in performing territorial work
Excessive use of technology	• Online interviews with no sense of contact, like talking behind glass or masks • Loss of contact with some people who are unable to use technology
Excess sanitation	• It takes up a certain amount of time to sanitise environments, and that's time taken away from the user

community services and hospital units, municipalities, and court offices, along with inappropriate referrals of potential cases to the MHS, were highlighted as well.

Changes in Teamwork Values

Responses regarding the most positive changes were in the category of teamwork values in 45.0% of cases (Table 4). Those responses were reported more frequently by nurses (54.3%), healthcare assistants (50.0%), and rehabilitation staff (42.7%) than by psychologists (38.9%) and psychiatrists (36.6%; $\chi 2 = 12.1$, df 4, $p < 0.02$); and by staff of cooperatives (57.6%) and residential facilities (56.9%) more frequently than by staff of general hospital psychiatric units (43.6%), mental health centres (42.9%), and day care centres (30.8%; $\chi 2 = 12.1$, df 4, $p < 0.02$). Responses emphasised the strengthening of teamwork and the more active involvement of professional groups that had had limited involvement in managing treatment in the pre-pandemic period (Table 7). The increased ability to work in teams and to collaborate with professionals from other health services and different medical disciplines was reported, as was heightened closeness between colleagues, both

Table 6 Examples of responses regarding the most positive and negative changes in the mental health service (MHS) in the category of MHS organisation

Subthemes	Statements about the most positive changes
Flexibility	• Mental, organisational, personal, and professional flexibility
More organisation	• Use of operational protocols
Digitalisation	• Streamlining of many procedures through digital support
Time savings	• Less time spent in meetings
Division of tasks	• Greater clarity in the allocation of tasks on the team
Staff organisation	• Rotation of nurses among different services • Reorganisation of the functions of all personnel, with flexibility and accountability
Lasting impact	• The efforts that we made in the early stages of the pandemic led us to reorganise many things, and even now, although we are more or less back to normal, we continue to use the same methods for all services, which has helped us to streamline our work
Subthemes	**Statements about the most negative changes**
Confusion and disorganisation	• Increased confusion in the organisation of practices due to continuous changes in government directives as the pandemic evolved • Continuous changes in rules and the use of safety devices that have caused confusion and hassles
Rigidity	• Our health agency never fully accepted or understood the situation, did not see any opportunities to change, showed rigidity and inadequacy. I would say that, on several levels, many of us have radically changed jobs or tasks • The incapacity of nurse coordinators both organisationally and communicatively, and the inability to manage and adapt to change: the "It's always been done this way" approach is still applied
Staff shortages	• Dramatic shortages in personnel
Bureaucracy	• Increased bureaucracy in clinical activities
Poor incentives	• Poor wages, insufficient incentives
Difficulties in procedures	• Time for routine work has been reduced due to triage checks on entry • The organisation of urgent admissions between COVID-19 and non-COVID-19 pathways was problematic throughout the pandemic and continues to be so
Lack of technology	• We don't even have Wi-Fi in the service
Inappropriate requests	• An excess of inappropriate requests due to the fact that the mental health centre remained open all the time while many outpatient clinics were operating on a shoestring. Requests for admission came from people over 65 years old, people with neurological problems, etc., not to mention offices such as municipalities, courts, etc., which put crazy demands on the mental health centre

objectively (i.e. working side by side to solve problems) and subjectively (i.e. greater solidarity and authenticity in relationships with colleagues). Last, the acquisition of new professional skills was also reported.

When staff members were asked about the most negative changes, 43% of the responses were in the category of teamwork values (Table 4). Participants described worsening formal and informal relationships with team members and conflicts with colleagues, the latter sometimes due to colleagues' anti-vaccination attitudes and, as a result, increased workloads for vaccinated staff (Table 7). Physical and mental fatigue, feelings of inadequacy in responding to new needs among users, and an increased burden of clinical responsibility were also reported, along with feelings of low esteem on the part of management.

Changes in Relationships with Users and Their Families

Responses about the most positive changes were in the thematic category of relationships with users and their families in 31.9% of cases (Table 4). Those responses were more frequently reported by staff in cooperatives (43.9%) and residential facilities (41.7%) than by staff in community mental health centres (29.7%), day care centres (28.2%), and psychiatric units of general hospitals (18.2%; $\chi 2 = 13.4$, df 4, $p < 0.01$). Staff perceived users to be as capable

Table 7 Examples of responses regarding the most positive and negative changes in the mental health service (MHS) in the category of teamwork values

Subthemes	Statements about the most positive changes
Team empowerment	• Strengthened teamwork
Professional empowerment	• Increased involvement and responsibility of providers such as rehabilitation technicians and nurses • Less doctor-centred approach
Use of soft skills	• We've been able to collaborate with colleagues, including those from different professions, who haven't hesitated to try their hand at tasks outside their professional profiles
Closeness to colleagues (objective)	• I noticed a greater interest and willingness among colleagues to think about new solutions to deal with the current emergency • Increased communication among colleagues regarding daily practices
Closeness to colleagues (subjective)	• Increased complicity among team members • Solidarity among colleagues
Team empathy	• I hope that the rediscovery of empathy during the pandemic won't just be temporary but a constant way of living and working in everyone's life
Sense of work	• The pandemic forced questions about how to work and the inescapable importance of team cohesion, not in terms of aligned thinking but in terms of clear dialectical confrontation
Skills enhancement	• Motivated staff were able to learn and participate with other colleagues in performing swabs and administering vaccines, which increased mutual exchange and knowledge and managed screening and surveillance
Subthemes	**Statements about the most negative changes**
Contact distance	• Less opportunity to meet and talk with colleagues due to fear of contagion
Dissatisfaction with MHS management	• Lack of attention to personnel by the health agency • Lack of financial rewards
Conflicts with colleagues	• Strained relationships between colleagues • Difficult relationships with people who stayed away from vaccination while others continued to work through a difficult time
Impact on staff's health	• General fatigue, team fatigue, poor confrontation, and a total lack of supervision • Increased responsibilities, difficult situations to deal with … certainly increased the level of stress and dissatisfaction of the whole team
Feelings of inadequacy	• Greater difficulty in providing adequate responses to complex needs • The sense that [my] job is difficult to maintain in the face of staff shortages and the continuity of care that characterises the beauty of nursing has disappeared

of responding to the pandemic as well as anyone else. At the same time, staff mentioned an increased awareness of their own capabilities among users, too (Table 8). Those aspects were compounded by the participants' perception of increased recognition by users and family members of the staff's efforts to cope with the pandemic. Participants also reported developing more informal ways of being close to users and paying more attention to aspects of users' lives that had previously received little attention. A renewed focus on staff–user relationships and a less paternalistic attitude towards users were reported as contributing to greater autonomy among users. Values such as closeness and solidarity with users and a sense of being "in the same boat", so to speak, also emerged.

When staff were asked about the most negative changes, 40.6% of responses were in the thematic category of relationships with users and their families (Table 4). Suspicions of mutual contagion between staff and users were mentioned, as were demanding attitudes and aggressive behaviour among users and family members towards staff (Table 8). Users' marked distress, worsened clinical status, and reduced functional autonomy were also highlighted.

Discussion

These findings paint a complex picture of the impact of the 2-year COVID-19 pandemic emergency on

Table 8 Examples of responses regarding the most positive and negative changes in the mental health service (MHS) in the category of relationships with users and their families

Subthemes	Statements about the most positive changes
Users as people with capacities	• Users were able to use new communication strategies and activate or reactivate personal resources • The users' potential, their fairness as citizens in complying with the rules of the emergency, their discipline and common sense, and their patience
Users' previously unused skills	• In my experience with a person who couldn't live alone in her own home, thanks to her positivity with COVID-19 we were able to let her live there much longer, because through that experience she discovered resources in herself that she couldn't see before • The increased self-efficacy of users with severe mental disorders who faced the pandemic like everyone else
New staff–user relationships	• Less welfarism, which allowed people to rediscover their own capacity for self-organisation • We experimented with simple forms of closeness with our users and their family members: passing by their homes and greeting them from the balcony, entertaining them in the courtyard of the houses
Users' attitudes	• Patients are more in touch with each other and aware of our commitment
Valuing contact	• Confirmation of the fundamental value of the encounter
Closeness and cooperation	• Sense of solidarity with users • Sense of mutual cooperation between users and staff in dealing with a common problem
Subthemes	**Statements on the most negative changes**
Distance	• Loss of direct contact with users and less empathy
Conflicts with users	• Demanding attitude of patients and family members towards the service
Increased mental health problems	• Isolation, discomfort, and social withdrawal, especially among younger people who came into contact with services during the pandemic • Increased mental distress and increased use and misuse of psychotropic substances, social withdrawal, and gambling
Decreased functional autonomy	• Anti-COVID-19 regulations limited the use of instrumental and daily living skills by residential hosts (e.g. denied access to the kitchen to prepare breakfast independently and to help with clearing away and washing dishes) and fostered demands for welfarism on their part and an increase in concrete problems (e.g. financial and employment-related ones)

MHSs in Italy by highlighting some of the positive effects of a situation characterised by enormous difficulties for health services. The use of a mixed-methods approach made it possible to qualitatively showcase the diversity of staff members' experiences and quantitatively examine their importance in relation to professional role and type of service. Moreover, the development of operational criteria facilitated the interpretation of responses to open-ended items based on both textual content and quantitative themes (Pluye & Hong, 2014).

Overall, changes in MHSs in Italy appear to have occurred in three major dimensions that cut across the four thematic categories explored by the QT-19: the subjective dimension, including individual values, feelings, and skills; the interpersonal dimension, including therapeutic relationships and relationships with colleagues; and the institutional dimension, including MHS practices and organisation. Within that interpretive framework, the study revealed that the professional role and type of service can significantly influence the importance that staff attached to changes in MHSs during the pandemic. Most often, participants attached great importance to positive changes in the thematic categories of MHS practices and teamwork values. However, those results only partly overlapped with the quantitative results, in which the highest mean subscale scores were for Awareness of Teamwork Values, followed by Maintenance and Introduction of Best Practices. The discrepancy between the most frequent and most important changes highlights the usefulness of collecting qualitative data in studies dominated by quantitative data (Pluye & Hong, 2014).

The thematic category of MHS practices that we identified includes several subthemes, including

making home visits, attention to users' physical health, renewal of treatment plans, attention to cleanliness of services, and staff members' digital literacy. In line with the findings of other studies (Benudis et al., 2022; Witteveen et al., 2022), participating staff in our study considered telepsychiatry to be an important resource for continuity of care and for maintaining relationships within the team and between staff and users. It cannot be ruled out, however, that the positive changes found in our study were a temporary response to extraordinary stress and that in some countries those changes risk disappearing once the emergency had ended (Ndwabe et al., 2024). Ad hoc studies are therefore needed to confirm the effectiveness of telepsychiatry on the clinical and social dimensions of mental health services in the post-pandemic period and to identify which users may benefit from remote interventions (Liberati et al., 2021; Bareis et al., 2023; Zhong et al., 2023). Further studies should also examine the sustainability of changes in MHS practices (e.g. telepsychiatry) in post-pandemic MHSs and the extent to which those changes are supported by different stakeholders. In a co-produced study on views of telepsychiatry conducted at two sites in England and two sites in Italy (Sheriff et al., 2023), remote consultation was viewed as being appropriate for routine follow-up appointments but less so for new assessments or for people with acutely disturbed mental states. That study revealed that clinicians had a more positive view on video consultations than service users and carers did and that users did not believe that telepsychiatry had improved during the COVID-19 pandemic.

Staff members in this study additionally emphasised changes in the value of teamwork, the rediscovery of themselves as being part of a team, and the reality that everyone was facing the pandemic together (Johnson et al., 2021; Hamano et al., 2022). Beyond that, the relationships with users and their families category was particularly rich in positive reports about the strengthening of staff–user relationships and users' capacity to mobilise personal and family resources. That finding is consistent with the results of previous qualitative research showing an increased respect for the resilience and self-management of MHS users during the pandemic (Leeming et al., 2022; McKeown et al., 2023). Of note is the recognition by users themselves of previously unexpressed personal capabilities. That aspect, which requires further ad hoc studies, could be useful in planning rehabilitation interventions, facilitating staff's proximity to people with mental disorders, empowering users, and reducing stigma (Magliano et al., 2016; Di Carlo et al., 2021).

The study found significant differences in the importance attached to positive changes by different professional groups. Participants identified that changes in areas in which their professional roles had more opportunities to be expressed and valued during the pandemic were the most relevant. Psychiatrists and psychologists were more likely than other professionals to report positive aspects related to clinical practice; the leadership mandate may have made those professionals especially sensitive to recognising changes in care practices (Sanghera et al., 2020). Nurses, healthcare assistants, and, to a lesser extent, rehabilitation workers were more positive than psychiatrists and psychologists about changes affecting the team and the meaning of their work. Most likely, non-medical staff's greater sensitivity to teamwork stemmed from a greater sense of professional belonging and/or an inclination towards multidisciplinary work (Gray et al., 2019). Improved colleagueship and the greater empowerment of non-clinical staff may have also related to the forced reduction of doctor-centredness due to the pandemic emergency. Greater collaboration between MHS staff members in different roles and between MHS staff and professionals in other medical disciplines may have enabled the development of new problem-solving strategies. In turn, that dynamic may have further facilitated the strengthening of relationships among staff members and revitalised a sense of teamwork (Viking et al., 2022; Westbrook et al., 2022).

Compared with other professional groups, staff in residential and social cooperative facilities were likely to report positive changes in their relationships with users and improvements in teamwork. In residential facilities, where the risk of passive intervention and staff demotivation is high (Magliano et al., 2016), restricted living space and limited external social contact may have fostered greater closeness between staff and users, along with the latter's increased involvement in daily activities. By extension, those aspects may have led users to deploy previously neglected skills or staff to discover unexpected abilities in them (Magliano et al., 2022).

Participants most frequently identified negative changes in the thematic categories of teamwork values and relationships with users and their families. Those difficulties can directly or indirectly relate to the progressive depletion of human resources in MHS and inadequate investment in staff training and supervision, in both Italy and other countries (Sheridan Rains et al., 2021). As reported by other authors (Bommersbach et al., 2021; Lee et al., 2023), staff have reported increased stress due to intensified workloads and a greater burden of responsibilities, as well as a perceived lack of support from managers. Those negative changes, consistent with findings from other studies (Giorgi et al., 2020; Foye et al., 2021), highlight the need for increased attention to healthcare staff's mental health (Ghahramani et al., 2023).

Participants reported that one of the most negative consequences of the pandemic was user withdrawal and loneliness. That finding highlights that for people with mental disorders, attending community services is sometimes also an opportunity to maintain social relationships, a dimension that was particularly compromised during the pandemic emergency (Lyne et al., 2020). That circumstance may partly explain the more frequent perception of negative changes in MHS practices among staff at community mental health centres and day centres than among staff at residential facilities and general hospital psychiatric units. The pessimistic view on MHS practices among staff on the front lines during the pandemic may relate to the reduction in rehabilitative, social, and vocational activities provided by those services in the community. In residential facilities, which are often managed by third sector staff, the marked reduction in external activities was partly compensated by social rehabilitation work within the facilities. In the psychiatric units at general hospitals, the medical–pharmacological treatments did not change significantly given the clinical conditions of the users.

These findings are valuable in that the study was conducted after 2 years of the COVID-19 emergency, when people and health services began to confront a more manageable pandemic. However, the reference to such a long period may have influenced participants' responses as well. Moreover, the study's cross-sectional design prevented us from capturing the temporal evolution of the changes recorded. For example, it prohibited us from determining whether positive changes had occurred primarily in the early phase of the pandemic or as an initial response to the public health emergency and/or whether negative changes became more burdensome as the pandemic progressed due to the depletion of resources and the drive for innovation. Those issues will be partly addressed in a forthcoming study comparing data collected at one and 2 years after the beginning of the pandemic emergency in MHSs in Trieste and Gorizia (Magliano et al., 2022).

Because 66% of the national study sample completed the additional section on the most important changes during the pandemic emergency, that percentage was likely influenced by the fact that the open-ended items took longer to complete than the items in the quantitative section. In interpreting the results, it should also be considered that the open-ended items followed the quantitative items addressing positive aspects; that circumstance may have led participants to respond to more positive changes based on the previous 30-item section, thereby limiting mentions of new issues and underestimating the reporting of the pandemic's more negative consequences. It should also be considered that the sample did not fully reflect the distribution of professional roles in MHSs in Italy or regional differences in the provision of MHSs throughout the country (Ministero della Salute, 2022). Furthermore, it cannot be ruled out that characteristics of the geographical areas sampled may have influenced staff members' opinions on the most important changes in MHSs, as shown in a quantitative analysis of the whole sample (Magliano et al., 2023). That possibility is supported by the interpretive analysis of the study's results, which revealed that staff in MHSs in northern Italy mentioned negative changes in the organisation of services more frequently than staff from MHSs in central and southern Italy (41.4% vs. 32.5% vs. 29.8%, $\chi^2 = 8.0$, df 2, $p < 0.02$).. Last, as stated by Bommersbach et al. (2021), "The pandemic provided a unique opportunity to innovate and redesign systems of care. Institutions and their staff have proposed transformative ideas to meet the evolving needs of patients during this unprecedented period". In that light, additional studies are needed to examine whether and how the positive changes that occurred in MHSs during such a dramatic period affected practices, the organisation of MHSs, and staff–user relationships in the post-pandemic period. At the same time, it remains

necessary to investigate whether the enormous strain that the pandemic placed on MHS staff was mitigated in the post-pandemic period by strengthening the human capital via investments in staff recruitment, training, and supervision.

Acknowledgements The authors thank: Dr. A. Fioritti (National College of Mental Health Departments) and dr. F. Starace (DMH, AUSL Modena) for promoting the study**;** the following health professionals who actively collaborated in promoting the study locally and disseminating the questionnaire among the staff (listed by alphabetical order of the Department of Mental Health—DMH—location): D. Semisa (DMH, ASL Bari); E. Monzani (DMH, ASST Bergamo Ovest); A. Malinconico (DMH, ASREM, Campobasso, Termoli and Isernia); G. De Mattia, M. Falco (DMH, ASL Caserta); R. Barone (DMH, ASP 3 Catania, Caltagirone); R. Manfredi (DMH, ASP Catanzaro); L. Ghio, P. Peloso (DMH, ASL 3 Genova); F. Starace, G. Tibaldi (DMH, AUSL Modena); DMH, L. Russo, C. Mottola (DMH, ASL Napoli 1 Centro; T. Maniscalco (DMH, ULSS 7 Pedemontana, Vicenza); P. Fundone (DMH, ASP Potenza); G. Ducci, A.G. Maone (DMH, ASL Roma1); M.M. Goglio, L. Pesce (DMH, APSS, Trento); T. Bonavigo, A. Oretti (DMH, ASUGI Trieste and Gorizia); M. Bertoli, G.D. Papanti P. (DMH, ASU FC, Udine); M.P. Lorenzetti, M. Grignani (DMH, USL Umbria 1, Perugia); A. Beoni (DMH, AUSL Valle d'Aosta); Prof. G. Affuso—University of Campania "Luigi Vanvitelli", Department of Psychology, Caserta, Italy, for her comments to the initial draft of the manuscript; the 714 participating professionals for responding to the additional section items and giving us their time.

Author contributions Conceptualization, methodology and funding acquisition: Lorenza Magliano; analysis and interpretation of the data, drafting and revising, and final approval of the submitted version: all authors.

Funding Open access funding provided by Università degli Studi della Campania Luigi Vanvitelli within the CRUI-CARE Agreement. The study was supported by grants from the University of Campania "Luigi Vanvitelli", Caserta, Italy (approval no. 3.7, 09/03/2021).

Data Availability The data that support the findings of this study are available from the corresponding author upon reasonable request, which must include a protocol and statistical analysis plan and not be in conflict with our publication plan. Answers to the open-ended questions are available in Italian only.

Declarations

Conflict of interest None.

Ethical Approval The study protocol was approved by the Ethics Committee of the Department of Psychology of the University of Campania "Luigi Vanvitelli" (authorization n. 1 of 2/2/2021) and acknowledged by the Office of Clinical and Epidemiological Studies, SC Research and Innovation, ASUGI. The study was carried out in accordance with the principles of the Declaration of Helsinki.

Consent to Participate Informed consent for participation and data publication was requested from each participant in the initial section of the online questionnaire.

References

Amerio, A., Vai, E., Bruno, E., Costanza, A., Escelsior, A., Odone, A., De Berardis, D., Aguglia, A., Serafini, G., Amore, M., & Ghaemi, S. N. (2023). COVID-19 Impact on the Italian Community-based System of Mental Health Care: Reflections and Lessons Learned for the Future. *Clinical Psychopharmacology and Neuroscience*, 21(1), 2–9. https://doi.org/10.9758/cpn.2023.21.1.2

Bareis, N., Tepper, M. C., Wang, R., Tang, F., Olfson, M., Dixon, L. B., Kimhy, D., Wall, M. M., Medalia, A., Finnerty, M. T., Anderson, A., & Smith, T. E. (2023). Engagement of individuals with serious mental illness in outpatient mental health services and telehealth use during the COVID-19 pandemic. *Psychiatry Research*, *329*,15497. https://doi.org/10.1016/j.psychres.2023.115497

Benudis, A., Re'em, Y., Kanellopoulos, D., Moreno, A., & Zonana, J. (2022). Patient and provider experiences of telemental health during the COVID-19 pandemic in a New York City academic medical center. *Psychiatry Research*, 311, 114496. https://doi.org/10.1016/j.psychres.2022.114496

Bommersbach, T., Dube, L., & Li, L. (2021). Mental Health Staff Perceptions of Improvement Opportunities around COVID-19: A Mixed-Methods Analysis. Psychiatric *Q*uarterly, 92(3), 1079–1092. https://doi.org/10.1007/s11126-021-09890-2

Carpiniello, B., Tusconi, M., Zanalda, E., Di Sciascio, G., & Di Giannantonio, M. (2020). Psychiatry during the Covid-19 pandemic: a survey on mental health departments in Italy. *BMC Psychiatry*, 20(1), 1-12. https://doi.org/10.1186/s12888-020-02997-z

Carpiniello, B., & Vita, A. (2022). Impact of COVID-19 on the Italian Mental Health System: A Narrative

Review.*Schizophrenia Bulletin Open,3*(1), sgac038. https://doi.org/10.1093/schizbullopen/sgac038

de Girolamo, G., Cerveri, G., Clerici, M., Monzani, E., Spinogatti, F., Starace, F., Tura, G., & Vita, A. (2020). Mental health in the coronavirus disease 2019 emergency—the Italian response. *JAMA Psychiatry*, 77(9), 974-976. https://doi.org/10.1001/jamapsychiatry.2020.1276

Di Carlo, F., Sociali, A., Picutti, E., Pettorruso, M., Vellante, F., Verrastro, V., Martinotti, G., & di Giannantonio, M. (2021). Telepsychiatry and other cutting-edge technologies in COVID-19 pandemic: Bridging the distance in mental health assistance. *International Journal of Clinical Practice*, *75*(1), https://doi.org/10.1111/ijcp.13716. https://doi.org/10.1111/ijcp.13716

Duden, G. S., Gersdorf, S., & Stengler, K. (2022). Global impact of the COVID-19 pandemic on mental health services: A systematic review. *Journal of Psychiatric Research*, *154*, 354–377. https://doi.org/10.1016/j.jpsychires.2022.08.013

Foye, U., Dalton-Locke, C., Harju-Seppänen, J., Lane, R., Beames, L., Vera San Juan, N., Johnson, S., & Simpson, A. (2021). How has COVID-19 affected mental health nurses and the delivery of mental health nursing care in the UK? Results of a mixed-methods study. *Journal of Psychiatric and Mental Health Nursing*,*28*(2), 126–137. https://doi.org/10.1111/jpm.12745

Ghahramani, S., Kasraei, H., Hayati, R., Tabrizi, R., & Marzaleh, M. A. (2023). Health care workers' mental health in the face of COVID-19: a systematic review and meta-analysis. *International Journal of Psychiatry in Clinical Practice*, *27*(2), 208–217. https://doi.org/10.1080/13651501.2022.2101927

Giorgi, G., Lecca, L. I., Alessio, F., Finstad, G. L., Bondanini, G., Lulli, L. G., Arcangeli, G., & Mucci, N. (2020). COVID-19-Related Mental Health Effects in the Workplace: A Narrative Review. *International Journal of Environmental Research and Public Health*, *17*(21), 7857. https://doi.org/10.3390/ijerph17217857

Gray, P., Senabe, S., Naicker, N., Kgalamono, S., Yassi, A., & Spiegel, J. M. (2019). Workplace-Based Organizational Interventions Promoting Mental Health and Happiness among Healthcare Workers: A Realist Review. *International Journal of Environmental Research and Public Health*, *16*(22), 4396. https://doi.org/10.3390/ijerph16224396

Hamano, J., Tachikawa, H., Takahashi, S., Ekoyama, S., Nagaoka, H., Ozone, S., Masumoto, S., Hosoi, T., & Arai, T. (2022). Exploration of the impact of the COVID-19 pandemic on the mental health of home health care workers in Japan: a multicenter cross-sectional web-based survey. *BMC Primary Care*, *23*(1), 129. https://doi.org/10.1186/s12875-022-01745-4

IBM Corp. Released 2012. IBM SPSS Statistics for Windows, Version 21.0. Armonk, NY: IBM Corp.

Italia, S., Costa, C., Briguglio, G., Mento, C., Muscatello, M. R. A., Alibrandi, A., Larese Filon, F., Spatari, G., Teodoro, M., & Fenga, C. (2021). Quality of Life, Insomnia and Coping Strategies during COVID-19 Pandemic in Hospital Workers. A Cross-Sectional Study. *International Journal of Environmental Research and Public Health*, 18(23), 12466. https://doi.org/10.3390/ijerph182312466

Johnson, S., Dalton-Locke, C., Vera San Juan, N., Foye, U., Oram, S., Papamichail, A., Landau, S., & COVID-19 Mental Health Policy Research Unit Group (2021). Impact on mental health care and on mental health service users of the COVID-19 pandemic: a mixed methods survey of UK mental health care staff. *Social Psychiatry and Psychiatric Epidemiology*, 56(1), 25–37. https://doi.org/10.1007/s00127-020-01927-4

Koralnik, I. J., & Tyler, K. L. (2020). COVID-19: A Global Threat to the Nervous System. *Annals of Neurology*, 88(1), 1–11. https://doi.org/10.1002/ana.25807

Lee, B. E. C., Ling, M., Boyd, L., Olsson, C., & Sheen, J. (2023). The prevalence of probable mental health disorders among hospital healthcare workers during COVID-19: A systematic review and meta-analysis. *Journal of Affective Disorders*, 330, 329–345. https://doi.org/10.1016/j.jad.2023.03.012

Leeming, D., Lucock, M., Shibazaki, K., Pilkington, N., & Scott, B. (2022). The Impact of the COVID-19 Pandemic on Those Supported in the Community with Long-Term Mental Health Problems: A Qualitative Analysis of Power, Threat, Meaning and Survival. *Community Mental Health Journal*, *58*(7), 1297–1309. https://doi.org/10.1007/s10597-021-00932-4

Lyne, J., Roche, E., Kamali, M., & Feeney, L. (2020). COVID-19 from the perspective of urban and rural general adult mental health services. *Irish Journal of Psychological Medicine,* 37(3), 181–186. https://doi.org/10.1017/ipm.2020.62

Liberati, E., Richards, N., Parker, J., Willars, J., Scott, D., Boydell, N., Pinfold, V., Martin, G., Dixon-Woods, M., & Jones, P. (2021). *BMJ Open*, 11(4), e049210. https://doi.org/10.1136/bmjopen-2021-049210

McKeown, J., Short, V., Newbronner, E., Wildbore, E., & Black, C. A. (2023). Caregiving and receiving experiences in UK community mental health services during COVID-19 pandemic restrictions: A qualitative, co-produced study. *Journal of Psychiatric and Mental Health Nursing*, https://doi.org/10.1111/jpm.13001. Advance online publication. https://doi.org/10.1111/jpm.13001

Magliano, L., Puviani, M., Rega, S., Marchesini, N., Rossetti, M., Starace, F., & Working Group (2016). Feasibility and effectiveness of a combined individual and psychoeducational group intervention in psychiatric residential facilities: A controlled, non-randomized study. *Psychiatry Research*, *235*, 19–28. https://doi.org/10.1016/j.psychres.2015.12.009

Magliano, L., Bonavigo, T., Battiston, C., Oretti, A., Accardo, R., D'Ambrosi, G., Affuso, G., & Pascolo-Fabrici, E. (2022). Views of Mental Health Professionals on Positive Changes in Service Practices and Staff-User Relationships After One Year of Covid-19 Pandemic in Italy. *Journal of Psychosocial Rehabilitation and Mental Health*, *9*(3), 239–249. https://doi.org/10.1007/s40737-022-00259-7

Magliano, L., Di Maio, G., Papa, C., Bonavigo, T., Starace, F., & Affuso, G. (2023). The Responsiveness of Mental Health Service Professionals to Two Years of Pandemic Emergency in Italy. *Administration and Policy in Mental Health*, *50*(6), 849–860. https://doi.org/10.1007/s10488-023-01284-9

Ministero della Salute (Ministry of Health) (2022). *Servizio Informativo Salute Mentale. Rapporto sulla Salute Mentale (Mental Health Information Service. Mental Health Report)* Retrieved February 27, 2024 from https://www.salute.gov.it/portale/documentazione/p6_2_2_1.jsp?id=3369

Ndwabe, H., Basu, A. Mohammed, J. (2024). Post pandemic analysis on comprehensive utilization of telehealth and telemedicine. *Clinical eHealth, 7, 5-14.* https://doi.org/10.1016/j.ceh.2023.12.002

Onder, G., Rezza, G., & Brusaferro, S. (2020). Case-Fatality Rate and Characteristics of Patients Dying in Relation to COVID-19 in Italy. *JAMA*, 323(18), 1775–1776. https://doi.org/10.1001/jama.2020.4683

Pluye, P., & Hong, Q. N. (2014). Combining the power of stories and the power of numbers: mixed methods research and mixed studies reviews. *Annual Review of Public Health*, *35*, 29–45. https://doi.org/10.1146/annurev-publhealth-032013-182440

Pinkham, A. E., Ackerman, R. A., Depp, C. A., Harvey, P. D., & Moore, R. C. (2020). A longitudinal investigation of the effects of the COVID-19 pandemic on the mental health of individuals with pre-existing severe mental illnesses. *Psychiatry Research*, 294, 113493. https://doi.org/10.1016/j.psychres.2020.113493

Qiu, J., Shen, B., Zhao, M., Wang, Z., Xie, B., & Xu, Y. (2020). A nationwide survey of psychological distress among Chinese people in the COVID-19 epidemic: implications and policy recommendations. *General Psychiatry*, *33*(2), e100213. https://doi.org/10.1136/gpsych-2020-100213

Rapisarda, F., Vallarino, M., Cavallini, E., Barbato, A., Brousseau-Paradis, C., De Benedictis, L., & Lesage, A. (2020). The early impact of the Covid-19 emergency on mental health workers: a survey in Lombardy, Italy *International Journal of Environmental Research and Public Health*, 17(22), 8615. https://doi.org/10.3390/ijerph17228615

Sanghera, J., Pattani, N., Hashmi, Y., Varley, K. F., Cheruvu, M. S., Bradley, A., & Burke, J. R. (2020). The impact of SARS-CoV-2 on the mental health of healthcare workers in a hospital setting-A Systematic Review. *Journal of Occupational Health,* 62(1), e12175. https://doi.org/10.1002/1348-9585.12175

Sheridan Rains, L., Johnson, S., Barnett, P., Steare, T., Needle, J. J., Carr, S., Lever Taylor, B., Bentivegna, F., Edbrooke-Childs, J., Scott, H. R., Rees, J., Shah, P., Lomani, J., Chipp, B., Barber, N., Dedat, Z., Oram, S., Morant, N., Simpson, A., & COVID-19 Mental Health Policy Research Unit Group (2021). Early impacts of the COVID-19 pandemic on mental health care and on people with mental health conditions: framework synthesis of international experiences and responses. *Social Psychiatry and Psychiatric Epidemiology*, *56*(1), 13–24. https://doi.org/10.1007/s00127-020-01924-7

Sheriff, R., Hong, J. S. W., Henshall, C., D'Agostino, A., Tomassi, S., Stein, H. C., Cerveri, G., Cibra, C., Bonora, S., Giordano, B., Smith, T., Phiri, P., Asher, C., Elliot, K., Zangani, C., Ede, R., Saad, F., Smith, K. A., & Cipriani, A. (2023). Evaluation of telepsychiatry during the COVID-19 pandemic across service users, carers and clinicians: an international mixed-methods study. *BMJ mental health*, *26*(1), e300646. https://doi.org/10.1136/bmjment-2022-300646

Singh, R. K., Bajpai, R., & Kaswan, P. (2021). COVID-19 pandemic and psychological wellbeing among health care workers and general population: A systematic-review and meta-analysis of the current evidence from India. *Clinical Epidemiology and Global Health*, *11*, 100737. https://doi.org/10.1016/j.cegh.2021.100737

Thome, J., Deloyer, J., Coogan, A. N., Bailey-Rodriguez, D., da Cruz E Silva, O. A. B., Faltraco, F., Grima, C., Gudjonsson, S. O., Hanon, C., Hollý, M., Joosten, J., Karlsson, I., Kelemen, G., Korman, M., Krysta, K., Lichterman, B., Loganovsky, K., Marazziti, D., Maraitou, M., Mertens deWilmars, S., Fond-Harmant, L. (2021). W*orld Journal of Biological Psychiatry*, *22*(7), 516–525. https://doi.org/10.1080/15622975.2020.1844290

Viking, T., Wenzer, J., Hylin, U., & Nilsson, L. (2022). Peer support workers' role and expertise and interprofessional learning in mental health care: a scoping review. *Journal of Interprofessional Care*, *36*(6), 828–838. https://doi.org/10.1080/13561820.2021.2014796

Westbrook, J. I., McMullan, R., Urwin, R., Churruca, K., Metri, J., Loh, E., & Li, L. (2022). Changes in unprofessional behaviour, teamwork and co-operation among hospital staff during the COVID-19 pandemic. *Internal Medicine Journal*, *52*https://doi.org/10.1111/imj.15913

Witteveen, A. B., Young, S., Cuijpers, P., Ayuso-Mateos, J. L., Barbui, C., Bertolini, F., Cabello, M., Cadorin, C., Downes, N., Franzoi, D., Gasior, M., John, A., Melchior, M., McDaid, D., Palantza, C., Purgato, M., Van der Waerden, J., Wang, S., & Sijbrandij, M. (2022). Remote mental health care interventions during the COVID-19 pandemic: An umbrella review. *Behaviour Research and Therapy 159*https://doi.org/10.1016/j.brat.2022.104226

Zhong, S., Yang, X., Pan, Z., Fan, Y., Chen, Y., Yu, X., & Zhou, L. (2023). The Usability, Feasibility, Acceptability, and Efficacy of Digital Mental Health Services in the COVID-19 Pandemic: Scoping Review, Systematic Review, and Meta-analysis. *JMIR Public Health and Surveillance*, *9*, e43730. https://doi.org/10.2196/43730