



Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

might be without iatrogenic harm but delay in giving necessary medication can also result in harm.

While doing our Cochrane review, we noted that the potential iatrogenic harm of any interventions other than antipsychotic medication was either poorly reported or not reported at all. However, absence of evidence does not mean evidence of absence. We have tried to honestly and objectively reproduce data as reported in relevant clinical trials and, because Cochrane reviews are maintained, are able to improve the repository of evidence. The reader can then continue to consider these transparent data from their perspective.

Notably, there is a need for better characterisation of the types and duration of psychological and psychosocial approaches used in the treatment of prodromes, as many different approaches are used,⁵ but only a few of these are tested in clinical trials. The predominance of studies on cognitive behavioural therapy in the literature might not necessarily suggest that other approaches do not work or are not given for first-episode psychosis. Because of this complexity, the two-stage approach in analysing studies was suggested as an attempt to break down the intervention to its main components.

We are sensitive to the concern of Nelson and colleagues¹ that the review's message could result in many young people who seek help being denied much needed psychosocial care and being at risk of worsening symptoms and functioning. This issue is certainly the most important, and we take this opportunity to stress again that the key message of the review was, by no means, that the current approaches for early detection and treatment of prodromes of psychosis do not work. Instead, we highlight that in this difficult field, the relatively little evidence we have, which is often from pioneering trials, contains considerable uncertainties.

With respect to the field, and the enormous progress made in the research and clinical treatment of the prodromes of psychosis in the past 20 years, we are aware that there are still many differences in the treatment of prodromes across early intervention services, even within one country. We are also acknowledging the common critique to the whole field that the methods of studies in the scientific psychiatric literature do not allow easy translation of scientific data to clinical practice.

We are glad to agree with Nelson and colleagues¹ that more, high quality, but independent, research is needed to evaluate approaches for young patients at high clinical risk of psychosis—as we concluded in our Cochrane review.²

We declare no competing interests.

We thank Clive Adams and the Cochrane Schizophrenia group for their support.

**Dina Bosnjak Kuharic, Ivana Kekin, Joanne Hew, Martina Rojnic Kuzman, Livia Puljak*
dina.bosnjak@bolnica-vrapce.hr

Department for Diagnostics and Intensive Care and Department for First Episode Psychosis, University Psychiatric Hospital Vrapče, Zagreb 10090, Croatia (DBK); Department of Psychiatry, Zagreb University Hospital Centre, Zagreb, Croatia (IK, MRK); Department of Acute Care Psychiatry, South London and Maudsley NHS Foundation Trust, London, UK (JH); Zagreb School of Medicine, University of Zagreb, Croatia (MRK); and Center for Evidence-Based Medicine and Health Care, Catholic University of Croatia, Zagreb, Croatia (LP)

- 1 Nelson B, Amminger GP, Bechdolf A, et al. Evidence for preventive treatments in young patients at clinical high risk of psychosis: the need for context. *Lancet Psychiatry* 2019; published online Dec 19. [https://doi.org/10.1016/S2215-0366\(19\)30513-9](https://doi.org/10.1016/S2215-0366(19)30513-9).
- 2 Bosnjak Kuharic D, Kekin I, Hew J, Rojnic Kuzman M, Puljak L. Interventions for prodromal stage of psychosis. *Cochrane Database Syst Rev* 2019; **11**: CD012236.
- 3 Bosnjak Kuharic D, Kekin I, Hew J, Rojnic Kuzman M. Early interventions for prodromal stage of psychosis. *Cochrane Database Syst Rev* 2016; **6**: CD012236.
- 4 Moher D, Liberati A, Tetzlaff J, Altman DG. Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *Open Med* 2009; **3**: e123–30.
- 5 Tandon R, Nasrallah HA, Keshavan MS. Schizophrenia, “just the facts” 5. Treatment and prevention. Past, present, and future. *Schizophr Res* 2010; **122**: 1–23.

Mental health services in Italy during the COVID-19 outbreak

As of March 24, 2020, 63 927 confirmed cases and 6077 deaths due to coronavirus disease 2019 (COVID-19) make Italy one of the most severely affected countries of what has been defined a global pandemic by WHO.¹ In Lombardy, the epicentre of the outbreak in Italy, large metropolitan hospitals in cities like Milan and Bergamo are struggling to contain an exponential growth of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) case presentations requiring hospitalisation.

Italian mental health services are grounded on a community-based model of care, which is organised according to districts serving a defined geographical area.² Multidisciplinary teams of psychiatrists, psychologists, nurses, social workers, occupational therapists, rehabilitation counsellors, and auxiliary staff are distributed across inpatient and outpatient services. These services are coordinated by the department of mental health, which provides a full range of psychiatric care, from acute emergency treatment to long-term rehabilitation.

Within the ASST Santi Paolo e Carlo department of mental health, our unit serves a population of approximately 350 000 citizens in south Milan. Two inpatient units with a maximum capacity of 29 beds are used for voluntary and compulsory admissions with an estimated length of stay of 12.9 days.³ These two locked psychiatric wards are in the context of a large university hospital, which includes 18–20 wards of medical and surgical specialties. Over the past 3 weeks, most wards have been converted to COVID-19 intensive and subintensive care units with a joint effort of pneumologists, infectious disease specialists, internists, anaesthesiologists, and a growing number of other specialists.

On March 8, 2020, the regional authority for welfare ordered a block on all but urgent outpatient services (eg, chemotherapy, radiotherapy, or dialysis), and to maintain full functionality of mental health and substance misuse services. This choice has several implications for mental health workers. First of all, inpatient and outpatient mental health services are recognised by authorities as fundamental services to the community during a global pandemic. Second, given the delay of shared guidelines, individual departments have been challenged to develop an emergency plan within hours.

In this context, we developed the following recommendations, agreed by the hospital management. First, we recommend closure of second-level and third-level outpatient units (eg, perinatal depression, eating disorders, psychiatry for older people, adult neuropsychiatry, adult autism); for these patients, staff have been doing phone calls and video conference-based visits only for emergencies or specific patient requests. Second, general psychiatry outpatient services should be restricted to urgent visits and patients who require daily administration of medicines or long-acting injectables; on a case-by-case individual revision, physicians are required to re-assess the need for patients to access the service daily and medication assignment on a biweekly or weekly basis is strongly encouraged; visits are limited to those identified as urgent by the patient or physician and frequent, brief telephone updates are encouraged. Third, mental health-care staff (including social workers, rehabilitation technicians, and nurses) are encouraged to actively revise patient charts to identify those with severe mental disorders who are considered to be at increased risk for severe outcomes of COVID-19 (including those with comorbid hypertension, diabetes, chronic obstructive pulmonary disease, and coronary heart disease).⁴ These patients

should be called via telephone to verify full understanding of the government lockdown procedures and instructed on basic hygiene norms. For those who live with older parents, a clear revision of requirements should be proposed at a time of welfare service restrictions and decreased availability of basic needs such as food. Fourth, patients should be advised to only access the emergency room of the hospital after having discussed alternative possibilities with staff from the outpatient service to follow the lockdown procedure and limit chances of infection.

Within the wards, we make the following seven recommendations: (1) restrict the number of co-working mental health-care staff to preserve material and human resources if needed during the course of the epidemic in other medical wards; (2) provide continuous training of hospitalised patients who have acute symptoms on hygiene norms and social distancing in particular (such patients might have generally disorganised behaviour and frequent repetition of norms should be considered to minimise the risk of infection); (3) be continuously and actively vigilant for suspected COVID-19 symptoms to minimise the risk of outbreak within the ward; (4) continuously revise the mechanism of patient discharge to minimise the risk of contact with newly admitted patients, for all those who can be safely readmitted home; (5) suspend all group activities, including the use of common dining rooms, which should be restricted to those patients who require direct observation during meals (if unavoidable, the minimal recommended distances of 1–2 m should be preserved between patients); (6) develop and review isolation procedures within the ward, based on local architectural and functional conditions, in the likelihood of asymptomatic or paucisymptomatic patients who are positive for SARS-CoV-2 with acute severe mental health conditions that cannot be treated outside the psychiatric ward; and

(7) on the basis of local availability, online videoconferencing should be implemented for all staff meeting activities (this should also be considered for patient visits and communication with relatives, whose access to the ward should be greatly restricted).

Finally, psychiatric emergency room activity should be carefully integrated in the revised activity of the hospital. Although the risk of contact with individuals with COVID-19 might increase slightly in this setting as the number of cases who access the emergency room surges, it seems safer to screen for COVID-19 symptoms adequately in the context of the general emergency room before access to the psychiatric ward.

In conclusion, several rapid modifications must be implemented in the context of a department of mental health during a pandemic to protect patients with severe mental disorders and staff. Optimisation of shared procedures is mandatory to also limit the potential lack of adherence of some patients with national lockdown indications. The feasibility and effectiveness of online mental health services has been suggested by colleagues who faced the COVID-19 outbreak in China.⁵ We fully agree that this approach could eventually improve the overall quality of emergency interventions and perhaps increase safety of health-care workers, given the risk of shortages of personal protective equipment.

We declare no competing interests.

*Armando D'Agostino, Benedetta Demartini, Simone Cavallotti, Orsola Gambini
armando.dagostino@unimi.it

Department of Mental Health, ASST Santi Paolo e Carlo, Milan 20142, Italy (AD, BD, SC, OG); and Department of Health Sciences (AD, BD, OG) and "Aldo Ravelli" Research Center for Neurotechnology and Experimental Brain Therapeutics (BD, OG), Università degli Studi di Milano, Milan, Italy

1 Dong E, Du H, Gardner L. An interactive web-based dashboard to track COVID-19 in real time. *Lancet Infect Dis* 2020; published online Feb 19. [https://doi.org/10.1016/S1473-3099\(20\)30120-1](https://doi.org/10.1016/S1473-3099(20)30120-1).

- 2 Ostinelli, EG, D'Agostino, A, Pesce, L, et al. Mental health services and the city: a neighbourhood-level epidemiological study. *J Pub Health* 2020; published online March 23. DOI:10.1007/s10389-020-01242-x.
- 3 Di Cesare, M, Di Fiandra, T, Di Minco, L, et al. Rapporto salute mentale: analisi dei dati del sistema informativo per la salute mentale (SISM). 2017. http://www.salute.gov.it/imgs/C_17_pubblicazioni_2841_allegato.pdf Table 12.1.1, p 122 (accessed March 24, 2020; in Italian).
- 4 Guan, W, Ni, Z, Yu Hu, et al. Clinical characteristics of coronavirus disease 2019 in China. *N Engl J Med* 2020. Published online Feb 28. DOI:10.1056/NEJMoa2002032.
- 5 Liu, S, Yang, L, Zhang, C, et al. Online mental health services in China during the COVID-19 outbreak. *Lancet Psychiatry* 2020; published online Feb 18. [https://doi.org/10.1016/S2215-0366\(20\)30077-8](https://doi.org/10.1016/S2215-0366(20)30077-8).

Nursing homes or besieged castles: COVID-19 in northern Italy

The tragic events in Italy, with more than 10 000 deaths due to novel coronavirus 2019 (COVID-19), are causing pain and demoralisation to a still incredulous and shocked general population. It is particularly distressing that outbreaks of infection have developed rapidly in many nursing homes, where staff have been completely neglected by health authorities and can offer only little protection to many frail and needy older people.

In the province of Bergamo, more than 600 nursing home residents, from a total capacity of 6400 beds, died between March 7 and 27, 2020. A similar hecatomb is occurring in many other parts of the administrative regions of Lombardy, Veneto, and Emilia-Romagna, where nursing homes commonly have 10–15 deaths due to COVID-19 out of 70 guests. In some cases, 3–4 guests died in a single day.

In the past decade, especially in the north of Italy, residences for older people had reached a good standard of quality, similar to the European average.¹ However, the system was seemingly operating at the limit of

economic survival, with no provision for an emergency. At the first crisis, the system thus met with serious difficulties. Today is time only to reduce the suffering of the present; at the end of the drama, planning the functioning of nursing homes in a different way must be essential.

In our view, during the COVID-19 epidemic, nursing homes of northern Italy are like isolated citadels, with very little contact with the external environment. Loneliness, therefore, is the general condition in these nursing homes, where nobody enters and nobody exits. The prevailing feeling is that of living in a trap, in a generally modern residence, where everything happens in the most complete closure, to defend those who are inside from the risk of contagion and those who are outside from the possibility of witnessing the progressive, unavoidable, and unmodifiable shutdown of many lives.

The situation is characterised by various dynamics. Residents struggle with the absence of relatives and their visits. An attempt has been made to replace direct contacts with the use of tablet computers. However, this provision has limited effectiveness on residents with dementia, who need a caress, a massage, and a nearby voice. In many cases, this attempt has caused serious discomfort, which manifests itself as delirium superimposed on dementia, in particular a hypokinetic type, with the consequent refusal of food and the difficulty of getting out of bed.² We are not yet able to measure the frequency of these reactions, but empirical observation indicates a prevalence of over 50% of the residents.³ Older residents who are cognitively intact also breathe the atmosphere of anxiety and anguish, even if staff try not to convey their worries and fears.

Relatives struggle with the breakdown of direct relationships with their loved ones. In some,

serious feelings of guilt develop. One relative told us, “if I had not put my dad in the nursing home, he would still be with me and in these dramatic moments I could make him understand all my affection”. In others, aggression towards nursing home managers arises. All are dominated by fear and anguish because the messages filtered by the staff regarding the condition of their loved ones do not eliminate anxieties for the future. This feeling is aggravated by television and newspaper reports that residents cannot be transferred to emergency hospital facilities because these are too overcrowded. Family members feel like they are left outside the walls of a castle, without knowing anything about what is going on inside.

Doctors working in nursing homes feel responsible (even if the blame lies with government administrations) for not having isolated residents in a timely manner, meaning that many residents transmitted the virus to their relatives. Doctors feel powerless and completely disoriented. They have seen their colleagues become infected and die despite protections and cautions. Doctors feel exhausted and unable to make good clinical predictions: some patients seem to be seriously ill and recover, whereas others appear to be fine then die. Swab tests are only done in hospitals, when patients are symptomatic.

The staff fear for their own families, particularly for the older people and children with whom they live at home. Moreover, every time a resident dies, a bond that has been built in months of closeness gets broken; this loss causes a pain that most of the time cannot be shared with anyone because the numbers of staff on duty have decreased because of contamination with the virus. Psychological support services for staff have been abolished during the epidemic. In some cases, staff have been provided accommodation